**Birzeit university**

**Undergraduate Catalogue**

**2015-2016**

Birzeit, Palestine

*All information contained in this catalog is subject to change without prior notice*

***-*** *This catalogue includes general information about the university in addition to academic information related to bachelor's degree programs only.*

*- Information on graduate studies are included in the university graduate studies catalogue.*

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Please direct any questions related to admission and registration to:

Registration and Admissions Department

Birzeit University

Birzeit Palestine

Phone: (02) 2982056

Fax: (02) 2982118

E-mail: [registrar@birzeit.edu](mailto:registrar@birzeit.edu)

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# BOARD OF TRUSTEES

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\* Member of the Executive Committee  
† ex-officio, University President

# University Council

**Academic year 2015-2016**

|  |  |
| --- | --- |
| Dr. Abdul Latif AbuHijleh, | University President |
| Dr. Henry Giacaman | Vice President for Academic Affairs |
| Dr. Adel Zagha | Vice President for Administrative and Financial Affairs |
| Dr. Ghassan Khatib | Vice President for Advancement |
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| Dr. Talal Shahwan | Dean, Faculty of Graduate Studies |
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| Dr. Hasan Abdelkareem | Dean, Faculty of Education |
| Dr. Khaled Swaileh | Dean, Faculty of Science |
| Dr. Grace Khoury | Dean, Faculty of Business and Economics |
| Dr. Khaled A. Abaza | Dean, Faculty of Engineering and Technology |
| Dr. Yaser Amouri | Dean, Faculty of Law and Public Administration |
| Dr. Munir Qazzaz | Dean, Faculty of Pharmacy, Nursing and Health Professions |
| Mr. Mohamad AL Ahmad | Acting Dean, Student Affairs |

# The University

## Mission

Birzeit University is an independent non-profit higher education organization supervised by an independent Board of Trustees. The University constantly aims at serving the society through achieving excellency in education and contributing in the advancement of knowledge through research. Birzeit University fully believes in the freedom of thought and expression, democratic practices, intellectual pluralism, and civilized discussions, and aims at graduating experienced community leaders from all walks of life who show integrity, impartiality, constructive critical thinking, interest in lifelong learning and in contributing to the development of human civilization, starting from the Arab-Islamic heritage.

## Vision

To retain its positions as the first ranking university in Palestine. Birzeit University is recognized for its excellence in the fields of education and community service. In addition, the University is known for having the best students and academics from all over Palestine, and for being the source of decision makers in the various fields of the society. On the Short run, Birzeit University aims at becoming one of the region’s most distinctive universities, and one of the long run, one of the world’s most distinctive universities.

## Values

Excellence: Birzeit University aims at achieving excellence in all fields: education, research, leadership, expression and in serving the society.

University atmosphere based on mutual respect, academic freedom, and freedom of speech: Birzeit University aims at treating all individuals with respect, dignity, justice, understanding, transparency, and with respect of differences in perspective, beliefs, traditions and experiences, and requests that all individuals treat each other in the same way.

A diverse student body: Birzeit University aims at having a diverse student body, representative of the various layers of the Palestinian society, socially, economically and geographically. The University also aims at providing all available resources that enables it to embrace all academically qualified individuals, without considering their economic status or any physical disability as a barrier.

Civil, social and humanitarian responsibility: Birzeit University commits to utilizing its creative intellectual resources in addressing all local, regional, and humanitarian difficulties with full responsibility, as a contribution to the development of the Palestinian society and environment, and the humanitarian heritage. The University also commits to instilling the spirit of cooperation, volunteering, serving others, and perfection in its students.

Integrity: Birzeit University values an individual’s sense of responsibility, integrity, impartiality, justice, accountability and honesty, and aims at enforcing these values through constant practice.

Concern for the Environment: Birzeit University aims at spreading and enforcing environmental awareness and respect, and makes sure reflect this concern through its practices.

Work Ethics: Birzeit University encourages its faculty members, students and staff to commit to the work ethics, and works constantly to implant these ethics into its students.

Lifelong learning: Birzeit University aims at encouraging its graduates to celebrate life and love it through constantly seeking knowledge and understanding, and through professional growth and exploring the joy of thought.

## Historical Overview

Currently, Birzeit University includes eight faculties, which offer 71 academic programs (45 programs that lead to Bachelors’ Degree, 23 programs that lead to Master’s Degree, two programs that lead to a Diploma, in addition to the Arab and Palestinian Studies program offered to foreign students).

For the academic year 2013/2014, the total number of students was around 10,100, from which 1,257 were enrolled in the graduate programs, 8,737 in the under graduate programs, and 109 in the diploma and the Arab and Palestinian Studies programs.

The number of graduates for the academic year 2012/2013 was 2,144 students, from which 417 graduated with a Master’s degree, 1,665 graduated with a Bachelor’s degree, and 62 graduated with a Diploma.

The total number of students graduating from Birzeit University since 1976 and until 2013 is 27,486 male and female students.

Below is a brief overview highlighting Birzeit University’s main events during the past 90 years:

1924

* Mrs. Nabiha Naser and Mrs. Ratibah Shqair founded “Birzeit Girls’ School” in the town of Birzeit, in an effort to offer education for girls from Birzeit and the adjacent villages.

1930

* Birzeit Girls’ School was changed to a mixed secondary school, for boys and girls.

1932

* The name of the School was changed to “Birzeit Higher School”

1942

* Birzeit Higher School became “Birzeit College”, but remained to function as a secondary school.

1948

* Birzeit College continued to deliver its mission despite the Nakba, and continued to provide opportunities of education for students who refuged to the area.

1953

* Birzeit College, with Mr. Mousa Naser as its President, started to offer first year university level courses, in addition to the first university grade in both scientific and literary tracks.

1961

* Birzeit College added second year courses, in addition to the second university grade and started to offer intermediate diploma degree in the following year. Primary, prep, and secondary and grades were gradually cancelled during the following six years, and the College became an Intermediate University College.

1967

* After a short abruption due to the Israeli occupation of the West Bank and Gaza in June 1967, Birzeit College proceeds its work despite of the surrounding difficulties.

1972

* Birzeit College, with Dr. Hanna Nasser as its President, launched its first academic program consisting of four years, and which lead to a Bachelor’s Degree in Arts and Science. The number of academic programs increased to 7, and the number of enrolled students was 200 male and female students from all over the Palestinian Territories.
* Community Service was added as a graduation requirement for all Bachelor’s Degree programs students. A number of development, social and voluntary programs were founded during the following years.

1973

* Birzeit University was changed from a private organization to a public organization, the Board of Trustees was formed and consisted from citizens who were interested in educational issues, in order to take the responsibility of managing the College.
* Based on a military order, the Israeli Forces closed the University Campus for a period of two weeks. The Campus was closed 15 times in the following two decades.

1974

* In November 1974, the Israeli Forces sent the University President, Dr. Hanna Nasser, for exile in Beirut. Dr. Gabi Baramki was assigned as the Acting President for the University, and led the University from Amman, Jordan.
* Birzeit College added third year courses, by adding the third university grade.

1975

* During the years 1975-1976, the name “Birzeit College” was changed to “Birzeit University”, and it included the Faculty of Arts and the Faculty of Science.

1976

* The Faculty of Arts and the Faculty of Science were founded. (Currently, the number of academic departments in the Faculty of Arts is 11 departments, offering 13 Bachelor’s Degree academic programs, and the number of academic departments in the Faculty of Science is 4 departments, offering 8 Bachelor’s Degree academic programs).
* Birzeit University became a member of the Association of Arab Universities in Beirut in April 1976, and it was the first Palestinian university to join the Association.
* On the 11th of July 1976, Birzeit University celebrated the graduation of the first batch of Bachelor’s Degree students from the Faculty of Arts and the Faculty of Science, which consisted of 55 students. The total number of students who graduated from the University during 1976 was 90 male and female students.
* Birzeit University launched the Literacy and Elderly Education program, which was one of the leading programs through which the University played an important role in spreading the idea of literacy and elderly learning to other organizations.

1977

* Mr. Tawfiq AbuAlsoud became the president of the University’s Board of Trustees.
* In April 1977, Birzeit University became a member of the International Association of Universities. It was the first Palestinian university to join the Association.
* Birzeit University launched the first Master’s program in Education, which was the first Master’s Degree program in Palestine.
* Birzeit University launched a committee for defending the rights of the University’s students imprisoned by the Israeli forces.

1978

* The regulations governing the University’s Board of Trustees was legally registered in September 1978. Mr. Tawfiq AbuAlsoud was elected as the first President of the Board of Trusties following its legal registration.
* The Faculty of Commerce and Economics was founded. (Currently, the number of academic departments in the Faculty is 4 departments, offering 6 Bachelor’s Degree academic programs).
* The Institute of Community and Public Health was founded. Birzeit University has founded a number of other institutes and center in an effort to provide community services and conduct research related to policies imposed during the nineties and the beginning of the third millennium. Currently, the number of centers and institutions is 12.

1979

* The Faculty of Engineering was founded, and it was later merged with the Faculty of Information Technology. (Currently, the number of academic departments in the Faculty is 6 departments, offering 7 Bachelor’s Degree academic programs).

1980

* The Israeli Occupation Forces issues a military order which stated that all are under the command of the Israeli Military Governor, which enabled him to interfere in the students’ registration and employment processes. Birzeit University led a national campaign against the military order, which resulted in cancellation of the order.
* The inauguration of the University’s new campus through the opening of the Faculty of Science building (a new section was added to the building in 1997). During the next three decades, a number of other buildings were added to the Campus in order to take in the increasing number of students and employees joining the newly established centers and programs.

1981

* Dr. Saadi AlFaqih, the Vice President of the University’s Board of Trustees, became the President of the Board of Trustees following Mr. Tawfiq AbuAlsoud.

1982

* The Institute of Environmental Health was founded. (It later became The Center of Birzeit University Testing Laboratories).

1984

* The Israeli Forces closed the University Campus for a period of one month. In addition, the Israeli Forces shot the student Sharaf AlTibi, who was the first of the 25 martyrs of Birzeit University who were killed during 1984-2008.
* The inauguration of the Faculty of Engineering building (Omar Aggad Faculty), in addition to the inauguration of the Engineering Workshops (another section was added to the building in 1995).

1985

* Dr. Saadi AlFaqih was elected as the President of the University’s Board of Trustees.
* The inauguration of the University’s main library (Yousef Ahmad Ghanem Library). (Another section was added to the library in 2004).
* The inauguration of the Administration Building (Walid Qattan and Zain Mayasi Building), and the inauguration of Martyr Kamal Nasser Hall, as a donation from Mr. AbdulMuhsen AlQattan.
* During the years 1985-1987, the Israeli Forces closed the University five times, for a total period of 7 months.

1988

* Dr. Darwish Nazzal was elected as the President of the University’s Board of Trustees.
* Birzeit University was closed for the fifteenth time, as part of a series of closure forced by the Israeli forces of schools, colleges and universities, during the first Intifada. The closure lasted for 51 months, during which Israel considered education a crime and an illegal act. During this ling closure, the University continued its work secretly through a number of small study groups that gathered outside the University Campus.

1991

* The Centre of Continuing Education was founded.

1993

* Dr. Hanna Naser, the University President, returns to the Occupied Palestinian Territories in April 1993 after spending over 18 years in exile. Dr. Naser retook the Presidency after Dr. Gabi Baramki, who has been the Acting President for the University during Dr. Naser’s exile, which was one of the most difficult phases for the Palestinians in general, but the University was able to face it with wisdom and patience.
* The inauguration of the Faculty of Commerce and Economics building, and was later known as the Faculty of Business and Economy (Abdulrahman AlJirisy Buiding).
* The Institute of Law was founded.

1994

* The Master’s Program for Education was reactivated after it was stopped during the first Intifada. In addition, the Master’s Program in International Studies was founded.
* The Institute of International Studies was founded (Ibrahim AbuLughd Institute for International Studies).
* The Institute of Women’s Studies was founded.

1996

* The Faculty of Graduate Studies was founded, and a number of graduate programs were introduced. In 2014, the total number of graduate programs was 23 programs.
* The inauguration of the University Clinic (Aziz Shahin Building)
* The Center of Media Development was founded.

1997

* The Center of Development Studies was founded.

1998

* The inauguration of the Institute of Law building (funded by the French and the Qatari Governments). Another section was added to the Institute in 2009, funded by the French Government.

1999

* The inauguration of AlMaktoum Building for Students’ Services and Activities (Shaikh Rashed Bin Saeed AlMaktoum Building).
* The Diana Tamari Sabbagh Center for Fine Arts was founded.

2001

* The Israeli Occupation forces set up a military check point near Surda village, on the road connecting Ramallah to Birzeit, which placed the University under siege for around three years. However, the University continued its work despite the hardships.
* The inauguration of the Graduates Studies building (Naseeb Shaheen Building).
* The Institute of Environmental and Water Studies was founded.

2002

* Miss Sabaa Arafat was elected the President of the University’s Board of Trustees.
* Birzeit University launches the Right to Education Campaign (which has emerged from the Prisoners Committee and the Work for Humanity Project that have emerged in the seventies and the eighties) in an effort to provide legal assistance to its students and employees whom were suppressed and arrested by the Israeli Forces.

2003

* Mr. Ibrahim Aldaqqaq was elected the President of the University’s Board of Trustees.

2004

* Dr. Nabil Qassis was elected the University President after Dr. Hanna Naser, who later became the President of the University’s Board of Trustees.
* A new section was added to the library building, funded by the Kuwaiti Government.
* The Faculty of Law and Public Administration was founded. (Currently, the number of academic departments in the Faculty is 3 departments, offering 3 Bachelor’s Degree academic programs).
* The inauguration of Bahrain Kingdom Building for Women’s Studies.

2005

* The Ethnographic & Art Museum & The Virtual Gallery were founded.

2006

* Dr. Hanna Naser was elected the President of the University’s Board of Trustees.
* The Faculty of Information Technology was founded – which was later merged with the Faculty of Engineering. (Currently, the number of academic departments in the Faculty is 6 departments, offering 7 Bachelor’s Degree academic programs).
* The inauguration of the Physical Education Building (Mohammad Imaran Bamia and Walid Kaiali Building).

2007

* The inauguration of the Faculty of Arts Building (Aziz Shahin Building).

2008

* Faculty of Nursing and Supporting Health Professions was founded (which later became the Faculty of Nursing, Pharmacy & Health Professions). (Currently, the number of academic departments in the Faculty is 4 departments, offering 4 Bachelor’s Degree academic programs).
* Najjad Zeenni Information Technology Center of Excellence was founded and its building was inaugurated.

2009

* Said Khoury Building for Development Studies was inaugurated.

2010

* Dr. Khalil Hindi was appointed the University President following Dr. Nabil Qassis.
* The inauguration of Nursing and Supporting Health Professions Building -which later became the building of Nursing, Pharmacy & Health Professions- (Ghalib Younis Building).
* The Faculty of Education was founded. (Currently, the number of academic departments in the Faculty is 1 department, offering 3 Bachelor’s Degree academic programs, and two Diploma Degree academic programs). The inauguration of The Faculty of Education building (Mohammad Omran Bamia Building).

2011

* The inauguration of the new Administration Building (Walid and Helen Qattan Building).

2012

* Birzeit University Museum was founded by The Ethnographic & Art Museum & The Virtual Gallery.

2013

* The inauguration of the Faculty of Information Technology building (Munib Rashid AlMasri Building).
* The inauguration of Mohamed AlMasruji Media building.

2014

* Birzeit University obtained the required approval to launch the Doctorate Program in Social Sciences, which is the University’s first Doctorate program.
* The Medicine Training Factory was founded – Sameeh Darwazeh Institute for Industrial Pharmacy – and its building was inaugurated.
* The Shurfa Garden was founded – Sameer Owaidah Garden.
* The Faculty of Information Technology and the Faculty of Engineering were merged into one faculty; The Faculty of Engineering and Information Technology. Currently, the number of academic departments in the Faculty is 6 departments, offering 7 Bachelor’s Degree academic programs).

2015

## The Campus

Birzeit University's campus is located on the outskirts of the town of Birzeit, 20 km to the north west of Jerusalem. Birzeit is characterized by its mild weather, and its olive trees covered mountains. Birzeit is 850 meters above sea level.

The total area of the University campus is 750 dumon (750,000 square meters), and includes the following buildings and facilities, as shown in the attached map:

|  |  |
| --- | --- |
| # | Building |
| 1 | Sewage Treatment Plant |
| 2 | Abdel Rahman Al-Juraysi Building |
| 3 | Naseeb Azeez Shaheen Building for Graduate Studies |
| 4 | Naseeb Azeez Shaheen Building – University Clinic |
| 5 | Faculty of Science Building (SCI) |
| 6 | Power Plant |
| 7 | Birzeit University Museum |
| 8 | Yousef Ahmad AlGhanim Library |
| 9 | Kamal Nasir Assembly Hall (KNH) |
| 10 | Gabi Baramki Building |
| 11 | Students Council |
| 12 | Omar Aggad Engineering Faculty Building |
| 13 | Workshops and Generic Warehouses |
| 14 | Walid and Helen Qattan Building |
| 15 | Institute of Law Building (IOL) |
| 16 | Shaikh Rashed AlMaktoum Building |
| 17 | Book Store |
| 18 | Sports Fields |
| 19 | Engineering Workshops |
| 20 | Water Reservoir |
| 21 | Engineering Electric Substation |
| 22 | Mohammed Omran Bamieh Building |
| 23 | Aziz Shaheen Building |
| 24 | Physical Education Building (GYM) |
| 25 | Najjad Zeenni Information Technology Center of Excellence Building |
| 26 | Said Khoury Building for Development Studies |
| 27 | The Kingdom of Bahrain Institute of Women Studies |
| 28 | Munib Rasheed Masri Building |
| 29 | Mohammad Masrouji  Media Building |
| 30 | Naseeb Shaheen Theatre |
| 31 | Faculty of Pharmacy, Nursing & Health Professions Building |
| 32 | Sameeh Darwazeh Institute for Industrial Pharmacy |
| 33 | Palestinian Heritage Museum (under construction) |



## Facilities and Services

* **Public Relations Office**

The main role of the Office is to provide information about the University, its programs and its services, in addition to managing and organizing activities and events. These roles are the core work of the Office’s two main units, which are the Information and Publication Unit, and the Events and Activities Unit.

Each of the Office’s Units provides the students with the opportunity for volunteering and training to gain various experiences and skills in the different activities and functions offered by the Office.

Right to Education Campaign: Supported by the Public Relations Office, the Right to Education Campaign aims at raising the students’ awareness about the Palestinian students’ legal right to education. This is done through a series of conferences and sessions held for students locally and internationally, giving students the opportunity to contribute and volunteer in the Campaign’s activities.

In addition, The Right to Education Campaign registers the Israeli Occupation’s violation of this right, keeps a record of the names of imprisoned students and communicated with their parents, follows up their cases through the University’s lawyer, and facilitates their ability to resume their university education after being released.

* **University Library**

The University’s main library (Yousef Ahmad AlGhanim Library) contains over 347,351 publications (165,606 printed books, 117,270 electronic books, 991 courses curricula, 682 books written using Braille system, 25,250 printed periodic publications, 34,451 electronic periodic publications, 60 video tapes, 38 data base on CD’s, 1818 Master’s thesis, 1041 PhD thesis, 3 printed newspapers, 103 electronic data bases and 38 microforms). The Library was considered as a center for keeping publications by the UNESCO since 1979, and a regional center for the World Bank publications since 2005. In addition, the Library was listed as a support center for Menezes computerized system in Palestine since 1998. Furthermore, the main library coordinates and cooperates with the University’s sub-libraries located at the various centers and institutes, which are: Institute of Law Library, Women’s Studies Center Library, Said Khoury Building for Development Studies Library (which is the result of the merging of three libraries; Ibrahim AbuLughd Institute for International Studies library, Developmental Studies Program Library, and the Institute of Community and Public Health library).

The library offers students and researchers numerous services, and provides access to many databases containing full texts of scientific books and electronic magazines. The total number of database the Library provides access to is about 103, some are obtained through paid membership and others are free.

* **Computer Center**

The Computer Center aims at providing the University’s society with an integrated information environment, both inside and outside the University campus. Its mission is to serve the academic process, scientific research, University management, and to contribute in the development of the society in consistency with the University’s mission.

The Computer Center provides the latest technologies to serve the University’s needs on the academic and administrative levels. Ritaj – the University’s e-portal - is used by students, faculty members, academic affairs employees and administrative departments. Ritaj also provides other specialized services such as registration services, admission services, financial affairs services, human resource management services, facilities, procurement, libraries, project management, institutes and centers management, and other services.

The Computer Center is managed through an advanced wired and wireless information networks that cover most of the University’s campus, making its services accessible to students, faculty members and staff alike by enabling them to benefit of the University’s electronic services and to access the World Wide Web.

The Computer Center supervises the work of the University’s other computer labs, which offer around 1000 computers for students’ use. These computers include programs that are required for academic programs, in addition to other generic programs that support the users in completing their jobs, research, electronic services and to connect smart devices to the wireless network.

The Computer Center offers the below contact methods to connect with the University’s students:

Email: help@ritaj.ps

Social Network Page: <http://www.facebook.com/RitajBZU>

* **Birzeit University Museum**

The museum was founded in 2005 as The Ethnographic & Art Museum to accommodate the very early ethnographic & Art collections. By then It was the first art space that offers the students & the community with valuable collection & Art exhibitions. Along with the Virtual Gallery website they offered the very first resources on Palestinian contemporary Art & Cultural Heritage. In 2012 the 2 projects were merged into one entity that was named Birzeit University Museum. The new exhibition program has a structural relationship with the collection & the educational component. Through series of thematic annual exhibitions BZUM produces and promotes art practices as alternative learning experience & instrument for cultural dialogue & social evolution. Guided by its social responsibility, BZUM functions a cultural hub located at the heart of Birzeit University, the museum facilitates a multidisciplinary approach to learning, and recognizes contemporary art practices and visual cultural heritage, as rich and tangible sources for the enhancement of thought. BZUM fulfills its mission by interconnecting the 3 programs of Exhibitions, Collections & Education.

Examples of The exhibitions produced so far by the museum: 4 editions of Cities Exhibitions between 2009-2013, 2 editions of Framed-Unframed between 2011-2012, 3 Editions of “Beyond Aesthetics” 2011-2014, more than 5 exhibitions & students workshop with different themes 2012-2015, Political Posters 2013, Solo exhibition of Bashir Makhoul 2015, Unlike Other Spring 2016 an exhibition on the history of art collection & more. All exhibitions interacted with the university community in different ways. Educational activities & internship are offered for students through Basar training program.

* **The Virtual Gallery**

Birzeit University’s Virtual Gallery was founded in 2005 as the first website project that aims at developing the new generation’s knowledge in visual art and inspiring them to creating dialogues with other Palestinians and others from all over the world. In addition, the Gallery aims at pointing out the creative acts of different cultures in various historical periods, and at helping artists to get some knowledge about the differences in arts and seeing the world with a wider perspective.

The Gallery’s services and activities are provided under four main categories; education, society, exhibitions and the University Museum. Below are some examples:

1. Academic courses related to the Palestinian, Arab and modern era arts offered to students using electronic learning and remote learning media.
2. An electronic library for Palestinian arts containing articles, photographs, videos and a database of the University’s ethnographic and artistic collection.
3. Community communication programs, which focuses on showcasing the Palestinian, Arab and international visual arts, in addition to offering a discussion and debate forums in topics related to modern art.
4. A schedule of exhibitions, seminars, lectures and virtual visits to some artists’ ateliers.
5. Special files related to artists and community arts projects.

## General Services Department

The General Services Department is one of the University’s vital and important departments. It offers many services – logistics, support and other services - to the University in the best manner in an effort to maintain a clean and safe the University Campus.

The sections related to the General Services Department are:

1. **Supporting Services Section:**

This Section is responsible for the supervision of a number of units, including printings, fleet, mail, production and academic maintenance (includes wooden furniture manufacture and maintenance, changing locks and copying keys), lost and found, and other general and students activities.

1. **Health Services Section:**

This Section provides medical and health services, including general medical services and dental services to the University employees and students, and transfer any medical conditions that cannot be treated in the University clinic to an external medical organization.

1. **Housing Section:**

This Section is responsible for the supervision of the University’s employees and guests’ residential apartments, in addition to directly supervising the female students housing with the capacity of 150 students.

1. **Janitorial Section:**

This Section is responsible for the general cleanness of all the University’s facilities, and to supervise the performance of the outsourced cleaning agencies.

1. **University Guards Section:**

This Section is responsible for guarding the University’s buildings and facilities, and to maintain order and serenity inside the University Campus, in addition to regulating the entrance and exit of the University’s visitors and invitees.

1. **Public Safety Section:**

This Section is responsible for implementing the necessary preventive procedures that ensure maintaining the safety and wellbeing of the University’s society and facilities.

Other duties of the General Services Department include the preparation, coordination and supervision of the annual graduation ceremony, supervising the performance of the University’s food facilities, bookstore, opening the University facilities and preparing for the University’s and students’ events, organizing the car parking spaces, fulfilling hospitality requests for offices and departments, issuing University ID cards for students and employees and the distribution of mail.

## Institutes and Centers

* **Institute of Community and Public Health**

The Institute of Community and Public Health was founded in 1978 in an effort to connect the academic life of the University with the social developmental activities in the field of health. Since its opening, the Institute has exerted large efforts in conduction purposeful strategic research that aims at developing the health conditions and health related services in Palestine, in addition to building a comprehensive database containing the basic information required for the advancement of the health related policies in the region.

The Institute offers a Master’s Program in Community and Public Health, and a High Diploma Program in Primary Health Care, in addition to various training programs that aim at increasing the efficiency of the public and private sector Palestinian health system workers. The Institute includes a specialized library that contains 5000 headings and around 40 specialized magazines, in addition to a wide range of annexes and data bases of international publications related to the health field.

* **Institute of Law**

The Institute of Law was founded in 1993, and was initially named “The Law Center”. The Institute of Law contributes to the development and enhancement of the Palestinian legal foundations, and to the building of scientific and professional capacities through its training programs and research.

Furthermore, the Institute works at developing legal databank (Al-Muqtafi), which aims at facilitating accessibility to legislations and information through the use of advanced IT programs. The Institute has a membership in “Montscio” electronic legal library, and provides access to the library through the Institute’s website.

* **Institute of Women’s Studies**

The Institute of Women’s Studies was established at the beginning of the academic year 1994/1995 as a program in the Faculty of Arts. The Institute offers academic programs and research related to the relationship between genders in the local and international societies. In addition, the Institute conducts research that highlight the gaps and prejudice between men and women in the various sectors of the Palestinian society, in an effort to contribute to defining policies that result in equal and democratic human development.

The Institute offers a Master’s Program in Gender and Development since 1998, which aims at qualifying academic and professional individuals. The Institute includes a specialized library, containing books and publications related to women studies.

* **Institute of Environmental and Water Studies**

The Institute of Environmental and Water Studies was established in 2001, its role and mission are summarized in the below points:

1. Improving the quality of the water resources in Palestine and finding alternative sources despite the limitations of the political rights and limited access to such water resources.
2. Introducing highly qualified and experienced experts in the field of water science and engineering to the local market and the neighboring countries, to support in the different aspects related to water studies, either engineering, scientific, environmental, administrative, economic, and water related policies.
3. Improving the abilities of the human resources available at the Institute and developing its capacity, in addition to reinforcing collaboration and close coordination with the other departments and institutes of the University in the fields related to water and the environment.
4. Developing projects and building strong partnerships with the related local and international parties in an effort to maintain the financial stability of the Institute.

The Institute of aims at achieving its goals through the below activities:

1. Creating and providing graduate studies programs in the field of Environmental and Water Studies, which are the Master’s Program in Water and Environmental Engineering and the Master’s Program in Water and Environmental Studies.
2. Conducting and developing research and studies, and publishing them locally and internationally.
3. Strengthening the collaboration and improving the ties of collation with local and international institutes and organizations in the field of water manufacturing and environmental quality.
4. Collecting technical data and references, and archiving them in a databank in order to make it available for researchers, and to have it as a supporting reference in the process of creating water and environment related policies.
5. Creating and providing specialized workshops and training sessions.

* **Ibrahim AbuLughd Institute for International Studies.**

Ibrahim AbuLughd Institute for International Studies was founded in Birzeit University in 1994. The Institute provides numerous opportunities and resources for students, academics, and others specialized in the field of international studies and to Palestinian decision makers through its many research sessions, conferences, international and local academic seminars, and through its specialized library.

The Institute offers a number of programs and activities:

1. The Institute offers a Master’s Program in International Studies since 1994, which is the only specialized program in the filed in Palestine.
2. The Institute conducts an annual international academic conference discussing one contemporary international issue related to Palestine, and the conference is documented and its productions are published in a book and are distributed.
3. The Institute conducts several annual academic conferences discussing issues related to political development in Palestine, institutional development, democracy, civil society, Palestinian policies and other topics.
4. The Institute conducts a series of seminars and lectures, on monthly basis, discussing issues related to local, regional and international issues.
5. The Institute publishes a series of strategic studies related to local, Arab and international issues.
6. The Institute includes the Forced Migration and Refugee Unit, which is an academic unit specialized in research and studies related to refugees around the world, with special focus on Palestinian refugees. In addition, the Unit aims at providing researchers and academics access to the needed resources, data and literature discussing issues related to refugees.

* **Birzeit University Testing Laboratory Center**

The Center aims at developing the Palestinian society and strengthening its ties with the Society through raising awareness and conducting environmental and health related training for individuals, societies and public and private sector organizations. In addition, the Center offers many services and activities, such as laboratory analysis services for various sectors and providing technical assistance in laboratory management.

Furthermore, the Center provides support to the Palestinian Industrial sector through conducting training sessions specialized in the methods of applying correct management and acquiring the skills of sound laboratory management. It also provides local industries with support in the field of assigning and specifying issues related to quality, pollution, contamination degree, and evaluation of industrial health. Moreover, the Center aims at developing the agricultural sector by providing training for farmers concerning the safety measures for using pesticides, and finding alternative methods that reduce the use of chemical pesticides in the Palestinian agriculture, through offering specialized training courses and through practical implementation.

The Center was founded in 1982, and consisted of three branches: the main branch consists of the headquarters and the main laboratories; the second branch is located in Gaza, and is specialized in water control and wastewater; the third branch is located in Jericho, and contains an agricultural viewing center that consists of greenhouses and a training center.

The Center is considered an active member in the Palestine Standards Institution, and in many other technical and evaluation committees such as the Committee for Environmental Characterization, and the Committee for Characterization of Food. In addition, the Center contributes in setting the standards for drinking water, bottled water, wastewater, dairy products, detergents and other products. The Center is currently preparing for obtaining the ISO107025 Certification, which is the first step towards international certification.

* **Centre for Continuing Education**

The Centre for Continuing Education was founded by Birzeit University in 1991 as a unit that supports the Palestinian Society in the fields of organizational development, building professional, technical and managerial capabilities of the human resources working in the society’s main sectors (which are the governments, non-governmental, private, and commercial sectors), in addition to building the administrative structures and the infrastructure for the organizations of the public and private sectors.

* **Media Development Center**

The Media Development Center was founded in 1996 under the name “Media Center” as a part of the Faculty of Arts. In 1999, it became the “Institute for Media Development” and was considered a one of the University’s community centers and institutes. In 2006, it was renamed and became the Media Development Center.

Vision:

The Center’s vision stresses its belief in the importance of freedom of speech and transparent discussion as the basis for achieving justice, equality, partnership, and democracy for all Palestinians. The Center contributes to the achievement of this vision through developing the journalists’ vocational skills and abilities in order to attain independency, transparency, and credibility in the field of journalism, taking into consideration that real democracy that is based on pluralism, critical thinking, and the search for the truth requires free media to nurture it.

Mission:

The Center’s mission is to enhance and spread the values of democracy, pluralism, tolerance, and freedom of speech in the Palestinian Society, through the Center’s different and interrelated activities; media production, training and education.

Center’s Goals:

The Center aims at achieving the below goals:

* Spreading the culture of independent media
* Building capabilities in the field of media, maintaining it and enhancing its professionalism.
* Increasing the journalists’ and citizens’ awareness of their rights and duties in a society that is governed by equality and freedom.
* Encouraging the development and production of typical media.
* Networking with local, regional and international partners in an effort to improve the Palestinian media.
* Creating production that aim at the development of democratic media.
* Contributing in seminars related to media policies, in addition to providing advise and support to governmental organization and civil society institutions.

The Center’s Activities:

The Center offers vocational training opportunities for those specializing in the field of Media through its trained team of professionals and consultants who provide a number of short term and long term training courses in the Centers five units; television, broadcasting, written journalism, modern media, gender, and media research and policies.

In cooperation with the Department of Media, the center offers training courses for student enrolled in the Bachelors Programs in television, broadcasting, written journalism, and modern media. An example of this cooperation is the students’ contribution in AlHal monthly newspaper issued by the Center, in which the students – under the supervision of the Center - contributed to 80% of the content of the newspaper, in addition to students’ broadcast of a radio program in the University’s radio station supervised by the Center.

The Center is located in Mohamed Masrouji Building for Media that was inaugurated in 2013. The Building consists of 6 floors with a total area of 3,000 square meters. In addition to the Media Development Center and the Department of Media, the Building includes four broadcasting and montage studios, an activities hall, a training hall equipped with the latest technologies in the field, in addition to the facilitates of the Journalism unit which includes computers with internet access and a graphic design program, as well as employees offices.

The Center includes the largest television studio of its kind in Palestine, with a total area of 160 square meters, it contains 140 audience seats. The studio is equipped with the latest HD technologies, which is the best technology available in Palestine in relation to image quality and transfer speed. The studio is characterized for its effective ceiling lightening that can be adjusted as needed, and is connected to the control room located above the studio. The control room contains an instant montage system. The Center supervises five digital editing lines, four fully equipped broadcasting studios, and the Journalism unit facilities which includes computers with internet access and a graphic design program.

At the beginning of the academic year 2014/2015, the Center launched Birzeit Radio Station with a soft launch that included inside the University only, and was then expanded to cover the Palestinian Territories. Birzeit Radio Station is a social station, which focuses on daily economic, cultural and media issues.

The Center’s relationship with the society became stronger in the recent years due to the diversity of the Center’s projects and the parties benefiting from its services, starting from journalists, media graduates, media students, media and public relations employees in ministries and official organizations, social activists, and nongovernmental organizations.

The Center became a destination for requesting consultative services in the field of media for ministries, official organizations, security services and nongovernmental organizations.

* **Center of Development Studies**

The Development Studies Program was founded in Birzeit University in 1997 as a part of the human development project that was required to issue the first Palestinian human development portfolio, supported by the United Nations developmental Program. The Program was transferred into a Center in 2007 as an appreciation for the Center’s efforts and contributions during the past ten years. The Center aims at establishing concepts and guidelines that correspond to the emerging needs of the Palestinian Society, as well as spreading consciousness in the field of development in an effort to reinforce the capabilities of organizations and individuals and enable them to contribute to the developmental process.

The Center’s responsibilities include:

1. Conducting research and studies in the different filed of practical and theoretical development.
2. Conducting qualitative and quantitative surveys that supports social and research projects.
3. Conducting specialized training courses that aim at enforcing and applying the concept of sustainable development.
4. Creating an academic program related to developmental studies, in an effort to stress the important role of educational organizations in the development of the Society.
5. Developing the Developmental Resources Center, and transferring it to a vital resource in the field of developmental studies.
6. Organizing social awareness activities within the marginalized groups of the society.

* **Najjad Zeenni Information Technology Center of Excellence**

Najjad Zeenni Information Technology Center of Excellence at Birzeit University aims at achieving the below goals:

1. Developing, facilitating and accelerating the process of developing IT related products and services in Palestine, through creating and stabilizing a suitable environments that adapts the best international practices in the field.
2. Creating interaction between the University and private and public sectors’ organizations through innovation, research, resources, and joint knowledge, and as a result contributing to the reinforcement of the Palestinian education and economic systems.
3. Enhancing research abilities for faculty members and students through the implementation of their ideas in developing companies, marketing their research, and through increasing their experience through offering practical training programs in private sector companies and with other entrepreneurs that consider the Center as their headquarters.
4. Encouraging IT related activities and initiatives. The Center will be a supporting unit for creating new initiatives, including the creation of specialized facilities and implementing new projects in the University campus and private sector companies, through providing and facilitating access to high-tech infrastructure. This infrastructure will reinforce all creative ideas and research and marketing initiatives with the required knowledge in the field of information technology.

* **Ebin Rush Unit for Educational Development**

Due to the difficulties and issues faced by the educational system in Palestine, the Faculty of Arts at Birzeit University recently founded Ebin Rush Unit for Educational Development. The Unit exerts extensive efforts to develop the mental capabilities of Palestinian individuals by enforcing knowledge and developing critical thinking abilities, research, investigation, problem solving and creativity on one hand, and developing ethical values and social responsibility on the other. The Unit, which was founded in 2007, aims at conducting educational research activities, providing consultation, developing adequate syllabus, developing teaching methods and connecting them to research, publishing and distribution, building relationships between the different educational organizations, and discussing the methods of developing educational policies and participating in their creating and development both locally and internationally. The Unit is planning to provide programs that cover four areas, which are universities, schools, research and consultancy, in addition to documenting knowledge and sharing experiences. The Unit will provide programs related to improving the quality of teaching for the University’s faculty members, in the different units, departments and faculties, in addition to providing programs that aim at exchanging and sharing experiences and knowledge, and planning for future projects.

* **Academic Support Unit**

The Academic Support Unit was founded in the Faculty of Graduate Studies in 2007, and aims at providing support for graduate studies students at Birzeit University in order to improve their academic performance and their professional and social future. The Unit functions through its three main programs:

* The Academic Support Program, which aims at conducting training courses and activities in the field of individual and group consultation in order to develop academic research and writing skills, this includes the use of computers and data base, Arabic and English lingual performance, academic writing tools for quantitative and qualitative research, in addition to academic consultation in writing seminars and thesis.
* Academic Environment Development Program, which aims at the development of the academic environment surrounding students by providing them access to resources and methodological evidences, conducting enlightening and introductory meetings and intellectual seminars, in addition to launching an interactive website.
* Social Networking Program, this Program encourages informative and cultural networking between the graduate studies society and its external supporters, its organizations, and research centers in the Palestinian society through networking activities such as discussions, records, and the annual conference.

Furthermore, and as part of its strategic plan, the Unit is currently working on creating an archive for academic papers, and producing a manual for academic research writing, and offering opportunities to publish any distinctive academic productions for its students.

## International Relations

The University is highly interested in developing its international relations and the interaction of its different units with international organizations and universities around the world. To achieve this, the university offers the below programs and International Studies:

* **Academic Cooperation Program:**

The University has good connections and joint relations with other Arab universities through its membership in the Association of Arab Universities. As for the non-Arab universities, Birzeit University has created bilateral relations with a number of international universities in an effort to conduct joint academic research and to exchange students and faculty members. The University has an academic relation with more than 12 European universities through the “Palestinian European Academic Co-operation in Education”.

* **Palestinian Arab Studies Program (PAS):**

This program was mainly created for foreign students who are willing to obtain more knowledge about the region. The program also gives the student the opportunity to learn both proper and informal Arabic, in addition to providing some classes in the fields of social science, history and political science in English.

* **Summer International Program:**

Each year during summer, the University offers a 6-weeks-long educational course for foreign students who are willing to learn the Arabic language and get educated about the different aspects of the modern Palestinian society, and to have a close look at the social and political situation under the Israeli occupation.

* **International Work Camp:**

Each year during summer, the University conducts a 2 to 3-weeks-long summer camp, in which University students and foreign students come together to implement different projects planned by the Social Services Program at the University, in order to give them an opportunity to better understand the West Bank and its relation to the Arab World in general, and the Palestinian issue in particular.

The University’s regular students can also benefit from the courses offered by the Program, as they are allowed to enroll in a number of courses offered through the Program. For more information about this Program, visit www.birzeit.edu/pas/.

## Students Affairs

The students’ body at the University consist of students from all over Palestine, from cities, villages and refugee camps. These students form a socio-economical sector that represents the Palestinian people.

The number of students at the University has been steadily increasing since the beginning of the University’s development in 1972. For example, the number of students during the academic year 1972/1973 was around 240 students, an in the academic year 2012/2013 the number of students became 10,011 students. During the past ten years, the number of female students at the University increased to 63% of the total number of students.

**Deanship of Students Affairs:**

The Deanship of Students Affairs is concerned with the different aspects of the students’ University life; socially, culturally, and technically, in addition to developing the students’ skills and enhancing their abilities that enable them to manage their lives and future. Furthermore, the Deanship of Students Affairs helps students to solve their Academic, financial and psychological issues they may face during their education.

**Mission:**

The Deanship of Students Affairs works constantly to provide students with opportunities that enrich their academic and non-academic experiences through conducting social, cultural, professional, intellectual democratic and volunteer activities which contribute to the development of students’ personalities and improve their psychological health. This approach will enable students to live and learn, develops their creative skills, encourage tolerance as well as social and ethical responsibility, in addition to achieving excellence in learning and developing their leadership skills.

**Vision:**

The Deanship of Students Affairs manages the services it offers to students carefully in order to provide excellent services and to enhance students’ performance in social, cultural, technical and volunteer activities, and help create a productive individual.

**Guidance Division:**

The Guidance Division consist of a group of specialists in the files of psychological, social and academic guidance who contribute to making the University Campus a place where students feel safer and are able to adapt personally and socially. In addition, the Division aims at supporting students and empowering them on the personal, social, professional and psychological levels, in order to enable them to refine their personalities, achieve their goals, and to overcome any obstacles they face.

The Division’s goals contribute to the University’s philosophy and goals, as it offers an environment that supports freedom of speech and the respect of others.

**Students Council and Bodies:**

The Council is considered the representative body of the University's students. On yearly basis, regular students elect the members of the Council from a number of candidates, who are required to enjoy a good academic level.  The elections process is supervised by the Deanship of Students Affairs, due to the Deanship’s belief in the importance of the representation of students through the formal democratic framework.

The Council is managed by a “Secretarial” Committee, in accordance with the Council’s Constitution and the University’s applicable laws and regulations. The Secretarial Committee consists of a number of sub committees that function under the supervision of the Deanship of Students Affairs, in an effort to develop a well-educated, mature and socially responsible students’ body.

**Voluntary Work:**

This Unit is responsible for the management and coordination of students’ voluntary work programs. Such programs aim at increasing students’ interaction with their society and increasing their awareness of the social issues surrounding them, in addition to contributing to the reduction of the gap between intellectual and manual work. Such voluntary work programs are conducted in different cities, villages and refugee camps.

**Educational and Artistic Activities Unit:**

This Unit aims at increasing students’ knowledge in artistic and literature fields in general through conducting plays, musical performances, art exhibitions and issuing educational brochures. This Unit is responsible for the development of students’ talents.

**Financial Aid Unit:**

The goal of Financial Aids Unit, which is a part of the Deanship of Students’ Affair, is to make sure that financial obstacles do not limit outstanding students’ opportunities of continuing their university education. To guarantee the achievement of its goal, the Unit coordinates with the University’s departments to provide financial support for students in need.

## Financial Affairs

**Scholarships, Exemption and Financial Aids**

Birzeit University exerts extensive efforts tomake sure that financial obstacles do not limit students’ opportunities of continuing their university education, and seeks to keep the tuition fees at their minimum, while maintaining high standards of teaching and providing other supporting services. The University does its best to offer students scholarships, loans and financial aids, in addition to supporting students financially through paid work.

The University gives scholarships and financial aids for new students who are academically outstanding at the beginning of each academic year. No less than ten scholarships are provided annually for the students who achieved the highest grades in the General Secondary Examinations (top ten), from all Palestinian cities, and for both scientific and literary streams.

In addition, the University gives scholarships - covering the tuition fees for one year only - for 5 students who achieved the highest grades in the General Secondary Examinations when enrolling in one of the following programs; biology, chemistry, physics, and math. In addition to other scholarships covering the tuition fees for one year for economics and nursing students.

Furthermore, Students posted on the Honor list at the end of one semester are provided with an encouragement scholarship covering the tuition fees for the following semester.

Birzeit University offers financial exemption for siblings enrolled in the University during the same semester (who are uncategorized and do not receive any other financial aid). The exemption rates are as below:

* The first sibling paid full fees
* The second sibling is exempted from 15% of the fees
* The third sibling is exempted from 20% of the fees
* The fourth sibling is exempted from 25% of the fees

The University offers scholarships and financial aids for children of martyrs. It also provides scholarships for 1948 students that cover the first academic year, and are renewable based on the academic performance of these students. A number of other scholarships are offered for new students nominated by the Ministry of Higher Education, Ramallah and AlBireh Governorate, and Birzeit Municipality.

Moreover, the University provides several other scholarships and financial aids supported by different individuals, organizations and associations. And the students can get funds through the Student Loan Funds available through higher education organizations in Palestine.

## Admission and Enrollment

New students are usually accepted in the University at the beginning of the first semester of every academic year. An additional number of students may be admitted at the beginning of the second semester, if possible. Admission requests are submitted to the Registration and Admission Department according to the schedule mentioned in the related annual brochure issued by the University.

The Admission Committee is responsible for the definition of admission procedures, taking into consideration the general policies specified by the University Council.

**Minimum General Admission Requirements:**

1. The student must have a General Secondary Examination Certificate with an average that enables him/her to be admitted to the desired faculty, according to the below:
   1. A General Secondary Examination Certificate – Scientific Stream enables the student to enroll in all faculties
   2. A General Secondary Examination Certificate – Literary Stream enables the student to enroll in the Faculty of Arts, Faculty of Business and Economy, Faculty of Law and Public Administration, and the Faculty of Education.
2. The student’s grades in all the subjects of the General Secondary Examination Certificate must be higher than the minimum passing grade.
3. The student’s grades the General Secondary Examination Certificate must not be lower than the average grade specified by the Palestinian Ministry of Higher Education for university admission.

**Admission of Regular Students:**

**Admission of First Year Students:**

* The admission of first year students is competitive, based on their average in the General Secondary Examination Certificate, taking into consideration that the student’s average is higher than the minimum acceptable admission average for the desired faculty.
* The minimum acceptable admission average for a faculty is determined by the University Council based on the desired number of students that the University desires to admit in each faculty, and/or based on the indicators provided by some vocational organizations in Palestine specifying the desired fields of specialization.
* All admitted first year students must conduct the English Language placement examination in the dates announced by the Registration and Admission Department. Based on the result of this exam, students are required to register for the suitable English Language courses.

**Admission of Students Transferring from other Recognized Universities:**

* The acceptance of the transferring student from other recognized universities depends on the University’s.
* Successfully completing no less than 30 credit hours from the university they are willing to transfer from, with a minimum accumulative average of 70%.
* Students are admitting based on their scores in the General Secondary Examination Certificate (Tawjihi), or its equivalent.

**In Case of Admission:**

* The equalization of any courses completed in the university the student is transferring from will be taken into consideration case by case.

**Admission for the Educational Qualification Diploma Program:**

* University students who are enrolled in Bachelor’s Degree programs from the Faculty of Art and the Faculty of Science (in a discipline taught in secondary schools) are accepted into this Program.
* In addition, students holding a Bachelor’s Degree from Birzeit University, or annoy other recognized university, taking into consideration that the degree is in a discipline taught in secondary schools.

**Admission of Non-regular Students:**

The University accepts the admission of some non-regular students based on the University’s capacity. Non-regular students shall conform to the University’s general admission rules, or shall be regular students at another recognized university, or shall hold at least a community college diploma degree.

**Transfer between Faculties:**

In case a student was accepted into a specific Faculty (or a specific program), he/she is not allowed to transfer to another Faculty or another program until he/she successfully completes no less than 30 credit hours. The acceptance of the transferring student depends on the Faculty’s capacity and on the student’s fulfillment of the admission requirements for that Faculty.

## Bachelor's Degree Regulations

1. **System of Education:**

The University adopts an open style educational system in which a student is given the opportunity to study the core courses from his/her major, in addition to other elective courses from other field of specialization in order to enrich the student’s knowledge and to allow them to fulfil some personal preferences. This is done through the credit hours system[[1]](#footnote-1). The University’s Undergraduate Catalogue contains a brief description for each course offered by the University, in addition to its reference numbers and the number of credit hours allocated for each course.

1. **Academic Year**

The Academic Year consists of two semesters. The duration of each semester consists of 15 weeks for studying, and two following weeks for conducting tests, revising the courses and extracting the semester’s grades. During the summer break, and depending on the available resources, the University offers a Summer Session with a maximum duration of nine weeks, including the final exams. The Summer Session is governed by The Summer Session Academic Regulations, Fridays and Sundays are official holidays and other holidays are announced in the Academic Calendar at the beginning of each academic year.

1. **Students Classification**

Upon admission, students are classified into two groups:

1. Regular Students: are students that have enrolled in one of the University’s faculties in order to obtain an academic degree or a certificate in an offered program. Regular students are further classified into sub-groups according to the students semester load and according to the number of credit hours that have been successfully completed, according to the below details:
2. Classification according to student semester load:
   * + 1. Full-time students: students who are registered for 12 credit hours or more per semester.
       2. Part-time students: students who are taking less than 12 credit hours per semester.
3. Classification according to the number of credit hours that have been successfully completed [[2]](#footnote-2)(for full-time or part-time students).

|  |  |
| --- | --- |
| Classification | Number of Successfully Completed Credit Hours |
| First Year Students | Less than 30 credit hours |
| Second Year Students | 30-59 credit hours |
| Third Year Students | 60-89 credit hours |
| Fourth Year Students | 90 credit hours or more |
| Fifth Year Students  (for programs requiring five years) | 120 credit hours or more |

1. Non-Regular Students: are students who have joined the University in order to enroll in some specific courses, or attend them, without having the will to obtain an academic degree or certificate. Non-Regular students are further classified into the below sub-groups:
   1. Special Students: students who are willing to take specific courses in the University in order to complete a specific number of credit hours.
   2. International Program Students: international students who join a specific program for one semester or one year at the University.
   3. Auditing Students: students who are interested in joining specific courses for personal development for which no official record or transcript certifying attendance is maintained.
2. **Admission Duration and Admission Requirements**
3. A regular student shall fulfill the admission requirements and enroll in one of the academic programs offered by his/her faculty within a time period that does not exceed his/her completion of 54 or more credit hours. In case the student fails to do so, and under the condition that he has been admitted in the University for less than four semesters, the student can be given an additional semester during which he/she has to fulfill the admission requirements and to enroll in one of the programs offered by his/her faculty or another faculty. Otherwise, the student will be suspended for a period of one semester.
4. Each academic program has its special enrolment regulations, which include at minimum that the student is not under academic probation, and taking into consideration the program capacity. In all cases, the student shall be able to complete the admission requirements within three semesters of his/her enrollment in the program. Program Admission Requirements are determined by the Academic Council, based on the recommendations of the Program Council and Faculty Council.

1. **Semester Load**
2. The semester load for a full-time regular student is a minimum of 12 credit hours and a maximum of 18 credit hours per semester.
3. A regular student must register as a full-time student and may not change from full-time to part-time status without prior approval of the Dean of his/her Faculty.
4. Foe each semester, a specialized student must register for a minimum of 6 credit hours from his/her program requirements, and a non-specialized student must register for a minimum of 9 hours from his/her Faculty requirements, unless directed otherwise by the Dear of his/her Faculty. This excludes any students that is expected to graduate by the end of that semester.
5. Some students are allowed, as an exception, to exceed the maximum number of credit hours in a specific semester, when any of the below cases applies:
   1. Students posted on the Honor list at the end of one semester may be permitted to register for up to 19 credit hours in the following semester.
   2. Students who are expected to graduate are allowed to exceed the maximum number of credit hours for two consecutive regular semesters or one regular semester and a summer semester (prior to or following the regular semester): such students are allowed to register for up to 21 credit hours in the regular semesters and up to ten credit hours on the summer semester, under the condition that the student is not under academic probation.
6. **Semester Program**
7. Students choose their own semester schedule in coordination with their assigned academic advisors during the registration period, and in-line with their academic plan. First Year students are advised by the Admissions and Registration Department. Each Faculty appoints academic advisors for students not yet admitted into major while students in major are advised by the head of their departments or faculty members assigned for that purpose.
8. When preparing their semester program, students shall take into consideration the below general guidelines:
   1. Prerequisites: A student cannot register for a course without successfully completing its prerequisites. In some exceptional cases, a student is allowed to register to a course without successfully completing it prerequisite after obtaining the approval of the Dean of the Faculty providing this course, and based on the recommendation of the concerned Department. Otherwise, the students’ registration in a course without completing its prerequisites will be cancelled by the Registrar.
   2. Repetition of Courses: A student is not allowed to register for the same course for more than three times (one registration and two repetitions), whether a student is repeating the course due to his/her failure in the course or in order to rise his/her average, except in the cases where the student has withdrawn from a course with a “W”. The credit hours for repeated courses are added only once in the total completed credit hours, and is recorded in the student’s transcript as repeated, the grade for the latest repetition is considered in the student’s average[[3]](#footnote-3).
   3. Changes to Schedule: A student may change his/her schedule during the “Registration Period” specified in the Academic calendar announced for each semester. According to Clause “VII” below, no changes are allowed beyond this period except for withdrawal.
9. **Withdrawal from Courses**
10. Withdrawal from one or more courses is an official procedure that a student shall complete according to the regulations specified for this procedure, including obtaining the necessary approvals, otherwise, a student is considered adjourned [[4]](#footnote-4) and a “Withdrawal with Failure WF”[[5]](#footnote-5) is recorded on the student's transcript. A Student can withdraw from a courses (or courses) according to the below:
    1. Withdrawal during the registration period specified in the academic calendar:

Withdrawal from a course during the registration period is not recorded in the student’s transcript.

* 1. Withdrawal after the expiration of the registration period and until the end of the twelfth week of the semester:

Withdrawal from a course during this period will be recorded in the student’s transcript as “Withdrawal W”, and the grades related to this course will not be considered in the student’s average.

* 1. Withdrawal after the end of the twelfth week of the semester:

Withdrawal from a course after this period will be recorded in the student’s transcript as “Withdrawal with Failure WF”.

1. The student will not be considered as withdrawn from a course if the was allowed by the faculty council to postpone the completion of the course requirements, in this case, the course will be recorded in the students transcript as “Incomplete I”, until the student fully completes the requirements of the course according to the related regulations.
2. No fees are refunded upon the student’s withdrawal from a course.
3. **Withdrawal from the University**

Withdrawal from the University is an official procedure that a student shall complete according to the regulations specified below, otherwise, a student is considered adjourned. Except in some exceptional emergency cases that are documented and can be referred to the University Vice President for Academic Affairs for final decision.

1. A student who is willing to officially withdraw from the University must submit the related form to the Department of Admission and Registration, obtain the approval of his/her Head of Department and Dean of Faculty, and complete all legal regulations listed in the withdrawal form. In case the student does not complete the form and its requirements, all the courses registered by the student for that semester will be recorded in the student’s transcript as “Withdrawal with Failure WF”, regardless of the time of withdrawal.
2. A Student can officially withdraw from the University according to the below:
   1. Withdrawal during the registration period specified in the academic calendar:

If a student withdraws from the University during this period, the courses registered by the student for that semester are not recorded student’s transcript for that semester.

* 1. Withdrawal after the expiration of the registration period and until the end of the twelfth week of the semester:

If a student withdraws from the University during this period, all the courses registered by the student for that semester will be recorded in the student’s transcript as “Withdrawal W”.

1. A student is not allowed to withdraw from the University after the end of the twelfth week of the semester. In case a student ceases to complete the requirements of the course, all the courses registered by the student for that semester will be recorded in the student’s transcript as “Withdrawal with Failure WF”, regardless of the time of withdrawal.
2. No fees are refunded upon the student’s withdrawal from the University.
3. **Student Attendance**
4. The University believes in students’ perseverance. The education in the University requires complete attendance of lectures, discussions, and lab sessions.
5. For each course, the University allows a student to miss a number of classes equivalent to double the number of classes for that course in one week.
6. When the student’s absences exceed the number specified in Clause 2 above, the student will be denied the ability to complete the course, unless such absence was due to a valid excuse according to Clause 6 below. In such cases, the student shall submit comprehensive documentation to the course instructor on his/her first day back, and delays in submitting the documentation will not be accepted, and the student will be considered withdrawn from the course, according to Clause VII of this document.
7. The students is not allowed, under any circumstances to miss a number of classes equivalent to one third of the total number of classes for that course, even in the case of valid excuses. In such case, the student will be considered withdrawn from the course, according to Clause VII of this document.
8. In all absence cases, a student is responsible for any announcements and information he missed during his/her absence.
9. Absences are considered legitimate only in the below two cases:
   1. Sickness: in case of delays or absences due to illness, the student must submit a Doctor’s notice, after it is approved by the University Doctor.
   2. Emergencies: in case of delays due to force measure accepted by the course instructor, the student must submit comprehensive documentations to prove the emergency.
10. **Academic Probation and Suspension**
11. Basis for Academic Probation:
    1. A student is placed under academic probation in the next semester following any regular semester in which the student’s accumulative average is below a certain percentage, based on the number of registered credit hours[[6]](#footnote-6) according to the below table, under the condition that the semester load is not less than 6 credit hours. Students who have not studied a total of 18 credit hours at the University cannot be placed under academic probation.

|  |  |
| --- | --- |
| Total number of registered credit hours | Minimum accumulative average for academic probation |
| 18-30 | 65% |
| 31-60 | 66% |
| 61-90 | 67% |
| 91 or more | 68% |

* 1. The University waives its right to issue an academic probation in accordance to Clause a above in case a student obtains a semester average of 75% or more in 12 or more credit hours[[7]](#footnote-7), without having to rise his/her accumulative average according to the numbers indicated in the above table.

1. In case of academic probation, the below regulations apply:
   1. A student an academic probation must register for a minimum of 12 credit hours[[8]](#footnote-8) and a maximum of 15 credit hours in the following semester, and is not allowed to withdraw from any courses if such withdrawal makes to total credit hours less than 12 except after obtaining the Dean of the Faculty’s approval.
   2. In case a student accumulates a total of two academic probations (in two consecutive or non-consecutive semesters), he/she will be suspended from the University for one semester. In this context, the summer semester can be considered as a regular semester in case the suspension occurred at the end of the academic year (by the end of the second regular semester). The student will be able to readmit to the University upon the completion of the mentioned duration or later, provided that the total duration does not exceed three regular semesters. Upon readmission, the student will be considered under continuous academic probation, and he/she shall fulfill academic regulations specified by the “Readmission Committee”[[9]](#footnote-9) by the end of the readmission semester, taking into consideration the terms of Clause XI.1.a below. In case the academic regulations were not fulfilled, the student will be dismissed from the University.
2. In case a student fails in a course required for his/graduation three times (Clause VI.2.a), except University requirements, the student will be dismissed from the program for one regular semester unless he was accepted in another program, and must be directed by Readmission Committee to transfer from one faculty/program to another, or to replace it with another course where applicable.
3. **Academic Dismissal**
4. Basis of Academic Dismissal:

Taking into consideration the terms of Clause XI.2 below, a student may be dismissed from the University due to any of the academic reasons specified below, and after the final decision of the Academic Council, and the student will be informed of the dismissal by the Registration Manager. Academic dismissal shall be applicable after the end of the semester during which the dismissal decision was taken. A student may be academically dismissed from the University in the following cases:

* 1. A student is dismissed from the University in the next semester following any regular semester in which the student’s accumulative average is below a certain percentage, based on the number of registered credit hours according to the below table, and after being placed under academic probation.

|  |  |
| --- | --- |
| Total number of registered credit hours | Minimum accumulative average for academic probation |
| 18-30 | 60% |
| 31-60 | 61% |
| 61-90 | 62% |
| 91 or more | 63% |

* 1. In case the student is eligible for a third academic probation.
  2. In case the student does not fulfill the defined regulations by the end of his/her first semester after being readmitted to the University following his/her suspension (Clause X.2.b).
  3. In case the student fails to fulfill the requirements for registration and admission in another academic program, in the same or different Faculty, within one semester after being readmitted to the University after being suspended according to Clause IV.1.
  4. In case the students fails for the third time in a university requirement. (Clause VI.2.b)
  5. In case a student accumulates a total of two academic probations.
  6. In case a regular student fails to be complete the graduation requirements after being admitted to the University for 16 semesters, except in the cases accepted by the University Council.

1. Exceptions for Academic Dismissal:
   1. In case the student was dismissed due to the reasons specified in Clause XI.1.a or XI.1.b above, and in case the students has no more than 24 credit hours remaining for his/her graduation for five or six years programs, and no more than 16 credit hours for four year programs, he/she will be not be dismissed and will be given a final chance to remove the academic probation, and to graduate within a period of two semesters. The summer semester may be considered as one of these semesters in case the student registers for 6 or more credit hours.

In case the student fails to graduate during this period, he/she will be dismissed from the University.

1. **Readmission to University**
2. A student who has officially withdrawn from the University for one or more semesters, and for no longer than three consecutive academic years, and a student who was dismissed from the University for academic or non-academic reasons, can apply for readmission by filling the readmission form two months prior to the beginning of the next semester he/she is eligible and willing to join. The application will be revised and treated according to the applicable regulations, instructions and decisions.
3. The University Council may give an exception for readmission requests in the cases where the student has withdrawn from the University for more than three years.
4. After being readmitted to the University, the student must observe the academic and financial regulations and the study plan applicable at the time of readmission. Where applicable, the courses completed by the student will be equivalence with the courses required in the applicable study plan.
5. **Structure of Academic Programs**

In its Bachelor’s Degree programs, the University offers a number of Academic Programs into which a student can enroll in order to obtain a major degree in a specific field, or a major degree in one field and a minor in another. A student must successfully complete the below graduation requirements in order to obtain a Bachelor’s Degree:

1. University Requirements

University requirements include a number of courses defined by the University Council, with a total of no less than 21 credit hours, in an effort to supply the students with some basic skills and knowledge.

1. Faculty Requirements

Faculty requirements include a number of mandatory and elective courses within the Faculty or from other Faculties, in an effort to supply the students with basic skills and knowledge in their field of specialization, or in order to obtain knowledge in different fields in the Faculty to enable them to select one of them as a field of specialization.

1. Program Requirements

Each academic program specifies a number of courses that are considered as program requirements. These requirements include courses from the field of specialization and some supporting courses from other fields.

1. Elective Courses

A student must complete a minimum number of elective courses that he selects, in order to complete the number of credit hours required for graduation. Credit hours related to elective courses may be considered for the purpose of completing a minor or a diploma in another field.

1. Duplication of Requirements

In case a particular course is a requirement for completing more than one major or minor programs, the student must register for another replacement course approved by the Head of the Department, the Head of the Program or the Dean of the related Faculty. In all cases, a student must complete the minimum number of credit hours required for graduation.

1. The University Council shall issue a separate document of regulations related to the maximum and minimum number of credit hours required for each of the requirements mentioned in Clauses XIII.2, 3, 4 mentioned above.
2. **Academic Degrees and Certificates**
3. Bachelor’s Degree Requirements:

A student is granted a Bachelor’s Degree from a Faculty upon completing the below graduation requirements:

* 1. Completing the minimum number of credit hours required for graduation. The completed credit hours must include University requirements, faculty requirements and program requirements according to the student’s academic program, and according to the below table:

|  |  |  |
| --- | --- | --- |
| Number of years for program according to academic program | Minimum number of Credit hours to be completed | Maximum number of credit hours to be completed |
| 4 | 120 | 144 |
| 5 | 150 | 180 |
| 6 | 180 | 216 |

* 1. Obtaining an accumulative average of 68% or more.
  2. Completing a minimum of 120 hours of community service.
  3. Student transferring to Birzeit University form other universities, or for Birzeit students who are taking courses in other universities, must complete no less than 40% of the credit hours required for graduation at Birzeit University, including no less than 50% of the credit hours of the program requirements. Based on the justified recommendation of the Dean of Faculty and the approval of the Vice President for Academic Affairs, a student may be allowed to complete a maximum of 9 credit hours of the last 30 credit hours required for graduation in another university, taking into consideration the University’s regulations related grades evaluation and the regulations related to the transfer form one university to another.
  4. A student who completes the requirements for a minor degree in any program other than the one specified in his/her transcript, and obtains an average of no less than 68% on each of the minor courses, will be issued an official sealed letter from the Head of the Registration and Admission Department stating that the student has a minor degree in the selected field. A minor degree can only be obtained if the student has completed the Bachelor’s degree at Birzeit University.

1. Second Bachelor’s Degree Requirements:

A student is not allowed to obtain two Bachelor’s Degrees simultaneously. In case a student completed the requirements for another specialization, his/her transcript will include a statement stating that he/she has completed the requirements of another specialization in addition to the main filed of specialization.

A student may readmit to the University for a second Bachelor’s Degree in the below cases:

* 1. The student must meet the requirements for enrolling in the desired program.
  2. The student will not be required to retake any courses that were completed in the first Bachelor’s Degree. However, the student must complete any new required courses in case the requirements were as amended at the time of readmission.
  3. The student will not be required to take any Faculty Requirements that were completed in the first Bachelor’s Degree, or any other equivalent courses. However, the student must complete any new required courses in case the requirements were as amended at the time of readmission.
  4. The student must complete no less than 70 credit hours, including all program requirements for the second degree. In case these courses were completed during the student’s first degree, they will be replaced with other courses agreed by the Department Head in order to complete the required number of credit hours.
  5. A student must maintain an accumulative average of no less than 68% in the second Degree courses, as state in the Academic regulations. In addition, the student must enroll for the second Degree no longer than 8 years after completing the first Bachelor’s Degree.

1. Evaluation of Degrees:

The evaluation of a graduating student is based on the cumulative average earned at the University. It is recorded in the student's transcript according to the following criteria:

|  |  |  |
| --- | --- | --- |
| Evaluation | Accumulative Average | |
| Starting from | Up to |
| High Distinction | 90 | 100 |
| Distinction | 85 | 90 |
| Very Good | 78 | 85 |
| Good | 70 | 78 |
| Satisfactory | 68 | 70 |

1. Diploma in Education Requirements:
   1. The University offers a Diploma in Education for a field taught at schools, to students holding a Bachelor’s Degree from Birzeit University, or any other recognized university.
   2. In addition, the University offers a Diploma in Education for its students who are enrolled in an academic program for a field taught in schools.
   3. Students must fulfill the requirements specified by the concerned academic department.
   4. A student must fulfill the requirements within a maximum period of 8 semesters.
2. **Grading Evaluation**
3. Evaluation of Grade:
   1. A student’s performance in a course is evaluated through course work, monthly exams, and the final exam, which contributes to 30-50% of the total grade for that course. Final grades are approved by the Department Council or the program council before being recorded in the student’s file.
   2. Course work includes research, reports, homework and tests as seen necessary by the course instructor.
   3. The maximum grade for any course in 100%, and the failure grade is 55% or 50% (or a grade rounded to 55% or 50%).
   4. A student’s performance in courses that are not included in the final credit hours is evaluated with “Pass P” or “Fail F”, and these courses are not calculated in the student’s accumulative average.
   5. In case a student withdraws from one or more courses, or withdraws from the University, then the grades for the registered courses will be recorded as follows:

Courses withdrawn with “W” are not calculated in the student’s accumulative average. Courses withdrawn with “WF” will be given an average of 50%, and are calculated in the student’s accumulative average. Withdrawal from courses and withdrawal from the University are treated as defined in the related clause in this Document.

In the case where a student is allowed to postpone the complete the requirements or test of a course, the course will be recorded as “Incomplete I”, and will not be calculated in the student’s accumulative average. Postponing the completion of a course is treated as defined in the related clause in this Document.

1. Honor List:

A full-time regular student who earns an average of 85% and above at the end of the semester and who does not have any grades below 80% in the courses he/she registered for, will have his/her name posted on the Honor List publicized by the Deans of the Faculties at the end of each semester.

1. **Transfer between Faculties**

In case a student was accepted into a specific Faculty (or a specific program), he/she is not allowed to transfer to another Faculty or another program until he/she successfully completes no less than 30 credit hours. The acceptance of the transferring student depends on the Faculty’s capacity and on the student’s fulfillment of the admission requirements for that Faculty.

1. The instructions related to the implementation of these regulations are issued and amended upon the request and decision of the University Council.

The regulations mentioned in this document were approved by the University Council in its session number (37) 2008/2009, held on 24/06/2009, and are effective starting from the Academic Year 2009/2010, taking into consideration the below for students who have joined the University before the academic Year 2009/2010 for the first time:

1. Continuing Students:

These students are subject to the academic regulations that were valid at the time of their enrollment in the University, especially in the issues related to the continuation requirements (academic probation, academic dismissal and readmission after dismissal).

1. Readmitted Student:
   1. In case such students were dismissed due to an academic procedure **or** in case the students’ files contain any academic decisions, then the students are subject to the academic regulations that were valid at the time of their enrollment in the University
   2. In case such students have withdrawn for non-academic reasons **and** in case the students’ files do not contain any academic decision, them the students are subject to the academic regulations effective during the year 2009.

Clause XIV.3 was amended according to University Council resolutions 2 16 and 17 2013/2014.

Clause X.2.b was amended according to University Council resolution 2 (25) on 10/06/2015.

Clauses IV.1 and XI.1.c were amended according to University Council resolution 2-26 2012/2013 on 06/03/2013.

Validity of Regulations:

1. Except for the cases mentioned in Clause XVII.2 above, the regulations specified in this Document are valid for all students who were dismissed from the University according to the terms of Clause IV.1.
2. The regulations specified in this Document are valid for students who were given an additional chance to fulfill the program enrollment requirements by the University Council.

Clause X.3 was amended according to University Council resolution 2 (21) on 03/05/2014.

Clause XIV.2 was amended according to University Council resolution during its 25th session held on 10/06/2015.

## Summer Session

During the summer break, and based on the availability of resources, the University offers a 9-weeks long summer course. The courses offered during the summer course are academically equal to these courses when given in a normal academic semester.

During the summer semester, the University is governed by the same laws and regulations applicable during normal semesters, with applying the below modifications:

* **Weekly Schedule:**

For each credit hour, a minimum of two lectures are provided per week are offered. The minimum number of credit hours a student can register to is 9 credit hours, and in exceptional cases only, a student may be allowed to register for 10 credit hours. Students are not allowed to register for more than 10 credit hours under any circumstances.

* **Amendment to the study Program:**

Students are allowed to amend their program during the first three days of the Summer Course. Students may withdraw from a course before the end of the sixth week of the semester, and the course will be recorded in the student’s transcript as “Withdrawal (W)”.

In case a student withdraws after the end of the sixth week of the semester, the course will be recorded in the student’s transcript as “Withdrawal with Failures (WF)”, and the course average will be recorded 50% in the student’s academic record.

* **Academic Probation and Dismissal:**

For academic probation and dismissal purposes, the Summer Course is considered a regular semester in case a student registers for 6 credit hours or more, except for the first academic probation which is given to the student based on the accumulative number of completed credit hours. In case the number of completed credit hours is sufficient, the student will be given a first probation, whether the probations was earned in a summer course or a regular semester.

**Important Notes:**

* Students withdrawn from the University cannot apply for readmission during summer courses.
* According to Clause 10.2.B of the Academic Regulations related to obtaining a Bachelor’s Degree, students dismissed from the University are not allowed to register for summer courses, and summer courses are not considered a part of the dismissal period.
* For students who have given an exceptional additional duration of two semesters to complete graduation requirements, a summer course can be considered one of the two courses in case a student registers for no less than 6 credit hours.

## Academic integrity Regulations

The University exerts great efforts to attain and guarantee academic honesty on the ethical and principal aspects, and considers any violation of academic honesty disrespectful to its reputation and its students’ reputation. Academic honesty implies avoiding cheating and deception, and avoiding the use of unethical and illegal methods in tests, University jobs, preparing and writing reports and research, and any similar actions.

In an effort to accomplish the University’s goals in developing the spirit of research and intellectual investigation, the University encourages students to maintain academic honesty and avoid any violation. In addition, the University takes serious actions against any student who violates the basis of academic honesty. Therefore, the University Council revises the University’s Instructions of Academic Honesty from time to time, and amends them as seen necessary.

**Clause 1: Definition of Cheating:**

For the purposed of academic honesty, cheating is defined as the use of illegal ways and methods in completing tests or getting a job in the University. In addition, attempted cheating and collusion are not different from actual cheating, as there is no substantial difference between cheating, attempting to cheat, or providing assistance for others who cheat in tests, homework, reports and research. The below cases, and any similar cases, are considered cheating:

1. Copying a full or part of written material from a book, magazine, electronic resource, or any other resource – including a research conducted by another student as part of fulfilling the graduation requirements from Birzeit University or any other university whether is was published or not – without referring to the source and documenting it properly, in addition to the use of another writer’s ideas or language without proper citation, whether such use was done in a test, homework, research, report, literature, Master’s thesis, graduation project, a project related to course, a computer program, or in any other filed used by the University to evaluate a student’s performance.
2. Lying during the student’s declaration – where provided – that the material he/she submitted is original and was not used by any other student or publisher from Birzeit University or any other university, except where explicitly indicated otherwise.
3. Performing a test, conducing a lab test, or performing a test on behalf of another student, or asking another student to perform a test, conduct a lab test or perform a test on his behalf.
4. The use of references or resources (books, magazines, printings, special papers, electronic media … etc.) that are not allowed to be used during an exam.
5. Passing or attempting to pass information form one student to another in any way during an exam.
6. Any fraudulent act, including using a false name on tests and homework papers, alteration of information and results in homework, research, and lab tests, and the amendment of grades or any other University documents.

**Clause 2: Academic Disciplinary Committee:**

1. The Academic Disciplinary Committee is formed for each Faculty. The Committee deals with cheating and takes disciplinary actions (except for probation or dismissal).
2. The Dean of each Faculty forms a Disciplinary Committee from within the Faculty within the first week of the academic year, and ensures proper function of the Committee during summer courses. As for the Academic Disciplinary Committees assigned for the investigations of fraudulent cases, a centralized committee is assigned for this purpose and the Dean of Graduate Studies is considered to the Dean of the concerned Faculty, wherever referred to in the Instructions.
3. All cheating and fraud cases that occur in courses offered by a specific Faculty shall be submitted to the Faculty’s Academic Disciplinary Committee, taking into consideration the cases related to the Faculty of Graduate Studies as mentioned in the previous clause.
4. The Academic Disciplinary Committee gives its recommendation to the University Council to take suspension or dismissal actions for the student who commits a serious fraudulent that requires a disciplinary action that is greater than the actions that can be imposed by the University.

**Clause 3: Punishment for Cheating:**

1. Any student who conducts, attempts to conduct, or assists in conducting a fraudulent act will be punished on the academic and disciplinary levels, as explained below:
   1. Academic Punishment:

* Cheating during tests: the punishment for cheating in a test ranges from deducting grades (minimum punishment), and giving a student a zero in a test (tougher punishment), to giving the student the lowest grade possible of the whole course (maximum punishment).
* Cheating in preparing homework, reports and research: the punishment ranges from making the student rewrite the homework, report or research (minimum punishment) and giving a student a zero in the assignment (tougher punishment), to giving the student the lowest grade possible of the whole course (maximum punishment).

* 1. Disciplinary Action:

A disciplinary action is an action that is taken in addition to the Academic Punishment imposed by the Faculty’s Disciplinary Committee, the General Academic Disciplinary Committee or the University Council. Disciplinary actions are governed by the instructions mentioned in the internal procedures manual defined by the University, and range from a written warning, probation, to temporary or permanent dismissal from the University (Clause 16 of the Internal Procedures Manual of the General Academic Disciplinary Committee). The Academic Disciplinary Committee may force any disciplinary action mentioned above except dismissal from the University (temporary or permanent dismissal), however, the Committee may recommend such actions for the University Council through the Dean of the related faculty, who follows up on the process of taking the adequate action.

1. A student may appeal the decision of the academic or disciplinary actions according to the process stated in Clause 4 of this document, however, the student may not appeal the dismissal decision taken by the University Council.

**Clause 4: Procedures**

1. The course instructor or observer must take all required measures to guarantee the avoidance of any cheating or fraudulent cases, and shall be responsible for discovering and reporting such acts.
2. In exams cheating cases, the responsible observer (or the course instructor) shall record the details of any fraudulent incident, and shall confiscate any related documents or papers, including the exam paper, in the presence of the other observer (if available). The observer shall have the right to request that the student leaves the exam hall as well. In cheating cases related to homework, reports, or research papers, the course instructor shall record the details of the incident and shall confiscate any related documents.
3. In the case where the course instructor has not witnessed the fraudulent act, and was not close to the cheating incident, the observer who has witnessed the incident shall submit all the confiscated documents to the related head of department or the Program Manager, accompanies with a detailed incident report, including the names of the witnesses, if any. Then the head of the department transfers the report and all related documents to the course instructor, and submits a copy to the Dean of the related faculty.
4. In case the instructor decides that the incident is considered cheating, according to the related procedures, the student will be given the chance to give his/her statement about the incident. In case the instructor decides that the fraudulent act has occurred, he/she shall impose the adequate academic punishment, in accordance to Clause (3.1.a), within two working days of discovering the fraudulent act or attempt.
5. In addition to imposing the academic punishment, the course instructor shall submit a recommendation including the suggested disciplinary action to the head of the department or program manager, and shall provide them with the related documents proofing the fraudulent act.
6. After the head of the department or the program manager receives the instructor’s decision related to the academic punishment and recommendation of the disciplinary action, he/she shall inform the Dean of the related faculty of the incident and provide him with a copy of the related documents and proofs.
7. The head of the department or the program manager may (in case the course instructor does not report the cheating incident and/or does not take any actions) give his/her recommendation to the department committee or program committee of an academic punishment or a disciplinary action against the student, after giving the student the chance to give his/her statement about the incident and proving the occurrence of the incident. The head of the department or the program manager shall inform the Dean of the related faculty of decisions of the department committee or program committee about the academic punishment and recommendation about the disciplinary action, and provide him with a copy of the related documents and proofs.
8. After the final decision of the course instructor or the department committee / program committee about the final academic punishment that will be imposed, the dean of the related faculty shall be informed of the decision and shall inform the student and provide a copy of the decision to the University’s Vice President of Academic Affairs. In addition, the Dean shall inform the head of the Registration and Admission Department, in order to document the decision in the student’s profile.
9. The Dean of the related faculty shall submit all documents and proofs related to the fraudulent act to the Academic Disciplinary Committee, and shall inform the Committee of the imposed academic punishment and the recommended disciplinary action, and asks the Committee to look into the case. This action shall be conducted within 5 business days from the date of the incident/or the date of submitting the documents to the Dean of the related department.
10. The Academic Disciplinary Committee shall call upon the student and hear his/her statement about the incident, the Committee may also invite other parties to be interrogated or consulted in the case.
11. The Academic Disciplinary Committee shall decide the type of disciplinary action that will be imposed, taking into consideration the significance of the case, and taking into consideration the unbinding recommended disciplinary action. This action shall be conducted within 10 business days from the date of referring the incident to the Academic Disciplinary Committee.
12. In case the Committee reaches a decision to dismiss the student from the University (either temporarily or permanently), the Committee shall provide its recommendation to the University Council through the Dean of the related faculty, providing details about the details of the incident, as such decision is outside the Committee’s power.
13. The Academic Disciplinary Committee shall provide the Dean of the related faculty a report about its meetings and discussion of the incident, and shall inform him/her of their decision about the disciplinary action (or recommendation in case of dismissal).
14. The Dean of the related faculty shall approve or reject the decision related to the disciplinary action. In case of rejection, the case must be returned to the Academic Disciplinary Committee, along with his/her notes, and the decision shall be final after taking into consideration the Dean’s notes.
15. The Dean of the related faculty shall inform the student of the issued disciplinary action, and shall inform the head of the Registration and Admission Department, in order to document the decision in the student’s profile properly.
16. The student may appeal the decision of the academic punishment in front of the Academic Disciplinary Committee within five business days of being informed of the decision by the Dean of the Faculty. The appeal will be rejected in case the student fails to attend in front of the Committee after being invited to the session.

After the Committee sits with the students and revises the document, the Committee may revise its punishment and impose a lower of tougher punishment, or proceed with the original punishment. The Committee shall issue its decision within 10 working days of the appeal date. In case the student was found innocent, the Head of the Registration and Admission Department shall be informed to amend the student’s profile, and – if seen adequate by the Committee - the student should be given the chance to retake the exam or rewrite the research or report.

1. The student may appeal the decision of the disciplinary action in front of the Academic Disciplinary Committee within five business days of being informed of the decision by the Dean of the Faculty. The appeal will be rejected in case the student fails to attend in front of the Committee after being invited to the session.

After the Committee sits with the students and revises the document, the Committee may revise its punishment and impose a lower of tougher punishment, or proceed with the original punishment. The Committee shall issue its decision within 10 working days of the appeal date. In case the student was found innocent, the Head of the Registration and Admission Department shall be informed to amend the student’s profile, and – if seen adequate by the Committee - the student should be given the chance to retake the exam or rewrite the research or report.

1. In all cases, a copy of the related Committees’ decisions shall be kept in the student’s profile in the department or program and in the student’s profile at the Registration and Admission Department. Any committee investigating a student’s case shall request the student’s profile from the Registration and Admission Department, and shall have a look at it before issuing any decisions, taking into consideration the frequency and recurrence of similar incidents. Students with recurring incidents shall be entitled for tougher punishments and/or disciplinary actions.

# Academic Programs

The University includes the below eight faculties:

* The Faculty of Arts
* The Faculty of Science
* The Faculty of Business and Economics
* The Faculty of Engineering and Technology
* The Faculty of Law and Public Administration
* The Faculty of Nursing, Pharmacy & Health Professions
* The Faculty of Education
* The Faculty of Graduate Studies

The eight faculties mentioned above offer first university degree level courses in a number of fields leading to a Bachelor’s Degree in these fields, some leading to a major in a single discipline, or a major in one discipline and a minor in another, in addition to a number of minor programs in different disciplines that students can study in addition to their main program. Furthermore, the faculties offer a number of graduate studies programs leading to Master’s Degrees in different fields.

**Doctor of Pharmacy Program:** The Program was launched in 2010 after it was approved by the Palestinian Ministry of Higher Education. The Program leads to a Bachelor’s Degree.

As for the Faculty of Graduate Studies, it oversees the performance of the different graduate programs offered by the University in a number of different fields. For detailed information about the offered programs, you can refer to the Graduate Studies Manual.

Below is a list of the Bachelor’s Degree academic programs offered by the eight faculties classified according to the academic department and the minimum number of credit hours required for graduation (distributed between University requirements, faculty requirements, program requirements, and elective courses which a student can select from any desired field).

Academic Programs Study Plans

## Study Plans

Below are the study plans for the different academic programs offered by Birzeit University, in addition to a description for each of the offered courses through the different departments and programs. The course descriptions are classified according to related faculty and includes the course code and the used teaching method, according to the below:

1. **Teaching Method:**

Each credit hour consists of one weekly 50-minutes lecture throughout the semester duration, which is 15 weeks.

For courses that depend on teaching methods other than lectures, the nature and duration of weekly meetings are detailed in the course description. As for practical hours (labs), each credit hour equals 3 hours of weekly meetings.

1. **Course Number:**

Each course is referred to using a special code that consists of 4 letter and 3 or 4 numbers. The first number from the left refers to the course level: first year level (1) second year level (2) and so on. The next number refers to the number of credit hours for the course, the third and fourth numbers refer to the course’s serial number. As for the letters, they define the field related to the course, as shown in the below table:

|  |  |  |  |
| --- | --- | --- | --- |
| **Faculty of Arts** | | | |
| **Code** | **Field of Knowledge (Cognitive Field)** | **Code** | **Field of Knowledge (Cognitive Field)** |
| ANTH | Anthropology | FREN | French Language |
| ARAB | Arabic Language and Literature | GEOG | Geography |
| ARCH | Archeology | GERM | German Language |
| ARSK | Arabic and Palestinian Studies | HEBR | Hebrew Language |
| ARTS | Fine Arts | HIST | History |
| CULS | Cultural Studies | ITAL | Italian |
| TURK | Turkish Language | JOUR | Journalism |
| ENGC | English Language Communication Skills | MDIA | Media |
| ENGL | English Language and Literature | MUSI | Music |
|  |  | PHED | Physical Education |
| PHIL | Philosophy | TELV | Television Media |
| PSYC | Psychology | TIFR | French Translation |
| RABC | Radio Broadcasting | TRAN | Translation |
| SOCI | Sociology | WOMS | Women’s Studies |
| SOCW | Social Work | SPAN | Spanish Language |
| TOUR | Tourism |  |  |
| **Faculty of Business and Economics** | | | |
| **Code** | **Field** | **Code** | **Field** |
| ACCT | Accounting | ECON | Economics |
| BUSA | Business Administration | FINN | Banking and Finance |
| MKET | Marketing |  |  |
| **Faculty of Science** | | | |
| **Code** | **Field** | **Code** | **Field** |
| APCH | Applied Chemistry | GENS | General Science |
| BIOC | Biochemistry | MAEC | Mathematics Applied To Economics |
| BIOL | Biology | MATH | Mathematics |
| CHEM | Chemistry | PHYS | Physics |
|  |  | STAT | Statistics |
| **Faculty of Engineering and Technology** | | | |
| **Code** | **Field** | **Code** | **Field** |
| ENAR | Architectural Engineering | ENEE | Electrical Engineering |
| ENCE | Civil Engineering | ENME | Mechanical Engineering |
| ENCS | Computer Systems Engineering | ENMC | Mechatronics Engineering |
| COMP | Computer Science | ENPL | Spatial Planning Engineering |
| **Faculty of Law and Public Administration** | | | |
| **Code** | **Field** | **Code** | **Field** |
| JURI | Law | PUBA | Public Administration |
| POLS | Political Science | INRE | International Relations |
| **Faculty of Nursing, Pharmacy and Health Professions** | | | |
| **Code** | **Field** | **Code** | **Field** |
| NURS | Nursing | NUTD | Nutrition and Dietetics |
| PHAR | Pharmacy | SPAU | Audiology and Speech Therapy |
| **Faculty of education** | | | |
| **Code** | **Field** |  |  |
| EDUC | Education |  |  |

**Faculty of Arts**

Following are the academic departments in this faculty and the bachelor programs offered by these departments and the minimum credit hours required for graduation in each program:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Department** | **Academic Program** | **University Requirements** | **Faculty Requirements** | **Specialization Requirements** | **Free Electives** | **Total** |
| **Arabic Language and Literature** | Arabic Language and Literature | 21 | 23 | 63 | 13 | **120** |
| **English Language and Literature** | English Language and Literature | 21 | 23 | 60 | 16 | **120** |
| Major English Language and Literature/ Minor Translation | 21 | 23 | 69 | 7 | **120** |
| **French Language** | French Language | 21 | 23 | 67 | 9 | **120** |
| **History and Archaeology** | Major History/ Minor Political Science | 21 | 23 | 66 | 10 | **120** |
| Major History/ Minor Palestinian Archaeology | 21 | 23 | 63 | 13 | **120** |
| **Geography** | Major Geography/ minor History | 21 | 23 | 63 | 13 | **120** |
| Major Geography/ minor Political Science | 21 | 23 | 66 | 10 | **120** |
| **Social and Behavioral Science** | Sociology | 21 | 23 | 57 | 19 | **120** |
| Major Psychology/ Minor Sociology | 21 | 23 | 60-61 | 15-16 | **120** |
| **Media** | Major Media-Journalism/ Minor Political Science | 21 | 26 | 67 | 6 | **120** |
| Major Media-Journalism/ Minor Sociology | 21 | 26 | 61-62 | 11-12 | **120** |
| Major Media-Radio Broadcasting/ Minor Television | 21 | 26 | 64 | 9 | **120** |
| **Languages and Translation** | German Language | 21 | 23 | 60 | 16 | **120** |
| **Physical Education** | Physical Education | 21 | 23 | 80 | 5 | **129** |

**Faculty of Science**

Following are the academic departments in this faculty and the bachelor programs offered by these departments and the minimum credit hours required for graduation in each program:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Department** | **Academic Program** | **University Requirements** | **Faculty Requirements** | **Specialization Requirements** | **Free Electives** | **Total** |
| **Biology and Biochemistry** | Biology | 21 | 29 | 68 | 10 | **128** |
| **Chemistry** | Chemistry | 21 | 29 | 63 | 15 | **128** |
| Major Chemistry / Minor Business Administration | 21 | 29 | 66 | 12 | **128** |
| Major Chemistry / Minor Marketing | 21 | 29 | 66 | 12 | **128** |
| Major Chemistry / Minor Biochemistry | 21 | 29 | 63 | 15 | **128** |
| **Physics** | Physics | 21 | 29 | 65 | 13 | **128** |
| Major Physics/ Minor Computer Science | 21 | 29 | 66 | 12 | **128** |
| Major Physics / Minor Mathematics | 21 | 29 | 66 | 12 | **128** |
| Major Physics/ Minor Electronics | 21 | 29 | 68 | 10 | **128** |
| **Mathematics** | Mathematics | 21 | 29 | 59 | 19 | **128** |
| Mathematics Applied To Economics | 21 | 29 | 68 | 10 | **128** |
| Major Mathematics / Minor Statistics | 21 | 29 | 62 | 16 | **128** |
| Major Mathematics / Minor Computer Science | 21 | 29 | 66 | 12 | **128** |
| Major Mathematics / Minor Economics | 21 | 29 | 68 | 10 | **128** |
| Major Mathematics / Minor Finance and Banking | 21 | 29 | 71 | 7 | **128** |

**Faculty of Business and Economics**

Following are the academic departments in this faculty and the bachelor programs offered by these departments and the minimum credit hours required for graduation in each program:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Department** | **Academic Program** | **University Requirements** | **Faculty Requirements** | **Specialization Requirements** | **Free Electives** | **Total** |
| **Economics** | Economics | 21 | 29-32 | 60 | 7-10 | **120** |
| Business Economics | 21 | 29-32 | 63 | 10-13 | **126** |
| **Business Administration** | Business Administration | 21 | 29-32 | 57 | 10-13 | **120** |
| [Marketing](http://www.birzeit.edu/node/31097) | 21 | 29-32 | 57 | 10-13 | **120** |
| **Finance and Banking** | Finance and Banking | 21 | 29-32 | 57 | 10-13 | **120** |
| **Accounting** | Accounting | 21 | 29-32 | 57 | 10-13 | **120** |

**Faculty of Engineering and Technology**

Following are the academic departments in this faculty and the bachelor programs offered by these departments and the minimum credit hours required for graduation in each program:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Department** | **Academic Program** | **University Requirements** | **Faculty Requirements** | **Specialization Requirements** | **Free Electives** | **Total** |
| **Architectural Engineering** | Architectural Engineering | 21 | 30 | 107 | 6 | **164** |
| Spatial Planning Engineering | 21 | 30 | 107 | 6 | **164** |
| **Civil Engineering** | Civil Engineering | 21 | 30 | 104 | 5 | **160** |
| **Mechanical Engineering and Mechatronics** | Mechanical Engineering | 21 | 30 | 103 | 6 | **160** |
| Mechatronics Engineering | 21 | 30 | 102 | 7 | **160** |
| **Electrical Engineering and Computer Engineering** | Electrical Engineering | 21 | 30 | 103 | 6 | **160** |
| Computer Systems Engineering | 21 | 33 | 101 | 5 | **160** |
| **Computer Science** | Computer Science | 21 | 32 | 69 | 6 | **128** |

**Faculty of Law and Public Administration**

Following are the academic departments in this faculty and the bachelor programs offered by these departments and the minimum credit hours required for graduation in each program:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Department** | **Academic Program** | **University Requirements** | **Faculty Requirements** | **Specialization Requirements** | **Free Electives** | **Total** |
| **Law** | Law | 21 | 29 | 88 | 6 | **144** |
| **Public Administration** | Public Administration | 21 | 29 | 65-68 | 8-11 | **126** |
| Public Administration/ Minor Economics | 21 | 26 | 69-72 | 7-10 | **126** |
| Public Administration/ Minor Political Science | 21 | 29 | 66-69 | 7-10 | **126** |
| **Political Science** | Major Political Science/ Minor Economics | 21 | 29 | 63 | 9 | **122** |
| Major Political Science/ Minor Public Administration | 21 | 29 | 63 | 9 | **122** |
| Major Political Science/ Minor Women’s Studies | 21 | 29 | 63 | 9 | **122** |
| Major Political Science/ Minor Philosophy | 21 | 29 | 63 | 9 | **122** |

**Faculty of Nursing, Pharmacy and Health Professions**

Following are the academic departments in this faculty and the bachelor programs offered by these departments and the minimum credit hours required for graduation in for each program:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Department** | **Academic Program** | **University Requirements** | **Faculty Requirements** | **Specialization Requirements** | **Free Electives** | **Total** |
| **Nursing** | Nursing | 21 | 35 | 79 | 6 | **141** |
| **Nutrition and Dietetics** | Nutrition and Dietetics | 21 | 33 | 69 | 6 | **129** |
| **Doctor of Pharmacy** | Doctor of Pharmacy | 21 | 52 | 137 | **0** | **210** |
| **Audiology and Speech Therapy** | Audiology and Speech Therapy | 21 | 27 | 75 | **6** | **129** |

**Faculty of Education**

Following are the academic departments in this faculty and the bachelor programs offered by these departments and the minimum credit hours required for graduation in each program:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Department** | **Academic Program** | **University Requirements** | **Faculty Requirements** | **Specialization Requirements** | **Free Electives** | **Total** |
| **Curriculum and Instruction** | Upper Elementary School Teacher Program - Teaching of Social Studies | 21 | 17 | 88 | 6 | **132** |
| Upper Elementary School Teacher Program - Teaching of Science | 21 | 18 | 84 | 6 | **129** |

**University Requirements**

University requirements are designed to provide the student with basic skills and general cultural knowledge.They include the completion of the of **21 credit hours** consisting of the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Pre-requisite** |
| ARAB135 | Arabic Language Skills I | **.** |
| ARAB136 | Arabic Language Skills II | ARAB135 |
| ENGC141 | English Language Skills -B | Adequate Placement Exam Result or ENGC101 |
| PHED120 | Physical Education | **.** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of credits** | **Course Number** | **Course Name** | **Pre-requisite** |
| 3 credits from the following courses | ENGC231 | English Language Skills - A | Adequate Placement Exam Result orENGC141 |
| ENGL233 | Writing 1 | Adequate Placement Exam Result |
| 6 credits from the following courses | CULS331 | Modern and Contemporary European Civilization | second year level |
| CULS332 | Modern and Contemporary Arab Thought | second year level |
| CULS333 | Palestinian Identity and Cause |  |

Faculty of Arts

# Faculty of Arts Study Plans

Established in 1972 as one of the first two faculties at Birzeit University, the Faculty of Arts is now the largest faculty on campus in terms of number of the various degree programs it offers and enrollment (currently more than 2,800 students). The first cohort of Faculty of Arts bachelor degree graduated in 1976, consisting of 43 students only.

Faculty members are involved in various areas of research in the fields of sociology, cultural studies, geography, history, and language and literature studies. Current research activities include national identity, psychological coping, gender and schooling, democracy education, curriculum analysis, social movements, empowerment, violence against children, the documentation of demolished villages in historic Palestine, Palestinian heritage and folklore, identity and democracy, land degradation and desertification, water and environment pollution, natural resources and management, regional and urban planning, population studies, comparative literature and linguistics, history of Palestine, Palestinian nationalism, the Zionist movement, and conflict management and resolution. The Faculty carries out community outreach programs in education and national curriculum development. Moreover, the Faculty provides various consulting services, training programs and evaluation services of local institutions. It also holds public lectures, conferences and art exhibitions.

The Faculty offers programs leading to Bachelor degrees, in: Arabic language and literature, English Language and Literature, French Language, Geography, History, Physical Education, Germany Language and Literature, Media, Physical education.

The Faculty offers programs leading to Master degrees in: Arab – Muslim History, Contemporary Arab Studies, Geography, Sociology and Anthropology, Community Psychology.

The Faculty also offers the following non-degree programs: ·Music and Fine Arts. Palestine and Arabic Studies Program (PAS) for international students· and Women's Studies.

**Departments**

* Department of Arabic Language and Literature
* Department of English Language and Literature
* Department of French Language
* Department of Geography
* Department of History and Archaeology
* Department of Languages and Translation
* Department of Media
* Department of Philosophy and Cultural Studies
* Department of Social and Behavioral Science
* Department of Physical Education

**Faculty of Arts Requirements for all programs excluding Media & Physical Education programs (23 Credits Hour):**

|  |  |  |  |
| --- | --- | --- | --- |
| Course No. | Course Name | Pre-requisite | Credit Hours |
| COMP121 | INTRODUCTION TO COMPUTER | . | 2 credit hours |
| GENS131 | LIFE SCIENCE | . | 3 credit hours |
| GENS132 | PHYSICAL SCIENCE | . |
| HIST133 | ARAB-ISLAMIC CIVILIZATION | . | 3 credit hours |
| SOCI233 | ARAB SOCIETY | . |
| HIST135 | HISTORY OF JERUSALEM | . | 3 credit hours |
| GEOG338 | GEOGRAPHY OF PALESTINE | . |
| POLS333 | PALESTINIAN QUESTION 1 | . |
| ARAB2301 | INTRODUCTION TO PALESTINIAN LITERATURE | . |
| ARAB231 | INTRODUCTION TO ARABIC LITERATURE | ARAB136 | 9 credit hours |
| ENGL236 | INTRODUCTION TO LINGUISTIC | ENGC231 |
| SOCI131 | INTRODUCTION TO SOCIOLOGY | . |
| HIST231 | INTRODUCTION TO THE STUDY OF HISTORY | . |
| GEOG230 | INTRODUCTION TO HUMAN GEOGRAPHY | . |
| FREN131 | INTRODUCTION TO FRENCH | . |
| PSYC231 | INTRODUCTION TO PSYCHOLOGY | . |
| MDIA231 | INTRODUCTION TO MEDIA STUDIES | . | 3 credits hours |
| PHIL231 | INTRODUCTION TO LOGIC | . |
| POLS231 | INTRODUCTION TO POLITICAL SCIENCE | . |
| WOMS231 | INTRODUCTION TO WOMENS STUDIES | . |
| ARCH131 | INTRODUCTION TO ARCHAEOLOGY OF PALESTINE | . |
| EDUC231 | INTRODUCTION TO EDUCATION | . |

**Faculty of Arts Requirements for Media Programs (26 Credits Hour):**

**A. 14 Hours from the following courses:**

|  |  |  |  |
| --- | --- | --- | --- |
| Course No. | Course Name | Pre-requisite | Credit Hours |
| COMP121 | INTRODUCTION TO COMPUTER | . | 2 |
| ARAB238 | GRAMMAR OF MEDIA LANGUAGE | Arab136 | 3 |
| ENGC232 | ENGLISH FOR JOURNALISM | Engc231 | 3 |
| MDIA231 | INTRODUCTION TO MEDIA STUDIES |  | 3 |
| ECON233 | GENERAL ECONOMY |  | 3 |

**B. 12 Hours from the following courses:**

|  |  |  |  |
| --- | --- | --- | --- |
| Course No. | Course Name | Pre-requisite | Credit Hours |
| GENS131 | LIFE SCIENCE | . | 3 credit hours |
| GENS132 | PHYCICAL SCIENCE | . |
| Soci131 | INTRODUCTION TO SOCIOLOGY | . | 3 credit hours |
| Pols 231 | INTRODUCTION TO POLITICAL SCIENCE | . |
| HIST135 | HISTORY OF JERUSALIM | . | 6 credit hours |
| GEOG338 | GEOGRAPHY OF PALESTINE | . |
| POLS333 | PALESTINIAN QUESTION 1 | . |
| ARAB2301 | INTRODUCTION TO PALESTINIAN LITERATURE | . |

**Faculty of Arts Requirements for Physical Education Program (23 hours)**

**A. 14 Hours from the following courses:**

|  |  |  |  |
| --- | --- | --- | --- |
| Course No. | Course Name | Pre-requisite | Credit Hours |
| COMP121 | INTRODUCTION TO COMPUTER | . | 2 |
| PHED121 | Physical Conditioning | . | 2 |
| PHED123 | Physical Trainings | . | 2 |
| PHED131 | Principles and Philosophy of Physical Education | . | 3 |
| PHED334 | Sport Training | . | 3 |
| PHED425 | Administration and Organization in Physical Education | . | 2 |

**B. 9 Hours from the following courses:**

|  |  |  |  |
| --- | --- | --- | --- |
| Course No. | Course Name | Pre-requisite | Credit Hours |
| HIST135 | HISTORY OF JERUSALEM | . | 3 credits hour |
| POLS333 | PALESTINIAN QUESTION 1 | . |
| Soci131 | INTRODUCTION TO SOCIOLOGY | . | 3 credits hour |
| PSYC231 | INTRODUCTION TO PSYCHOLOGY | . |
| MDIA231 | INTRODUCTION TO MEDIA STUDIES | . | 3 credits hour |
| EDUC231 | INTRODUCTION TO EDUCATION | . |

**Department of Arabic Language and Literature**

The Department of Arabic Language and Literature offers an academic program leading to Bachelor degree, Arabic Language and Literature. The Department also offers a minor specialization in Arabic Language and Literature that can be combined with Major from other departments.

**1- Major in Arabic Language and Literature Requirements (63 CR. HRS)**

A. Department Requirements (51 CR. HRS):

|  |  |  |
| --- | --- | --- |
| **Course #** | **Course Title** | **Pre-requisite** |
| ARAB 232 | Introduction to Arabic Linguistics | ARAB136 |
| ARAB 233 | Arabic Grammar I | Arab 136 |
| ARAB 234 | Pre-Islamic Literature | Arab 136 |
| ARAB 235 | Early Islamic and Umayyad Literature | Arab 234 |
| ARAB 237 | Arabic Grammar II | Arab 233 |
| ARAB 2390 | Prosody and Rhyme | Arab 136 |
| ARAB 2391 | Rhetoric | Arab136 |
| ARAB 333 | Abbasid Literature | Arab 235 or dept. approval |
| ARAB 334 | Arabic Grammar III | Arab 237 |
| ARAB 336 | Arabic Philology | Arab 232 |
| ARAB 338 | Arabic Literary Criticism | Arab 234 |
| ARAB 339 | Methodology of Modern Literary Criticism | Arab 338 or dept. approval |
| ARAB 431 | Linguistic Applications | Arab 334 (pre or with) |
| ARAB 432 | Modern Arabic Literature | Seniors |
| ARAB 436 | Trends in Palestinian Literature | Seniors |
| ARAB 437 | General Linguistics | Seniors |
| ARAB 438 | Seminar in Arabic Language and Literature | Seniors |

B- Department Elective Courses (12 CR. HRS) out of the following courses:

|  |  |  |
| --- | --- | --- |
| **Course #** | **Course Title** | **Pre- requisite** |
| Arab 331 | Qur’an Studies | Arab 136 |
| Arab 332 | Habit (Islamic Tradition) Literature and Scholarship | Arab 136 |
| Arab 230 | Palestinian Folk Literature | Arab 136 |
| Arab 236 | Arabic Semantics and Lexicography | Arab 136 |
| Arab 335 | Literature in the Ayyubi and Mamluk Periods | Arab 136 |
| Arab 337 | Andalusian Literature | Arab 136 |
| Arab 430 | Creative Writing | Seniors & Dept. Approval |
| Arab 4301 | Children Literature | Arab 136 |
| Arab 433 | Contemporary Arabic Poetry | Seniors |
| Arab 434 | Arabic Play | Seniors |
| Arab 435 | Arabic Fiction | Seniors |
| Arab 439 | Special Topic in Arabic Language and Literature | Seniors |

**2- Minor in Arabic Language and Literature Requirements (21 CR. HRS.)**

A. Department Requirements (12 CR. HRS.):

|  |  |  |
| --- | --- | --- |
| **Course #** | **Course Title** | **Pre-requisite** |
| Arab 231 | Introduction to Arabic Literature | Arab 136 |
| Arab 232 | Introduction to Arabic Linguistics | Arab 136 |
| Arab 233 | Arabic Grammar I | Arab 136 |
| Arab 237 | Arabic Grammar II | Arab 233 |

B. Department Elective Courses (9 CR. HRS.) of the following:

|  |  |  |  |
| --- | --- | --- | --- |
| **CR. HRS.** | **Course #** | **Course Title** | **Pre-requisite** |
| 3 CR. HRS. of | Arab 234 | Pre-Islamic Literature | Arab 136 |
| Arab 333 | Abbasid Literature | Arab 235 or Dept. Approval |
| 3 CR. HRS. of | Arab 432 | Arabic Modern Literature | Seniors |
| Arab 436 | Trends in Palestinian Literature | Seniors |
| **3 CR. HRS. from Dept. Courses not including ARAB 238** | | | |

**Course Description**

**ARAB101 | ARABIC LANGUAGE FOR NON-NATIVE SPEAKERS**

Introduction to basic Arabic language skills, development of the basic skills of listening and reading comprehension, speaking, and writing, training in listening to dialogues, recorded material and discussions conducted in formal standard Arabic, reading and understanding various classical and modern texts, oral and written reporting on reading texts, grammatical rules such as definite and indefinite nouns, masculine and feminine forms, distinction between nouns and verbs, conjugation of verbs with pronouns, relative pronouns, demonstrative pronouns, singular, dual and plural forms.

**ARAB111 | CALLIGRAPHY**

History of Arabic Calligraphy, origins of Arabic alphabets, old forms of Arabic calligraphy, punctuation, development of calligraphy, prominent calligraphers and their styles, application of calligraphy and its relevance to the Holy Qur’an and the Arab-Islamic culture, traditional tools of calligraphy, practical exercises on two forms of calligraphy: An-Naskh and Ar-ruqâa.

**ARAB135 | ARABIC LANGUAGE SKILLS 1**

Development of students' proficiency in basic Arabic communication skills, recognition and production of correct phrases, sentences and paragraphs, producing structures free from grammatical and spelling errors, dictionary skills, practice in using general language and subject dictionaries, training on using classical and modern dictionaries, using the two different systems of organizing entries, the alphabetical and the first-letter-final-letter rhyme-based system, use of subject-specific dictionaries.

**ARAB136 | ARABIC LANGUAGE SKILLS 2**

Fundamentals of an essay, a summary, a report, and a term paper, specific genres relevant to students' work (letters, job applications, speeches, essays and reports), some basic research skills such as using index cards for note-taking from primary and secondary sources, academic journals and manuscripts, preparing table of contents, producing first draft, revising and writing the final draft, writing introductions and conclusions, documenting, etc. discussion of model essays and reports in terms of paragraph structure, coherence, cohesion, correct punctuation, spelling, and grammar (syntax and morphology). Prerequisite: ARAB135

**ARAB230 | PALESTINIAN FOLK LITERATURE**

Introduction of the concepts of culture, folklore, and folk Literature, the interrelation between them, the connection between the Palestinian vernacular, local dialect (colloquial or slang) and formal standard Arabic, various branches of folk literature, methods used for data gathering, classification and research methods followed in that field, analysis and discussion of prose and verse models of folk literature. Prerequisite: ARAB136

**ARAB2301 | INTRODUCTION TO PALESTINIAN LITERATURE**

Palestinian literature from the beginning of the twentieth century to the present time. How different forms of literature are interrelated, and how do they overlap with politics, social life and culture. The readings will reflect the literary quality of each stage. A writer’s biography and a model of his/her literary work will be explored gradually.

**ARAB231 | INTRODUCTION TO ARABIC LITERATURE**

A survey of the long history and movement of Arabic Literature (poetry and prose) from Pre-Islamic times to present, major schools of thought, artistic and stylistic features, the main issues raised by the contemporary literary critics of the time, study and analysis of major themes and artistic characteristics of representative prose and poetry models. Prerequisite: ARAB136

**ARAB232 | INTRODUCTION TO ARABIC LINGUISTICS**

Arabic linguistics and its main trends, the phonemes of Arabic, their points and manners of articulation, discussion of mutual phonetic influence, phonetic rules such as assimilation, dissimilation, veleolarization and transposition, certain aspects of Arabic morphology, comparison between the perspectives of classical and modern Arab linguists. Prerequisite: ARAB136

**ARAB233 | ARABIC GRAMMAR 1**

An introductory grammar course, parts of speech, declinable and indeclinable forms, major and minor diacritical marks, six noun forms, dual form, regular masculine plural, regular feminine, plural, declension of present tense, declension of the five verb forms, definite and indefinite nouns, pronouns, demonstrative pronouns, relative pronouns, interrogative pronouns, proper nouns, nouns defined by the definite article, subject and predicate, types of noun clauses Kana and Inna clauses, Prerequisite: ARAB136

**ARAB234 | PRE-ISLAMIC LITERATURE**

An introduction to pre-Islamic literature, the various ages of Arabic literature starting with the pre-Islamic period, description of the social, economic, and political conditions of the Arabs living at that time, drawing a comparison between the life of the Arabs living in the north and those living in the southern part of the Arabian Peninsula, study of pre-Islamic poetry in light of certain social phenomena such as low-class poets (Sa'aleek) and 'knights-poets' (Fursan), analysis of pre-Islamic master pieces such as 'the long poems' (Mu'alaqat), Mufaddalyat, Asma'yat, Dawaween (collections of pre-Islamic poems), study of pre-Islamic prose such as proverbs and orations used for certain occasions in those days. Prerequisite: ARAB136

**ARAB235 | EARLY ISLAMIC AND UMAYYAD LITERATURE**

Early Islamic prose and poetry through the Umayyad period, the significant role of poetry and oration in the emerging Islamic society, Islam impact on poetry as expressed by 'conquest poetry', poetry as a reflection of social life, cultural mixture and the spread of singing during the Umayyad period. Prerequisite: ARAB234

**ARAB236 | ARABIC SEMANTICS AND LEXICOGRAPHY**

The concept of semantics, its history and approaches to the study of meaning, semantic phenomena such as semantic units, polysemy, ambiguity, homonymy, synonymy, antonymy, textual and contextual meaning, use of Arabic dictionaries, famous approaches to and history of Arabic dictionary making and organization, problems of Arabic dictionaries and ways to improve them. Prerequisite: ARAB136

**ARAB237 | ARABIC GRAMMAR 2**

Transitive-intransitive verbs, subject-agent of active and passive verbs, types of objects, exception, Haal (adverb of manner or circumstantial phrase), Tamyeez (specification), prepositions, Idafa (genitive case). Prerequisite: ARAB 233

**ARAB238 | GRAMMAR OF MEDIA LANGUAGE**

Grammar for journalists for collecting and writing news stories for newspapers, magazines, radio and television, application of grammatical rules such as interrogation, negation and emphasis on various genre texts such as news stories, newspaper articles, interviews, news analyses, commercials, advertisementsâ¦etc., reading correctly, loud and clear, grammar-based spelling with an eye on editing and proofreading. Prerequisite: ARAB136

**ARAB2390 | PROSODY AND RHYME**

History of prosody, its divisions, prosodic writing, types of meters in classical and modern poetry, rhythm innovation, views of researchers in prosody, nature of free verse, history of rhyme, definition of rhyme, and its endings, rhyme innovation, its classifications, and types of rhyme in free verse. Prerequisite: ARAB136

**ARAB2391 | RHETORIC**

Rhetoric types: figures of speech, eloquence and semantics, its history and evolution, famous rhetoricians and their contributions, characteristic of the eloquent speech, the relationship of rhetoric to stylistics, criticism and literature, art of eloquence. Prerequisite: ARAB136

**ARAB331 | QUR'ANIC STUDIES**

Prominent Qur'anic studies such as revelation, collection, recording, scriptâ¦etc. investigation of Qur'anic style and the concept of Qur'anic miracle with emphasis on the major classical commentaries and interpretations of the Qur'an, influence of holy text on Arabic language and literature, reading, interpreting and commenting on some chapters of the Qur'an as an application of the systems used in the major commentaries. Prerequisite: ARAB136

**ARAB332 | HADITH (ISLAMIC TRADITION) LITERATURE AND SCHOLARSHIP**

Hadith (Islamic Tradition) Literature and Scholarship A definition of Hadith (sayings, actions and silent agreement of Prophet Mohammad), its status in Islamic jurisprudence/jurisdiction, methods of collection and recording, its categories, its narrators, methods of delivery, the verification efforts made by ancient scholars, Arab grammarians use of Hadith texts to prove their linguistic theories, the Hadith literature as an exploration of some aspects of the Prophet's eloquence and purity of language. Prerequisite: ARAB136

**ARAB333 | ABBASID LITERATURE**

Most important factors affecting the Abbasid literature, political, social and religious trends in poetry, samples of political, love, satirical and religious poetry as the works of Mutanabbi, Abul Ala' el Ma'arri, Bashar Ibn Bord, Abu Nuwas, Ibn el-Roomy, Abu el Atahyiah, Ibn el Faridh, the prose renaissance with its new trends in writing and scholarship using prototypical letters and other prose works. Prerequisite: ARAB 235 or department approval

**ARAB334 | ARABIC GRAMMAR 3**

Advanced grammatical concepts, nomen agentis, nomen patientis, hyperbole, exclamation, comparative-superlative form, praise and criticism, modifiers and qualifiers such as adjectives, emphatic words, warning words, numbers and declension of sentences. Prerequisite: ARAB237

**ARAB335 | LITERATURE IN THE AYYUBI AND MAMLUK PERIODS**

Typical themes and artistic features of poetry and prose in this period, contributions of the Crusades to the emergence of new themes and artistic traits in literature, study of the works of major poets (e.g. Ibn Sa'ati, Ibn Sana' el-Mulk, Ibn Arabi, Ibn el-Faridh, Boseiri), and prominent writers (e.g. Al-Qadi el-Fadhel, Al-Imad el-Asfahani, Dhiya' Eddin Ibn el Atheer, Nuwayri, Qalqashandi). Prerequisite: ARAB136

**ARAB336 | ARABIC PHILOLOGY**

Major issues of Arabic language, views of ancient and modern philologists, analysis of some philology books to detect such views, tracing the origins and development of Arabic, its branches and varieties by looking at the family tree of Semitic languages, considering the history of Arabic in the north and south of the Arabian Peninsula, discussion of modern standard Arabic together with its ancient and modern dialects, declension, analogy,, blending, derivation, foreign words and phrases, translation, history and development of Arabic script and calligraphy , other language issues that need to be solved. Prerequisite: ARAB232

**ARAB337 | ANDALUSIAN LITERATURE**

Political, social and cultural life in Andalusia, the themes and artistic modes common to the literature of that age, identification of certain types of Andalusian prose and poetic motifs (e.g. nature poetry, eulogies, Muashahat and Zajal). Prerequisite: ARAB136

**ARAB338 | ARABIC LITERARY CRITICISM**

Literary criticism in the pre-Islamic Arab context, underlying philosophy of that criticism, modes of critical theory in the early Islamic and Umayyad periods, major trends of and approaches to literary criticism in Abbasid age, major critics and works of criticism and other relevant issues in this domain. Prerequisite: ARAB234

**ARAB339 | METHODOLOGY OF MODERN LITERARY CRITICISM**

European critical theory and its development, exposition of modern Arabic critical trends such as revivalism, deconstructionist theory, social approach, psychological approach, aesthetic approach and integral approach to literary criticism, models of critical approaches applied to certain literary works. Prerequisite: ARAB338 or department approval

**ARAB430 | CREATIVE WRITING**

Exercise and development of students' creative literary talents by producing poems, novels, tales, and plays, presentations and discussions of local Palestinian models by novice writers, and students' creations, feedback in light of critical theory relevant to each genre. Prerequisite: Fourth year standing or department approval

**ARAB4301 | CHILDREN LITERATURE**

Children literature, its concept, difference between child literature and literature written about children, similarity and difference with other types of literature, folklore, history and roots, its evolution in the orient and occident, its main themes in poetry, short story, novel and plays, Arab and universal selections, child literature in Palestine: aesthetic, intellectional and educational values. Prerequisite: ARAB136

**ARAB431 | LINGUISTIC APPLICATIONS**

An application of various language rules in phonology, morphology, syntax and semantics to point out the perspectives of different linguistic schools of thought on the items to be practiced, presentation of the views of renovative grammarians. Prerequisite: ARAB334 or concurrent

**ARAB432 | MODERN ARABIC LITERATURE**

The factors contributing to the advancement of modern Arabic literature, study of the most significant developments, themes, trends, literary types and figures. Prerequisite: Fourth year standing

**ARAB433 | CONTEMPORARY ARABIC POETRY**

Modern trends in modern and contemporary Arabic poetry and innovations attempts in this respect as represented by the two poetic schools, Al-Diwwan, and Apollo, analysis of content, form and representative writers and prototypical models of free verse. Prerequisite: Fourth year standing

**ARAB434 | ARABIC DRAMA**

Introductory course in dramatic art, its history and development, pioneering works in this domain, the artistic and theoretical aspects of drama, study of examples from modern Arabic plays. Prerequisite: Fourth year standing.

**ARAB435 | ARABIC FICTION**

Exploration of Arabic narrative art by analyzing aspects of the novel and short story, western influence on those genres, analysis of some modern fiction. Prerequisite: Fourth year standing.

**ARAB436 | TRENDS IN PALESTINIAN LITERATURE**

Introductory course to Palestinian literature within its social, economic, and political context, study major Palestinian poets and writers in various fields of poetry and prose, the Palestinian condition influence on literary trends. Prerequisite: Fourth year standing.

**ARAB437 | GENERAL LINGUISTICS**

A study of linguistics in the past and at present, a distinction between linguistics and philology, the contributions of the Arabs to the field of linguistics, classification of languages, discussion of different linguistic sciences such as phonology, morphology, syntax, presentations for different subfields of linguistics like descriptive linguistics, historical linguistics, comparative linguistics, applied linguistics, survey of western models of grammar, applications of modern approaches to the study of language to Arabic. Prerequisite: Fourth year standing

**ARAB438 | SEMINAR IN ARABIC LANGUAGE AND LITERATURE**

In-depth study of major topics and issues in language and literature. Prerequisite: Fourth year standing

**ARAB439 | Special Topic**

## Department of English Language and Literature

**Vision:**

The Department of English Language and Literature will continue its commitment to intellectual excellence and creativity enhancing students’ skills through the critical and analytical study of English Literature, Language, and Linguistics. The department will provide appropriate pedagogies and learning environments that will lead to students success in academia and the community, at large.

**Mission:**

The Department of English Language and Literature at Birzeit University seeks to promote the University's mission through the disciplined study of the English language, linguistics and literature, and through the development of the attributes associated with a liberal arts education: skill with language, intellectual curiosity, critical judgment, effective and persuasive writing, creative imagination and independent thought, and technological skills.

By offering an array of courses in writing, linguistics, literature and translation, the Department of English fosters an invigorating and diverse and technologically advanced learning community, judiciously combining breadth with depth of knowledge and tradition with contemporaneity. It seeks to attract the best possible students from diverse Palestinian backgrounds, and at the same time recruit, support and retain the best faculty to achieve its goals at the highest professional and intellectual levels.

**Bachelor Program in English Language and Literature**

The Department of English Language and Literature offers two academic programs leading to Bachelor degree; the first is Major English Language and Literature and the second is Major English Language and Literature/Minor Translation. The Department also offers Minor specialization in English Language and Literature that can be combined with Major from another department.

**Major English Language and Literature Admission Requirements**

1. An average of not less than 75% in Engl233, ENGL236 and ENGL238

2. A score of not less than 70% in the courses specified above

3. Department intake capacity - priority is given to students with higher scores in the courses above

**Condition for Continuing in Major**

Student in Major must maintain a cumulative Major average of not less than 70%.

**Graduation Requirements:**

The student must successfully complete university requirements (21 credit hours), Arts Faculty requirements (23 credit hours), major requirements (60 credit hours) and Free Electives (16 Credit Hours)

**Program Requirements:**

Student must successfully complete a minimum of 60 credit hours of courses in English Language and Literature distributed as follows:

1. Core courses (39 credit hours): ENGL233 , ENGL234 , ENGL235 , ENGL237 ENGL238 , ENGL330 , ENGL331 , ENGL333 , ENGL334 , ENGL336 , ENGL337 , ENGL339, and ENGL435 .
2. 9 credit hours distributed as follows: ENGL3321 or ENGL3322 , ENGL4301 or ENGL4302 , ENGL4381 or ENGL4382
3. Elective courses (12 credit hours) from courses in English Language and Literature

**Major English Language and Literature/ Minor Translation**

**Admission Requirements:**

1. An average of not less than 75% in ENGL233, ENGL236, and ENGL238.

2. A score of not less than 70% in ENGL233, ENGL236, ENGL238 and ENGC233.

3. Department intake capacity - priority is given to students with higher scores in the courses above.

4. Passing a translation test - given by the Translation and Languages Department.

**Condition for Continuing in Major**

Student in Major must maintain a cumulative Major average of not less than 70%.

**Program Requirements**

1. Student must successfully complete a minimum of 45 credit hours of courses in English Language and Literature distributed as follows:

a. Core courses (30 credit hours):

ENGL234, ENGL235, ENGL237, ENGL238, ENGL330, ENGL331, ENGL333, ENGL336, ENGL339, and ENGL435.

b. Elective courses (12 credit hours) distributed as follows:

ENGL3321 or ENGL3322, ENGL337 or ENGL432, ENGL431 or (ENGL4301 or ENGL4302), and ENGL4381 or ENGL4382

c. 3 credit hours in any advanced course in English Language and Literature.

1. Student must successfully complete a minimum of 24 credit hours distributed as follows:

**Core courses (18 credit hours):**

ENGC233, ENGL233, ARAB2361, TRAN330, TRAN331 , TRAN433

Elective courses (6 credit hours) from courses in Translation:

TRAN334, TRAN335, TRAN431, TRAN432, TRAN435, TRAN436

**Minor in English Language and Literature**

**Program Requirements:**

Student must successfully complete a minimum of 21 credit hours of courses in English Language and Literature distributed as follows with a cumulative average not less than 70%:

1. Core courses ( 15 credit hours):

ENGL233, ENGL234, ENGL235, ENGL238, and ENGL339

2. Elective courses (6 credit hours) from courses in English Language and Literature.

**Courses offered by the Department:**

**Core Courses:**

|  |  |
| --- | --- |
| **Course** | **Title** |
| English 233 | Writing I |
| English 234 | Writing II |
| English 235 | English Grammar |
| English 236 | Introduction to Linguistics |
| English 237 | Functional Phonetics |
| English 238 | Introduction to Literature |
| English 330 | English Literature I |
| English 331 | English Literature II |
| English 3321 | Structure and Development of the Novel |
| English 3322 | Modern Fiction |
| English 333 | Criticism: Theory and Practice |
| English 334 | Phonology and Morphology |
| English 336 | Syntax |
| English 337  English 339 | Semantics  Interactive English |
| English 4301 | The Development of Drama |
| English 4302 | Modern Drama |
| English 435 | Modern Poetry |
| English 4381 | Seminar in Linguistics |
| English 4382 | Seminar in Literature |

**Electives**

|  |  |
| --- | --- |
| **Course** | **Title** |
| English 3391 | Psycholinguistics |
| English 3392 | Sociolinguistics |
| English 432 | Contrastive Linguistics |
| English 434 | Advanced English Grammar |
| English 436 | Discourse Analysis |
| English 4391 | Special Topic in Linguistics |
| English 335 | American Literature |
| English 338 | Mythology and Literature |
| English 431 | Shakespeare |
| English 433 | Issues in Critical Theory |
| English 437 | World Literature in English |
| English 4392 | Special Topic in Literature |

**Course Description**

**English 233: Writing I**

**(Prerequisite: Communications 231)**

The course emphasizes writing skills needed in the study of literature and language, with attention to basic grammatical structures and rhetorical modes. Close reading and critical analysis are used to generate ideas and logical organization.

**English 234: Writing II**

**(Prerequisite: English 233)**

This is an advanced course in essay writing, reading and research skills. At least half the course is devoted to studying the sources available for research today, practical applications in academic papers, and research strategies in different situations.

**English 235: English Grammar**

**(Prerequisite: Communications 231)**

This course is a formal analysis of the basic grammatical structures of English and their appropriate use for communication in real-life situations. It is designed to promote students' proficiency to the level of communication and accuracy. It puts a great deal of emphasis on exercises and applicative aspects.

**English 236: Introduction to Linguistics**

**(Prerequisite: Communications 231)**

This course is a general introduction to the study of language which surveys current language issues and emphasizes English linguistics. It provides students with basic knowledge concerning the relationship between language and society, language and the brain, language and the dialects, as well as knowledge of the principles of English phonology, morphology, syntax and semantics.

**English 237: Functional Phonetics**

**(Prerequisite: English 236)**

The course emphasizes a practical approach to developing fluency and accuracy in spoken English. It provides training in phonetics and covers air stream mechanisms, places and manners of articulation, the International Phonetic Alphabet (IPA) system of transcription.

**English 238: Introduction to Literature**

**(Prerequisite: Communications 231)**

This course consists of readings and practical literary analysis of poetry, short story, and drama. It includes an introduction to literary concepts and evaluation of the three genres.

**English 330: English Literature I**

**(Prerequisite: English 238)**

This is a historical and critical overview of the development of English literature from Beowulf to the eighteenth century with emphasis on major writers and movements.

**English 331: English Literature II**

**(Prerequisite: English 330)**

This course continues the historical and critical overview of the development of English literature from the eighteenth century to the present with emphasis on major authors and movements

**English 3321: The Structure and Development of the Novel**

**(Prerequisite: English 238)**

This course is an intensive discussion of this literary genre including aspects such as structure, narrative technique, characterization, and thematic development in selected works

**English 3322: Modern Fiction**

**(Prerequisite: English 238)**

As a study of the evolution of fiction in the post-1945 period, the course examines contemporary short stories and novels in English through their relationship to literary and intellectual traditions, principal themes and technical innovations

**English 333:****Criticism: Theory and Practice**

**(Prerequisite: English 330)**

This course develops practice in literary analysis. In addition to knowledge of literary concepts, the course uses major critical theories to enhance understanding of literary texts. (Prerequisite: English 238).

**English 334: Phonology and Morphology**

**(Prerequisite: English 237)**

This course surveys phonological principles and practices with special emphasis on the structure of words in the lexicon of English. It further explores the interaction between morphological and phonological constructs. (Prerequisite: English 236).

**English 335: American Literature**

**(Prerequisite: English 238)**

The course concentrates on the emergence of a distinctive American literary tradition in the nineteenth and twentieth centuries, with some attention to the colonial period in North America. Specific themes are traced in major texts with particular relevance to our region.

**English 336: Syntax**

**(Prerequisite English 235 and English 236)**

This is an introduction to English syntax with special emphasis on clause structure and argumentation for different types of phrasal internal structures. Complements, adjuncts, attributes, and other types of premodifiers and postmodifiers are also examined.

**English 337: Semantics**

**(Prerequisites: English 236)**

This is an introduction to methods of semantic analysis and their applications. Topics include word meaning and meaning postulates, lexical structure and relations, metaphors and idioms, sentences and utterances, semantic roles and conversational principles.

**English 338: Mythology and Literature**

**(Prerequisite: English 238)**

Through a study of selected world mythologies, the course traces recurrent patterns and specific references or applications in literary works. It highlights developments in the uses of the classical and biblical traditions in western literature, and it examines the relationship of "myth" to "reality." (Prerequisite: English 238).

**English 339: Interactive English**

**(Prerequisite: 236, 238)**

This course is designed to develop English majors â oral and listening skills in English *with the aim of enhancing students abilities to effectively conceptualize, organize, and* present ideas and arguments. A variety of activities, including oral presentations, interactive exercises, and facilitation skills are used as training techniques with emphasis placed on intellectual engagement, not exclusive to academia. The course is adapted to students needs and interests.

**English 3391: Psycholinguistics**

**(Prerequisites: English 236)**

This course studies the relationship between Linguistics and Psychology, and focuses on the study of the human mind, the role of language in thought, language acquisition and bilingualism.

**English 3392:Sociolinguistics**

**(Prerequisites: English 236)**

This course places language in it social context. It introduces the linguistic variations in society according to class, power, geographical area and gender, as well as the importance of language in the socialization process of a society individuals. These areas will be studied in terms of how speech sounds, morphemes and sentence structure are affected by/affect the social situation.

**English 4301: The Development of Drama**

**(Prerequisite: English 330)**

The course is a critical study of drama as a genre. Representative examples of the major periods and types of western drama from the Greeks to the present are studied.

**English 4302: Modern Drama**

**(Prerequisite: English 330)**

As an investigation of a period of theatrical experimentation and innovation organized thematically, the course studies conflicting traditions and varieties of recent dramatic works.

**English 431: Shakespeare**

**(Prerequisite: English 330)**

Selected comedies, tragedies and histories of Shakespeare are considered from a variety of critical, theatrical, historical and textual perspectives. The Elizabethan world view is introduced to render texts more accessible to the reader

**English 432: Contrastive Linguistics**

**(Prerequisite: English 336)**

The course focuses on linguistic analysis of similarities and differences between the linguistic systems of Arabic and English. Emphasis will be on problems of interference for Arabic speakers learning English. Application is an integral part of this course.

**English 434: Advanced English Grammar**

**(Prerequisite: English 336)**

The course examines advanced areas in English grammar such as time, tense, aspect, proposing and post-posing, construction types, and verb complementation. Emphasis is given to accuracy in description and to exercises.

**English 435: Modern Poetry**

**(Prerequisite: English 333)**

This course is designed to increase understanding of poetry. It covers such topics as versification, form, structure, and figurative language. Students are introduced to a range of poetic styles and techniques written in English, with emphasis on twentieth-century varieties. The aim is to produce a mastery of poetic terminology and an articulate response to it.

**English 436: Discourse Analysis**

**(Prerequisite: English 337)**

The course introduces students to the most recent theories in discourse analysis of spoken and written language with focus on the analysis of conversation and of written texts.

**English 437: World Literature in English**

**(Prerequisite: English 330)**

Through reading representative works from Africa, South Asia, the Caribbean and other non-British/non-American writers, this course surveys the range and significance of post colonial / neocolonial writing. Historical, political, cultural, language and other issues are discussed as they bear on an understanding of such writing.

**English 4381: Seminar in Linguistics**

**(Prerequisite: fourth year standing)**

This course is an in-depth study of a specific area of Language and / or Linguistics to be announced every semester. The course emphasizes research and therefore producing a research project is a requirement.

**English 4382: Seminar in Literature**

**(Prerequisite: fourth year standing)**

This course is an in-depth study of a specific area in Literature to be announced every semester. The course emphasizes research and therefore producing a research project is a requirement.

**English 4391: Special Topic in Linguistics**

**(Prerequisite: English 336)**

This course offers an in-depth study in special areas in language or linguistics. Topics are chosen in accordance with students' needs. The course could be taken more than once.

**English 4392:** **Special Topic in Literature**

**(Prerequisite: English 330)**

The course offers an in-depth study in a special area of literature. Topics are chosen in accordance with students' needs. The course could be taken more than once.

## Department of French Language

The French Department offers academic programs that leads to Bachelor degree in French Language as a single Major as well as a Minor specialization in French that can be combined with a Major from another department.

**Major French Language**

Admission Requirements

1. Direct Admission

2. Indirect Admission

A grade of no less than 70% in FREN 131 and FREN 142

2. Students with knowledge in French Language:

- Placement Exam equivalent to FREN 131 with a grade no less than 75%.

3. Department approval based on program intake capacity

Student Plan

Student must finish 120 credit hours distributed as follows :

|  |  |
| --- | --- |
| University Requirements | 21 credit hours |
| Faculty Requirements | 23 credit hours |
| Program Requirements | 67 credit hours |
| Free Electives courses | 9 credit hours |
| Total | 120 credit hours |

**Program Requirements**

Student must successfully complete a minimum of 67 credit hours of courses in French Language distributed as follows:

1. Core courses (56 credit hours):

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| FREN 123 | French Practice I | FREN 131 |
| FREN 222 | Spoken French Lab I | FREN 142 |
| FREN 223 | French Practice II | FREN 123 |
| FREN 224 | French Practice III | FREN 223 |
| FREN 225 | Spoken French Lab II | FREN 222 |
| FREN 241 | French Communications II | FREN 142 |
| FREN 242 | French Communications III | FREN 241 |
| FREN 321 | Introduction to World Literature in French | FREN 131 |
| FREN 322 | Spoken French Lab III | FREN 225 |
| FREN 331 | French through Current Issues 1 | FREN 242 |
| FREN 332 | French through Current Issues II | FREN 331 |
| FREN 333 | French Writing I | FREN 224 |
| FREN 334 | French Grammar I | FREN 242 or FREN 224 |
| FREN 336 | French Writing II | FREN 333 |
| FREN 337 | French Grammar II | FREN 336 |
| FREN 421 | Research Methodology | FREN 336 or FREN 332 |
| FREN 423 | Reading and Analysis of Literary Texts in French I | FREN 321 |
| FREN 424 | Introduction to French Linguistics | Fourth year standing or Department approval |
| FREN 425 | Reading and Analysis of Literary Texts in French II | FREN 423 |
| FREN 426 | French language and Cultures | Fourth year standing or Department approval |
| FREN 427 | Seminar in French Language | FREN 442 and FREN 421 |
| FREN 442 | Writing III | FREN 336 |

2. Electives courses (11 credit hours)

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| FREN 226 | Writing Workshop 2 | FREN 234 or FREN 241 |
| FREN 227 | Oral Communication Workshop 2 | FREN 234 or FREN 241 |
| FREN 234 | French Workshop I | FREN 131 |
| FREN 335 | French Workshop III | FREN 242 |
| FREN 428 | Sociolinguistics | FREN 424 |
| TIFR 331 | Introduction to Translation | FREN 224 or FREN 242 |
| TIFR 332 | Translation of Economic and Juridical texts | TIFR 331 |
| TIFR 333 | Translation of Scientific and Technical texts | TIFR 331 |
| TIFR 426 | On-Sight Translation | TIFR 331 |
| TIFR 434 | Translation of Social and Cultural texts | TIFR 331 |

**Minor French Language**

Admission Requirements

1. Students with no Knowledge in French Language:

A grade of no less than 70% in FREN 131 and FREN 142

2. Students with knowledge in French Language:

- Placement Exam equivalent to FREN 131 and to FREN 142

3. Department approval based on program intake capacity.

4. Interested individuals from the outside of Birzeit University must have an undergraduate degree from a recognized University.

Program Requirements

Student must successfully complete a minimum of 21 credit hours of courses in French Language distributed as follows :

1. Core courses (18 credit hours)

FREN 123, REN 222, FREN 223, FREN 224, FREN 225, FREN 241, FREN 242

2. Elective courses (3 credit hours) from the following courses list:

FREN 331, FREN 333, FREN 334

**French Language Courses Description (FREN):**

131 Introduction to French (*For Beginners Only*) 3 cr. hrs.

Beginner level of basic French for communicating in simple situations, teaching language skills, listening, speaking, reading and writing, socio-cultural aspects, informal and formal addressing, description of specific place, the feminine and the masculine, socio-cultural aspects, etc.

142 French Communications I 4 cr. hrs.

Beginner level (A1), wide variety of lexical items and basic grammatical structures necessary for communication in simple real life situations, language skills, listening, speaking, reading and writing, socio-cultural aspects such as daily life, life in a city, employment, spare-time activities, etc.

*Prerequisite: FREN 131 or 75% and above in Placement Test*

123 French Practice I 2 cr. hrs.

Beginner level (A1), exercises in vocabulary, grammar and writing, language skills, reading, comprehension and writing, functional language use such as forming questions, producing various types of simple texts, etc.

*Prerequisite: FREN131 or 75% and above in the Placement Test*

241 French Communications II 4 cr. hrs.

Low-intermediate level (level A2), new lexical items and grammatical structures, language skills, listening, speaking, reading and writing, socio-cultural aspects such as daily life in the four skills (oral and written comprehension, oral and written production).

*Prerequisite: FREN 142*

222 Spoken French Lab I 2 cr. hrs.

Low-intermediate level (A2), listening and speaking skills, mechanisms of speech production, pronunciation and spelling, phonetics, listening strategies, developing oral communication in simple real life situations.

*Prerequisite: FREN 131*

223 French Practice II 2 cr. hrs.

Low-intermediate level (A2), practice of French writing and basic grammatical structures: development of writing and reading skills.

*Prerequisite: FREN 123*

224 French Practice III

Intermediate level (A2-B1), practice of writing and reading skills through articles of the press, excerpts from literary texts such as novels or short stories, study of different types of texts (informative, descriptive, explicative, narrative etc.), reinforcement of grammatical rules, vocabulary and comprehension and writing production mechanisms.

*Prerequisite: FREN 223,*

225 Spoken French Lab II 2 cr. hrs.

Intermediate level (A2-B1), listening and speaking skills, mechanisms of speech production, pronunciation and spelling, stress rules, improving skills, idioms and vocabulary in oral comprehension and production by using audio and audiovisual resources.

*Prerequisite: FREN 222*

234 French workshop I 3 cr. hrs.

Beginner level (A1-A2), pronunciation, grammar, vocabulary, writing mechanics, speaking, action learning by creating a final project, bridging the gap between students with background in French and those without. Content based on objectives courses in parallel.

*Prerequisite: FREN 131* ***or 75%*** *and above in the Placement Test, concurrent with FREN241.*

226 Writing Workshop 2 2 cr. hrs.

Intermediate level (A2-B1), reading and writing skills based on a particular theme. Reinforcement of reading comprehension and written production. Content based on the objectives of parallel courses. A collective final project is required.

*Prerequisites: FREN 234 or FREN 241*

227 Oral Communication Workshop 2 2 cr. hrs.

Intermediate level (A2-B1), speaking and listening skills based on a particular theme. Reinforcement of communication skills (oral comprehension and production). Content based on the objectives of parallel courses. A collective final project is required.

*Prerequisites: FREN 241 or FREN 234*

242 French Communications III 4 cr. hrs.

Intermediate level (A2-B1), reinforcement of language abilities and skills acquired earlier, new lexical items and grammatical structures, comprehension of oral and written authentic documents, introducing the argumentative techniques.

*Prerequisite: FREN 241*

322 Spoken French Lab III 2 cr. hrs.

Intermediate level (B1), practice of listening and speaking skills, mechanisms of speech production and comprehension, pronunciation and spelling, stress rules. Reinforcement of speech skills through presentations and conversations in French. Work of the comprehension strategies through authentic audiovisual documents.

*Prerequisite: FREN 225*

334 French Grammar I 3 cr. hrs.

Intermediate level (B1), analysis of intermediate grammatical structures and their appropriate use in communication and through articles, excerpts from literary texts, reinforcement of the basic notions of French grammar, language mechanisms, conceptualization of grammar rules in speaking and writing through applicative aspects.

*Prerequisite: FREN 242 or FREN 224*

337 French Grammar II 3 cr. hrs.

High intermediate level (B1-B2), analysis of advanced grammatical structure through articles, excerpts from literary texts, using the most complex notions of French grammar in written and oral expressions, analysis of operating rules of syntax and macro-syntax in different contexts, construction types, development of students proficiency to the level of communication and accuracy.

*Prerequisite: FREN 334*

333 French Writing I 3 cr. hrs.

Intermediate level (B1), reinforcement of reading and writing skills through different texts, reinforcement of student’s ability of writing and reading different types of texts, introduction to academic skills such as writing a ''summary''.

*Prerequisite: FREN 224*

336 French Writing II 3 cr. hrs.

High intermediate level (B1-B2), reinforcement of reading and writing skills through different texts, reinforcement of the writing of a ''summary'', work on academic skills such as reading and writing of argumentative texts, improvement of sentence structures.

*Prerequisite: FREN 333*

331 French through Current Issues 1 3 cr. hrs.

Intermediate level (B1), advanced practice in speaking and writing French through current issues, use of authentic resources such as newspaper articles and contemporary French-speaking literature as the basis for developing advanced comprehension, discussion, and writing skills.

*Prerequisite: FREN 242*

332 French through Current Issues II 3 cr. hrs.

High intermediate level (B1-B2), practice of oral discussion and debate and written acquired skills, study and analysis of current authentic documents (written or oral) related to French-speaking countries such as excerpts from the press and audio-visual documentaries,

*Prerequisite: FREN 331*

321 Introduction to World Literature in French 2 cr. hrs.

High intermediate level (B1-B2), panoramic view of world literature in French (France, Canada, Algeria, Senegal, Morocco, Martinique etc.), initiative to the reading of literary texts and discovery of common themes of ''Francophone'' literature (historical, social, political), preparation to the study and analysis of literary texts.

*Prerequisite: FREN 131*

335 French Workshop III 3 cr. hrs.

Intermediate level (B1), consolidation of oral and writing skills based on a particular theme, reinforcement of the four communication skills by the action-oriented approach. A collective final project is required.

*Prerequisite: FREN 242*

4 cr. hrs.

442 Writing III

Advanced level (C1), advanced reading, writing and research skills, analysis of a text's structure, reinforcement of writing a summary, work on synthesis.

*Prerequisite: FREN336.*

421 Research Methodology 2 cr. hrs.

Advanced level (B2-C1), introduction to academic research skills and methods such as documentation, topic description, research questions, problem definition, ethical issues, research strategies in different situations.

*Prerequisite: FREN 336 or FREN 332*

423 Reading and Analysis of Literary Texts in French I 2 cr. hrs.

Advanced level (B2-C1), readings and practical literary analysis, three genres: poetry, novel and drama and their specific structures, literary concepts and evaluation of the three genres.

*Prerequisite: FREN 321*

425 Reading and Analysis of Literary Texts in French II 2 cr. hrs.

Advanced level (C1), readings and practice of literary analysis based on a specific topic, reading and writing of literary commentary.

*Prerequisite: FREN423*

427 Seminar in French Language 2 cr. hrs.

Advanced level (C1), in-depth study of specific topics in grammar, sociolinguistics, linguistics, literature or education, a space of exchange and learning through discussion, critical analysis based on a special theme to be announced every semester, individual student research project.

*Prerequisite: FREN 421, FREN 442*

426 French language and Cultures 2 cr. hrs.

Advanced level (C1), a study of the concept of culture as a set of social practices in the sphere of French-speaking world, comparison of languages in different contexts and communities through literary, social, political texts and non-text media (media, songs, documentaries, etc.), study of concepts such as colonization, decolonization, post-colonialism, acculturation, etc.

*Prerequisite: Fourth year standing or Department approval*

424 Introduction to French Linguistics 2 cr. hrs.

Advanced level (B2-C1), synchronic linguistics of contemporary French, linguistics definitions and concepts, knowledge of French phonology, morphology, semantics, syntax and pragmatics, discourse analysis of spoken and written language, basic knowledge concerning the relationship between language and society, language and the dialects.

*Prerequisite: Fourth year standing or Department approval*

428 Sociolinguistics 2 cr. hrs.

Advanced level (C1), language in its social context, introduction to the connection between a dominant imposed language and an individual through different phenomena : linguistic insecurity, linguistic representation, and interstitial culture. Understanding of intercultural sociolinguistics : code switching and cultural misunderstanding.

*Prerequisite: FREN424*

**French Translation Courses Description (TIFR):**

331 Introduction to Translation 3 cr. hrs.

Intermediate level (B1), introduction to translation through theory (comparative analysis) and practice (translation), systematic presentation of a theoretical framework, overview of basic translation strategies, discourse and stylistic features used in both Arabic and French, introduction to the translation practice, texts selected from various sources.

*Prerequisite: FREN 224 or FREN 242*

332 Translation of Economic and Juridical texts 3 cr. hrs.

High intermediate level (B1-B2), theoretical introduction and especially practical (special practice?) in the translation of economic and legal texts, training in terminology, Arabic-French and French-Arabic translation workshops, skills in analysis, interpretation and translation of economic and legal speech, emphasis on development of a professional and rigorous attitude to approach texts in fields in which students lack knowledge.

*Prerequisite: TIFR331*

333 Translation of Scientific and Technical texts 3 cr. hrs.

High intermediate level (B1-B2), theoretical introduction and especially practical in the translation of scientific and technical texts, training in terminology, Arabic-French and French-Arabic translation workshops, skills in analysis, interpretation and translation of scientific and technical speech, emphasis on development of a professional and a rigorous attitude to approach texts in fields in which students lack knowledge.

*Prerequisite: TIFR331*

434 Translation of Social and Cultural texts 3 cr. hrs.

Advanced level (C1), theoretical and practical translation of socio-cultural texts, training in terminology, Arabic-French and French-Arabic translation workshops, skills in analysis, interpretation and translation of socio-cultural speech, emphasis on development of a professional and a rigorous attitude to approach texts in fields in which students lack knowledge.

*Prerequisite: TIFR331*

426 Oral Translation 2 cr. hrs.

Advanced level (C1), introduction to oral translation : simultaneous and consecutive interpretation as well as on-sight translation through editorial, technical and economic texts. Optimizing the capacity to understand and translate spontaneously with little or no prior preparation.

*Prerequisite: TIFR331*

## Department of Languages and Translation

The Department of Languages and Translation offers a Bachelor’s degree in German Language, minor in translation (English-Arabic and vice versa), English communications courses (University requirement courses), in addition to Communication courses in Italian, Spanish, Hebrew and Turkish.

1. **BA Program in German Language**

The Department of Languages and Translation offers a BA in German Language. The program requirements are distributed as follows:

|  |  |  |
| --- | --- | --- |
| **Number** | **Type of course** | **Credit hours** |
| 1. | University requirements | 21 |
| 2. | Faculty of Arts requirements | 23 |
| 3. | Free electives | 16 |
| 4. | Major compulsory requirements | 48 |
| 5. | Major elective requirements | 12 |
| **Total** |  | **120** |

**1. University Requirements (21 credit hours)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course number** | **Course title** | **Credit hours** | **Prerequisites** |
| ARAB135 | Arabic Language Skills 1 | 3 | --- |
| ARAB136 | Arabic Language Skills 2 | 3 | ARAB135 |
| PHED120 | Physical education | 2 | --- |
| ENGC141 | English Communications - B | 4 | ENG102 or placement test |
| ENGC231 | English Communications - A | 3 | ENG141 or placement test |
| CULS331 | Modern and Contemporary European Civilization | 3 | second study year |
| CULS332 | Modern and Contemporary Arab Thought | 3 | second study year |

**2. Faculty Requirements (23 credit hours)**

23 credit hours to be chosen from the following groups of courses:

|  |  |  |  |
| --- | --- | --- | --- |
| **Course number** | **Course title** | **Credit hours** | **Prerequisites** |
| COMP121 | Introduction to Computer | 2 | --- |
| GENS131 | Life Science | 3 | --- |
| GENS132 | Physical Science | --- |
| HIST133 | Arab Islamic Civilization | 3 | --- |
| SOCI233 | Arab Society | --- |
| HIST135 | History of Jerusalem | 3 | --- |
| GEOG338 | Geography of Palestine | --- |
| POLS333 | Palestinian Questions 1 | --- |
| ARAB2301 | Introduction to Palestinian Literature | --- |
| ARAB231 | Introduction to Arabic Literature | 9 | ARAB136 |
| ENGL236 | Introduction to Linguistics | ENGL231 |
| SOCI131 | Introduction to Sociology | --- |
| HIST231 | Introduction to the Study of History | --- |
| GEOG230 | Introduction to Human Geography | --- |
| FREN131 | Introduction to French Language | --- |
| GERM130 [[10]](#footnote-10) | Introduction to German Language | --- |
| PSYC231 | Introduction to Psychology |  |
| MDIA231 | Introduction to Media Studies | 3 | --- |
| PHIL231 | Introduction to Philosophy | --- |
| POLS231 | Introduction to Political Science | --- |
| WOMS231 | Introduction to Women’s Studies | --- |
| ARCH131 | Introduction to Archaeology of Palestine | --- |
| EDUC231 | Introduction to Education | --- |

**3. Free Electives (16)**

To be chosen from subjects of all departments.

**4. Major Requirements (60 credit hours)**

**a) Major Compulsory Requirements (48 credit hours)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course number** | **Course title** | **Credit hours** | **Prerequisites** |
| GERM131\* | German for Beginners I b1 (A1.2) | 3 | --- |
| **Or** GERM1310 | Special Course for Advanced Students I2 | 3 | DSD I or II  or certificates A2-C23 |
| GERM132\* | German for Beginners II a (A2.1) | 3 | GERM131  (or A1 certificate) |
| GERM133\* | German for Beginners II b1 (A2.2) | 3 |
| **Or** GERM1330 | Special Course for Advanced Students II2a | 3 | DSD I or II or certificates A2-C2 |
| GERM230\* | Intermediate German I a (B1.1) | 3 | GERM133 (or A2 certificate)4 |
| GERM231\* | Intermediate German I b1 (B1.2) | 3 |
| GERM232 | Introduction to German Country Studies | 3 | GERM133 (or A2 certificate) |
| GERM233\* | Intermediate German II (B2.1) | 3 | GERM231 (or DSD I or B1 certificate)5 |
| GERM234 | Introduction to German Literature | 3 | GERM 231 (or DSD I or B1 certificate) |
| GERM330\* | Intermediate German III (B2.2) | 3 | GERM2325 |
| GERM331\* | Advanced German I (C1.1) | 3 | GERM330 (or DSD II or B2 certificate)6 |
| GERM332 | German Language in the Media | 3 | GERM231 (or DSD I or B1 certificate) |
| GERM333 | Methodology and Didactics of German as a Foreign Language | 3 | GERM330 (or DSD II or B2 certificate) |
| GERM430\* | Advanced German II (C1.2) | 3 | GERM3316 |
| GERM431 | Contemporary German Literature | 3 | GERM234 |
| GERM432 | Advanced German Writing | 3 | GERM331 |
| GERM438 | Graduation Project | 3 | Fourth study year |

**b) Major Elective Requirements****(12 credit hours)**

The students choose four courses (12 credit hours) out of the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| **Course number** | **Course title** | **Credit hours** | **Prerequisites** |
| GERM334 | Special Topic in German Language, Linguistics or Phonetics | 3 | GERM233 |
| GERM335 | German-Arabic Translation I | 3 | GERM233 |
| GERM336 | Special Topic in German Country Studies | 3 | GERM232 |
| GERM337 | Special Topic in German Literature | 3 | GERM 234 |
| GERM433 | Current Issues in German Language Media | 3 | GERM332 |
| GERM434 | Special Topic in DaF Didactics and Methodology | 3 | GERM 333 |
| GERM435 | German for Professional Purposes | 3 | GERM330 |
| GERM436 | German-Arabic Translation II | 3 | GERM335 |
| GERM4371 | Methods of Teaching German as a Foreign Language I | 3 | GERM331, GERM333 |
| GERM4472 | Methods of Teaching German as a Foreign Language II | 4 | GERM4371 |

**V. Description of the Courses**

**GERM130 German for Beginners I a**

Introduction in a communicative way to the very basic grammatical structures of German; paying attention to all four language skills: reading and listening comprehension, and writing and oral skills. Topics include personal details, work, hobbies, and interests; situations at the supermarket, in the restaurant, in the university, in public offices.

**Prerequisite**: (3credit hours, 5 contact hours)

**GERM131 German for Beginners I b**

Exercises become progressively more complex and generally train specific abilities like listening comprehension, speaking, reading comprehension, or writing. Topics include study, personal environment, hopes, plans and aims.

**Prerequisite**: (3 credit hours, 5 contact hours)

**GERM1310 Special Course for Advanced Students I**

The course is offered to students of the first study year with DSD I or II or with an A2-C2 certificate or an equal result in the GPT who do not take part in the beginner courses. The aim is to attract students with advanced German skills to the study program by offering them interesting courses. The topics of the course should differ from the regular curriculum. Possible topics are: Modern German literature; German in the print media; Writing skills; Oral communication and conversation.

**Prerequisite**: DSD I or II certificates A2-C2. (3 credit hours, 3 contact hours)

**GERM132 German for Beginners II a**

Expanding reading, listening, writing and speaking skills, while revising and deepening more advanced aspects of German grammar. Topics include language and learning, family, travel, leisure time, media, careers and social contacts. Grammar topics include adjectives, the genitive form, causal and temporal relative clauses, and reflexive verb forms.

**Prerequisite**: GERM131 (3credit hours, 5 contact hours)

**GERM133 German for Beginners II b**

Further training in the four language skills (listening, reading, writing and speaking) and the knowledge of grammatical structures. Topics include urban life, peoples and nationalities, culture, the workplace, festivals and gift-giving, body language, and inventions. Grammar topics include sentence connectors, the past tense, prepositions and the passive form.

**Prerequisite**: GERM131 (3 credit hours, 5 contact hours)

**GERM1330 Special Course for Advanced Students II**

The course is offered to students of the first study year with DSD I or II or with an A2-C2 certificate or an equal result in the GPT who do not take part in the beginner courses. The aim is to attract students with advanced German skills to the study program by offering them interesting courses. The topics of the course should differ from the regular curriculum. Possible topics are: Modern German literature; German in the print media; Writing skills; Oral communication and conversation.

**Prerequisite**: DSD I or II or certificates A2-C2 (3 credit hours, 3 contact hours)

**GERM230 Intermediate German I a**

Continuing the training in the four language skills (listening, reading, writing and speaking) and broadening the knowledge of grammatical structures. Topics include daily life of people in the German speaking countries; men and women, partnership, gender stereotypes; school, university and profession; time and history. Development of grammatical structures linked to topics and language activities that meet the communication needs.

**Prerequisite**: GERM133 (3 credit hours, 5 contact hours)

**GERM231 Intermediate German I b**

Expanding reading, listening, writing and speaking skills, while revising and deepening more advanced grammatical aspects. Topics include: politics and history. other people and foreign countries, technology.

**Prerequisite**: GERM133 (3 credit hours, 5 contact hours)

**GERM232 Introduction to German Country Studies**

Facts about German geography, population, the federal states etc.; politics, culture, society, and daily life issues of Germany, Switzerland and Austria; providing a living context to facilitate the process of language acquisition; different concepts of Country and Cultural Studies such as the communicative, the comparative and the intercultural approach;.

**Prerequisite**: GERM133 (3 credit hours, 3 contact hours)

**GERM233 Intermediate German II**

Enhancing the previously acquired language skills: listening, reading, writing and speaking; providing with a further variety of grammatical structures. Focusing on the ability to understand the main ideas of complex and abstract texts and to communicate and express oneself clearly and in detail on a wide range of subjects. Topics include travel, conflict and cooperation, work and science.

**Prerequisite**: GERM231 (3 credit hours, 5 contact hours)

**GERM234 Introduction to German Literature**

History of German literature from its beginnings in the Middle Ages and its classical perfection in the works of Goethe and Schiller until the modern period; introduction to history, music and culture of the respective periods to complete the picture. Reading selected texts (prose and poems); giving a short presentation of life and work of a German writer; handing in the presentation at the end of the semester in written form.

**Prerequisite**: GERM231 (3 credit hours, 3 contact hours)

**GERM330 Intermediate German III**

Deepening the acquired language skills (listening, reading, writing and speaking) and the knowledge of grammatical structures. Topics include the field of experience of the students and topics of social interests.

**Prerequisite**: GERM233 (3 credit hours, 5 contact hours)

**GERM331 Advanced German I**

Deepening of the competence in speaking and writing and expanding and refining the vocabulary usage of the students. Developing effective reading and listening strategies and deepening the knowledge of grammar structures. Topics include society, economy, technology and science.

**Prerequisite**: GERM330 (3 credit hours, 5 contact hours)

**GERM332 German Language in the Media**

Analysis of German print, audiovisual and digital media (newspapers, magazines, forums, videos, TV channels); confrontation with the language used in these media (dialects and idiomatic expressions); introduction to the use of media in language teaching and learning in the field of German as a Foreign Language. Reading and discussing articles from newspapers and magazines; watching short TV programs and news broadcasts.

**Prerequisite**: GERM231 (3 credit hours, 3 contact hours)

**GERM333 Methodology and Didactics of German as a Foreign Language**

Presentation and discussion of different forms of language acquisition as translation-method, learner-orientation, communicative approach, grammatical exercises; concept of intercultural pedagogic; analysis of German language study books.

**Prerequisite**: GERM330 (3 credit hours, 3 contact hours)

**GERM334 Special Topic in German Language and Linguistics**

Possible topics: Introduction to Theories and Trends in German Linguistics; Intensive Survey of German Grammar and Teaching Grammar in the Context of German as a Foreign Language; Introduction to Phonetics; Language Learning and the Computer etc.

**Prerequisite**: GERM233 (3 credit hours, 3 contact hours)

**GERM335 German-Arabic Translation I**

Introduction to the theory and practice of translation. Discussion of techniques and stylistic approaches. Emphasis on German-Arabic translation using a variety of texts, including technical texts, business communication, and texts on current topics.

**Prerequisite**: GERM233 (3 credit hours, 3 contact hours)

**GERM336 Special Topic in German Country Studies**

Possible topics: History of Germany, Switzerland and Austria; Contemporary Culture in the German-Speaking Countries (institutions and major personalities, customs, traditions, changing mentalities, and lifestyles); Intercultural German Studies; German Cinema and Music.

**Prerequisite**: GERM232 (3 credit hours, 3 contact hours)

**GERM337 Special Topic in German Literature**

Possible topics: Contemporary literature after 1945; Austrian or Swiss Literature; Literature of the Democratic Republic of Germany; Women Writers; Migration Literature; Short Stories; Comparative Literature; Methods of Literary Science; German Myths and Fairy Tales; German Children’s and Youth Literature.

**Prerequisite**: GERM234 (3 credit hours, 3 contact hours)

**GERM430 Advanced German II**

Focus on systematically enhancing all four skills and on students' ability to become efficient independent language learners. Topics include the world of experience of the students; work, study, business and language. The expansion of grammatical structures is linked to topics and language activities that meet the communication needs.

**Prerequisite**: GERM331 (3 credit hours, 5 contact hours)

**GERM431 Contemporary German Literature**

Overview of the development of German Literature from the modern period (end of the 19th century) until the present day. Emphasis on major authors and movements. Focus on the literature after 1945 in the divided and re-united Germany. Lecture and analysis of representative works of German writing authors.

**Prerequisite**: GERM234 (3 credit hours, 3 contact hours)

**GERM432 Advanced German Writing**

Directed and independent research on agreed areas relating to culture, language or current affairs. Practice and guidance in essay writing based on a series of authentic texts. Focus on idiomatic expression and style needed for academic writing.

**Prerequisite**: GERM331 (3 credit hours, 3 contact hours)

**GERM433 Current Issues in German Language Media**

Exploring the complexity of contemporary German culture through the media: new media (such as the internet, podcasts, blogging) and older media (like newspapers, radio, and television). Topics ranging from politics, economic, environment to cultural and educational issues.

**Prerequisite**: GERM332 (3 credit hours, 3 contact hours)

**GERM434 Special Topic in DaF Methodology and Didactics**

Possible topics: Exercises and Tasks in DaF Courses; Examinations, Tests and Evaluation; Text Analysis and Text Production in DaF Teaching; Lesson Planning; DaF and Adult Education; DaF and Primary Education; Analysis of language teaching books; Primary and Second Language acquisition.

This course is designed especially for students who want to become German language teachers at schools or universities.

**Prerequisite**: GERM333 (3 credit hours, 3 contact hours)

**GERM435 German for Professional Purposes**

Possible topics: Business German; German Language in the Field of Politics, Science, or Medicine; German Language and Tourism.

**Prerequisite**: GERM330 (3 credit hours, 3 contact hours)

**GERM436 German-Arabic Translation II**

Intensive translation practice in many text categories: commercial and economic translations, scientific, technical, political, and legal texts. Applied work combined with study of theory and methodology of translation, comparative structural and stylistical analysis and evaluation of sample translations. Emphasis on Arabic- German translation. Use of computer-assisted translation management.

**Prerequisite**: GERM335 (3 credit hours, 3 contact hours)

**GERM4371 Methods of Teaching German as a Foreign Language I**

**Course Description**

Introduction to the methodology of teaching German as a Foreign Language; special emphasis at teaching methodology for schools. Theoretical basics of class and teaching observation.

**Prerequisite**: GERM331 (3 credit hours, 3 contact hours)

**GERM4472 Methods of Teaching German as a Foreign Language II**

Specialization in the methodology and didactics of teaching German as a Foreign Language at schools.

**Prerequisite**: GERM4371 (4 credit hours, 4 contact hours)

**GERM438 Graduation Project**

Thesis of about 25 pages to presented orally. Topics from the fields of German Literature, German Language, Teaching German as a Foreign Language, German in the Media or Cultural Studies etc.

**Prerequisite**: Fourth study year (3 credit hours, 3 contact hours)

1. **Minor Program in Translation (English/Arabic)**
2. **Compulsory Courses: 15 Credit Hours**

|  |  |  |
| --- | --- | --- |
| Course No. | Course Title | Prerequisite |
| ENGC 233 | English Through Current Issues | ENGC 231 |
| ENGL 233 | Writing I | ENGC 231 |
| TRAN 330 | Introduction to Translation | ENGC 233, ENGL 233 |
| TRAN 331 | Practice in General Translation | TRAN 330 |
| TRAN 433 | Interpreting | TRAN 331 |

1. **Elective Courses:-**

**9 Credit Hours from the following courses:-**

|  |  |  |
| --- | --- | --- |
| Course No. | Course Title | Prerequisite |
| TRAN 334 | Translation of Journalistic Texts | TRAN 330 |
| TRAN 335 | Translation of Economic and Business Texts | TRAN 330 |
| TRAN 431 | Translation of Technical and Scientific Text | TRAN 331 |
| TRAN 432 | Translation of Literary Text | TRAN 331 |
| TRAN 435 | Translation of legal Text | TRAN 331 |
| TRAN 436 | Translation of Diplomatic and Political Text | TRAN 331 |

**Description of the Courses**

**TRAN 330 – Introduction to Translation**

The theoretical component of the course encompasses a broad concept of translation including definition , types, and different views regarding its practice. Focus will shift to some problematic issues including translation equivalence and untranslatability and transliteration problems and possible solutions . Ample translating exercises are planned through out the practical component of the course. Some of these are applications of learned principles and techniques . Texts from varied sources will be used for this purpose . The translation process is a two-way street: English to Arabic and vice verse. (3 credits, 3 contact hours. Prerequisite: scoring 70% in ENGC 233 and ENG. 233).

**TRAN 331 – Practice in General Translation**

A workshop in Arabic – English and English – Arabic general translation, using principles and concepts from TRAN. 330. A non-specialized course covering literary, linguistic, administrative, economic, financial, legal, social, scientific, technical and other topics. (3 credits, 3 contact hours. Prerequisite: TRAN. 330 or concurrently with it).

**TRAN 334 – Translation of Journalistic Texts:**

The course will focus on translation and analysis of translations of various texts clipped from local and international journalistic materials , for example, papers and magazines . The selected texts will mainly be of a political , economic, social and advertising nature. (3 credits, 3contact hours. Prerequisite: TRAN. 331).

**TRAN 335 – Translation of Business and Economic Texts:**

A specialized course concentrating on translation of business and economic textual material. Training in terminology, syntactic and stylistic idiosyncrasies of such texts. English-Arabic and Arabic-English translation workshops. Texts include business correspondence, validity studies, economic and business proposals, statistical analyses, seminar working papers, contracts, agreements, tenders, and media, business, and economic reports and commentaries. (3 credits, 3 contact hours. Prerequisite: TRAN. 331).

**TRAN 431 – Translation of Scientific and Technical Texts:**

A specialized course concentrating on translation of scientific and technical texts. Training to analyze terminology, idiosyncrasies, style and grammar of such texts. English – Arabic and Arabic – English translation workshop. Texts include engineering, medicine, law, economics, business, politics, communication, and other areas of the natural and social sciences. ( 3 credits, 3 contact hours. Prerequisite: TRAN. 331)

**TRAN 432 – Translation of Literary Texts:**

A specialized course focusing on literary writing. Training in linguistics factors, terminology, idiosyncrasies of style and grammar of literary writing on prose, poetry, drama, etc. English-Arabic and Arabic-English translation of representative textual material. Special emphasis is placed on national literature. ( 3 credits, 3 contact hours. Prerequisite: TRAN. 331)

**TRAN 433 – Interpreting:**

Interpreting workshop with extensive training in consecutive and simultaneous interpreting, using verbatim materials in the fields of politics, economics, business, journalism, and other social sciences. Practice in public-speaking, conference and seminar interpreting . ( 3 credits, 3 contact hours. Prerequisite: TRAN. 331)

**TRAN 435 – Translation of Legal Texts:**

A specialized course concerned with legal texts. Features of legal texts are stressed where every word counts and equal attention given to content, intention, and all possible interpretations and misinterpretations of the texts. Students are introduced to a great variety of legal terminology and documents. Sources include agreements, contracts, power of attorney, court cases, UNSC Resolutions, human rights, and others. (3 credits, 3 contact hours. Prerequisite: TRAN. 331).

**TRAN 436 – Translation of Diplomatic and Political Texts:**

A specialized course focusing on translation of diplomatic and political textual material. Training in terminology, syntactic and stylistic peculiarities of such texts. English – Arabic and Arabic – English translation workshop. Texts include joint communiqués, political statements, press releases, press counter proposals, agreements, media reports and political analyses. (3 credits, 3 contact hours. Prerequisite: TRAN. 331).

1. **English Communications Program**
2. **Compulsory Courses**

**ENGC 101 - English Communications / D :**

ENGC 101 is a non – credit course offered for students who score 20-40 on the university Placement Test and therefore, need remedial work and reinforcement in basic reading, writing, grammar, listening and speaking skills. It meets for 5 hours weekly and 1 hour for Language Laboratory.

ENGC 101 is a combined skills course that integrates the four language skills in a holistic-whole language – approach. It aims to provide students with a strong basic foundation in pre-academic English to better enable them to function within the university requirement. (Prerequisite: the result in the Placement Test)

**ENGC 102 – English Communications / C :**

ENGC 102 is a non – credit course offered for students who successfully passed the Exit Test for 101 and for students who score 40-60 on the university Placement Test. It meets for 5 hours weekly and 1 hour for the Language Laboratory.

ENGC 102 is a course that builds on the integrated skills taught in ENGC 101. It recycles and reinforces the specific objectives of 101 while meeting the needs of the students who are placed directly into ENGC 102. (Prerequisite: ENGC 101 or the result in the Placement Test)

**ENGC 141 – English Communications / B :**

This course reinforces the development of the four languages skills (reading, writing, listening, speaking) and raises the student’s languages proficiency to the level of efficient communication and accuracy. Emphasis is placed on reading and writing. The writing component enables students to write cohesive and coherent paragraphs and essays. The aural/oral skills are to practiced mainly in connection with the reading materials. (4 credits,4 contact hours. Prerequisite: ENGC 102 or the result in the Placement Test)

ENGC 231 – English Communications / A :

This is the final course in the general communications sequence. Its aim is to further the students’ communication skills to level of fluency, accuracy and comprehension that will high quality university work. Emphasis is placed on essays, and training students in all the technical aspects of writing a research based essay. (3 credits, 4 contact hours. Prerequisite : ENGC 131 or the result in the Placement Test)

1. **Elective English Communications Courses:**

**ENGC 233 – English Through Current Issues:**

ENGC 233 is an elective course open to all students. The course aims at reinforcing the skills previously acquired in the communication courses (ENGC 101,102,131 and 231). It focuses on developing the oral communicative skills of the students. The course materials deal with current issues such as development, environment, ecology, technology, politics etc. They include printed as well as audio-visual texts. The students will be required to read texts, listen to recorded material and watch videos. Most of the class time will be devoted to summarizing the content, discussing the ideas and assessing the viewpoints of authors. (3 credits, 3 contact hours. Prerequisite: ENGC 231)

**ENGC 234 – English Through the Humanities:**

ENGC 234 is an elective course open to all students. It aims at reinforcing and developing the students’ skills and capabilities previously acquired in the communication courses. Emphasis is placed on reading and writing skills at the essay level. The students will read extended specialized texts in humanities in a comprehensive manner in order to understand , discuss and assess the view points of their authors. (Prerequisite: ENGC 231)

**ENGC 332 – English Through Content Areas:**

ENGC 332 is an elective course open to junior and senior students. Its general objective is to encourage content based language learning and interdisciplinary exposure. It aims at encouraging the participants to research topics of their interests from the fields of engineering, science, commerce and arts . Emphasis is placed on the skills of reading, notetaking, summarizing and assessing and presenting information both orally and in writing . The participants work as a team while the instructor works as coordinator and supervisor. (Prerequisite: ENGC 231)

1. **Other Communications Program : Elective Courses**

**HEB 331 – Hebrew Language / A:**

HEB 331 covers Hebrew alphabet , its visual representation in writing and printing, word endings ,diacritic, definite articles , interrogative articles , pronouns , prepositions , coordinating conjunction (waw’ al – atf) , masculine and feminine forms , dual and plural forms. Progress from the word level to the meaningful sentence level and from the simple sentence to the complex one . The students will read a variety of dialogue – based texts that talk about everyday life situations at home , in the street , at school , at university …….etc. (Prerequisite: Approval of the Department)

**HEB 332 – Hebrew Language / B:**

HEB 332 elaborates on the verb types, forms, derivations, conjugation of verbs and tenses. It also stresses the close relationships existing between Hebrew and the remaining Semitic languages particularly Arabic. The students will be advised to consult Hebrew dictionaries and study selected prose texts extracted from Hebrew books , newspapers and journals encompassing political news, social , economic, and literary studies pertaining to Palestine and the Arab World. (Prerequisite: HEB 331, Placement Test or the approval of the department)

**HEB 333 – Hebrew Language / C:**

HEB 333 is concerned with syntax , sentence structure , morphology , studying a variety of literary books and orienting the students on the Old Testament and its Books. (Prerequisite: HEB 332, Placement Test or the approval of the department)

**ITAL 131 – Italian Communications / beginners:**

This is a beginners level course designed to teach students basic Italian necessary for communication in simple situations . The four language skills (listening, speaking, reading and writing) are introduced with equal emphasis . The course is expected to enable them to comprehend written texts and write short texts. The course encompasses Italian pronunciation idiosyncrasies , definite articles , adjective, adjective plural, person, connected pronouns, demonstratives, adverbs of time and adverbs of place, conjugation of verbs and interrogative , interdiction and negation forms. ( 3 credits, 4 contact hours).

**ITAL 132 – Italian Communications / Intermediate:**

This is a low – intermediate level, a continuation of ITAL. 131 / beginners, designed to each students a wider variety of lexical items and basic grammatical structures necessary for communication in simple real life situations . The four language skills (listening, speaking, reading and writing) are developed with equal emphasis . Socio – cultural aspects to be presented are : daily life, employment, spare-time activities, Italian food habits…….etc. ( 3 credits, 4 contact hours. Prerequisite: ITAL. 131 or equivalence).

**Turkish 131**

Introducing basic language skills: reading, writing, speaking and listening; teaching the necessary structures needed in everyday activities and routines; comprehension of short readings and writing short and straightforward texts.

**Turkish 132**

This course builds on the previous course:

Expanding students’ vocabulary and basic structures; emphasizing and expanding the four language skills: reading, writing, speaking and listening comprehension; training students to write texts of social and cultural aspect.

***Prerequisite: Turkish 131***

**SPAN 131**

The First Year Spanish course is designed for university students who are approaching Spanish for the first time in their lives. Taking this into account, we want to give the subject an introductory nature and present in the most attractive and interesting possible way in order to encourage students to continue studying Spanish. The course is therefore focused, on the one side, on conversational contents, so that the students will start to communicate in Spanish from the first week, and cultural ones in order to present Hispanic culture to Palestinian students, raise their curiosity and make them want to learn more about it and compare its similarities and differences with their own culture.

## Department of History and Archeology

The Department of History and Archeology offers two academic programs leading to Bachelor degree Major History/Minor Political Science or Minor Palestinian Archeology as well as Minor specialization in History that can be combined with Major from another department.

**Major History /Minor Political Science**

**Admission Requirement**

1. A grade not less than 70% in the following course :

HIST231

1. Department’s approval based on intake capacity

**Academic Plan : 120 Credit Hours as the following :**

|  |  |
| --- | --- |
| Requirements | Credit Hours |
| University | 21 |
| Faculty | 23 |
| Major | 42 |
| Minor | 21 |
| Free Elective | 13 |
| **Total** | **120** |

**Major History Requirement (42 hours)**

1. **Core courses**

**36 hours as the following:**

|  |  |  |
| --- | --- | --- |
| Course No | Course Name | Prerequisite |
| HIST134 | History of Palestine since 18th century |  |
| HIST230 | Historical Research Methodology |  |
| HIST232 | Ancient Middle Eastern History |  |
| HIST234 | Oral History |  |
| HIST238 | Early Islam And The Umayyad State | Hist 231 |
| HIST331 | History of Abbasids and the Period of Petty States | Hist 231 |
| HIST333 | Ottoman Empire and Modern Turkey |  |
| HIST3371 | History of the Contemporary Arab Nation | Level 3 or Department |
| HIST338 | History Of Palestine During Islamic Periods | Level 3 or Department |
| HIST4301 | Modern and Contemporary History of Europe | Level 3 or Department |
| HIST432 | Modern History Of USA | Level 3 or Department |
| HIST438 | Seminar In History | Level 4 |

1. **Elective courses**

**6 hours in another history courses**

**Program Requirements**

1. Student must successfully complete a minimum of **42 credit hours** of courses in History distributed as follows:
2. Core courses **(36 credit hours):**

HIST 134, 230, 232 ,234 , 238 , 331 , 333, 3371 , 338 , 4301 , 432, 438 .

1. Elective courses **(6 credit hours )** from other courses in History.
2. **Student must successfully complete a minimum of 24 credit hours of courses in PoliticalScience follows :**

Core courses **( 24 credit hours )**

POLS231 , 233,234 , 235 , 331 , 334 , 432 , 433.

**Major History /Minor Palestinian Archeology**

**Admission Requirements**

1. A grade not less than 70% in the following course :

HIST321

1. Department’s approval pending intake capacity – priority is giving to students with higher scores in the courses above and where these are even, other academic criteria can be sought by the department committee.

**Academic Plan: 120 Credit Hours**

|  |  |
| --- | --- |
| Requirements | Credit Hours |
| University | 21 |
| Faculty | 23 |
| Major | 42 |
| Minor | 21 |
| Free Elective | 13 |
| **Total** | **120** |

**Program Requirements**

1. Student must successfully complete a minimum of **42 credit hours**of courses in History distributed as follows :
2. Core courses **(36 credit hours):**

HIST133 , 135 , 231 , 232 , 238, 331 , 3371 , 338 , 4301 , 432 , 438

b. Elective courses (6credit hours ) from other courses in History except HIST.

2. Student must successfully complete a minimum of (27 credit hours) of courses in Palestine Archeology as follows:

a. Core courses (9 credit hours)

ARCH 230 , 367

|  |  |  |  |
| --- | --- | --- | --- |
| **Course No** | **Credit hours** | **Course Name** | **Prerequisite** |
| ARCH230 | 3 | Introduction to Archeology |  |
| ARCH367 | 6 | Field Archaeology | Department Approval |

b. Elective courses (18 credit hours ) in order Archeology courses .

1. ARCH 231 or 232 , ARCH 233 or 234, 331 or 332
2. 6 credit hours from the following:

ARCH 2301, TOUR 230, BUSA 2361, TOUR 235, TOUR 332, TOUR 447

1. 3 credit hours from any of the Archeology program courses

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Course No | | Credit hours | Course Name | Prerequisite |
| ARCH 231 or ARCH 232 | | 3 | Stratigraphic History of Palestine 1 | ARCH 131 |
| Stratigraphic History of Palestine 2 | ARCH 131 |
| ARCH 233 or ARCH 234 | | 3 | Stratigraphic History of Palestine 3 | ARCH 131 |
| Stratigraphic History of Palestine 4 | ARCH 131 |
| ARCH 331 or ARCH 332 | | 3 | Ceramic Tradition of Palestine 1 | ARCH 131 |
| Ceramic Tradition of Palestine 2 | ARCH 131 |
| 6 hours from the following: | ARCH 2301 | 3 | Introduction to Cultural Heritage Resource and Management |  |
| TOUR 230 | 3 | Introduction to Tourism Science and Tourism Industry |  |
| BUSA 2361 | 3 | Small Tourism Enterprises Management |  |
| TOUR 235 | 3 | English for Tourism |  |
| TOUR 332 | 3 | Eco Tourism | TOUR 230 |
| TOUR 447 | 4 | Practicum in Tourism | TOUR 230 |
| 3 hours from any of the archeology courses | | 3 |  |  |

**Minor History**

Program Requirements

Student must successfully complete a minimum of 21 credit hours distributed as follows with a cumulative average not less than 70% :

1. Core courses (18 credit hours )

HIST230 , 238 , 3371 , 338 , 4301, 432

1. Elective course (3 credit hours ) from other History courses.

**Department courses:**

|  |  |  |  |
| --- | --- | --- | --- |
| Course No | Course Name | Prerequisite | Comments |
| HIST133 | Arab Islamic Civilization |  |  |
| HIST134 | History of Palestine since 18th Century |  |  |
| HIST135 | History of Jerusalem |  |  |
| HIST230 | Historical Research Methodology |  |  |
| HIST231 | Introduction to the Study of History |  |  |
| HIST232 | Ancient Middle Eastern History |  |  |
| HIST233 | Arab before Islam |  |  |
| HIST234 | Oral History |  |  |
| HIST235 | Ancient History of Palestine |  |  |
| HIST236 | Selected Historical Text | HIST231 |  |
| HIST237 | History of Islamic sects |  |  |
| HIST238 | Early Islam and the Umayyad State | HIST231 |  |
| HIST339 | Europe from Renaissance to Enlightenment |  |  |
| HIST330 | Economic Systems in the Islamic Word | HIST133  Level 3 or Department |  |
| HIST331 | History of Abbasids and the Period of Pretty States | HIST231 |  |
| HIST332 | Medieval European History | Level 3 or Department |  |
| HIST333 | Ottoman Empire and Modern Turkey |  |  |
| HIST334 | Safavid State and Modern Iran | Level 3 or Department |  |
| HIST335 | Modern and Contemporary History of North Africa |  |  |
| HIST3371 | History of the Contemporary Arab Nation | Level 3 or Department |  |
| HIST338 | History of Palestine during Islamic Periods | Level 3 or Department |  |
| HIST339 | Europe from Renaissance to Enlightenment (1453-1789) | Level 3 |  |
| HIST4301 | Modern and Contemporary History of Europe | Level 3 or Department |  |
| HIST432 | Modern History of USA | Level 3 or Department |  |
| HIST433 | Modern History of Latin America | Level 3 or Department |  |
| HIST343 | History of the Maghreb and the Muslim Spain |  |  |
| HIST435 | History of Russia and the Soviet Union | Level 3 or Department |  |
| HIST436 | Modern History of Sub-Saharan Africa | Level 3 or Department |  |
| HIST438 | Seminar in Archaeology | Level 4 |  |
| HIST439 | Special Topic in Archaeology | Level 3 or Department |  |
| ARCH131 | Introduction to Archaeology of Palestine |  |  |
| ARCH230 | Introduction to Archaeology |  |  |
| ARCH231 | Strategic History of Palestine 1 | ARCH131 |  |
| ARCH232 | Stratigraphic History of Palestine 2 | ARCH131 |  |
| ARCH233 | Stratigraphic History of Palestine 3 | ARCH131 |  |
| ARCH234 |  |  |  |
| ARCH331 | Ceramic Tradition of Palestine 1 | ARCH131 |  |
| ARCH332 | Ceramic Tradition of Palestine 2 | ARCH131 |  |
| ARCH334 | History of Archaeology in Palestine | ARCH131 |  |
| ARCH337 | Field Archaeology | Department | Not creditable hours for students minoring in archeology  Field work will occur over the summer session over a period of 3 weeks |
| ARCH367 | Field Archaeology | Department | Field work will occur over the summer session for a period of 6 weeks |
| ARCH438 | Seminar in Archaeology | ARCH131 |  |
| ARCH439 | Special Topic in Archeology | Department |  |

**History Courses Description .**

**HIST 133 Arab Islamic Civilization 3 cr . hrs .**

Introductory to monument of the Arab Islamic Civilization, evolution of political institutions, military, and economic system, social, architectural, artistic, educational, and cultural aspects, evolution of sciences in Arab and Muslim world, its contribution to the rise of western civilization.

**HIST134 History of Palestine since 18th Century 3 cr. hrs.**

Descriptive introduction to key history events including Zahir El-Omar, Al-Jazzar, Ottoman Rulers, Egyptian rules, the rise of Ottoman rules, movements, European colonialism, Zionist movement, Arab Nationalism, First World War, British Mandate , the Palestinian Zionist conflict 1935-39 , national uprising , McDonald's white paper, Second World War , Palestinian problem in the United Nations, Palestinian Nakbeh ( 1948 war ) and Diaspora .

**HIST135 History of Jerusalem 3 cr. hrs.**

Comprehensive survey of different historical since 5000B. C . until modern times, description of the religious legacy, written and archaeological accounts as sources for Jerusalem history , different nations that controlled the city and their impact on the city .

**HIST230 Historical Research Methodology 3 cr. hrs.**

Training the student in the disciplinary methods of historical research and writing; the training involves how to prepare a research outline that includes: choice of topic, a focused research question (problematic), writing the hypotheses, choose a suitable methodology, justifications and goals of the research project, literature review, specify the historical written material and the various schools of citation; training in critical reading of historical material to determine its validity and usefulness.

**HIST231Introduction to the Study of History 3 cr. hrs.**

Concept of history , its importance, history as science, historian characteristics, sources for history writing and Supporting sciences, the rise , evolution and development of schools of history writing, historical reasoning. Arab Muslim historian styles of writing history, modern trends in researching and writing history, the historical research design, training in writing short research paper.

**HIST232 Ancient Middle Eastern History 3 cr. hrs.**

Historical sources of ancient Middle East , the stone ages , agriculture, minerals and clay in pharaonic Egypt, the Assyrian, Persian, Greek, Roman, and Byzantine occupations of Mesopotamia, the Babylonians, Assyrian, civilization, the Greek occupation, the Syrian costal civilizations : the Canaanites, the Jews , the rise of Christianity , the Legacy of ancient oriental civilization

**HIST233 Arab before Islam 3 cr. hrs.**

Arab States in the south : Marib, Saba and Main , Arab states in the north : the Nabataeans , Tadmur , Ghassanids, al-Mandherah and kingdom of Kindah , the social , religious, economic and political life in north and middle of the Arabian Peninsula prior to the rise of Islam.

**HIST234 Oral History 3 cr. hrs.**

Presenting concepts of oral history and its importance, development of the oral narrative; methodology and means of collective the oral narrative and its relation to the discourse of history; process of selecting a sample group and the conditions involved in selection; the process of writing a questionnaire, structuring its component parts and formulating questions, techniques of conducting and preparing for oral interviews; transcribing oral interviews and transforming them into material for historical knowledge production; subject the oral narrative to historical criticism and interrogate the utility of oral narratives in the writing of history, practical applications.

**HIST235 Ancient History of Palestine 3 cr. hrs.**

written and archaeological sources of ancient Palestine, their short-coming, per-historic era, the political and cultural evolution during Canaanite's time of modern empire, Palestine during iron age the Palestinian , the Israelites and the Old Testament, Egyptian-Assyrian conflict, Greek and Roman rule, the rise of Christianity .

**HIST236 Selected Historical Text 3 cr. hrs.**

Style and terminology employed in writing history in various historical stages, different analytical and critical methods of historical texts and their verification, selected texts from Islamic and modern Arab history.

**HIST237 History of Islamic sects 3 cr. hrs.**

Political and religious factors behind the rise of Islamic sects , the doctrines and history of Al-Khawarij , the Twelvers, the Zaydis , the Isma'ilis , the Fatimids , the radical Sh'iates , Al-Jabriah , Al-Mu'tazilah , Al-Murjiah , the Sunni sect , Al- Asha'erah , Al-Karamiah and modern Islamic sects e.g. Like Bah'is .

**HIST238 Early Islam and the Umayyad State 3 cr. hrs.**

Al-Hijas on the eve of Islamic message , the call for Islam and it's different stages, prophet Mohammad death , the issue of succession , the wars of apostasy , Islamic conquest , the formation of department and a managerial system , political conflict and emergence of Umayyad rule , the Arab Kingdom , political order , foreign relations , continuation of the Islamic conquest , the economic order , the Arabs and non Arabs Muslims the tribal conflict , the revolutions and mutinies , the call for Abbasids and the fall of Umayyad rule .

Prerequisite : HIST231 ,HIST133.

**HIST239 Egypt and Syria from Fatimids to Mamluks 3 cr. hrs.**

Rise and development of Shi'ate doctrine , Fatimid rule and their advent towards the East , Fatimids foreign relation and domestic conditions, the Saljuks , Sunnis control of Greater Syria , Greater Syria on the eave of Crusades , Crusade expeditions , Greater Syria domestic conditions during the Crusade invasion , the Zinkies and Ayyubids rise to power, the decline of the Fatimids , the Ayyubids struggle against the Crusaders, Mamluk rule in Egypt and its expansion to Greater Syria , the Mamluk State internal and external conditions , and its decline .

**HIST330 Economic Systems in the Islamic Word 3 cr. hrs.**

Major problems facing the researcher in Islamic economy , currency and gold , agriculture, land and property ownership , crafts , and technology, commerce, large land holdings ( feudalism ) and their effect on the economy, economic policies.

Prerequisite : HIST133 , third year standing or department approval.

**HIST331 History of Abbasids and the Period of Pretty States . 3 cr. hrs.**

The Abbasid propaganda, their victory over Umayyad , the first century of Abbasids rule , foreign relations, Al-Mu'tazilah predicament, the formation of Arab Muslim army, decentralization of the state, the separation of eastern and western provinces, decay of military , economic and political situation , the Mongols invasion and the fall of Baghdad in 1258 AD .

Prerequisite : HIST231

**HIST 332 Medieval European History 3 cr. hrs.**

The fall of the Roman Empire , and the Middle Ages in Europe , Sharliman , the feudal system , the Catholic church as central organization, the struggle between the Pope and the Emperor , religion , knighthood , the Crusade expedition , France and England in the 100\_year war , the Byzantine Empire and its fall in 1453AD , the expulsion of Muslims from Spain , it's unification, growth of cities and the rise of the bourgeoisie, collapse of feudal system , Arts renaissance in Italy.

Prerequisite : Third year standing or department approval

**HIST333 Ottoman Empire and Modern Turkey 3 cr. hrs.**

Turkey The establishment of Ottoman rule , the Ottoman Empire and various phases of expansion , the socio-economic, political and intellectual orders , foreign relations, weakness in centralization, reformation , the growth of Western interests in the Empire , the collapse and disintegration of the Empire , Attatork and the formation of modern turkey , internal condition and foreign relation in the period between the two Wars , the Second World War and its aftermath.

**HIST334 Safavid State and Modern Iran 3 cr. hrs.**

Safavid Ardabil State , the Safavid state and its capital Asfahan , managerial and economic organizations, the Qajars , Russian-British colonial rivalry , the 1909 revolt , the Pahlavi regime, the Second World War , oil discovery, Mossadaq revolt , the Islamic revolution and the rise of Islamic republic .

Prerequisite : Third year standing or department approval .

**HIST335 Modern and Contemporary History of North Africa. 3 cr. hrs.**

Arab North Africa in 18th century, colonial power interests and ventures, Ahmad Bey reformation, Tunisian constitution, France occupation of Algeria, Morocco and Tunisian , independence movements, post-independence.

**HIST3371History of the Contemporary Arab Nation 3 cr. hrs.**

Colonial competition and its effects on the Arab region (the Arab East), colonial encroachments in the Arab region, the First World War and its effect on Arab region, the subsequent protectorate system and mandates, revolutions against foreign rule, development of the Arab national movements, the Second World War and its effect on Arab liberation movements, the Arab League, independent Arab states, military coups, plans and politics of Arab unity, the Arab struggle against Zionism and the Zionist state, petroleum and its political and economic effects on the Arab region, the Arab region from independence to dependency, attempts at de-colonization.

**HIST338 History of Palestine during Islamic Periods 3 cr. hrs.**

The conditions in Palestine on the eve of Islamic conquests , development under the Caliphs , condition under Umayyads , Abbasids and Fatimids rule , the crusades , the Mamluks and Ottoman rule .

Prerequisite: Third year standing or department approval.

**HIST339 Europe from Renaissance to Enlightenment (1453-1789) 3 cr. hrs.**

Study of the rise of the Nation-State in England, France and Spain , Reformation , Counter-Reformation, the Thirty-Year war , European colonial expansion , the eighteenth-century Enlightenment , background to the revolution on the European continent .

Prerequisite: Third year standing

**HIST4301 Modern and Contemporary History of Europe 3 cr. hrs.**

“European Renaissance” or the construction of European modernity, the Industrial revolution, the French Revolution, the Napoleonic wars, the Vienna Conference (1815), Italian unification, German unification, the First World War, the Bolshevik Revolution, the Paris Peace Conference (1919), the League of Nations, the growth of fascism and the Nazi movement, Stalinism, the Great Depression of 1929, the Spanish Civil War, the Second World War, the founding of the United Nations, the Cold War, plans for European unity.

**HIST432 Modern History of USA 3 cr. hrs.**

Indigenous civilizations , explorations, the 13 English colonies, war of independence, the constitution, expansion toward the West , slavery and the civil war , USA as an expansion state in 20th century, Wilson and the First World War, the isolation policy , 1921 economic depression, the Second World War, American internal conditions, the cold war , the wars in Korea and Vietnam, the USA as a great power.

Prerequisite: Third year standing or department approval.

**HIST433 Modern History of Latin America 3 cr. hrs.**

The geography and demography of the content, indigenous inhabitants, the era of exploration and settlement, the wars of independence, post independence fragmentation, constitutional problems, revolution during the 20th century, Latin America relation with USA and Europe, wealth resources and unfair income distribution, intercontinental relations.

Prerequisite: Third year standing or department approval.

**HIST434History of the Maghreb and the Muslim Spain 3 cr. hrs.**

Northern Africa before Islam, Muslim conquests in northern Africa, the emirate period in Muslim Spain, the regression of the Umayyad Caliphate state in Andalusia, Tawaif kings (independent Muslim ruled principalities), Murabitun, Muwahhidun, Kingdom of Granada, the end of the Muslim rule in Spain and the Re-conquest War, landmarks of Arab and Muslim civilization in Andalusia.

**HIST435 History of Russia and the Soviet Union 3 cr. hrs.**

Perter the Great and the start of westernization, the expansion towards the East, south, and west, Katrina and the movement of enlightenment, Napoleon war, war,19th century regressive, reformist and revolutionary movement, the Kirum war , liberation of slaves industrialization, First World War and the Bolshevik revolution, Leninism and Stalinism , the Second World War, the Soviet Union as a great power , the cold war and detente , the collapse and disintegration of USSR.

Prerequisite: Third year standing or department approval

**HIST436 Modern History of Sub-Saharan Africa 3 cr. hrs.**

The Geography , inhabitants religious in the continent, penetration of European colonization, slavery trade, the republic of South Africa and its independence, Africa nationalism, the Organization of Africa Unity , post-independence era.

Prerequisite: Third year standing or department approval.

**HIST438 Seminar in History 3 cr. hrs.**

Advanced study distinct topic chosen by the department council to enrich student understanding of historical events and issues, individual student research projects or papers.

Prerequisite: Fourth year standing

**HIST439 Special Topic in History 3 cr. hrs.**

Thorough study of special topic selected by the department council depending on the needs of history student.

Prerequisite: Third year standing or department approval

**Archeology courses Description ( ARCH) :**

**ARCH131Introduction to Archaeology of Palestine 3 cr. hrs.**

Introduction to the theoretical and particle frameWorks to Archeology in Palestine, highlights of major periods in the History of civilization from Paleolithic of archeological finds in Palestine, coursework include two one-day field trips to cover north and south of Palestine.

**ARCH230 Introduction to Archaeology 3 cr. hrs.**

The archaeology and its relationship to social and natural sciences, the objectives of archaeological research, methods and methodology of archaeological research, including archaeological excavation and surveys, the scientific techniques used in dating the archaeology, remains. Displaying the most important theories and the most common terms in archeology, the relationship between methods of research and teaching methods of the global culture tradition. Display a summary of those civilization that have influenced and affected by the culture of historical Palestine .

**ARCH231Stratigraphic History of Palestine 1 3 cr. hrs.**

Prehistory in Palestine, Paleolithic through Neolithic, Archaeology as a discipline, theory and practice.

Prerequisite: ARCH131

**ARCH232 Stratigraphic History of Palestine 2 3 cr. hrs.**

Bronze and Iron Age, cultural development including a study of how to correlate literary texts and archaeological remains .

Prerequisite: ARCH131

**ARCH233 Stratigraphic History of Palestine 3 3 cr. hrs.**

Hellenistic, Roman Byzantine Archaeology, art and architecture. Prerequisite: ARCH131

Stratigraphic History of Palestine 4 The Islamic period in Palestine, reconstruction of life in the villages ending with the Ottoman period.

Prerequisite: ARCH131

**ARCH234 Stratigraphic History of Palestine 4 3 cr. hrs.**

The Islamic period in Palestine, reconstruction of life in the village ending with the Ottoman period.

Prerequisite: ARCH131

**ARCH331 Ceramic Tradition of Palestine 1 3 cr. hrs.**

Clay of Palestine and it served the life of people in the land from about 7000 B.C. - 300 B.C . , the development of forms and the manufacturing techniques of pottery vessels, selected other ceramic artifacts, three visits to major collections in museums and excavation laboratories. Prerequisite: ARCH131

**ARCH332 Ceramic Tradition of Palestine 2 3 cr. hrs.**

Study of ceramic tradition and technology in Palestine from Hellenistic period to modern times , pottery study from excavations, stratigraphic separation of debris layers to major collection of pottery in museums and from recent excavations.

Prerequisite: ARCH131

**ARCH334 History of Archaeology in Palestine 3 cr. hrs.**

Motivation, aims and methods of the major scholars of Palestine from earliest pilgrims and explorers to modern excavators, the intellectual style of various national tradition that have contributed to the study of Archaeology of Palestine.

Prerequisite: ARCH131

**ARCH337 Field Archaeology 3 cr. hrs.**

( Not for Minor Students )

Field experience during Summer Session of 3 weeks, principles of stratigraphic excavation in history and in practice.

Prerequisite: Department approval

**ARCH367 Field Archaeology 6 cr. hrs.**

( For minor student only )

Filed experience during Summer session of 6 weeks, principles of stratigraphic excavation in theory and in practice.

Prerequisite: Department approval .

**ARCH438 Seminar in Archaeology 3 cr. hrs.**

Advanced study of selected fields in Archeology with emphasis on developing research skills. Prerequisite: ARCH131

**ARCH439 Special Topic in Archeology**

Included among subjects that may studied are the following: stratigraphic study, using computer in Archaeology research, theory of archaeology, ethnographic finds, sits formation and others . Prerequisite: Department approval.

**ARCH2301 Introduction to Cultural Heritage Resource and Management 3 cr. hrs**

Concepts of Cultural Heritage, major theories dealing with the subject, main theoretical approaches, classifications and definitions of movable and immovable material heritage resources, such as archaeological sites , historical and traditional buildings, traditional crafts, tourists attraction areas, museums, non material resources, means of defining heritage values, major concepts of public management, crisis management, target groups and stakeholders, national parks, wild life in Palestine, the use of resources in development and education, cultural heritage management plan.

**TOUR2301 Introduction to Tourism Science and Tourism Industry 3 cr. hrs**

Definition of Tourism as a science and industry, basic tourism principles and concepts, principles of tourism marketing, management of tourism resources and facilities, media and publication propaganda, organizing and attracting groups for local and external tourism, introducing marine, air and land travel means and tracks, problem of tourism marketing in Palestine and their solutions.

**TOUR332 Eco Tourism 3 cr. hrs**

Definitions and concepts of eco tourism, the structure of Palestine environment, survey of natural resources, plants and animals, elements f natural attractions, outdoor leisure activities, natural and cultural landscape, sea, forest, wadis, mountains, and its natural and cultural significance. Campaigning internal outdoor activities.

Pre-requisite: TOUR231.

**TOUR235English for Tourism 3 cr. hrs**

Basic tourism terminology and concepts, developing listening, reading and conversational fluency in the tourism language, hospitality and tourism industry topics, workplace communication, hotels services, reception, front desk and telephone interaction, inquiries and complaints, transport and direction, food and restaurant services, travel agents concepts, guided tours, Palestinian cultural heritage, reading tour guides and travel magazines, description and promoting tourist attractions and facilities, job descriptions, verbal communication and body language.

**TOUR 447Practicum in Tourism 3 cr. hrs**

Practical field training in tourism resources: Tour operators offices, hotels, various booking program, organizing tour groups, tourism advertising, methods of marketing, developing a tourism project.(Require 4 weeks field training in offices and hotels to be coordinated with partners). Pre- requisite: Department Approval

**BUSA2361Small Tourism Enterprises Management 3 cr. hrs**

Basic Management, entrepreneurship in tourism sector, small tourism enterprise management, tourism enterprise plans, strategic plans, marketing and financial plans for tourism enterprise, administrative and source of finance, analyzing location decision, organizational structure and financial evaluation of the tourism enterprise

## Department of Geography

The Department of Geography offers two academic programs that lead to the bachelor’s degree in geography as the primary major field and either history or political science as minor fields.

**First: Geography Program Major / History Minor**

Conditions of Enrollment:

1. A grade of 70 percent or in more GEOG230
2. Permission of the department based on availability of seats

The academic program

The academic program consists of 120 hours distributed according to the following categories:

|  |  |
| --- | --- |
| Requirement category | Credits |
| University Requirements | 21 |
| College of Arts Requirements | 23 |
| Major Program Requirements | 42 |
| Minor Program Requirements | 24 |
| Electives | 10 |
| Total | 120 |

**Major Program Requirements in Geography (42 credit hours)**

1. Required courses:

30 hours from the following courses

|  |  |  |
| --- | --- | --- |
| Course Number | **Course Name** | Prerequisite |
| GEOG231 | INTRODUCTION TO PHYSICAL GEOGRAPHY |  |
| GEOG232 | PRINCIPLES OF CARTOGRAPHY | GEOG230, GEOG231 |
| GEOG234 | CLIMATIC GEOGRAPHY | GEOG231 |
| GEOG235 | REGIONAL GEOGRAPHY OF THE WORLD | GEOG230 |
| GEOG331 | GEOMORPHOLOGY | GEOG231 |
| GEOG333 | GEOGRAPHY OF THE ARAB WORLD |  |
| GEOG335 | INTRODUCTION TO REMOTE SENSING | GEOG232 |
| GEOG436 | GEOGRAPHIC INFORMATION SYSTEMS (GIS) | GEOG232 |
| GEOG437 | APPLIED GEOGRAPHY OF PALESTINE | GEOG231 |
| GEOG438 | Seminar in Geography | Fourth- Year level and Department Permission |

1. Elective courses

12 hours from the following courses

|  |  |  |  |
| --- | --- | --- | --- |
| Course Number | Course Name | Prerequisite | Credits |
| GEOG 239 | Principles of general geology | GEOG 231 | 3 credit hours |
| GEOG 236 | Applied geography | GEOG 230 |
| GEOG 336 | Geography of Environment |  | 3 credit hours |
| GEOG 431 | Urban Geography | GEOG 230 |
| **Other 6 credit hours from geography courses** | |

**The minor in history program requirements (21 hours)**

* 1. Required courses:

15 hours from the following courses

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| HIST230 | RESEARCH METHODS IN HISTORY |  |
| HIST238 | EARLY ISLAM AND THE UMAYYAD STATE | HIST231 |
| HIST337 | HISTORY OF ARAB EAST IN 20TH CENTURY | 3rd year level |
| HIST338 | HISTORY OF PALESTINE DURING ISLAMIC PERIODS | 3rd year level or department approve |
| HIST432 | MODERN HISTORY OF USA | 3rd year level or department approve |

B. Elective courses

6 hours from the following courses

|  |  |  |  |
| --- | --- | --- | --- |
| Credits | Course Number | Course Name | Prerequisite |
| 3 credit hours from the following courses | HIST 430 | HISTORY OF MODERN EUROPE (1789-1918) | 3rd year level or department approve |
| HIST 431 | History of Europe since first world war | 3rd year level or department approve |
| Other 3 credit hours from History courses | | | |

**Second: Geography Program Major / Political Science Minor**

Conditions of Enrollment:

1. A grade of 70 percent or more in GEOG230
2. Permission of the department based on availability of seats.

**The academic program**

The academic program consists of 120 hours distributed according to the following categories:

|  |  |
| --- | --- |
| Requirement category | Credits |
| University Requirements | 21 |
| College of Arts Requirements | 23 |
| Major Program Requirements | 42 |
| Minor Program Requirements | 24 |
| Electives | 10 |
| Total | 120 |

Major Program Requirements in Geography (42 credit hours)

|  |  |  |
| --- | --- | --- |
| Course Number | **Course Name** | Prerequisite |
| GEOG231 | INTRODUCTION TO PHYSICAL GEOGRAPHY |  |
| GEOG232 | PRINCIPLES OF CARTOGRAPHY | GEOG230, GEOG231 |
| GEOG234 | CLIMATIC GEOGRAPHY | GEOG231 |
| GEOG235 | REGIONAL GEOGRAPHY OF THE WORLD | GEOG230 |
| GEOG331 | GEOMORPHOLOGY | GEOG231 |
| GEOG333 | GEOGRAPHY OF THE ARAB WORLD |  |
| GEOG335 | INTRODUCTION TO REMOTE SENSING | GEOG232 |
| GEOG436 | GEOGRAPHIC INFORMATION SYSTEMS (GIS) | GEOG232 |
| GEOG437 | APPLIED GEOGRAPHY OF PALESTINE | GEOG231 |
| GEOG438 | Seminar in Geography | Fourth- Year level and Department Permission |

1. Required courses:

30 hours from the following courses

1. Elective courses

12 hours from the following courses

|  |  |  |  |
| --- | --- | --- | --- |
| Course Number | Course Name | Prerequisite | Credits |
| GEOG 239 | Principles of general geology | GEOG 231 | 3 credit hours |
| GEOG 236 | Applied geography | GEOG 230 |
| GEOG 336 | Geography of Environment |  | 3 credit hours |
| GEOG 431 | Urban Geography | GEOG 230 |
| **Other 6 credit hours from geography courses** | |

2. Requirements the minor of political science

24 hours from the following credit hours

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| POLS231 | INTRODUCTION TO POLITICAL SCIENCE |  |
| POLS233 | INTRODUCTION TO COMPARATIVE SYSTEMS | POLS231 |
| POLS234 | INTRODUCTION TO INTERNATIONAL RELATIONS | POLS231 |
| POLS235 | POLITICAL THOUGHT AND CONTEMPORARY POLITICAL THEORIES |  |
| POLS331 | POLITICAL SYSTEMS IN THE ARAB WORLD | POLS233 |
| POLS334 | PALESTINIAN QUESTION 2 |  |
| POLS432 | COMPARATIVE POLITICS (INTERNATIONAL REGIONS) | POLS233, POLS234 |
| POLS433 | FOREIGN POLICY OF GREAT POWERS | POLS234 |

**Courses description**

**Geog 210 ENVIRONMENTAL ISSUES IN THE PALESTINIAN SOCIETY**

Causes, impacts and treatment of selected environmental issues in Palestine. Pollution of surface and underground water resources, waste water, random dumping sites, quarries and stone industry. Environmental education, using the principle of environmental protection and management to mitigate the negative impacts of pollution.

**Geog 212 Map reading and interpretation**

Map concept, importance, usage and types. Maps reading methods and interpretations, reading skills, extracting measurements from maps. Usage of maps and atlases. Web cartography. Introduction to digital earth using Google Earth.

**Geog 230 Introduction to Human Geography**

The study of the field of geography and its branches, its place among the other fields and its main methods and principles. The relationship of humans to time and space and the interaction between humans and the natural world with its advantages and disadvantages. The central principles of population geography, the main effects of development of population growth on Earth. The main factors affecting in the geographic distribution of populations and their characteristics. Economic geography in its various branches and urban geography and political geography.

**Geog 231 INTRODUCTION TO PHYSICAL GEOGRAPHY**

The study of Earth’s nature, formation, contents, dimensions, and its relations with regard to other planets in the solar system. The course includes also the study the multiple spheres surrounding Earth (lithosphere, hydrosphere, atmosphere and biosphere) and the relationships between these spheres as well as between these spheres and the human beings.

**Geog 232 PRINCIPLES OF CARTOGRAPHY**

History of maps science development, Maps and survey in Palestine. Sources of data, web-cartography, introduction to Global Position Systems GPS, Map definition, types of maps and map elements. Map reading and interpretation, benefits of maps. Scale of map, extraction of measurements. Geographic and projected coordinate systems. Principles of cartographic generalization, geographic information representation and symbolization. Labeling, thematic mapping, topographic maps, contour lines, reading and analysis of detailed topographic maps.

**Geog 233 ECONOMIC GEOGRAPHY**

The concept of economic geography and its relation to other fields. The relation of economic resources and natural and human resources that affect economic production. Agriculture and its development, water resources, mineral resources, energy resources, the problem of food in the world, industry and national industries and business. The transition of services sector. The development of capitalism its relation to economic geography. The geography distribution of labor, the patterns of financial industries, the dynamics of the geographies of the economy its relation to place. The relation of economic geography to globalization.

**Geog 234 CLIMATIC GEOGRAPHY**

Study of the concept and evolution of weather and climate science, the differences between both and the relation to the other science as well as the related methodological approaches. Nature and characteristics of the layers of the atmosphere, pollution, climatic elements, measurements, climatic turbulence, cyclones and anti - cyclones. World climatic regions and classification, their types and comparison. Weather forecasting and associated calculation, and world climatic changes (Prerequisite 231).

**Geog 235 REGIONAL GEOGRAPHY OF THE WORLD**

The course concentrates on the concept of region from a geographic research perspectives. The world will be divided into different geographic regions according to its different environmental, natural and human factors such as geology, topography, geomorphology, climate, water, soils, vegetation, population and population growth, economic activities. As a result of these natural and human factors, the course will explore the most important problems and difficulties facing different continents in a regional context. (Prerequisite: Geography 230).

**Geog 236 APPLIED GEOGRAPHY**

Applied study of the basic theories of physical and human geography, using geographic research principles and quantitative methods. Training on the measurement of spatial and temporal geographical elements and its analysis. Hypothesis testing and spatiotemporal variation of geographical features. Practical training on the collection of geographical field data, structuring, and the use of suitable quantitative significance test for analysis of the collected data. (Prerequisite: Geog230)

**Geog 238 Applied Cartographic**

Branches of surveying, introduction to geographic coordinate systems, projection systems, Global Position Systems (GPS), stereo photogrammetry processing, geo-referencing of aerial photos and satellite images, photos interpretation and satellite image processing, data extraction, data re presentation, data graphing and symbolization. Cartographic database, principles of cartographic design, considerations for coloring, data classification, layout design and implementation, final touches, map production.

The course also trains the student on digitalizing of diverse spatial data types as well as data structuring in different layers. The course also provide students with knowledge and skills on cartographic design and colors considerations, classification of geographic data, map execution and dissemination. (Prerequisite: Geog 232)

**Geog 239 PRINCIPLES OF GENERAL GEOLOGY**

The course gives the basics, evolution and development of geology as a science and its relation to other sciences. The course focuses on the earth crust components from minerals and rock types. The course also explains the planet tectonic theory and underground movements (rapid and slow movements) represented by earthquakes, volcanoes, folds and faults. The course also deals with the general hydrologic cycle, ocean and seas’ initiation, the initiation of springs, surface and ground water. The course also provides basics on paleo-geology through a quick look on the geologic fossils and remains formulation. Finally the course givers general exploration of the geology of Palestine, geologic maps and geological cross-sections. The course includes a geologic field trip. (Prerequisite: Geog 231).

**Geog 331 GEOMORPHOLOGY**

The concept and development of geomorphology (land forms) and its relation to other sciences, methodological research in geomorphology, the major geomorphological processes that form land characteristics such as weathering processes, erosion by rainfall, wind, river, glaciers, marine waves, and mass movements. Karst geomorphology, topographic forms as a result of different geomorphologic processes, climatic geomorphology and soils, applied geomorphology, and field trips.

**Geog 332 POLITICAL GEOGRAPHY**

This class discusses the following topics: definition of political geography and its development, importance of geopolitics in our present world in terms of shape of states, their borders, topography, climate, water resources, population and economic resources. The class includes study of borders and their problems. It also tackles geostrategic theories such as heartland, sea power, rim-land, and air power. Teaching this class includes analyzing of current political geography problems.

**Geog 333 GEOGRAPHY OF THE ARAB WORLD**

The course includes a comprehensive study of the physical and traditional geography of the Arab world that includes: location identification and its importance, the geologic and topographic formation, climate, soil, natural plants, water resources, population and the existing economic activities (agriculture, industry, petroleum and services). The course also gives an overview of the major problems facing the Arab world such as desertification, land degradation, overpopulation and agglomeration, natural resources overexploitation, pollution, poverty, hunger, unemployment, political crisis and water related problems.

**Geog 334 Historical geography of the Islamic world**

The geographic environments in which Islam spread out, the factors that initiated the Arab-Islamic civilization. Arab-Islamic achievements in economy (agriculture, industry, trade linkages and routes). Urban achievements and patterns (human settlement patterns, Islamic city, its characteristics and importance). (Prerequisite: Geog 230)

**Geog 335 INTRODUCTION TO REMOTE SENSING**

Definition of remote sensing and its development, data collection techniques, the physical bases of remote sensing, types and characteristics of aerial photos, stereovision, principles of analyzing and interpretation of aerial photos, multispectral satellite data, types, characteristics and uses of satellite sensors, satellite platforms: Landsat, SPOT and IKONOS, radar satellites, digital images and their enhancement techniques, image processing and classification.

**Geog 336 GEOGRAPHY OF THE ENVIRONMENT**

Understanding the concept of environment and its development, the importance of studying the environment in the present time, natural and human components of the environment such as lithosphere, atmosphere, hydrosphere and biosphere. Reciprocal relations between man and the surrounding environment and ecosystems. Major environmental problems such as land degradation, depletion of natural resources, various forms of pollution in different ecosystems with special focus on Arab world and Palestine.

**Geog 338 GEOGRAPHY OF PALESTINE**

The geographic location of Palestine, its characteristics and importance. Origin and the development of Palestine’s name and other important geographic locations in Palestine, the borders and its history, natural environmental settings including geology, topography, climate, water resources and related policies, soil, fauna and flora, demography, economy, archeology, the history of human settlements in Palestine, and the geographic impacts of the Palestinian case. (an obligatory four-days field trip).

**Geog 430 Biogeography**

The concept of biogeography and its relation with other sciences, the basics for scientific classification (nomenclature) of plants and animals, factors affecting vegetation cover, major plants and animals groups, nature reserves (properties and types). The economic value of the natural plants and wild animals, as well as problems related to their exploitation. The definition of biodiversity, its importance, and methods of diversity conservation in Palestine.

**Geog 431 URBAN GEOGRAPHY**

The course deals with the concept and importance of urban geography, the construction and development of urban centers and the proper classification and differentiation between urban and rural centers and the urban centers allocations and structures. The spatial allocation of urban centers and its development will also be studied. The course will also focus on the main theories on the growth of urban centers and its land uses, the international classification of land uses inside urban centers, land uses survey in urban centers, master plans for urban centers, as well as the urban centers problems with applications on the problems related to the Palestinians’ urban centers and agglomerations. (Prerequisite: Geog 230).

**Geog 432 POPULATION GEOGRAPHY**

This course includes the definitions of population geography, its importance and its relation to the other sciences. The main objective of this course is to study the various aspects of the world population (population growth through history, spatial distribution on earth surface, density of the demographic situation and characteristics, social and economic structure). The effect of the geographic factors on population distribution into different area of the world, and the role of population policies in relation to the growing food crises phenomenon in the third world. The course also includes the population projections and its modeling in order to understand the optimum size of population within the context of proportional availability of natural resources of the world (Prerequisite: Geog 230).

**Geog 433 GEOGRAPHY OF TOURISM**

This class tackles the following items: definition of tourism, geographical distribution of tourist areas in the world, discussion of internal and external tourism activities, receiving and exporting tourist countries, types of tourism rural and urban, pilgrimage, recreation, cultural, medical, historical. This class also tackles factors which affect tourism such as socioeconomic, cultural physical and environmental. Present conditions of tourism in Palestine in specific and the Arab World in general will be considered.

**Geog 434 GEOGRAPHY OF WATER RESOURCES**

The course includes the definition of water resources and their importance in the hydrological cycle as well as the factors controlling its elements. The water measurable elements, the natural factors that affect water resources and the regional classifications will be studied. The course will also focus on surface water and its role in the maintaining an environmental balance. The origin of the groundwater, its occurrences and formations, its recharge basins and the quality of water, and different methodologies for water resources exploitation and the explorations will also be included. (Prerequisite: Geog 231).

**Geog 435 Geography of Development and Regional Planning**

Definition of the main elements of economic and human development, concepts and general objectives of planning in developed and developing countries, geographic factors affecting social, environmental and economic development, planning and sustainable development, models and development plans from developed and developing countries, planning, development and globalization, planning types, concepts and methods of regional planning, implementing geographic information systems in development, urban and regional planning.

**Geog 436 GEOGRAPHIC INFORMATION SYSTEMS (GIS)**

Definition, concepts and importance of geographic information systems, geographic information data sources, geographic information sciences, GIS components and development, modeling of reality, creation of geographic databases, computer modeling of geographic data, main functions and basic operations of GIS, an applied project for implementation of GIS, training on geographic information specialized software programs (2 hours of lectures, 3 hours of lab).

**Geog 437 APPLIED GEOGRAPHY OF PALESTINE**

Advanced application on physical and human related elements in Palestine; including geology, geomorphology, climate, water, topography, soils, natural plants, humans related activities and urban patterns and livelihood. Field training, field work (includes a four-days field trip) and new geographic tools and labs will also be used. (Prerequisite: Geog 231).

**Geog 438 Seminar in Geography**

Detailed Study on human and natural geographical topics using scientific research methods. It includes reading, discussions some of the published researches in referred scientific journals. Presentation and discussion of the principles of scientific integrity and ethics of scientific research should be focused. Writing on the subject of specific research from natural and human geographical topics chosen by a student, which includes a review of a sufficient number of literature. The report has to be presented by a student in order to discuss it with the instructor and the seminar students and finally to be submitted according to their discussions and notifications.

(Prerequisite: fourth year level and the Department acceptance).

**GEOG439 | Special Topic**

Prerequisite: Department Approval.

## Department of Social and Behavioral Sciences

The Department of Social and Behavioral Sciences offers two academic programs leading to Bachelor degree: Sociology as single Major and Major Psychology/ Minor Sociology as well as two Minors specializations in Sociology and Psychology.

**1. Major Sociology**

**Admission Requirements**

* Average not less than 70% in SOCI 131.
* Department approval based on program intake capacity.

**Study Plan**

Study Plan consists of 120 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirements** | Credit hours |
| University Requirements | 21 |
| Faculty Requirements | 23 |
| Single Major Requirements | 57 |
| Free Courses | 19 |
| Total | 120 |

**Program Requirements**

Student must successfully complete a minimum of 57 credit hours of courses in Sociology, Anthropology and Social Work distributed as follows:

1. Core courses (39 credit hours):

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Previous Requirement** |
| SOCI231 | Critical Readings in Sociological Texts | SOCI231 |
| SOCI232 | Classical Sociological Theory | SOCI231 |
| SOCI234 | Palestinian Society |  |
| SOCI237 | Methods of Qualitative Research | SOCI231 |
| SOCI238 | Sociology of the Family | SOCI231 |
| SOCI334 | Social Stratification | SOCI231, SOCI232 |
| SOCI338 | Modern Sociological Theory | SOCI232 |
| SOCI340 | Principles of Social Statistics |  |
| SOCI341 | Methods of Field Research | SOCI231, third year level in specialization |
| SOCI438 | Seminar in Sociology | Forth year level in specialization or approval of the Sociology Program |
| ANTH241 | Introduction to Anthropology |  |
| ANTH334 | Anthropological Theory | ANTH241 |

1. Elective course (18 credit courses) from courses offered by the Department, at least 3 credit hours in Anthropology. (WOMS 232 is also considered as an elective course)

**2. Major Psychology/Minor Sociology**

**Admission Requirements**

* Average not less than 70% in PSYC 231.
* Department approval based on program intake capacity.

**Study Plan**

Study Plan consists of 120 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirements** | Credit hours |
| University Requirements | 21 |
| Faculty Requirements | 23 |
| Major Requirements | 42 |
| Minor Requirements | 18-19 |
| Free Courses | 15-16 |
| Total | 120 |

1. **Major Psychology Program Requirements**

Student must successfully complete a minimum of 42 credit hours of courses in Psychology distributed as follows:

* + 1. Core courses ( 33 credit hours):

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Previous Requirement** |
| PSYC 330 | Introduction to Cognitive Psychology | PSYC 231 |
| PSYC 331 | History and Systems of Psychology | PSYC 231 |
| PSYC 332 | Developmental Psychology | PSYC 231 |
| PSYC 333 | Psychology of Learning | PSYC 231 |
| PSYC 335 | Psychophysiology | PSYC 231 |
| PSYC 336 | Research Methods in Psychology | PSYC 231 |
| PSYC 337 | Mental Health | PSYC 231 |
| PSYC 338 | Social Psychology | PSYC 231 |
| PSYC 430 | General Methods in Psychological Services | PSYC 337 |
| PSYC 435 | Counseling Psychology | PSYC 337 |
| PSYC 438 | Seminar in psychology | Forth year level in specialization or approval of the Sociology Program |

Elective courses: 9 credit hours from other courses in Psychology.

1. Student must successfully complete a minimum of 18-19 credit hours of courses in Sociology as follows:
   1. Core courses: 12 credit hours

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Previous Requirement** |
| SOCI231 | Critical Readings in Sociological Texts | SOCI231 |
| SOCI232 | Classical Sociological Theory | SOCI231 |
| SOCI234 | Palestinian Society |  |
| SOCI238 | Sociology of the Family | SOCI231 |

Elective course (6-7 credit hours) from courses follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Course Number** | | **Course Name** | **Previous Requirement** |
| One of The Courses follows | SOCI237 | Methods of Qualitative Research | SOCI231 |
| SOCI341 | Methods of Field Research | SOCI231, third year level in specialization |
| 3 credit hours from Sociology | | | |

**3. Minor Sociology**

**Program Requirements**

Student must successfully complete a minimum of 18-19 credit hours:

* 1. Core courses Core courses: 12 credit hours

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Previous Requirement** |
| SOCI231 | Critical Readings in Sociological Texts | SOCI231 |
| SOCI232 | Classical Sociological Theory | SOCI231 |
| SOCI234 | Palestinian Society |  |
| SOCI238 | Sociology of the Family | SOCI231 |

1. Elective course (6-7 credit hours) from courses follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Course Number** | | **Course Name** | **Previous Requirement** |
| One of The Courses follows | SOCI237 | Methods of Qualitative Research | SOCI231 |
| SOCI341 | Methods of Field Research | SOCI231, third year level in specialization |
| 3 credit hours from Sociology | | | |

**4. Minor Psychology**

**Program Requirements**

Student must successfully complete a minimum of 21 credit hours:

1. Core courses (15 credit hours)

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Previous Requirement** |
| PSYC 331 | History and Systems of Psychology | PSYC 231 |
| PSYC 332 | Developmental Psychology | PSYC 231 |
| PSYC 333 | Psychology of Learning | PSYC 231 |
| PSYC 337 | Mental Health | PSYC 231 |
| PSYC 338 | Social Psychology | PSYC 231 |

1. Elective courses (6 credit hours) from the following:

PSYC445, PSYC439, PSYC438, PSYC433, PSYC429

**A. Sociology Courses (SOCI)**

**131- Introduction to Sociology**

Introduction to the study of society from a historical and comparative perspective. Overview of major social institutions with an emphasis on the changes they undergo and their impact on the social structure. In addition, the course introduces students to sociological research methods and a review of the major sociological schools and trends. The course aims at equipping students with a conceptual and analytical framework for understanding modern society.

**231- Critical Readings in Sociological Texts**

Necessary skills to read and comprehend scientific articles and essays with theoretical and empirical content.  The relation between theory and empirical research. Selected sociological and anthropological texts where students are trained in the basics of theorizing, and the role of evidence in description, explanation and prediction.  Basic skills in searching for sociological literature in electronic databases and indexes. Practical training in proper citation methods. Critical and analytic reading of empirical research in non-specialized media.

(Prerequisite: SOCI 131)

**232- Classical Sociological Theory**

Survey of classical sociological thought, with a focus on the works of Comte, Marx, Spencer, Weber, and Durkheim. Study of various conceptualization of society and its components, the mechanisms of change and stability, the bases of social relationships, and methodological issues in the study of society (Prerequisite: SOCI 131)

**233 - Arab Society**

Introduction to the major social institutions and structures of modern Arab society (the political, economic, and class systems, in addition to family and religion), with a focus on mechanisms and directions of change within these systems and structures since the beginning of the 20th century. Study of the factors contributing to homogeneity, differentiation, contradiction and crises, especially the relation between state and society and the relation between the Arab majority and ethnic minorities. During the presentation of these topics, major sociological concepts will be explained.

**234 - Palestinian Society**

Introduction to the major social institutions and structures of modern Palestinian society (the political, economic, and class systems, in addition to family and religion), and a review of the major transformations undergone by these institutions and structures under various regimes since the beginning of the twentieth century. Emphasis on the impact of Zionist colonial settlement and the 1948 Catastrophe on the structure of Palestinian society, and a study of the eviction of Palestinians from their homeland and the situation of the Palestinian communities in the Diaspora. During the presentation of these topics, major sociological concepts will be elaborated.

**235 - Israeli Society**

Study of the emergence of the Zionist movement, stages and types of Zionist colonial settlement in Palestine, Zionist institutions in Palestine and their contribution in the establishment of the Jewish State. Israeli society as it developed after 1948, the demographic composition of the population of Israel, ethnic relations, the major social institutions and structures (the political, economic, class, religious and family systems). Study of the differential impact of the major social transformations on Jews and Arabs in Israel. (Prerequisite: SOCI 131).

**237- Methods of Qualitative Research**

Study of the main qualitative methods in sociology. The interview, observation, the use of documents and other primary sources. Stages of research from the formulation of the research problem to the writing of the research report (Prerequisite: SOCI 131).

**238- Sociology of the Family**

Study of the internal structure of the family: power relations, the sexual division of labor, marriage, role allocation, and socialization. The family in its relation with larger kin groups. The impact of urbanization, industrialization and migration on family size, structure, and function, and on marriage and divorce patterns. Focus on the comparative study of family structures (Prerequisite: SOCI 131).

334 **- Social Stratification**

Study of the phenomenon of social stratification and differentiation within different socio-economic formations. Review of the different bases of the processes of social differentiation, class division, and the distribution of social, economic and political resources. These phenomena will be studied from the perspective of the different theoretical orientations in sociology. (Prerequisite: SOCI131, SOCI232)

**338- Modern Sociological Theory**

Contemporary perspectives on society and its analysis. Major sociological debates, particularly as they developed in the period after the Second World War. Emphasis on Structural-Functionalism, Neo-Marxism, Structuralism, Phenomenology and Ethnomethodology, and theories of Modernity, Post-Modernity and Development (Prerequisite: SOCI232).

**339- Ethnic Relations and Minority Issues**

Study of the formation of ethnic communities through analyzing their solidarity, internal cohesion, border construction, and the formation of ethnic awareness. Emphasis on sociological, cultural and materialist perspectives in examining the ethnic phenomenon. Patterns of ethnic relations such as pluralism, coexistence, integration, assimilation, separation and conflict. Prejudice, racism, and mechanisms of stability and change in the cohesion of ethnic groups and their relations with other communities. (Prerequisite: SOCI 131).

**340- Principles of Social Statistics**

Study of basic statistical concepts, with emphasis on descriptive statistics, classification of data and the construction of tables and graphs, measures of central tendency and dispersion, probability, normal distribution, inferential statistics, testing of hypotheses, measures of correlation, and regression analysis. Practical applications using statistical packages such as SPSS.

**341- Methods of Field Research**

Study of the major aspects of the social survey: formulation of the research problem, defining the hypothesis, measurement of the variables, measures of reliability and validity. Types of questions, questionnaire construction, types of samples, problems in data collection, analyzing the data, and writing the research report. (Prerequisite Sociology 131, third year level in specialization).

**438- Seminar in Sociology**

Seminar combining theory and field or library application on selected topics. It includes preparation of an advanced research paper under the supervision of the course instructor (Forth year level in specialization or approval of the Sociology Department).

**B. Anthropology Courses**

**240- Introduction to Anthropology**

Study of the emergence of anthropology and an introduction to its various branches. Introduction to anthropological methods. The development of primates, the biological and cultural link between humans and other primates, and the emergence of *homo sapiens.*  Main concepts and schools in cultural anthropology. Study of hunting and gathering societies, peasant societies, and industrial societies, with a focus on contemporary non-Western societies.

**334- Anthropological Theory**

Study of the emergence of anthropology, survey of major anthropological schools: evolutionism, functionalism, structuralism, neo-evolutionism, Marxist anthropology, psychological anthropology. Theories are studied within their historical context (Prerequisite: ANTH 240).

**335- Socio-Cultural Change**

Study of the relation between cultural change and development, and the difference between contexts of socio-cultural change. The meeting of cultures, inventions, acculturation and assimilation, modernization, Westernization, and the mechanisms of the spread of Western culture in the modern period. Study of psychological aspects of cultural change: change and adaptation, change and identity, change and mental health (Prerequisite: ANTH 240)

**C. Social Work Courses**

**231-Introduction to Social Work**

The historical development of the idea of social welfare, from its beginnings in religious teachings to the emergence of the concept of state responsibility for the welfare of individuals and groups. Study of the principle of social rights and social legislation. The emergence of the modern welfare state. A survey of principal approaches in social work, especially individual and group social work and community organizing.

**232- Social Work Case**

The philosophy and principles of individual social work, survey of life problems faced by individuals in the family, school, workplace and the immediate environment, introduction to the range of services provided to individuals in areas such as psychological counseling and the welfare of the disabled, the elderly and those with special needs, the professional relationship between the social worker and beneficiaries, its role in the identification and management of problems, focus on the interview and the home visit as means of gaining information and determining the course of intervention. Prerequisite: SOCW231

**233- Social Group Work Method**

The historical development of

Introduction to the concept of the group, its types, bases of group formation, determinants of group dynamics, principles and objectives of group social work, the role of the social worker in group work, practical observations in selected institutional settings. Prerequisite: SOCW231

**D. Psychology Courses (PSYC)**

**Psychology 231: Introduction to Psychology**

An introduction encompassing the most vital principles in psychology. It includes the history of psychology, its various schools of thought, biological bases for behavior, learning principles, perception, personality, drives and emotions, and social interaction.

**Psychology 233: Psychology of Individuals with Special Needs**

This course deals with the identification, diagnosis, and characteristics of those with special needs, especially the physically impaired, sensorial deprivation, emotionally disturbed, mentally retarded, and speech impaired. It also focuses on the psychological needs and adjustment of individuals with special needs. (Prerequisite: PSYC. 231)

**Psychology 236: Psychology Health Professions**

(This Course is designed for students in Nursing, Pharmacy and Health Professions.)

This course introduces basic concepts in psychology, Stages of human development with emphasis on ageing stage. Besides issues like learning, adjustment, Motivation and emotion. Also studies personality, abnormal behavior, counseling, Psychotherapy, Communication and speech disorders. In addition to the structure and functions of the nervous system.

**Psychology 330: Introduction to Cognitive Psychology**

This course covers theories of cognitive processing and performance. It deals specifically with operations of thinking, classification, memory, coding and encoding of information, problem solving, and concept formation. (Prerequisite: PSYC. 231)

**Psychology 331: History and Systems of Psychology**

A historical review of the various schools of thought in psychology will be presented in this courses. Focus will be on the historical development of these schools of thought, they methods of inquiry they utilize, and the positions they take regarding the nature and development of human beings (Prerequisite: PSYC. 231).

**Psychology 332: Developmental Psychology**

The physical, cognitive, and psychosocial development of human beings is the focus of this course. It will cover development from conception until death, with primary emphasis on childhood and adolescence. (Prerequisite: PSYC. 231)

**Psychology 333: Psychology of Learning**

This course deals with the various theories of learning, especially those emanating from empirical studies on animals and human beings. Special emphasis will be placed on behavioral, cognitive, and social learning theories. (Prerequisite: PSYC. 231)

**Psychology 334: Psychology of Perception**

An overview of theories dealing with perception will be presented in this course. It will cover the topics of sensation, attention, and perception, especially visual, auditory, and kinetic. The course will also deal with the relationship between perception and personality and culture. (Prerequisite: PSYC. 231)

**Psychology 335: Psychophysiology**

The relationship between mind and body will be the focus of this course. It will deal with how the nervous system, hormones, and physiological states affect behavior. Special focus will be given to the process of neural transmission and function.

(Prerequisite: PSYC. 231)

**Psychology 336: Research Methods in Psychology**

This course deals with scientific methods used to carry out psychological research. It includes observational techniques, statistical tools, sampling methods, instrument development, and research design. The course also deals with how research reports are organized and written, and the ethical codes adhered to in psychological research.

(Prerequisite: PSYC. 231).

**Psychology 337: Mental Health**

A comprehensive overview of the factors and variables associated with mental health and psychopathology will be presented in this course. It also will deal with how mental health is assessed and promoted emphasizing preventive mental health care. (Prerequisite: PSYC. 231).

**Psychology 338: Social Psychology**

Introduction to social psychology that encompasses examining the social psychological phenomena within the studies on social interaction between individuals and groups. The objectives include understanding and analyzing the individual and group behavior in light of the theoretical and empirical studies on group dynamics including formation of the groups, membership, leadership, followers' behavior and solutions to group conflicts within and outside the group. (Prerequisite: PSYC. 231).

**Psychology 339: Vocational Counseling**

This course offers the main theories in vocational development including personality and development of psychological theories. The course introduces the students to tests and inventories of vocational development. Moreover, students are trained in the use of tools that suit the client and help him/her make vocational decisions(Prerequisite: PSYC. 332)

**Psychology 430: General Methods in Psychological Services**

This course covers training students in primary psychological skills that help practitioners. It also introduces the student to the local psychological institutes, the procedures of conducting the initial interviews and evaluation, diagnostic tests, principles of conducting thorough observation, active listening, collecting and reporting data in case studies, and the skills of validating data and writing reports without violating the ethical professional values (Prerequisite: PSYC.. 337).

**Psychology 431: Psychology of Personality**

Discusses various psychological models of human nature. Personality theories in the various schools of psychology including: behaviorist, cognitive, psychoanalytic, humanistic, phenomenologist (gestalt and existentialist orientations). A given theory is presented to cover the position of the theorist from personality development, traits, biological, social, and cultural personality dimensions (Prerequisite: PSYC. 332).

**Psychology 432: Experimental Psychology**

Training students in designing experiments, using psychological experimental lab. Students are trained to observe animal behavior, human behavior in memory, perception, and reaction time in reflex behavior and to know how some instruments are used for measuring the physiology of psychological behavior. Simple experiments are conducted during the course, including those that relate to memory and perception in human behavior. (Prerequisite: PSYC. 336).

**Psychology 433: Clinical Psychology**

This course introduces the students with the relationship of clinical psychology and abnormal psychology, as well as counseling psychology as they relate to the theoretical foundations of this field in modern schools of psychology. The student gets to know the clinical methods used in helping psychological cases, including conducting interviews, taking notes, using psychological standardized tests such as personality tests, mental ability tests, behavior, readiness, referral techniques. In addition the course introduces students to individual and group therapeutic techniques (Prerequisite: PSYC. 337).

**Psychology 434: Psychology of Individual Differences**

Covers topics that deal with individual differences, the factors affecting these differences, instruments used for measuring the cognitive, personality, motivational, and feelings dimensions with a special focus on the case study, interview, participants observation. The course also acquaints students with the statistical procedures employed in data analysis that are used in investigations of individual differences (Prerequisite: PSYC. 336).

**Psychology 435: Counseling Psychology**

Basic introduction course in counseling psychology, concepts, models and skills of counseling, methods and techniques, with a focus on micro-counseling (role-playing) on basic skills in counseling (Prerequisite: PSYC 337).

**Psychology 436: Psychology of the Aged**

This course deals with the last stage of the individual development in depth (old age 60 years and older). It deals with the different changes that occur as the individual proceeds in age in the varius aspects including the biological, mental, psychological, and social changes. It focuses on the issues of adjustment, mental health & physical status of the elderly, and health related quality of life. The course focuses on the psychological and social problems as experienced by the elderly. It explores the needs of the elderly, methods of studying the related issues in the psychology of the aged and their needs (Prerequisite: Psyc. 332).

**Psychology 437: Community Psychology**

Introduces students to the field of community psychology, its history, discipline sources and resources, objectives, orientations and instrumentality. The significance of community psychology in mental health as a preventive mental health primary care by controlling the community environmental factors that lead to mental health problems. Developing the community psychological sense as a preventive measure. Training students in the psychological sense of community as introduced, in at least one case study. (Prerequisite: PSYC. 437).

**Psychology 438: Seminar in psychology**

Advanced study in a topic choosen by the department. It aims at upgrading and advancing the student understanding in the choosen topic. The course requires writing a research paper in one aspect of the given topic, the paper could include field practices (prerequisite: senior level and dept. approval).

**Psychology 439: Practicum in Mental Health Skills (A)**

This course is covered in one contact classroom for two hours weekly and seven field training hours weekly. The field training has to cover visiting four mental health centers during the 16-week semester. (Prerequisite: PSYC. 337 and senior class status).

**Psychology 429: Practicum in mental health skills (B)**

This course is covered in one contact hour, five field training hours a week. The field training takes place in one mental health center for the whole duration of the semester. (Prerequisite: PSYC. 439).

**Psychology 445: Advanced Counseling Psychology**

The course introduces the student with some counseling models including: the psychoanalytic, the phenomenological, humanistic, gestalt, existentialist models, in addition to the rational emotive model. All these models are given within their own

theoretical and philosophical conceptual perspectives. The student focuses on one model which s/he chooses to for training and practice its therapeutic techniques and

## Department of Media

The Media Department was established as a specialized department for graduating journalists in the field of written and audio media in 1996. And in 2002, the field of visual media was added in teaching so that there will be three academic programs at the Media Department, leading to the Bachelor Degree in the following specializations:-

1. Media/Journalism – Major, Political Science – Minor
2. Media/Journalism – Major, Sociology – Minor.
3. Media/Radio – Major, Television – Minor.

**Mission and Vision of Media Deparment:**

The Department seeks to graduate proficient persons in the fields of Media capable on serving their country and contributing to the universal civilization with professionalism, spirit, ethics and national feeling through graduating students who have the instruments of scientific research, critical thinking, skills of media wrok with all its fields and in depth study with profession ethics.

Since Palestine is in the front of the universal news and as the role of Media is out of suspicion, the Department seeks to graduate the qualified persons to work in differenct media institutions and fulfill the needs of the market with Pakestinian media persons with higher grade of professionalism and proficiency competing the world media persons and distinguished from them with deep knowledge on the existing conflict on the Arab region; and they constitute a part of the local culture and they are empowered in their mother tongue as will as aware of habits and conventions and capable on communicating the truth; and at the same time they do not ignore the human demension behind the event.

1. **MEDIA COURSES**

MDIA231 | INTRODUCTION TO MEDIA STUDIES

The concept of information, the beginning and development of the press world with particular reference to the Arab world and Palestine, key concepts of the press and its role in society and information mechanisms, the study of news agencies, news and public opinion, propaganda and psychological warfare, overview of press theories and media law.

**MDIA223 | BROADCASTING PRESENTATION**

Presentation’s techniques for radio and TV, articulations, pauses, pronunciations, coloring and expressing by voice, giving meanings to words according to the intended meaning (Lecture 1hr, Lab 3hrs).

**MDIA233 | PRINCIPLES OF EDITING AND THE LANGUAGE OF JOURNALISM**

The study of proofreading, the art of self-expression, articulating ideas, sentence structure, grammar and style, modern styles of writing, syntax and diction. Prerequisite: MDIA231

**MDIA237 | THEORIES OF MASS COMMUNICATION**

The theories of mass communication and its role in society, the effects of TV, radio and print products on society and public opinion, media campaigns and their influence, theories of media development and its ideological context, media mechanisms, different models of media theory, Islamic media, socialist media, free market media and state media. Prerequisite: JOUR232

**MDIA335 | MEDIA AND SOCIETY**

The role of media in society and its effects on social and political processes, contemporary media issues, cinema, TV and video, the effect of TV on public opinion and audiences, freedom of information, media laws, media monitoring, ethical issues, the role of media in the development and growth of society. Prerequisite: MDIA231

**MDIA336 | ARAB AND PALESTINIAN MEDIA**

The study and analysis of media in the Arab world and Palestine in particular, its relationship with the state and society, the role of media in propaganda and on public opinion, types of Arab newspapers and magazines with special focus on the press in Egypt, Syria and the Arab press published in Europe, a short history of the media in the Arab world and Palestine, law and other mechanism which govern mass communications, contemporary issues in Arab media. Prerequisite: MDIA231

**MDIA337 | COMPARATIVE INTERNATIONAL MASS COMMUNICATIONS**

The study and analysis of the organization of mass communications, variety of media systems in the world, relationships with the state and various institutions in society, media in the developed world, under developed countries and Israel, Israeli Media and its structure, administration and policies, the role of media in international relations, the relation between industrial countries as regards news and its distribution. Prerequisite: MDIA232

**MDIA425 | MEDIA LANGUAGE**

Application of Arabic classical grammar, practicing writing and reading different texts for radio, practice on finding mistakes in different texts and correcting them (Lecture 1hr, Lab 3hrs). Prerequisite: ARAB238

**MDIA432 | PUBLIC RELATIONS**

The principles of public relations for general institutions, governments, companies, committees and clubs, editing bulletins, news bulletins, advertisements and reports, public announcements and speeches, the protocol of correspondence, media in the service of public relations, the role of spokesmen in public and private institutions. Prerequisite: JOUR332, MDIA233

**MDIA439 | Special Topic**

Prerequisite: MDIA233

1. **Jour courses**

**JOUR232 | PRINCIPLES OF NEWS GATHERING AND EDITING**

Principles of gathering and editing the news, what are news elements, how news is written, theories and practical elements of news gathering and news selections, focus on news stories and news in brief, the difference between writing for the press and creative writing news intros and the five 'W' questions, the inverted pyramid, interview techniques, news reports, reportage and feature stories, practical tasks and assignments. Prerequisite: MDIA231

**JOUR234 | INVESTIGATIVE REPORTING**

Theoretical and practical study of data collection and writing the investigative reports that covers varied interests of audience such as: political, social, educational, economic, health issues. research methods of investigation and data collection, data analysis and simple critical style, using traditional and non traditional human sources information, books and journalism, studying the Investigation Report and Reportage. Prerequisite: JOUR232, MDIA233

**JOUR235 | PHOTO JOURNALISM**

Principle of photo journalism, using the camera, the art of photo journalism, lighting, printing and development of photography, the use of photography in sport, news, investigation â¦ etc., the caption, photographs and the caption, training on photography equipment, the language of the camera, photography as information, principle of image selection. Prerequisite: JOUR232

**JOUR236 | COMPUTER FOR JOURNALISM**

Introduction to computer, programs for word processing, e-.mail, internet, networks, using computers for information, typing, the use of computers in news paper production (Lecture 2hrs, Lab 2hrs). Prerequisite: JOUR232

**JOUR331 | JOURNALISM LAB**

Follow up on news agencies in the lab, selecting news editing news, photo selection through photographic agencies, training on the production of a newspaper (Lecture 1hr, Lab 6hrs). Prerequisite: JOUR234, JOUR235

**JOUR332 | ANALYSIS AND COMMENT WRITING**

Principles of analysis writing, writing columns and opinion, editorials, research for journalists, news analysis, diary writing, language use in analytical writing and arts critical reviews. Prerequisite: JOUR233

**JOUR338 | NEWSPAPER LAYOUT**

Principles of the layout process in news paper, the art of creative newspaper production, theories of layout, montage in magazines and other print materials, computers use in newspaper layout. Prerequisite: JOUR232

**JOUR412 | INTERNSHIP IN NEWSPAPER**

Gathering, writing, and editing news through work as correspondents in local daily newspapers, the work of student in the newspaper is arranged by the instructor, who contacts the papers and agrees on the conditions of work with them, (Training: 3 weeks or minimum of 120 hrs). Prerequisite: JOUR331

**JOUR431 | MAGAZINE JOURNALISM**

Writing articles and investigative reports for weeklies with special attention to factual and scientific style in fields of health, economics, and general science... etc., different writing styles, headlines, layout , design and information on front page, use of pictures, the differences between weeklies and dailies. Prerequisite: JOUR234

**JOUR433 | ADVERTISING IN JOURNALISM**

Basics of copy writing, and design of ads for daily papers, advertising campaigns and campaigns in general, ways of influencing the consumer and the utilized psychological elements, strategies and planning in marketing goods and services, basics of public relations, advertising for public corporations, governmental offices, companies, non-profitable associations and clubs, writing advertising pamphlets, company news, public addresses, the difference between those and journalism. Prerequisite: JOUR232

**JOUR438 | SEMINAR IN JOURNALISM**

Work on an academic research paper on a subject from the media activities in society under close supervision of an instructor. The student produces and defends a paper in front of a panel chosen by the department or the program’s council. (Prerequisite: Fourth year standing and department approval)

1. **Radio Courses Description**

**RABC234 | WRITING FOR RADIO AND PROGRAMS**

Writings for different Media, writing for radio different genres; radio news, radio reporting, interviews, radio magazine, radio presentations for news, for entertainments, for politics. Prerequisite: JOUR232

**RABC235 | RADIO INVESTIGATIVE REPORTS**

Theories and drills of information gathering for political, sociological, and economic issues, writing and presenting this information in a simplified logical order, using classical sources and new technology for gathering information, the ethical perspective in investigative reporting. Prerequisite: RABC234

**RABC236 | RADIO ARTS**

Producing and writing for radio programs, educational and cultural programs, entertainment light programs. Prerequisite: RABC234

**RABC321 | SOUND EDITING**

Theory and implications of recording and editing sound for radio, the cut master programs, creative sound editing, mixing sound, using music and effects for radio (Lecture 1hr, Lab 3hrs). Prerequisite: RABC234

**RABC331 | RADIO LAB**

Using news agencies for selectivity of news items, writing and editing news bulletins, presenting news and programs, producing and directing radio broadcasting (Lecture 1hr, Lab 6hrs).

Prerequisite: RABC236

**RABC333 | INTERNATIONAL POLICIES FOR RADIO**

Comparing different international radio systems, media policies and structures of different international radios, media cooperation’s among radio stations in the third worlds and the western radios. Prerequisite: RABC234

**RABC412 | INTERNSHIP IN RADIO STATION**

Experiencing work in real radio stations, working with reporters, editors, producers, presenters and directors, (Training: 3 weeks or minimum of 120hrs). Prerequisite: RABC331

**RABC433 | RADIO DIRECTING**

The differences between radio directing and TV directing, elements for directing the different radio genres; structures, using effects and music. Prerequisite: RABC321, RABC235

**RABC434 | RADIO ADVERTISEMENTS**

Basics of copy writing, production of commercials for radio stations, commercials in campaigns, campaigns in general, ways of influencing the consumer, the psychological elements, strategies and planning in marketing goods and services, public relations basics, advertising for public corporations. Prerequisite: RABC234

**RABC438 | SEMINAR IN RADIO MEDIUM**

The student is required to produce a research paper. He must decide on the research methodology, review literature and analyze results under the supervision of the instructor. The student should defend his research in front of a department committee. Prerequisite: Fourth year standing and department approval.

1. **Television Courses** **Descriptions**

**TELV234 | INTRODUCTION TO TV**

Historical introduction of the origin of pictures and moving images, language of novels, theater, cinema, video; compositions, framing, movement, natural sounds, and sounds on tapes, narration and voice over and sound bites, piece to camera, body language and credibility, video tape editing, writing for picture, researching and gathering news and information, conducting interviews. Prerequisite: Concurrent with TELV322

**TELV235 | TV NEWS WRITING**

Electronic news gathering, elements of news items, accuracy and immediacy, writing and editing. Prerequisite: Concurrent with TELV322

**TELV238 | TV REPORTING**

Principles of news gathering, writing for picture, structure of TV story, different genres, news story, feature story, in house reports, investigative report (Lecture 1hr, Lab 6hrs). (Prerequisite: TELV234)

**TELV322 | TV TECHNOLOGY**

Operating Electronic News gathering (ENG) cameras, operating edit units, operating studio and control room, sound system , lights, video tape recorders VTRs (Lab 6hrs). Prerequisite: Concurrent with TELV234

**TELV332 | TV PROGRAMS**

TV production; pre production, production itself, post production of TV programs and shows like news, magazines, talk shows (Lecture 2hrs, Lab 3hrs). Prerequisite: TELV238

**TELV412 | INTERNSHIP IN TV STATION**

Experiencing work in real TV stations, or TV production houses, working with reporters, editors, producers, presenters, and directors, video filming and editing (Training: minimum of 100hrs). Prerequisite: TELV433

**TELV431 | TV DOCUMENTARIES**

Theories of documentaries, history of documentaries, kinds of documentaries, pre production for documentaries, scenario writings, critiques. Prerequisite: TELV322, TELV234

**TELV433 | TV STUDIO**

Practical production and the needed skills, operating equipments, team work, writing and editing, directing, presenting, shooting for TV production, reporting (Lecture 1hr, Lab 6hrs). Prerequisite: TELV332

## Department of Philosophy and Cultural Studies

The Department of Philosophy and Cultural Studies offers a Minor in Philosophy, administers an interdisciplinary MA program in Contemporary Arab Studies, and offers three Cultural Studies (CS) courses as part of the University Requirements, the general education requirement that all students need to take to graduate. Students can choose any two of the three CS courses, totaling six credit hours.

CULS 331 covers modern and contemporary Western thought. Readings include Machiavelli, Bacon, Locke, Kant, Mill, Marx, Freud, among others. CULS 332 covers late 19th and 20th Century Arab thought focusing on issues that occupied Arab writers such as political reform, modernity and tradition, Islamic movements, secularism, nationalism, underdevelopment and development. CULS 333 is entitled: Palestine: The Identity and The Cause. It covers aspects of the history of Palestine, culture, Literature, Palestinian identity, and social and economic transformations in the 20th century.

The Department also offers several elective courses in ancient Near Eastern, Greek, and Roman civilizations, as well as the Arab/Islamic civilization in the medieval period, among other courses.

**Minor in Philosophy:** 18 credit hours

1. 12 credit hours from the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| Course No. | Course Name | Prerequisite | Credit Hour |
| PHIL231 | INTRODUCTION TO PHILOSOPHY | . | 3 |
| Phil 232 | INTRODUCTION TO LOGIC | PHIL231 | 3 |
| Phil233 | ANCIENT PHILOSOPHY | PHIL231 | 3 |
| Phil 438 | SEMINAR IN PHILOSOPHY | PHIL231 or department approval | 3 |

1. 6 Credit hours from Philosophy courses

**Course Description**

**Cultural studies courses:**

**Culs 230 Democracy, Human Rights and International Humanitarian Law:**

This course endeavors to introduce students to the fundamental concepts and issues in democracy, human rights and international humanitarian law. It hopes to raise the students’ awareness to their democratic and human rights and encourage them to participate actively in the ongoing political and intellectual debates tackling the problematics and limitations embedded in such rights. It also aims at encouraging students to react critically to the issues related to the implementation of democracy, human rights and international humanitarian law especially in light of the hegemony of the foreign policies of the industrially advanced countries and the contradictions and inconsistencies that follow from such policies and their negative and damaging impact on third world countries.

**CULS231  ANCIENT AND ISLAMIC CIVILIZATIONS**

Literary and philosophical anthologies from the literature of the old civilizations, Greek civilization, Roman civilization, the Far East civilization etc., the Islamic civilization, complete texts or selected articles representing prominent intellectual ideologies in the old civilizations and the Islamic civilization. Prerequisite: ENGC141 or department approval

**CULS232  PALESTINE: PAST AND PRESENT**

Issues related to Palestinian history: past and present. Modern and contemporary Palestine, the transformations in Palestinian social and economic structure, their impact on the Palestinian culture identity and its manifestations. Palestine in its Arabic and international contexts. Prerequisite: second year standing

**CULS331 Modern and Contemporary European Thought:**

This course is concerned with the study and analysis of classical texts (complete or in partial selection) of European thought from the Renaissance to the present. The texts are meant to represent important intellectual currents and schools of thought (philosophical, social, and political) which contributed to the definition and structuring of European culture over the past few centuries.

**CULS332 Modern and Contemporary Arab Thought:**

This course deals with the rise and development of Modern and contemporary Arab Thought. This is carried out through a systematic and deep-searching study of important intellectual and cultural currents. These include reformism, religious fundamentalism, nationalism, socialism, liberalism, etc. The course also deals with the interaction between these currents and the Arab-Islamic heritage, as well as Western Civilization. Finally, the course deals with the most important challenges which face Al-Mashriq And Al-Maghreb, which include: imperialism and decolonization, the national state and Arab unity, Democracy, Pan-Arabism and Islam, dependency and independence, problems of Arab-Islamic Culture, minorities, innovation and creativity, Palestine and the Zionist Challenge. (Course requirement: completion and 30 credit hrs).

**CULS333 “Palestine: The Identity and the Cause”:**

The impact of the ancient history of Palestine (with an emphasis on the Abrahamic religions) on the modern struggle between the Palestinian national movement the Zionist movement and its colonial-settler state of Israel. The location of Palestine in the global divide both in the classical and modern eras of colonialism (pre-modern, modern, and post-modern). The emergence of the nation state and its impact on the “Jewish Question,” Palestinian nationalism, the Zionist movement, and the phenomenon of Pan-Arabism. Construction of the Palestinian identity in the late Ottoman period, and its clash with the colonial British mandate and the Zionist movement. The Palestinian Nakba of 1948 and the Palestinian plight in its aftermath. The birth of the modern Palestinian national movement with an emphasis on the Palestinian Liberation Organization (PLO). The transformations of the Palestinian national project since 1960s. The ‘new Palestine’ in the post-Oslo era.

**CULS438: Special topic in cultural studies**

Topics and subjects from different civilizations including oriental civilizations such as sematic, Islamic and European civilizations This course will also deal with modernity, post-modernism, democracy and human rights and civil society. Requirement; CULS 331, 332

**Philosophy Courses**

**PHIL231  INTRODUCTION TO PHILOSOPHY**

Introduction to main areas of philosophy, , aspects of its history and problems, topics in ethics, metaphysics, epistemology, philosophy of science, philosophy of religion, readings for classical and contemporary writers.

**PHIL232  INTRODUCTION TO LOGIC**

The course aims at developing critical, analytic, and reasoning abilities through the study of logic. Emphasis is placed on practical applications and varied and relevant exercises necessary for the development of those skills. Topics covered include: uses of language, fallacies, categorical propositions, categorical syllogisms, arguments in ordinary language, symbolic logic, the method of deduction, and a brief introduction to induction..

**PHIL233** Introduction to the history of Philosophy

Readings of the main philosophical texts and of secondary sources so as to introduce the student to the stages in the development of philosophical thought, from the pre-Socratic period till today; this includes Greek philosophy, Medieval philosophy, Arab Islamic philosophy and Modern European philosophy, as well as nineteenth and twentieth century philosophy and contemporary philosophical thought in the twenty first century. The course intends to cover the necessary introductions to understand the features of the various stages and varieties of philosophical thought. The course will introduce the student to the main trajectories in the development of philosophy and its branches in addition to the instruments of modernization and development.

**PHIL234  ARAB ISLAMIC PHILOSOPHY**

Introduction to Islamic Philosophy tracing its continuity with Greek philosophy and its contribution to modern Western Philosophy, the translation movement from Greek into Arabic, the early theological philosophical beginnings, main figures such as al-Kindi, al-Farabi, Avicenna, Ghazali, and Averroes up to Ibn-Khaldun, philosophical outputs after Inb-Khaldun.

**PHIL333  Introduction to Ethics and Aesthetics**

The study of various issues in Ethics and Aesthetics, including the main ethical theories and the principles that are derived from them, the standards of right and wrong, good and evil, justice and injustice, liberty and moral responsibility, social justice, rights and duties, morals and politics, the extent of the objectivity of principles, values and moral judgments, in addition to the most important theories and the aesthetic issues that prevailed in various historical periods regarding the aesthetic experience, the aesthetic position, aesthetic values, arts and the beauty of nature, aesthetic taste, and arts and society.

**PHIL334  POLITICAL PHILOSOPHY**

Selections from ancient and contemporary writers including Plato, Aristotle, St. Augustin, Farabi, Ibn-Khaldun, Mill, Marx, Rawls, Nozick, and Dworkin, legitimacy of government, obligation and its limits, justice in the state, liberty and civil disobedience. Prerequisite: PHIL231 or department approval

**PHIL431** Theory of Knowledge (Epistemology)

To study the fundamental problems concerning knowledge such as its boundaries, scientific, sensory and rational knowledge, and the main doctrines in epistemology: experimental, rationalism, deconstructionism, etc., the philosophy of the natural and social sciences and the various perceptions of scientific methods, conceptual relationships between different fields of science, the idiosyncrasy of social phenomena regarding the specific method of its study of the modes of verification utilized in it, to get acquaintance with the fundamental concepts arising within the framework of the history of analytical philosophy, e.g. the historical truth, objectivity, history as science, historical verification, the methods utilized in proving the soundness of historical theory, determinism and freedom in history and the relationship between history and other sciences.

**PHIL438  SEMINAR IN PHILOSOPHY**

Study of a thinker, a school, or a specific topic in philosophy, or a more advanced treatment of a subject offered in the courses leading to Minor

**PHIL439  Special topic**

Study a special topic from a philosophical perspective addresses the current issue by reading, analyzing and discussing texts.

## Physical Education Program

**University Requirement course from the program:-**

**120. Physical Education:-**

This course aims at equipping with theoretical information, basic skills and rules and training in the following aspects: physical Fitness, posture, track and filed games, Handball, Basketball. The course will also include basic principles for track and filed games; i.e., all kinds of running, high and broad jumping. Furthermore, students will be acquainted with single elimination knockout tournament.

**B. Elective Courses:-**

**211. Physical Fitness**

This class meets twice weekly. It aims at furnishing students with information about the role and importance of physical fitness in modern life, its connection with health, its positive effects on the efficiency of body system, maintaining a healthy body posture through physical training and use of different apparatuses which improve muscular strength, endurance, flexibility, speed, agility (elements of physical fitness) in addition to aerobic training. pre- requisite: physical Education 120.

**Optional credit hours from the department:-**

**Cross Country 117,217,317,417:-**

To improve cardio respiratory fitness and stamina. Includes theory Information and practical exercises. Encounters twice a week training prerequisite: ( PHED120).

**Sports teams:-**

Intensive training for the technical and tactical skills and to participate in indoor and outdoor games, teams are choosing through an extensive process by coaches According to **specific criteria.**

These courses are classified as follows:-

Football 113-213-313-413

Basketball 114-214-314-414

Volley ball 115-215-315-415

Hand ball 116-216-316-416

**The faculty of Art provides an academic program aiming to obtain the Bachelor degree in Physical Education.**

**Admission requirements:-** (Entry requirements):-

1. The student is admitted to the first year level based on his obtained average in High School General Exam, Tawjihi (or equivalent approved by MOEHE) and according to the average announced as a minimum the school of Art.

2. Comprehensive medical examination (the efficiency of the heart to physical capabilities based on a medical report).

3. free of any Distortions skeleton.

4. Passing physical abilities exam.

5. Absorptive capacity of within the department.

6. Passing of pre-requisite courses:-

A. Principles & Philosophy of Physical Education PHED 131.

b. Physical Conditioning PHED 121.

**Completion of the program requirements:-**

1. Complete successfully the minimum number of credit hours required for graduation (129 credit hours) and obtaining cumulative grade point average of at least 68%.  
2. Completion of a minimum of 120 hours collaborative work.

**The program structure:-**

The Bachelor's degree in physical education consists of a total of 129 credit hours distributed between university requirements , the college requirements , the specialty courses and the General Courses, they are distributed as follows:-

|  |  |
| --- | --- |
| **type of requirement** | **Number of hours** |
| University requirements | 21 |
| College of Art requirements | 23 |
| Speciality requirement | 80 |
| Free courses | 5 |
| TOTAL | 129 |

The requirements for major (one) speciality (80) credit hours this covers the following courses.

1) The compulsory requirements for the specialty (73) credit hours include the following courses:-

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course number**  **and symbol** | **Course title** | **Class rooms hours** | | **Credit hours** | **Prerequisite** |
|  |  | **Theory** | **practical** |  |  |
| PHED122 | Soccer 1. | 1 | 2 | 2 |  |
| PHED124 | Volleyball 1. | 1 | 2 | 2 |  |
| PHED127 | Physical Training 2. | 1 | 2 | 2 | PHED 123 |
| NURS133 | Principles of Anatomy. | 3 | - | 3 |  |
| PHED220 | Mobility Learning. | 2 | - | 2 |  |
| PHED221 | Athletics 1. | 1 | 2 | 2 |  |
| PHED222 | Soccer 2. | 1 | 2 | 2 | PHED122 |
| PHED223 | Basketball 1. | 1 | 2 | 2 |  |
| PHED224 | Volleyball 2. | 1 | 2 | 2 | PHED124 |
| PHED225 | Handball 1. | 1 | 2 | 2 |  |
| PHED226 | Gymnastic 1. | 1 | 2 | 2 |  |
| PHED227 | Swimming 1. | 1 | 2 | 2 |  |
| PHED228 | Rhythmic Dancing. | 1 | 2 | 2 |  |
| STAT 229 | Statistics in Physical education. | 2 | ـ | 2 |  |
| PHED233 | Physiology of Physical activity. | 3 | ـ | 3 | NURS133 |
| PHYS2201 | Principles of biomechanics. | 2 | - | 2 |  |
| PHED321 | Athletics 2. | 1 | 2 | 2 | PHED221 |
| PHED332 | Sports Psychology. | 3 | - | 3 |  |
| PHED323 | Basketball 2. | 1 | 2 | 2 | PHED223 |
| PHED325 | Handball 2. | 1 | 2 | 2 | PHED225 |
| PHED326 | Gymnastic 2. | 1 | 2 | 2 | PHED226 |
| PHED327 | Swimming 2. | 1 | 2 | 2 | PHED227 |
| PHED328 | Rhythmic Dance 2. | 1 | 2 | 2 | PHED228 |
| PHED 329 | Physical Education curricula. | 2 | - | 2 |  |
| PHED 331 | Sports Pedagogy. | 3 | - | 3 |  |
| PHED  336 | Measurements and Research in Physical education. | 3 | - | 3 | STAT 229 |
| PHED420 | Practicum 1. | 1 | 2 | 2 | PHED127 |
| PHED421 | Practicum 2. | 1 | 2 | 2 | PHED420 |
| NURS436 | Athletic injuries and Therapy. | 3 | - | 3 | NURS133 |
| PHED438 | Seminar in Physical Education. | 3 | - | 3 | PHED  336 |
| NURS426 | Health Education. | 2 | - | 2 |  |
| PHED428 | Physical Education for Special needs. | 2 | - | 2 |  |
| NUTD429 | Nutrition for Athletes. | 2 | - | 2 |  |

2) Optional speciality requirements (7) credit hours, the student can choose from the following groups:-

a) First group (2) credit hours can be chosen from the following courses:-

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course number and symbol** | **Course title** | **Class rooms hours** | | **Credit hours** | **Prerequisite** |
|  |  | **Theory** | **Practical** |  |  |
| PHED427 | Leisure & Recreation. | 2 | - | 2 |  |
| PHED 4202 | Sports Media. | 2 | ـ | 2 |  |
| PHED 4203 | Marketing in the Sports field. | 2 | ـ | 2 |  |
| PHED 4204 | Drifters and outdoor life. | 2 | ـ | 2 |  |
| PHED 4205 | Athletics Sociology. | 2 | ـ | 2 |  |

b) Second group (3) credit hours can be chosen from the following courses:-

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course Number and symbol** | **Course title** | **Class rooms hours** | | **Credit hours** | **Prerequisite** |
|  |  | **theory** | **practical** |  |  |
| PHED432 | Soccer 3/ Specialization Requirement. | 2 | 2 | 3 | PHED222 |
| PHED433 | Basketball 3/ Specialization Requirement. | 2 | 2 | 3 | PHED323 |
| PHED434 | Volleyball 3/ Specialization Requirement. | 2 | 2 | 3 | PHED224 |
| PHED435 | Handball 3/ Specialization Requirement. | 2 | 2 | 3 | PHED325 |
| PHED431 | Athletics 3/ Specialization Requirement. | 2 | 2 | 3 | PHED321 |

c) Third group (2 ) credit hours can be chosen from the following courses:-

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course number and**  **Symbol** | **Course title** | **Class rooms hours** | | **Credit hours** | **Prerequisite** |
|  |  | **Theory** | **practical** |  |  |
| PHED422 | Karate | 1 | 2 | 2 |  |
| PHED 423 | Badminton | 1 | 2 | 2 |  |
| PHED424 | Tennis | 1 | 2 | 2 |  |
| PHED 425 | Small Games | 1 | 2 | 2 |  |
| PHED 4206 | Taekwondo | 1 | 2 | 2 |  |
| PHED4207 | Table Tennis | 1 | 2 | 2 |  |

**Course Description**

A brief description of each course separately so as to include its reference, course title, a brief description of the course and the pre-requisite (if any).

**The theoretical and practical courses for the Physical Education program (PHED):-**

**Physical Conditioning PHED121:-**

Preparing students in a physically comprehensive and integrated manner; equipping students with knowledge necessary for  physical conditioning and improving and evaluating  physical fitness with all its components; training students on how to use training equipment in order to upgrade physical fitness, in addition to the effect of controlling body temperature during physical exercise.

**Physical Trainings PHED123:-**

Trainings: Definitions, aims and manners, introducing the different training positions, designing mini sport shows out of the different training activities, in addition to theoretically and practically preparing these training activities.

**Physical Trainings 2 PHED127:-**

Using equipment and machines in training, pair VS group training, training shows in groups using equipment and machines, performing shows using equipment. (Pre-requisite:Physical Trainings PHED123).

**Principles of Biomechanics PHED2201** (in cooperation with the Dept. of Physics):-

Improving information and concepts regarding human motion; dealing with motor patterns, in addition to the movement of the upper and lower limbs in the three dimensions.

**Principles and Philosophy of Physical Education PHED131:-**

Role of physical education as a social phenomenon in modern society, general and specific definitions of physical education, its aims and applications and its scientific principles (biologic, physiologic, philosophic, psychological), physical education new concepts and goals in addition to the basic foundations and principles for physical conditioning.

**Principles of Anatomy and Physiology of Physical Conditioning NURS133**(in cooperation with Faculty Nursing and Allied Health Professions):-

General anatomy of human body systems: bones (their structure, joints, muscles, nerves, motion), nervous system, cardiovascular system, digestion, respiratory system and hormones.

**Athletics 1 PHED 221:-**

Introducing basic skills for some events (short distances, hurdles, sprints, discus, shot put, long jump); introducing theory of basic skills and historical background in addition to the basic principles and law of these events.

**Soccer 1 PHED 122:-**

Teaching students basic soccer skills gradually; introducing rules of soccer in addition to some theoretical background.

**Basketball 1 PHED223:-**

Introducing basketball basic skills; equipping students with these skills theoretically and practically

**Motor Learning PHED220:-**

Basic concepts of human movement, motor behaviour, maturity and its effect on performance; motor skills and their development; levels and features of learning; theories of behaviour; theories of motor learning and biologic rhythm and learning using modern technology.

**Volleyball 1 PHED124:-**

Introducing basic skills like posture and different ways of passing the ball and playing; implementing international volleyball law; volleyball competitions; historical and theoretical framework of volleyball and basic skills.

**Handball 1 PHED225:-**

Handball, the game (offensive and defensive parts), the rules, how to acquire its skills, introducing students to the rules of the game and theoretical framework to evaluate performance.

**Gymnastics 1 PHED226:-**

Introducing basic gymnastic skills and introducing the most important skills in gymnastic machines, equipping students with knowledge about these skills, in addition to gymnastics theoretical background, its types and applications in different sports.

**Swimming 1 PHED227:-**

Covering basic swimming skills; theoretical framework for basic skills; basic swimming principles; rules of swimming in addition to a theoretical background

**Statistics in Physical Education STAT229:**(in cooperation with the Dept of Math):-

Focusing on the importance of statistics  in physical education ; its applications; some statistical concepts like the community, the sample, methods of selecting sample, quantitative and qualitative variables; statistical methods and procedures, different criteria, deviation, correlation, regression and different applications for these criteria; the most frequently-used statistical distributions.

**Physical Education Curricula PHED329:-**

Concepts and terminology of physical education; physical education traditional curriculum versus physical education modern curriculum; social, psychological and philosophical components of curricula; steps and principle of developing curriculum; role of science and modern technology in building curricula; modern teaching methods; evaluation of curriculum and role of teacher in the evaluating and upgrading the curriculum.

**Rhythmic  Dance 1 PHED228:-**

Covering topic including basics of rhythmic dance and movement; space-time dynamic organization of movement, ways of performing eastern dance and ballet in addition to musical appreciation for the triple dance based on rhythm using the drum.

**Athletics 2 PHED321:-**

Developing skill performance through motor training in different sports; training students on planning to enable them to formulate and train school sports teams. (Pre-requisite: Athletics 1 0 PHED221).

**Practicum 1 PHED420:-**

Exposing students to real teaching experiences and skills in basic and high schools; getting on-going feedback on their performance from training supervisors. (Pre-requisite: **Physical Trainings PHED127**)

**Soccer 2 PHED222:-**

Introducing manners of offensive and defensive playing; individual and team tactics and how they are used taking into account obligations of players, in addition to refereeing soccer game. (Pre-requisite: **Soccer** 1:PHED122).

**Sport Training PHED334:-**

Importance sport training; scientific principles of sport training, its concepts, features, objectives and obligations; theoretical framework of sport training; techniques of upgrading physical skills and features.

**Basketball 2 PHED323:-**

Basic motor skills, offensive and defensive, individual and team; using these skills in different stages of games; techniques of putting down defensive and offensive plans theoretically and practically in addition to methods of teaching them. (Pre-requisite: Basketball 1: PHED223)

**Sport Psychology PHED332:-**

Rudiments and development of sport psychology; features of different stages (body, motor, emotional); enhancing students’ motivation and inclinations and emotional state; stages of psychological preparation; introducing psychological aspects of team and discussing psychological issues in sports.

**Volleyball 2 PHED224:-**

Skills and development of the game through motor training in different games; introducing aspects of planning and rules of the game; enabling students to formulate and train school sports teams (pre-requisite: **Volleyball** 1  PHED124).

**Handball 2 PHED325:-**

A continuation and development of **Handball 1** in terms of upgrading basic defensive and offensive skills; visiting offensive and defensive plans; techniques of leading the team to the match and rules of the game. (Pre-requisite: **Handball** 1 PHED225).

**Gymnastics 2 PHED326:-**

Information and technical concepts relevant to gymnastic; basics and principles of some psychomotor skills using machines; possibility of performing integrated psychomotor skills on carpet. (Pre-requisite: Gymnastic 1: PHED226).

**Swimming 2 PHED 327:-**

Upgrading students’ skills and performance; training on different skills and methods of teaching them; getting to know more on planning and rules. (Pre-requisite:Swimming1: PHED227).

**Rhythmic Dance 2 PHED328:-**

Modern dance using manual equipment (i.e., balls, baton..); complete psychomotor in harmony with music; performing psychomotor skills with music as part of classic and folkloric dance. (Pre-requisite: **Rhythmic Dance**1: PHED228).

**Physiology of Physical Activity PHED 233 :-**

Familiarizing students with things like reaction and adaptation of the internal organs to training; effects of different environments on the adaptation of body organs; the difference between reaction and adaptation; physiological limit of exercising; structure of body organs; effects of physical activity on body organs and changes on body organs as a result of training. (pre-requisite: Principles of Anatomy and Physiology of Physical Conditioning NURS133).

**Sport Pedagogy PHED331:-**

Topics and skills relevant to the teaching of  physical education at schools; effective teaching and methods of teaching physical education in addition to the motor skills in different games.

**Measurement and Research in Physical Education 336 PHED:-**

Relevance of measurement to scientific research; steps and procedures of scientific research; types of measurements used in scientific research; characteristics of a successful measurement. (Pre-requisite**Statistics in Physical Education (**STAT229)**.**

**Practicum1 PHED421:-**

Various teaching skills; living real working life as a student teacher in high school and clubs; getting continuous feedback from training pervisors pre-requisite. ( **Practicum1 PHED420).**

**Athletic Injuries and Therapy PHED423** (in cooperation with Faculty of Nursing and Allied Health Professions):-

Introducing the concept of athletic injuries; their conditions; causes and symptoms; treatment for the injured and rehabilitation; methods of physiotherapy in all stages of injury. Pre-requisite**.(Principles of Anatomy and Physiology of Physical Conditioning NURS133).**

**Administration and Organization in Physical Education PHED425:-**

Introducing the general principles of organization and administration (in school and society) and the modern meaning of administrative planning in the field of physical education; an analytic study of administration in physical education; methods and techniques for organizing and running competitions.

**Seminar in Physical Education PHED438:-**

Reading and analysing a number of refereed papers; methods of data collection and scientific research; exposing students to scientific integrity and ethics; students doing  research papers  in  topic s of their own selection but using the methods of scientific research; discussing the research with the instructor and students; rewriting the research taking into account the notes. (Pre-requisite:**Measurement and Research in Physical Education**PHED336).

**Health Education NURS426:-**

General health rules that should be followed in different age stages; health aspects related to physical education and their effect on improving performance; study of body stature and deformities and effect of nutrition on man’s health, efficiency and ability to do job.

**Leisure and Recreation PHED427:-**

Definition of leisure and recreation; factors that affect the choice of activity to fill out free time; methods of designing recreational programs for different educational levels or community members; methods of planning and organizing camps and application.

**Physical Education For Special Need PHED428:-**

Knowledge, skills and behavioural patterns of special need; definition and objectives of Physical Education For Special need; different athletic organizations for people with special disabilities; methods of changing activities and programs to fit the disabled and their abilities and needs; the international Paralympics movement, its training and sports

**Nutrition For Athletes PHED NUTD429:-**

Biological principles of nutrition, exercise and health; digestion and absorption of main nutrients such as starches, fats, proteins, vitamins, minerals and water and their relationship with exercise and athletic performance; relationship between food and weight-control; advantages of food supplements such as natural and manufactured  amino acids.

**Sports media PHED 4202:-**

Collection of sports news and sports of writing to highlight the sports news in the visual media, print, radio, this is the role of the media in the dissemination of sports culture.

**Marketing in the sports field PHED 4203:-**

Sports marketing elements and its role in the success of the tournaments and human care, the economic dimension, and won the matches, and the right of the television broadcast, and investment in the field of sports, and to prepare for the marketing scheme tournaments and installations.

**Drifters and Outdoor Life PHED 4204:-**

Skills and active outdoor life, and leadership qualities, and the subordination of collective teamwork, qualities collective, patriotism, and order, and cooperation, and belonging to the group.

**Athletic Sociology  PHED 4205:-**

Familiarizing students with athletic analysis as a social system; using social and functional stratification of groups and teams; clarifying different future trends; using theories of social evolution which tackled challenges of social development that faced Physical Education; possibility of developing different social theories to use in studying basics of Physical Education and predicting future trends as well.

***Optional courses:-***

**Soccer 3 / Specialization requirement PHED432:-**

Providing information necessary for training; principles of training different age groups; how to plan training programs; preparing plans and analysing competitions; basics of team building. (Pre-requisite: PHED222).

**Basketball 3 / Specialization requirement PHED433:-**

Introducing technical, educational aspects of the basic skills of the game in addition to the rules; equipping students with the skills and methods of teaching them; basic offensive and defensive motor skills for singles, teams and groups; building offensive and defensive plans theoretically and practically; body conditioning for basketball players; methods of preparing training plans; bases of selecting players; rules of the game and practicing refereeing. (pre-requisite: PHED332).

**Volleyball 3/ Specialization requirement PHED434:-**

Introducing students to physical conditioning and skill acquisition for volleyball players; single and team plans both at the offensive and defensive levels; tests of the body, skills and measurement in planning; mini and shore volleyball; how to select players  and analysis; volleyball injuries; advanced applications; how to lead the team; rules of the game and refereeing. (Pre-requisite: PHED224)

**Handball 3/ Specialization requirement PHED435:-**

Offensive and defensive skills in addition to skills of goalkeeper; tactics in offensive and defensive aspects; how to select handball player; exploration; leading the team and refereeing. (Pre-requisite: PHED325).

**Athletics : PHED 431:-**  
Mastering basic athletic skills; familiarizing students with training plans in athletic competition; law of the game and  forming athletic teams; couching athletic teams; building training programs. (Pre-requisite: PHED321)

**Karate PHED422:-**

Teaching basic skills of karate and ways of teaching and performing; introducing technical aspects of these skills and the rules; origin and development of the game; the game through ages; readiness position; offensive and defensive skills; international law for refereeing boxing

**Badminton PHED423:-**

Theoretical aspects of the game and learn badminton shuttlecock skills, singles and doubles play, and teach badminton skills, and usefulness of badminton and arbitration.

**Tennis PHED424:-**

Providing historical background on the origin and development of the game and the tools used in it; providing the rules of the game and organizing competitions; how to perform basic skills; training aids and plans for single or double playing; the most important training to upgrade body parts needed for the game.

**Small games PHED 425:-**

The importance of small toys and their relationship to learn mathematical skills, and writing small games, choosing names, popular games inherited, and the work of a small sports festivals for these games.

**Taekwondo PHED4206:-**

Learn the basic skills, and to know how to learn them, and theoretical aspects of the game, and the historical background of Taekwondo, and secondary aspects, and arbitration

**Table Tennis PHED4207:-**

Theoretical aspects of table tennis learn skills, and there are special exercises in table tennis, and arbitration, and the law of table tennis.

## Fine Arts Program

**Courses Description (MUSI):**

**213 Choir 1 1 cr. hr.**

Introduction to chanting English and Arabic rhymes

*Prerequisite: Program approval*

**214 Choir 2 1 cr. hr.**

Advanced chanting English and Arabic rhymes

*Prerequisite: MUSI312*

**215-218 Woodwind and Brass Instruments 1 cr. hr.**

Students chose an instrument for training and get acquainted with the principles of musical theories.

*Prerequisite: Program approval*

**221 Principles of Music Theory and Solfege 1 2 cr. hrs.**

Students experiment with the notes and make up short and melodic phrases that move in steps. *Prerequisite: Program approval*

**222 Principles of Music Theory and Solfege 2 2 cr. hrs.**

Students will try to put more ideas together to make longer melodies and musical ladders and will understand the significance of the musical ladders. Students will be able to spot melodic shapes and patterns.

*Prerequisite: MUSI221*

**231 Introduction to Music 3 cr. hrs.**

A concise history of universal music and what characterizes various periods in the history of music. Students will appreciate universal musical masterpieces through listening to recordings.

**232 History of Music 3 cr. hrs.**

An introduction to the development of western music during the medieval ages up till present. Students will listen to selective musical pieces by famous musicians from each period for analytical purposes.

**Courses Description (ARTS):**

**231 Introduction to Islamic Art 3 cr. hrs.**

A review of Islamic art and the diversity of its forms as demonstrated in architecture, painting, applied arts and decoration. Intellectual, political and economic influences and interaction with preceding civilizations, specially those which influenced the rise of a distinctive Islamic style. Manifestations of this style in Palestine and the Arab and Islamic worlds and artistic characteristics associated with different Islamic periods.

**232 Islamic Architecture 3cr. hrs.**

Study of the development of building styles during the different Islamic periods in religious and civilian architecture, specially mosques and palaces with a focus on Bilad al Sham, Iraq and Egypt. Construction plans and basic Islamic architectural elements (minarets, arches, columns, capitals, domes etc…) as well as decoration and building materials , how they developed and the immerging regional variations

**233 Introduction to Islamic Crafts 3 cr. hrs.**

Characteristic crafts from the Islamic world (ceramic, wood, metalwork, glass, mosaics, plasterwork, weaving and calligraphy). Introducing the forms and materials used in the production of those crafts, their sources, techniques and decoration. The dissemination of those crafts and their functional application as well as elements of creativity, innovation, interaction and influences within the major known crafts.

**234 Contemporary Palestinian Art 3 cr. hrs.**

The history of the Palestinian visual art during 1948 till present – the chronological sequence of historical, social and aesthetic factors that contributed to the development of Palestinian art. Contemporary issues in Palestinian art.

**236 Introduction to Pottery Making 3 cr. hrs.**

Introducing the various stages in pottery making from preparation of materials, forming of shapes to decoration and firing. Traditional as well as industrial techniques in the forming of clay and the development of basic skills and concepts related to harmony and balance of shape as well as the relationship of the decorative elements to the form. Creativity and individuality of expression will be emphasized with an introduction of the raw materials such as clays, glazes and colors, their sources in nature, chemical components and preparation. Pottery production centers in Palestine and the importance of protecting this traditional craft.

*Prerequisite: Program approval*

## Women Studies Program

Women's Studies Program offers a minor program in women’s studies.

Requirements for the minor in women’s studies (24 credit hours):

1. Core courses (12 credit hours):

|  |  |
| --- | --- |
| **Course number** | **Course title** |
| WOMS 231 | INTRODUCTION TO WOMEN’S STUDIES |
| WOMS 232 | WOMEN IN ARAB SOCIETY |
| WOMS 236 | FEMINIST METHODOLOGIES |
| WOMS 438 | SEMINAR IN WOMEN'S STUDIES |

1. Elective courses (12 credit hours):

|  |  |
| --- | --- |
| **Course number** | **Course title** |
| WOMS 233 | WOMEN IN THE FAMILY |
| WOMS 234 | WOMAN IN PSYCHOLOGY |
| WOMS 235 | WOMEN IN MEDIA |
| WOMS 331 | HISTORY OF WOMEN’S MOVEMENTS |
| WOMS 332 | WOMEN In DEVELOPMENT |
| WOMS 333 | FEMINIST POLITICAL THOUGHT |
| WOMS 334 | FEMINISM, POLITICAL ECONOMY AND GLOBALIZATION |
| WOMS 437 | Special Topic |

**Courses Description (WOMS):**

**WOMS 231 INTRODUCTION TO WOMEN’S STUDIES**

Gender issues, Gender differences as shaped by society, culture, economy, politics. Gender and Development Indicators in the Palestinian society, gender concepts, various historical factors leading to differences between women and men in pre-industrial societies, Western and Arab feminist theories, analyzing the causes of women's subordination and inferior social position.

**WOMS 232 Women in Arab Society**

The different aspects of the position and status of Women in Arab Societies. The main gender indicators in Arab Societies. Family relations and their impact on women’s status in society. The legal and cultural discourse on gender, and their implications on the legal and social status of Arab women. The production of Arab feminist discourse.

**WOMS 233 Women in the Family**

The social, economic and cultural determinants of women’s status and position in the family in a comparative historical perspective, the division of domestic labor and its impact on women’s status in family and society, socialization processes and the development of social conscious identity and social roles, the changes in the structure of the family in contemporary societies and the accompanying changes in the power structure within the family. The increasing role of the state in shaping family relations in different aspects.

**WOMS 234 Feminism, political economy and globalization**

The different philosophical approaches of psychological theories to “human nature,” and the “nature” of men and women. Feminist criticism of the construction of “femininity” and “masculinity,” in psychological theory. Psychoanalytic theory, the biosocial theory, the cognitive and ethical development theory. The social and political implications of the foundational structures of thought and their projections on psychological theories.

**WOMS 235 Women in Media**

The way women issues are present in the media, the way they are portrayed, the ideological and discursive contents of the representations of women in the media. The course deals with visual and print media through three axes: first, the theoretical: includes the definition of communication, its theories, and sociological research methods employed in this field. Second, the feminist-sociological: seeks to deepen theoretical and sociological understanding of questions related to media and communication, and their impact on the individual and society, mainly their role in formulating and reformulating social positions and ideologies towards women and their social role. Finally: examples of women in the media.

**WOMS 236 Feminist Methodologies**

Problems of knowledge production, the possibility of creating a knowledge that feeds into the paths of social justice, human and national liberation. Oral history as a research method. Discourse analysis, ethnographic research, human agency in everyday life, the problematics of researchers as subjects, reading research and texts from a feminist perspective.

**WOMS 331 History of women’s movements**

The main women’s movements, their emergence, the focus of their activities, the founders and activists, the constituency, mechanisms of activism. Problems in analyzing women’s positions. Examples from the American and European feminist movements, the liberation movements in the third world, Arab women’s movements. the Palestinian women's movement.

**WOMS332 Women and development**

The question of development and its main theories, mainly modernization and dependency theories, the possibilities of a liberating development in a colonial situation, the difference between growth and development, the different methods of development, the experience of integrating women in development during the last five decades, gender and development in the Palestinian case and Arab world.

**WOMS333 Feminist political thought**

Introduces the main concepts and movements in the history of feminist political thought, investigating political thought from a feminist perspective. The relation between feminist theory and feminist practice, to illustrate the connection between the development of feminist theory through feminist political practice and activism, the critical issues in modern society and politics and their relation to the feminist political thought, mainly the focus on power relations, colonial systems, political (democratic) systems, the state, freedom, and the different gender identities.

**WOMS334 Feminism, political economy and globalization**

Globalization and neo-liberal policies, the changes in the political and economic global map from a feminist political economy. The impacts of globalization and neo-liberal policies: the shrinking role of the state and its services mainly in health and education, the liberalization of markets and privatization, on different social groups and mainly on women. The way globalization informed feminist approaches to women’s emancipation.

**WOMS437 Special topic in women’s studies**

A focused study on a selected topic in Women’s Studies.

**WOMS438 Seminar in women’s studies**

A seminar that combines theory and implementation through field study in a selected topic. This includes writing a research paper under the supervision of the course instructor.

Faculty of Science

# Faculty of Science Study Plans

The faculty of science is one of the first faculties on campus. It was founded in 1974.

The faculty hosts the following departments:

* Department of Biology and Biochemistry
* Department of Mathematics
* Department of Physics
* Department of Chemistry

The faculty offers academic programs leading to a bachelor’s degree in the following specializations:

Biology; chemistry; major chemistry/minor business administration; major chemistry/minor marketing; major chemistry/minor biochemistry; mathematics; mathematics applied to economics; major mathematics/minor statistics; major mathematics/minor computer science; major mathematics/minor economics; major mathematics/minor finance and banking; minor in mathematics; minor in statistics; physics; major physics/minor mathematics; major physics/minor computer science; major physics/minor electronics.

In addition, the faculty offers several minors in different disciplines that can be studied by the university students.

Moreover, the faculty services other faculties by offering mandatory and elective courses in alliance with the university policy of enhancing and diversifying students’ knowledge.

The faculty houses many laboratories specialized in physics, biology, and chemistry, which are constantly used in teaching and research activities.

Furthermore, the faculty has an in-house animal breeding unit and a glass blowing workshop both of which service the University community, local universities and industrial institutions.

Acceptance to this faculty depends on the score in the general secondary school exam (Tawjihi) according to a pre-determined average. Students are accepted in each specialization if they fulfill the requirements of each.

The table below presents the faculty requirements:

**Faculty Requirements (29 credit hours)**

The following courses constitute the faculty requirements:

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course name** | **Pre-requisite** |
| MATH1411 | Calculus 1 |  |
| MATH1321 | Calculus 2 | MATH1411 |
| CHEM111 | General chemistry lab 1 | CHEM141 or concurrent |
| CHEM141 | General chemistry |  |
| CHEM132 | General chemistry 2 | CHEM141 |
| PHYS111 | General physics lab 1 |  |
| PHYS141 | General physics | MATH1411 or concurrent |
| PHYS132 | General physics 2 | PHYS141, MATH1321 or concurrent |
| BIOL131 | General biology |  |
| COMP132 | Introduction to computer and programming |  |

## Department of Biology and Biochemistry

The Department of Biology and Biochemistry offers an academic program leading to Bachelor degree single Major Biology as well as Minor specialization in Biochemistry.

**Major Biology Admission Requirements**

Student must successfully complete and obtain a cumulative average of 70% in BIOL 111, 131 provided the grade in each course is not less than 65%.

Department approval based on intake capacity - priority is given to students with higher scores in the courses above and where these are even, other academic criteria can be sought by the department committee.

**Condition for Continuing in Major**

Student in Major must maintain a cumulative Major average of not less than 70%.

**Program Requirements**

Student must successfully complete a minimum of 68 credit hours of courses distributed as follows:

Core courses (59 credit hours): BIOL 111, 241, 242, 243, 244, 245, 311, 312 ,313 ,331 ,332 ,333 ,410,, 411, 412,430,431, BIOC 311, 312, 331, 332, CHEM 112, 221, 230, 234

Elective courses (3credit hours) from the following list: BIOL 436,439, plus 6 credit hours from any of the following BIOL 221, 334, 432, 433, 434, 435, 437, 438, CHEM 331, STAT2381, PHYS234 for a total of 9 credit hours

**Minor Biochemistry Program Requirements**

Student must successfully complete in Business Accounting a minimum of 19 credit hours of courses distributed as follows with a cumulative average not less than 70%:

1. Core courses (13 credit hours): BIOC 311, 322, 331, 332, 413, 432
2. Elective courses (6 credit hours) from the following list: BIOC 412, 434, 438, CHEM 336, 430, 433

**Biology Courses Description (BIOL):**

**111 General Biology Lab 1 cr. hr.**

This laboratory aims at helping the students understand more deeply the topics discussed in the general biology course. It focuses on practical aspects of general biology like detecting different organic compounds, learning how to use the microscope, studying cell structures, osmosis and diffusion, photosynthesis, mitosis, genetics, diversity of life, anatomy of invertebrates and vertebrates and animal tissues.

*Prerequisite: BIOL 131 or concurrent*

**131 General Biology 3 cr. Hrs**

Introduction to the chemical basis of life, the basic unit of life (the cell) in terms of structure and function, photosynthesis, cellular respiration, cell reproduction (mitosis and meiosis), genetics and different biological systems of the body like the digestive, respiratory, circulatory, reproductive systems.

**221 Microtechniques 2 cr. hrs.**

Standard histological procedures and basic methods applicable to animal and plant tissues, practical study of tissue preparation including fixation, embedding in paraffin, sectioning on a microtome, mounting on slides and staining to be ready for study under the microscope (Lecture 1hr, Lab 3hrs). *Prerequisite: BIOL 131, BIOL 111*

**241 Botany 4 cr. hrs.**

Introduction to plant sciences, structure of a plant cell, plant tissues and their functions, anatomy and morphology of various plant parts and structures, plant growth and development, reproductive growth and development including fruit types, biodiversity of plants including the following plant divisions and groups: fungi, algae, bryophytes, seedless vascular plants, gymnosperms, and angiosperms (Lecture 3hrs, Lab 3hrs). *Prerequisite: BIOL 131, BIOL 111*

**242 Invertebrate Zoology 4 cr. hrs.**

Illustrations of different invertebrate phyla with focus on taxonomy, structure, function and morphology of the invertebrates, ecological and evolutionary aspects, effect of certain invertebrate groups on human health (Lecture 3hrs, Lab 3hrs). *Prerequisite: BIOL 131, BIOL 111*

**243 General Microbiology 4 cr. hrs.**

Introduction to micro-organisms including bacteria, viruses, fungi and protozoa, it includes a brief description of the structure, classification and genetics of micro-organisms, their role in the eco-system, their relationship to human in health and disease, industrial and food microbiology as well as the role of the host immune system in restricting microbial growth (Lecture 3hrs, Lab 3hrs). *Prerequisite: BIOL 111*

**244 Cell Biology 4 cr. hrs.**

Study of the detailed components of eukaryotic cells. Structure-function relationships, cellular trafficking and signal transduction. The cytoskeleton and cellular motion. The cell cycle in normal and abnormal cell like cancers. (Lecture 3hrs, Lab 3hrs). *Prerequisite: BIOL 111*

**245 Vertebrate Zoology 4 cr. hrs.**

Illustrations for the diversity and adaptation of this relatively small group of animals with vertebral column, the morphological, functional and evolutionary features of different classes like fish, amphibians, reptiles, birds and mammals and their relationships to the basic environmental demands (Lecture 3hrs, Lab 3hrs).

*Prerequisite: BIOL 242*

**311 Genetics Laboratory 1 cr. hr.**

Selected experiments and projects on mendelian and non-mendelian genetics. Quantitative characteristics and their inheritance. (Lab3 hrs) *Prerequisite 331 or concurrent*

**312 Ecology Laboratory 1 cr. hr.**

Laboratory experiments and outdoor activities including the study and analysis of living and non-living components of ecosystems, the interaction of organisms with the environment, Sampling and measurement of productivity and analysis of the distribution of plants and animals, human impact on the environment) (Lab 3 hrs) *Prerequisite: BIOL332 or concurrent*

**313 Molecular Biology Laboratory 1 cr. hr.**

Selectedexperiments and projects in the field of molecular biology including the study of replication of genetic material and genetic variability and protein synthesis.and the genetic code. (Lab 3 hrs) *Prerequisite: BIOL333 or concurrent*

**334 Parasitology 3 cr. hrs.**

Introduction to parasitology and classification of parasites, unicellular parasites, parasitic flatworms, annelids and arthropods, reproduction and life cycles of parasites, means of controlling parasite transmission (Lecture 2hrs, Lab 3hrs). *Prerequisite: BIOL 242*

**331 Genetics 3 cr. hrs.**

Basic concepts of transmission genetics, mitosis, meiosis Mendelian and non-Mendelian inheritance, quantitative traits inheritance, linkage and gene mapping, genetic variation at chromosomal and gene levels, biochemical structure and function of the genetic material, DNA replication, DNA transcription, mutation, selection and genetics of populations (Lecture 3hrs). *Prerequisite: BIOL 111*

**332 Ecology 3 cr. hrs.**

Basic concepts in ecology, ecosystem, its characteristics and energy flow, the biogeochemical cycles, ecosystems of the world and human impacts on the environment (Lecture 3hrs, ). *Prerequisite: BIOL 245*

**410 Animal Physiology Laboratory 1 cr. hr.**

Selectedexperiments and projects in the field of animal physiology including the study of the functions of vital organs and systems, transfer of materials, and the balance of salts, water and energy (Lab 3 hrs).  *Prerequisite 430 or concurrent*

**412 Plant Physiology Laboratory 1 cr. hr.**

Selected experiments and projects in the field of plant physiology including the study of water balance and nutrition and the effect of plant hormones and gas exchange. (Lab 3 hrs.) *Prerequisite 431 or concurrent*

**430 Animal Physiology 3 cr. hrs.**

Specific characteristics and mechanisms of human body, the basic and general physiological mechanisms such as transport of ions and molecules across biological membranes and their different channel types, the neuronal and muscular excitability and their action potentials, the respiratory system including pulmonary ventilation, gas transport and gas exchange (Lecture 3hrs). *Prerequisite: BIOL 245, BIOC 331*

**431 Plant Physiology 3 cr. hrs.**

Plant-water relation including diffusion, osmosis, water potential, and transpiration, mineral nutrition and phloem transport, plant biochemistry including photosynthesis, respiration, nitrogen and phosphorus metabolism, plant growth and development including phytohormones, photomorphogenesis, and stress physiology, plant propagation particularly tissue culture (Lecture 3hrs). *Prerequisite: BIOL 241, BIOC 331*

**411 Seminar in Biology 1 cr. hr.**

Seminars in biology delivered by students and attended by other students and department members. Topics are usually selected from papers published in reviewed journals. The course aims at training students to use the library and give scientific seminars followed by an open discussion. *Prerequisite: Fourth year standing and department approval*

**432 Molecular Biology 3 cr. hrs.**

Structure and function of the genetic material, organization and synthesis of proteins, DNA replications in different cell types, DNA cloning, genetic code, mutation and recombinant DNA technology. *Prerequisite: BIOL 331*

**433 Entomology 3 cr. hrs.**

Insect taxonomic position in the animal kingdom origin and abundance morphology modifications of appendages, anatomy of typical insects (locusts and bees), the life cycles and reproduction among insects (Lecture 2hrs, Lab 3hrs). *Prerequisite: BIOL 242*

**435 Plant Taxonomy 3 cr. hrs.**

Classification of plants including its rules, theories, principles, and procedures, families of ferns and their allies (Pteridophytes), families of Pinophyta, families of flowering plants, Magnoliopsida and Liliopsida, reproductive structures of plants, flower structure and morphology, floral number, and fruit types (Lecture 2hrs, Lab 3hrs). *Prerequisite: BIOL 241*

**436 Immunology 3 cr. hrs.**

The immune system in the human body, it works to defend the human body responding to internal changes that happen as a result of antigens entry to the human body, antibody structures, functions and role of white blood cells in defending the body. Prerequisite: BIOL 243

**437 Independent Study in Biology 3 cr. hrs.**

Research or study conducted by students and guided by a department member to produce a detailed report. Prerequisite: Fourth year standing and department approval

**438 Special Topic in Biology 3 cr. hrs.**

In-depth study of some important topics in biology not covered by the regular courses, content depends on students and department member interest (Lecture 3hrs, or 2hrs, Lab 3hrs). Prerequisite: Department approval

**Biochemistry Courses Description (BIOC):**

**311 Introductory Biochemistry Lab I 1 cr. hr.**

Methods of preparation, separation, qualitative and quantitative analysis of proteins carbohydrates, lipids and nucleic acids and their monomers (Lab 3hrs). Prerequisite: BIOC 331 or concurrent

**322 Biochemistry Lab II 2 cr. hrs.**

Laboratory study of metabolic intermediates and their changes under different physiological conditions (Lecture 1hr, Lab 3hrs). Prerequisite: BIOC 311, BIOC 332 or concurrent

**331 Introductory Biochemistry I 3 cr. hrs.**

Structures, physical and chemical properties, occurrence and functions of biomolecules, introduction to main metabolic pathways. Prerequisite: BIOL 111, CHEM 241 or CHEM 232 or concurrent

**332 Metabolic Biochemistry II 3 cr. hrs.**

Comprehensive study of protein, lipid and carbohydrate metabolism on the cellular level, with special emphasis on organization and regulation of different enzymes. Prerequisite: BIOC 331

**412 Biochemistry Seminar 1 cr. hrs.**

Seminars in biochemistry delivered by students and attended by other students and department members. Topics are usually selected from papers published in reviewed journals. The course aims at training students to use the library and give scientific seminars followed by an open discussion. Prerequisite: Fourth year standing and department approval

**413 Clinical Biochemistry Lab 1 cr. hrs.**

Methods of analysis of body fluids, mainly blood, both normal and pathological (Lab 3hrs). Prerequisite: BIOC 432 or concurrent

**430 Signal Transduction 3 cr. hrs.**

Study of cell signaling, how hormones and growth factors interact with their cell surface receptors and how the signal is transduced to cell nucleus, mistakes in this system that lead to diseases including cancer. Prerequisite: BIOC 332, BIOL 24

**432 Clinical Biochemistry 3 cr. hrs.**

Principles of theoretical and practical clinical biochemistry, study of some diseases and the use of laboratory results in diagnosis. Prerequisite: BIOC 311, CHEM 221 or CHEM 234

**434 Enzymology 3 cr. hrs.**

Study of the general characteristics of enzymes, their classification and their kinetics, general principles of mechanisms and regulations using specific enzymes (Lecture 2hrs, Lab 3hrs). Prerequisite: BIOC 332

**435 Endocrinology 3 cr. hrs.**

Study of endocrine glands, the synthesis and secretion of hormones and their mechanism of actions, their role in connection with the nervous system and hormonal control of metabolism. Prerequisite: BIOC 332, BIOL 345

**438 Special Topic in Biochemistry 3 cr. hrs.**

In-depth study of some important topics in biochemistry, content depends on students and department member interest. Prerequisite: Fourth year standing and department approval

**General Science Courses Description (GENS):**

**120 Home Gardening 2 cr. hrs.**

Scientific and practical aspects of cultivation of plants in gardens, garden design, types of gardens, and selection of the appropriate plants (annuals, bulbous plants, herbaceous perennials, shrubs, ornamental trees, fruit trees, vegetables, and indoor plants), cultivation and management of plants in the garden including pest management, training and pruning of plants, irrigation, fertilizer application and programming, and soil management.

**131 Life Science I (For Non-science Students) 3 cr. hrs.**

Relationships between science, technology and society, ethical, social and political dimensions of some scientific and technological aspects related to the Palestinian society, human biology and relationships between man and the environment, characteristics of living organisms and the cell theory, human body systems, genetics, evolution and adaptation, viruses, bacteria, infectious diseases and drugs (Lecture 3hrs).

**132 Life Science II 3 cr. hrs.**

Study of some of the basic principles of physics, chemistry and geology, and their applications to environmental issues such as pollution, global warming, renewable energy sources, pesticides, acid rain etc., a brief study of astronomy and meteorology (Lecture 2hrs, Discussion 1hr).

**220 Human Reproduction 3 cr. hrs.**

General knowledge about human sexuality, male and female reproductive systems including their differentiation during the embryonic development and human sexual response, brief description and study of fertilization, pregnancy and fetal development, infertility, methods of contraception and sexually transmissible infections (STIs).

## Department of Mathematics

The department of mathematics offers the following academic programs:

**Program 1: Bachelor in Mathematics**

**Program 2: Minor in Mathematics**

**Program 3: Bachelor in Mathematics Applied to Economics**

**Program 4: Bachelor with Major in Mathematics / Minor Statistics**

**Program 5: Minor in Statistics**

**Program 6: Bachelor with Major in Mathematics / Minor in Computer Science**

**Program 7: Bachelor with Major in Mathematics / Minor in Economics**

**Program 8: Bachelor with Major in Mathematics / Minor in Finance and Banking**

**Program 1: Bachelor in Mathematics Admission Requirements**

1. A cumulative average of 70 or more in MATH1411 and MATH1321 provided that both grades are 65 or more.
2. Department’s approval depending on its capacity.

**Academic Plan**

The academic plan consists of 128 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirement Type** | **Credit Hours** |
| University Requirements | 21 |
| Faculty Requirements | 29 |
| Major Requirements | 50 |
| Major Electives | 9 |
| Free Electives | 19 |
| Total | 128 |

**Major Requirements (50 credit hours)**

Include the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Prerequisite** |
| MATH2311 | CALCULUS 3 | MATH1321 |
| MATH234 | INTRODUCTION TO LINEAR ALGEBRA | MATH1321 |
| MATH243 | FOUNDATIONS OF MATHEMATICS | MATH1321 |
| MATH330 | NUMERICAL METHODS | MATH234 and (COMP132 or COMP133 or COMP142 or COMP230) |
| MATH331 | ORDINARY DIFFERENTIAL EQUATIONS | MATH1321 |
| MATH332 | PARTIAL DIFFERENTIAL EQUATIONS | MATH2311 and MATH331 |
| MATH3331 | MATHEMATICAL ANALYSIS 1 | MATH243 |
| MATH3341 | MATHEMATICAL ANALYSIS 2 | MATH2311, MATH234, and MATH3331 |
| MATH337 | ABSTRACT ALGEBRA 1 | MATH234 and MATH243 |
| MATH338 | ABSTRACT ALGEBRA 2 | MATH337 |
| MATH339 | EUCLIDEAN AND NON-EUCLIDEAN GEOMETRY | MATH243 |
| MATH411 | SEMINAR IN MATHEMATICS | Department’s Approval |
| MATH431 | COMPLEX VARIABLES | MATH331 |
| MATH432 | POINT SET TOPOLOGY | MATH331 |
| STAT2311 | STATISTICS 1 | Secondary Education Scientific Stream or Equivalent or MATH1351 |
| STAT3311 | STATISTICS 2 | MATH1321 and STAT2311 |
| STAT3321 | PROBABILITY THEORY | MATH2311 and STAT3311 |

**Major Electives (9 credit hours)**

Selected from the following courses:

MATH courses 300 level or above

MAEC courses 300 level or above

STAT courses 300 level or above

**Program 2: Minor in Mathematics**

**Academic Plan**

The academic plan consists of 22 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirement Type** | **Credit Hours** |
| Minor Requirements | 19 |
| Minor Electives | 3 |
| Total | 22 |

**Minor Requirements (19 credit hours)**

Include the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Prerequisite** |
| MATH2311 | CALCULUS 3 | MATH1321 |
| MATH234 | INTRODUCTION TO LINEAR ALGEBRA | MATH1321 |
| MATH243 | FOUNDATIONS OF MATHEMATICS | MATH1321 |
| MATH331 | ORDINARY DIFFERENTIAL EQUATIONS | MATH1321 |
| MATH3331 | MATHEMATICAL ANALYSIS 1 | MATH243 |
| MATH337 | ABSTRACT ALGEBRA 1 | MATH234 and MATH243 |

**Minor Electives (3 credit hours)**

Selected from the following courses:

MATH courses 300 level or above

**Program 3: Bachelor in Mathematics Applied to Economics**

**Admission Requirements**

1. A cumulative average of 70 or more in MATH1411 and MATH1321 provided that both grades are 65 or more.
2. A grade of 70 or more in ECON131.
3. Department’s approval depending on its capacity.

**Academic Plan**

The academic plan consists of 128 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirement Type** | **Credit Hours** |
| University Requirements | 21 |
| Faculty Requirements | 29 |
| Major Requirements | 59 |
| Major Electives | 9 |
| Free Electives | 10 |
| Total | 128 |

**Major Requirements (59 credit hours)**

Include the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Prerequisite** |
| ECON131 | PRINCIPLES OF MICROECONOMICS | No Prerequisite |
| ECON132 | PRINCIPLES OF MACROECONOMICS | ECON131 |
| ECON3321 | ANALYTICAL MACROECONOMICS 1 | ECON132 and ECON2351 |
| ECON432 | INTRODUCTION TO ECONOMETRICS | STAT2361 |
| MAEC3301 | MICROECONOMIC THEORY | ECON132 and MATH 3361 |
| MAEC3331 | GENERAL EQUILIBRIUM AND PUBLIC CHOICE | MAEC3301 |
| MAEC411 | SEMINAR IN MATHEMATICS APPLIED TO ECONOMICS | Department’s Approval |
| MAEC436 | GAME THEORY | STAT2311 and MAEC3301 |
| MATH2311 | CALCULUS 3 | MATH1321 |
| MATH234 | INTRODUCTION TO LINEAR ALGEBRA | MATH1321 |
| MATH243 | FOUNDATIONS OF MATHEMATICS | MATH1321 |
| MATH330 | NUMERICAL METHODS | MATH234 and (COMP132 or COMP133 or COMP142 or COMP230) |
| MATH331 | ORDINARY DIFFERENTIAL EQUATIONS | MATH1321 |
| MATH3331 | MATHEMATICAL ANALYSIS 1 | MATH243 |
| MATH3341 | MATHEMATICAL ANALYSIS 2 | MATH2311, MATH234, and MATH3331 |
| MATH3361 | OPTIMIZATION AND CONVEXITY | MATH2311 and MATH234 |
| MATH337 | ABSTRACT ALGEBRA 1 | MATH234 and MATH243 |
| STAT2311 | STATISTICS 1 | Secondary Education Scientific Stream or Equivalent or MATH1351 |
| STAT3311 | STATISTICS 2 | MATH1321 and STAT2311 |
| STAT3321 | PROBABILITY THEORY | MATH2311 and STAT3311 |

**Major Electives (9 credit hours)**

Selected from the following courses:

MATH courses 300 level or above

MAEC courses 300 level or above

STAT courses 300 level or above

**Program 4: Bachelor with Major in Mathematics / Minor in Statistics**

**Admission Requirements**

1. A cumulative average of 70 or more in MATH1411 and MATH1321 provided that both grades are 65 or more.
2. Department’s approval depending on its capacity.

**Academic Plan**

The academic plan consists of 128 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirement Type** | **Credit Hours** |
| University Requirements | 21 |
| Faculty Requirements | 29 |
| Major Requirements | 50 |
| Major Electives | 12 |
| Free Electives | 16 |
| Total | 128 |

**Major Requirements (50 credit hours)**

Include the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Prerequisite** |
| MATH2311 | CALCULUS 3 | MATH1321 |
| MATH234 | INTRODUCTION TO LINEAR ALGEBRA | MATH1321 |
| MATH243 | FOUNDATIONS OF MATHEMATICS | MATH1321 |
| MATH330 | NUMERICAL METHODS | MATH234 and (COMP132 or COMP133 or COMP142 or COMP230) |
| MATH331 | ORDINARY DIFFERENTIAL EQUATIONS | MATH1321 |
| MATH3331 | MATHEMATICAL ANALYSIS 1 | MATH243 |
| MATH3341 | MATHEMATICAL ANALYSIS 2 | MATH2311, MATH234, and MATH3331 |
| MATH337 | ABSTRACT ALGEBRA 1 | MATH234 and MATH243 |
| MATH411 | SEMINAR IN MATHEMATICS | Department’s Approval |
| MATH431 | COMPLEX VARIABLES | MATH331 |
| STAT2311 | STATISTICS 1 | Secondary Education Scientific Stream or Equivalent or MATH1351 |
| STAT3311 | STATISTICS 2 | MATH1321 and STAT2311 |
| STAT3321 | PROBABILITY THEORY | MATH2311 and STAT3311 |
| STAT3331 | STATISTICAL INFERENCE | MATH234 and STAT3321 |
| STAT3341 | REGRESSION ANALYSIS | MATH234 and STAT3321 |
| STAT335 | NONPARAMETRIC STATISTICAL METHODS | MATH234 and STAT3321 |
| STAT435 | TIME SERIES ANALYSIS | MATH234 and STAT3321 |

**Major Electives (12 credit hours)**

Selected from the following courses (at least 3 credit hours should be STAT courses):

MATH courses 300 level or above

MAEC courses 300 level or above

STAT courses 300 level or above

**Program 5: Minor in Statistics**

**Academic Plan**

The academic plan consists of 24 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirement Type** | **Credit Hours** |
| Minor Requirements | 21 |
| Minor Electives | 3 |
| Total | 24 |

**Minor Requirements (21 credit hours)**

Include the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Prerequisite** |
| STAT2311 | STATISTICS 1 | Secondary Education Scientific Stream or Equivalent or MATH1351 |
| STAT3311 | STATISTICS 2 | MATH1321 and STAT2311 |
| STAT3321 | PROBABILITY THEORY | MATH2311 and STAT3311 |
| STAT3331 | STATISTICAL INFERENCE | MATH234 and STAT3321 |
| STAT3341 | REGRESSION ANALYSIS | MATH234 and STAT3321 |
| STAT335 | NONPARAMETRIC STATISTICAL METHODS | MATH234 and STAT3321 |
| STAT435 | TIME SERIES ANALYSIS | MATH234 and STAT3321 |

**Minor Electives (3 credit hours)**

Selected from the following courses:

STAT courses 300 level or above

**Program 6: Bachelor with Major in Mathematics / Minor in Computer Science**

**Admission Requirements**

1. A cumulative average of 70 or more in MATH1411 and MATH1321 provided that both grades are 65 or more.
2. Department’s approval depending on its capacity.

**Academic Plan**

The academic plan consists of 128 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirement Type** | **Credit Hours** |
| University Requirements | 21 |
| Faculty Requirements | 29 |
| Major Requirements | 54 |
| Major Electives | 12 |
| Free Electives | 12 |
| Total | 128 |

**Major Requirements (54 credit hours)**

Include the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Prerequisite** |
| MATH2311 | CALCULUS 3 | MATH1321 |
| MATH234 | INTRODUCTION TO LINEAR ALGEBRA | MATH1321 |
| MATH243 | FOUNDATIONS OF MATHEMATICS | MATH1321 |
| MATH330 | NUMERICAL METHODS | MATH234 and (COMP132 or COMP133 or COMP142 or COMP230) |
| MATH331 | ORDINARY DIFFERENTIAL EQUATIONS | MATH1321 |
| MATH3331 | MATHEMATICAL ANALYSIS 1 | MATH243 |
| MATH3341 | MATHEMATICAL ANALYSIS 2 | MATH2311, MATH234, and MATH3331 |
| MATH337 | ABSTRACT ALGEBRA 1 | MATH234 and MATH243 |
| MATH411 | SEMINAR IN MATHEMATICS | Department’s Approval |
| MATH431 | COMPLEX VARIABLES | MATH331 |
| STAT2311 | STATISTICS 1 | Secondary Education Scientific Stream or Equivalent or MATH1351 |
| STAT3311 | STATISTICS 2 | MATH1321 and STAT2311 |
| STAT3321 | PROBABILITY THEORY | MATH2311 and STAT3311 |
| COMP231 | ADVANCED PROGRAMMING | COMP132 or COMP133 or COMP142 or COMP230 |
| COMP242 | DATA STRUCTURES | COMP231 |
| COMP333 | DATABASE SYSTEMS | COMP242 or COMP2321 |
| COMP334 | WEB APPLICATION AND TECHNOLOGY | COMP333 |
| COMP433 | SOFTWARE ENGINEERING | COMP333 |

**Major Electives (12 credit hours)**

Selected from the following courses:

**Group 1 (6 credit hours)**

MATH courses 300 level or above

MAEC courses 300 level or above

STAT courses 300 level or above

**Group 2 (6 credit hours)**

COMP courses 300 level or above

**Program 7: Bachelor with Major in Mathematics / Minor in Economics**

**Admission Requirements**

1. A cumulative average of 70 or more in MATH1411 and MATH1321 provided that both grades are 65 or more.
2. Department’s approval depending on its capacity.

**Academic Plan**

The academic plan consists of 128 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirement Type** | **Credit Hours** |
| University Requirements | 21 |
| Faculty Requirements | 29 |
| Major Requirements | 56 |
| Major Electives | 12 |
| Free Electives | 10 |
| Total | 128 |

**Major Requirements (56 credit hours)**

Include the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Prerequisite** |
| MATH2311 | CALCULUS 3 | MATH1321 |
| MATH234 | INTRODUCTION TO LINEAR ALGEBRA | MATH1321 |
| MATH243 | FOUNDATIONS OF MATHEMATICS | MATH1321 |
| MATH330 | NUMERICAL METHODS | MATH234 and (COMP132 or COMP133 or COMP142 or COMP230) |
| MATH331 | ORDINARY DIFFERENTIAL EQUATIONS | MATH1321 |
| MATH3331 | MATHEMATICAL ANALYSIS 1 | MATH243 |
| MATH3341 | MATHEMATICAL ANALYSIS 2 | MATH2311, MATH234, and MATH3331 |
| MATH337 | ABSTRACT ALGEBRA 1 | MATH234 and MATH243 |
| MATH411 | SEMINAR IN MATHEMATICS | Department’s Approval |
| MATH431 | COMPLEX VARIABLES | MATH331 |
| STAT2311 | STATISTICS 1 | Secondary Education Scientific Stream or Equivalent or MATH1351 |
| STAT3311 | STATISTICS 2 | MATH1321 and STAT2311 |
| STAT3321 | PROBABILITY THEORY | MATH2311 and STAT3311 |
| ECON131 | PRINCIPLES OF MICROECONOMICS | No Prerequisite |
| ECON132 | PRINCIPLES OF MACROECONOMICS | ECON131 |
| ECON3311 | ANALYTICAL MICROECONOMICS 1 | ECON131 |
| ECON3321 | ANALYTICAL MACROECONOMICS 1 | ECON132 and ECON2351 |
| ECON335 | HISTORY OF ECONOMIC THOUGHT | ECON132 |
| ECON3361 | INTERNATIONAL TRADE | ECON3311 |

**Major Electives (12 credit hours)**

Selected from the following courses:

**Group 1 (6 credit hours)**

MATH courses 300 level or above

MAEC courses 300 level or above

STAT courses 300 level or above

**Group 2 (6 credit hours)**

ECON courses 300 level or above

**Program 8: Bachelor with Major in Mathematics / Minor in finance and Banking**

**Admission Requirements**

1. A cumulative average of 70 or more in MATH1411 and MATH1321 provided that both grades are 65 or more.
2. Department’s approval depending on its capacity.

**Academic Plan**

The academic plan consists of 128 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirement Type** | **Credit Hours** |
| University Requirements | 21 |
| Faculty Requirements | 29 |
| Major Requirements | 65 |
| Major Electives | 6 |
| Free Electives | 7 |
| Total | 128 |

**Major Requirements (65 credit hours)**

Include the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Prerequisite** |
| MATH2311 | CALCULUS 3 | MATH1321 |
| MATH234 | INTRODUCTION TO LINEAR ALGEBRA | MATH1321 |
| MATH243 | FOUNDATIONS OF MATHEMATICS | MATH1321 |
| MATH330 | NUMERICAL METHODS | MATH234 and (COMP132 or COMP133 or COMP142 or COMP230) |
| MATH331 | ORDINARY DIFFERENTIAL EQUATIONS | MATH1321 |
| MATH3331 | MATHEMATICAL ANALYSIS 1 | MATH243 |
| MATH3341 | MATHEMATICAL ANALYSIS 2 | MATH2311, MATH234, and MATH3331 |
| MATH337 | ABSTRACT ALGEBRA 1 | MATH234 and MATH243 |
| MATH411 | SEMINAR IN MATHEMATICS | Department’s Approval |
| MATH431 | COMPLEX VARIABLES | MATH331 |
| STAT2311 | STATISTICS 1 | Secondary Education Scientific Stream or Equivalent or MATH1351 |
| STAT3311 | STATISTICS 2 | MATH1321 and STAT2311 |
| STAT3321 | PROBABILITY THEORY | MATH2311 and STAT3311 |
| ACCT130 | FINANCIAL ACCOUNTING 1 | No Prerequisite |
| ACCT230 | FINANCIAL ACCOUNTING 2 | ACCT130 |
| FINN130 | INTRODUCTION TO FINANCE AND BANKING | No Prerequisite |
| FINN230 | PRINCIPLES OF FINANCIAL MANAGEMENT | ACCT230 and FINN130 |
| FINN233 | PRINCIPLES OF INSURANCE | FINN230 |
| FINN330 | INTERMEDIATE MANAGERIAL FINANCE | FINN230 |
| FINN331 | CORPORATE FINANCIAL ANALYSIS | FINN330 |
| FINN333 | MANAGEMENT OF COMMERCIAL BANKS | FINN230 |
| FINN3391 | MONEY AND CAPITAL MARKETS | FINN330 |

**Major Electives (6 credit hours)**

Selected from the following courses:

FINN courses 300 level or above

**Mathematics Course Descriptions (MATH)**

**1321 CALCULUS 2**

Improper Integrals. Infinite Sequences and Series. Absolute and Conditional Convergence. Power Series. Taylor and Maclaurin Series. The Binomial Series. Parametric Equations and Polar Coordinates. Graphing in Polar Coordinates. Areas and Lengths in Polar Coordinates. Conic Sections. Complex Numbers. Vectors and the Geometry of Space. The Dot Product. The Cross Product. Lines and Planes in Space.

Vector-Valued Functions. Curves in Space and Their Tangents. Arc Length in Space. Curvature and Normal Vectors of a Curve.

Prerequisite: MATH1411

**1351 PRECALCULUS**

(No credit hours for Secondary Education Scientific Stream or Equivalent)

Sets. Venn Diagrams. Linear Equations. Solutions of 2x2 Systems of Linear Equations. Polynomials. Quadratic Equations. Functions. The Exponential Function. Inequalities. Linear Programming. Matrices. Determinants and Applications.

**1411 CALCULUS 1**

Review of Functions. Review of Limits and Continuity. Review of Differentiation. Applications of Derivatives. Integration. Applications of Definite Integrals.

Transcendental Functions. Inverse Transcendental Functions. Techniques of Integration. Integration by parts. Trigonometric Integrals. Integration of Rational Functions by Partial Fractions.

Prerequisite: Secondary Education Scientific Stream or Equivalent or MATH135

**1431 CALCULUS FOR HEALTH SCIENCES**

**(No credit hours for students who completed MATH1411 or MATH2351)**

Linear Equations and Their Solutions. Matrix Algebra. Determinants and Applications. Functions. Differentiation. Extreme Values. First Derivative Test, Second Derivative Test, and Graphing Techniques. Applications of Derivatives. Integration. Definite and Indefinite Integrals. Functions of Several Variables. Partial Differentiation. Extreme Values of Functions of Two Variables and Applications.

Prerequisite: Secondary Education Scientific Stream or Equivalent

**2311 CALCULUS 3**

Functions of Several Variables. Limits and Continuity in Higher Dimensions. Partial Derivatives. The Chain Rule. Directional Derivatives and Gradient Vectors. Tangent Planes and Differentials. Extreme Values and Saddle Points. Lagrange Multipliers. Taylor’s Formula for Two Variables. Double and Iterated Integrals over Rectangles. Double Integrals over General Regions. Area by Double Integration. Double Integrals in Polar Forms. Triple Integrals in Rectangular Coordinates. Triple Integrals in Cylindrical and Spherical Coordinates. Substitutions in Multiple integrals. Line Integrals. Vector Fields. Green’s Theorem in the Plane. Surface Integrals. Stokes’ Theorem. The Divergence Theorem.

Prerequisite: MATH1321

**234 INTRODUCTION TO LINEAR ALGEBRA**

Systems of Linear Equations. Matrix Algebra and Determinants. Cramer’s Rule. Vector Spaces. Subspaces. Basis and Dimension. Inner Product Spaces. Linear Transformations and their Matrices. Eigenvalues and Eigenvectors.

Prerequisite: MATH1321

**2351 CALCULUS FOR BUSINESS AND ECONOMICS**

**(No credit hours for students who completed MATH1411 or MATH1431)**

Matrix algebra. Determinants and Applications. Differentiation Rules. Extreme Values for Functions of One Variable. Definite and Indefinite Integrals. Fundamental Theorem of Calculus. Introduction to Differential Equations. Function of Two Variables. Partial Differentiation. Finding Extreme Values of Functions of Two Variables. Financial Mathematics and Applications in Business and Economics.

Prerequisite: Secondary Education Scientific Stream or Equivalent or MATH1351

**243 FOUNDATIONS OF MATHEMATICS**

Mathematical Induction and Symbolic Logic. Methods of Proof. Mathematical Reasoning. Sets. Relations. Equivalence Relations. Congruence. Partitions. Total Order and Partial Order (Partial Ordered Sets). Zorn’s Lemma. Functions (one-to-one, onto). Finite and Infinite Sets. Countable and Uncountable Sets.

Prerequisite: MATH 1321

1. **NUMERICAL METHODS**

Floating Point Representation and Computer Arithmetic. Solutions of Linear and Non- Linear Equations. Polynomial Interpolation, Curve fitting and Splines. Numerical Differentiation and Integration. Solving Initial Value Problems.

Prerequisite: MATH234 and (COMP132 or COMP133 or COMP142 or COMP230)

1. **ORDINARY DIFFERENTIAL EQUATIONS**

First Order Differential Equations. The Existence and Uniqueness Theorem. Linear Differential Equations. Method of Undetermined Coefficients. The Method of Variation of Parameters. Series Solutions of Differential Equations. Laplace Transform. Systems of Linear Differential Equations. Introduction to Partial Differential Equations.

Prerequisite: MATH1321

1. **PARTIAL DIFFERENTIAL EQUATIONS**

Fourier Series. Partial Differential Equations and Boundary Values Problems. Separation of Variables Method. Diffusion, Wave, and Laplace Equations. Bessel and Legendre Functions. The Existence and Uniqueness of Laplace, Wave, and Heat Equations.

Prerequisite: MATH2311 and MATH331

**3331 MATHEMATICAL ANALYSIS 1**

The Real Number System. Ordered field axioms. Well-Ordering Principle. Completeness Axiom. Archimedean Property. Sequences in R. Bolzano-Weierstrass Theorem. Cauchy Sequences. Continuity in R. Limits. Continuity. Uniform Continuity. Differentiability in

R. Chain Rule. Mean Value Theorem and its Applications. Integrability in R. Riemann Sums. Fundamental Theorem of Calculus.

Prerequisite: MATH243

**3341 MATHEMATICAL ANALYSIS 2**

Convergence of Sequences of Functions. Euclidean Spaces. Algebraic Structures. Topology of R^n. Completeness. Connectedness. Convergence in R^n. Limits of Sequences. Limits of Functions. Continuous Functions. Metric Spaces. Differentiability in R^n. Partial Derivatives. Rules of Differentiation in R^n. Chain Rule. Mean Value Theorem in R^n. Integration in R^n. Partitions in R^n. Riemann Integration in R^n.

Prerequisite: MATH2311, MATH234, and MATH3331

**335 INTRODUCTION TO COMBINATORICS**

Examples of Combinatorial Problems (Coverings of Chessboards, Magic Squares, Euler’s Thirty-Six Officers). Pigeonhole Principle. Stirling Numbers. Combinations and Permutations. Binomial and Multinomial Theorems. The Inclusion–Exclusion Principle. Recurrence Relations and Generating Functions. Introduction to Graph Theory.

Prerequisite: MATH243

**3361 OPTIMIZATION AND CONVEXITY**

Quadratic Forms. Unconstrained Optimization. Constrained Optimization. Optimization under Equality and Inequality Constraints. First and Second Order Conditions. Envelope Theorem. Homogeneous Functions. Convex and Concave Functions. Quasiconvex and Quasiconcave Functions. Introduction to Dynamic Optimization.

Prerequisite: MATH231 and MATH234

1. **ABSTRACT ALGEBRA 1**

Introduction to Algebraic Structures. Groups. Cyclic Groups. Subgroups and Normal Subgroups. Factor Groups. Group Isomorphisms and Homomorphisms. Direct Sums. Prerequisite: MATH234 and MATH243

1. **ABSTRACT ALGEBRA 2**

Rings. Ideals. Prime Ideals and Maximal Ideals. Ring Isomorphisms. Factor Rings. Polynomial Rings. Unique Factorization Domains. Euclidean Domains. Field Extensions. Geometric Constructions.

Prerequisite: MATH337

1. **EUCLIDEAN AND NON-EUCLIDEAN GEOMETRY**

Introduction to the Principles of Euclidean Geometry using the Axiomatic Method. Euclid’s Parallel Postulate and its Consequences on Theorems in Euclidean Geometry. Straightedge-and-Compass Constructions. Geometric Transformations. Reflection and Rotation. Volume of Solids.

Prerequisite: MATH243

**411 SEMINAR IN MATHEMATICS**

Presenting and discussing the principles of scientific research ethics. Knowing the refereed scientific mediums and the relevant databases. Training to use references. Studying an advanced topic by reading, analyzing, and discussing a number of refereed publications. Presenting and discussing the readings with the course instructor and the enrolled students. Writing a report about the topic which includes rewriting the readings, reviewing the references, the results, the analysis, the discussions, and the remarks made by the course instructor and the enrolled students.

Prerequisite: Department’s Approval

**431 COMPLEX VARIABLES**

Complex Numbers. Limits and Continuity of Functions of Complex Variables. Analytic Functions. The Integral of Functions of Complex Variables. Series of Functions of Complex Variables. Residue Theorem and its Applications in Integrals of Functions of Real Variables.

Prerequisite: MATH3331

**432 POINT SET TOPOLOGY**

Topological Spaces. Basis and Subbasis. Continuity. Homeomorphisms and their Properties. Subspaces and Product Spaces. Metric and Pseudometric Spaces. The Separations Axioms. Compactness and Divergence.

Prerequisite: MATH3331

**433 GRAPH THEORY**

Graphs. Puzzles Solving. Connectedness. Eulerian and Hamiltonian Graphs. Algorithms. Trees and Counting Trees. Planar Graphs and Euler Formula. Vertex Coloring. Face Coloring. Edge Coloring. Chromatic Polynomial. Group of Graph Automorphism.

Prerequisite: MATH243

**434 ADVANCED LINEAR ALGEBRA**

Vector Spaces. Dimension and Basis. Direct Sums of Subspaces. Linear Transformations and Null Spaces. Representing Linear Transformations by Matrices (Invertible Linear Transformation, Eigenvalues) and Eigenvectors. Subspaces and Invariant Subspaces.

Inner Product Spaces. Linear Functionals. Self-Adjoint Operators. Dual Spaces.

Prerequisite: MATH234 and MATH243

**435 INTRODUCTION TO NUMBER THEORY**

The Integers. The Integers Modulo n. Division and the Euclidean Algorithm. Prime Factorization. Divisibility. Congruences. The Distribution of Primes. Quadratic Residues. Diophantine Equations.

Prerequisite: MATH243

**437 INDEPENDENT STUDY IN MATHEMATICS**

A research study or independent study done by the student based on the supervision of a faculty member and ends up with writing a report.

Prerequisite: Department’s Approval

**438 SPECIAL TOPIC IN MATHEMATICS**

Special mathematical topics chosen by the department based on the needs of students and the interests of the faculty members.

Prerequisite: Department’s Approval

**439 MATHEMATICAL MODELING**

Discrete Dynamical Systems. Growth and Decay Problems. Nonlinear Differential Equations. Nonlinear Discrete Models.

Prerequisite: MATH331

**Mathematics Applied to Economics Course Descriptions (MAEC)**

**3301 MICROECONOMIC THEORY**

Consumer Theory. Direct Utility. Indirect Utility. Indifference Curves. Demand Functions. Elasticity. Income Effect. Substitution Effect. Choice under Uncertainty. Production Theory. Production Functions. Cost Functions. Profit Maximization.

Monopoly. Duopoly. Oligopoly.

Prerequisite: MATH3361

**3331 GENERAL EQUILIBRIUM AND PUBLIC CHOICE**

Partial Equilibrium. General Equilibrium. Existence and Uniqueness of Equilibrium. Equilibrium in Exchange Economies. Equilibrium in Production Economies. Pareto optimality. First and Second Welfare Theorems. Externalities and Public goods. General Equilibrium under Uncertainty.

Prerequisite: MAEC3301

**411 SEMINAR IN MATHEMATICS APPLIED TO ECONOMICS**

Presenting and discussing the principles of scientific research ethics. Knowing the refereed scientific mediums and the relevant databases. Training to use references. Studying an advanced topic by reading, analyzing, and discussing a number of refereed publications. Presenting and discussing the readings with the course instructor and the enrolled students. Writing a report about the topic which includes rewriting the readings, reviewing the references, the results, the analysis, the discussions, and the remarks made by the course instructor and the enrolled students.

Prerequisite: Department’s Approval

**432 MACROECONOMIC DYNAMICS**

Consumption and Investment. Short Term Economic Dynamics. Inflation and Unemployment. Expectations. Models of Economic Growth. Optimal Growth. Model of Successive Generations. The Relationship between Economic Growth and Development. Prerequisite: ECON3321 and MAEC3331

**434 ADVANCED ECONOMETRICS**

Simultaneous Equations Models. Maximum Likelihood Method. Time Series Analysis of Stationary and Non-Stationary Models. Tests of Integration. Autoregressive Conditional Heteroskedasticity (ARCH) Models. Applications in Advanced Topics.

Prerequisite: ECON432 and STAT3321

**436 GAME THEORY**

Normal-Form Games. Nash Equilibrium. Mixed Strategies. Inefficiency of the Nash Equilibrium. Dynamic Games. Perfect Equilibrium. Repeated Games. Games of Incomplete Information. Bayesian Equilibrium.

Prerequisite: MAEC3301 and STAT2311

**438 SPECIAL TOPIC IN MATHEMATICS APPLIED TO ECONOMICS**

Special topics in mathematics applied to economics chosen by the department based on the needs of students and the interests of the faculty members.

Prerequisite: Department’s Approval

**439 FINANCIAL MARKETS**

The Existence of Financial Markets. Financial Risk. Financial Assets. Stocks. Bonds. Contracts. Options. Modeling Financial Markets in a Static Framework. Risk-Taking and Risk-Hedging. The Capital Asset Pricing Model. Modeling Financial Markets in Dynamic Discrete Framework. Risk-Hedging. The No Arbitrage Property. The Pricing of Redundant Assets. European and American Options. Modeling Financial Markets in Dynamic Continuous Framework. The Black-Scholes Model. Numerical Methods.

Prerequisite: MAEC3301 and STAT 2311.

**Statistics Course Descriptions (STAT)**

**229 STATISTICS FOR PHYSICAL EDUCATION**

(No credit hours for students who completed STAT2311 or STAT2361or STAT2371 or STAT2381)

The importance of statistics in various field of knowledge especially in the professional sports field. The uses of statistics. Some statistical concepts like the population and the sample. Methods of selecting a sample. Qualitative and quantitative variables and their scales of measurement. The statistical method and its procedure. Various measures including the measures of central tendency, variation and correlation, and application on these measures. Statistical distributions popular in the educational field.

**2311 STATISTICS 1**

(No credit hours for students who completed STAT2361 or STAT2371 or STAT2381)

Data and Statistics. Descriptive Statistics: Tabular and Graphical Presentations. Descriptive Statistics: Numerical Measures. Introduction to Probability. Discrete Probability Distributions. Continuous Probability Distributions. Sampling and Sampling Distributions. Interval Estimation. Hypothesis Tests.

Prerequisite: Secondary Education Scientific Stream or Equivalent or MATH1351

**2361 STATISTICS FOR BUSINESS AND ECONOMICS**

(No credit hours for students who completed STAT2311 or STAT2371 or STAT2381)

Population Parameters. Data Description. Probability. Random Variables. Distributions of Some Special Random Variables. Point Estimation of Population Parameters.

Hypothesis Tests about the Mean of One Population. Expectation. Introduction to Regression and Correlation.

Prerequisite: Secondary Education Scientific Stream or Equivalent or MATH1351

**2371 STATISTICS FOR PUBLIC ADMINISTRATION**

(No credit hours for students who completed STAT2311 or STAT2361 or STAT2381)

Data Types. Frequency Distributions. Measures of Central Tendency. Measures of Variability. Introduction to Probability. The Normal Distribution. The Binomial Distribution. Some Special Distributions. Introduction to Statistical Inference. Hypothesis Tests.

Prerequisite: Secondary Education Scientific Stream or Equivalent or MATH1351

**238 BIOSTATISTICS**

(No credit hours for students who completed STAT2311 or STAT2361 or STAT2371)

Descriptive Statistics. Graphical Representations of Data. Introduction to Probability. Expected Value and Variance of Random Variables. Confidence Intervals. Hypothesis Tests (Normal Test, t-Test, Chi-Squared Test). Regression. Analysis of Variance.

Prerequisite: Secondary Education Scientific Stream or Equivalent or MATH1351

**3311 STATISTICS 2**

Inference About Means and Proportions with Two Populations. Inferences About Population Variances. Tests of Goodness of Fit and Independence. Experimental Design and Analysis of Variance. Simple Linear Regression. Multiple Regression.

Prerequisite: STAT2311 and MATH1321

**3321 PROBABILITY THEORY**

Probability and Univariate Distributions of the Discrete and Continuous Types. Expectation. Variance. Moment Generating Function. Chebyshev’s Inequality. Multivariate Distributions. Conditional Distributions and Expectations. Correlation Coefficient. Independent Random Variables. Distributions of Transformations of Variables of Discrete and Continuous Types using CDF Techniue, Change-of-Variable Technique, and Moment-Generating-Function Technique. Some Special Distributions: Binomial Distribution, Poisson Distribution, Gamma Distribution, Chi-Square Distribution, Normal Distribution, Bivariate Normal Distribution. Beta Distribution, t Distribution, and F Distribution. Distributions of Order Statistics.

Prerequisite: STAT3311 and MATH2311

**333 STATISTICAL INFERENCE**

Limiting Distributions. Central Limit Theory. Statistical Inference. Point Estimation. Confidence Intervals for Means. Confidence Intervals for Differences in Means. Tests of Statistical Hypotheses. Chi-Square Test. Sufficient Statistics. Bayesian Estimation. Rao- Cramer Inequality. Limiting Distributions of Maximum Likelihood Estimators.

Uniformly Most Powerful Tests. Inferences about Normal Models.

Prerequisite: STAT3321 and MATH234

**3341 REGRESSION ANALYSIS**

Linear Regression Models using Matrix Notation. Multiple Regression Models. Polynomial Regression Models. Logistic Regression Models.

Prerequisite: STAT332 and MATH234

1. **NONPARAMETRIC STATISTICAL METHODS**

Estimation using Nonparametric Methods for One Population and for Two Populations. Kruskal-Wallis Test. Mann-Whitney-Wilcoxon Test. Wilcoxon Signed-Rank Test.

Friedman Test. Analysis of Variance.

Prerequisite: MATH 234 and STAT3321

1. **RESEARCH METHODS**

Research Topics Design. Designing Questionnaires. Data Collection, Data Entry, and Data Analysis using Statistical Programs such as SPSS, SAS, and STATA. Prerequisite: STAT2311 or STAT2361

337 **QUALITATIVE DATA ANALYSIS**

Measures and Tests of Association such as Phi, Somer’s D, and Lambda. Mantel- Haenszel Method. Least-Squares and Weighted Least Squares. Maximum Likelihood Estimation in Linear Models including Log-Linear Models.

Prerequisite: STAT3331

**431 SAMPLING METHODS 1**

Simple Random Sampling and Properties of the Estimates. Variances of the Estimates. Estimation of a Ratio. Estimates of Totals. Sampling Proportions and Percentages. The Effect of P on the Standard Errors. The Distributions Related to Estimating P. The Conditional Distribution of p. Comparisons between Two Different Proportions.

Estimation of Proportions in Cluster Sampling. The Estimation of Sample Size and for Quantitative Data. Stratified Sampling including the Properties of the Estimates and the Estimation of the Sample Size.

Prerequisite: STAT3311

**432 SAMPLING METHODS 2**

Stratified Sampling. Effects of Deviations from the Optimum Allocations. Determining the Number of Strata. Building the Stratum. Two-Way Stratification. Explaining proportions. Ratio Estimators. Bias in Ratio Estimators. Regression Estimation.

Systematic Sampling. Single-Stage Cluster Sampling (Cluster of Equal Sizes). Single- Stage Cluster Sampling (Cluster of Unequal Sizes). Subsampling with Units of Equal Sizes. Subsampling with Units of Unequal Sizes. Double Sampling. Sources of Errors in Surveys.

Prerequisite: STAT431

**433 EXPERIMENTAL DESIGNS**

Selected Topics in Experimental Designs including Experimental Designs with Fixed Random Effect. Nested Designs. Crossover Designs. Latin Squares. Latin Hypercubes. Analysis of Covariance.

Prerequisite: STAT2311 or STAT2361

**434 STATISTICAL DATA MANAGEMENT**

Organizing and Building Statistical Data. Designing Statistical Databases. Analyzing Statistical Programs. Data Import and Export between Programs. Analyzing Missing Data.

Prerequisite: STAT2311 or STAT2361

**435 TIME SERIES ANALYSIS**

Stochastic Processes. Stationary Processes. Autocorrelation Function. Autoregressive (AR) Process. Moving Average (MA) Process. Autoregressive Moving Average (ARMA) Model. Integrated Autoregressive Moving Average (ARIMA) Model. Box- Jenkins Integrated Seasonal Autoregressive Moving Average (SARIMA) Model. Estimation of Model Parameters. Forecasting using Models.

Prerequisite: STAT3321 and MATH234

**438 SPECIAL TOPIC IN STATISTICS**

Studying a certain topic in statistics; choosing the topic depends on the needs of students and the interests of the faculty members.

Prerequisite: Department’s Approval

## Department of Physics

The Department of Physics offers an academic program leading to Bachelor degree in Physics Single Major. This is in addition to three other academic programs leading to the same degree in Major Physics/Minor Computer Science or Mathematics or Electronics. The Department also offers Minor specialization in Physics.

**Programs Admission Requirements**

1. Student must successfully complete and obtain a cumulative average of 70% in PHYS111, PHYS141 and PHYS132.
2. Student must successfully complete and obtain a cumulative average of 70% in MATH1321 and MATH1411.
3. Department approval based on intake capacity

**FIRST: Physics Single Major**

**Program Requirements:**

Student must successfully complete 128 credit hours of courses distributed as follows:

|  |  |
| --- | --- |
| **Courses Type** | **Number of Credit Hours** |
| University Requirements | 21 |
| College Requirements | 29 |
| Major Requirements | 65 |
| Free Elective Courses | 13 |
| **Total** | **128** |

**Physics Single Major Requirements: (65 Credit Hours)**

**Compulsory Courses for Physics Single Major: (53 Credit Hours) of the following courses:**

|  |  |  |
| --- | --- | --- |
| **Course Code** | **Course Title** | **Course Prerequisite** |
| PHYS112 | General Physics Lab. 2 | PHYS111 and PHYS132 (or Concurrent) |
| PHYS211 | General Physics Lab. 3 | PHYS111 and PHYS231 (or Concurrent) |
| PHYS212 | Modern Physics Lab. | PHYS112 and PHYS232 (or Concurrent) |
| PHYS231 | General Physics 3 | PHYS141 |
| PHYS232 | Modern Physics | PHYS231 and MATH2311 |
| PHYS236 | Physics of Vibrations and Waves | PHYS141 and MATH331 (or Concurrent) |
| PHYS330 | Methods of Mathematical Physics | MATH331 |
| PHYS331 | Electromagnetic Theory 1 | MATH331 |
| PHYS332 | Electromagnetic Theory 2 | PHYS331 |
| PHYS333 | Mechanics 1 | MATH331 |
| PHYS334 | Mechanics 2 | PHYS333 |
| PHYS336 | Analog Electronics | PHYS112 and PHYS132 |
| PHYS411 | Seminar in Physics | Department Approval |
| PHYS430 | Advanced Physics Lab. | PHYS212 and PHYS336 |
| PHYS431 | Thermal and Statistical Physics | PHYS232 |
| PHYS433 | Quantum Mechanics 1 | PHYS232 and PHYS333 |
| PHYS4332 | Quantum Mechanics 2 | PHYS433 |
| MATH2311 | Calculus and Analytical Geometry 3 | MATH1321 |
| MATH234 | Introduction to Linear Algebra | MATH1321 |
| MATH331 | Ordinary Differential Equations | MATH1321 |
| CHEM112 | General Chemistry Lab. 2 | CHEM111 and CHEM132 (or Concurrent) |

Elective Courses for Physics Single Major: 12 Credit Hours of other PHYS courses, only 3 of these can be from PHYS23X level.

**SECOND: Major Physics/Minor Mathematics**

**Program Requirements:**

Student must successfully complete 128 credit hours of courses distributed as follows:

|  |  |
| --- | --- |
| **Courses Type** | **Number of Credit Hours** |
| University Requirements | 21 |
| College Requirements | 29 |
| Major/Minor Requirements | 66 |
| Free Elective Courses | 12 |
| **Total** | **128** |

**Major Physics/Minor Mathematics Requirements: (66 Credit Hours)**

Compulsory Courses for Major Physics/Minor Mathematics: (57 Credit Hours) of the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Code** | **Course Title** | **Course Prerequisite** |
| PHYS112 | General Physics Lab. 2 | PHYS111 and PHYS132 (or Concurrent) |
| PHYS211 | General Physics Lab. 3 | PHYS111 and PHYS231 (or Concurrent) |
| PHYS212 | Modern Physics Lab. | PHYS112 and PHYS232 (or Concurrent) |
| PHYS231 | General Physics 3 | PHYS141 |
| PHYS232 | Modern Physics | PHYS231 and MATH2311 |
| PHYS236 | Physics of Vibrations and Waves | PHYS141 and MATH331 (or Concurrent) |
| PHYS330 | Methods of Mathematical Physics | MATH331 |
| PHYS331 | Electromagnetic Theory 1 | MATH331 |
| PHYS333 | Mechanics 1 | MATH331 |
| PHYS334 | Mechanics 2 | PHYS333 |
| PHYS336 | Analog Electronics | PHYS112 and PHYS132 |
| PHYS411 | Seminar in Physics | Department Approval |
| PHYS430 | Advanced Physics Lab. | PHYS212 and PHYS336 |
| PHYS431 | Thermal and Statistical Physics | PHYS232 |
| PHYS433 | Quantum Mechanics 1 | PHYS232 and PHYS333 |
| MATH2311 | Calculus and Analytical Geometry 3 | MATH1321 |
| MATH234 | Introduction to Linear Algebra | MATH1321 |
| MATH243 | Foundations of Mathematics | MATH1321 |
| MATH331 | Ordinary Differential Equations | MATH1321 |
| MATH3331 | Mathematical Analysis 1 | MATH243 |
| MATH337 | Abstract Algebra 1 | MATH243 |
| CHEM112 | General Chemistry Lab. 2 | CHEM111 and CHEM132 (or Concurrent) |

Elective Courses for Major Physics/Minor Mathematics: (9 Credit Hours): 6 Credits of other PHYS courses, (only 3 of these can be from PHYS23X level) and 3 Credits of other MATH courses from MATH33X level and above.

**THIRD: Major Physics/Minor Electronics**

**Program Requirements:**

Student must successfully complete 128 credit hours of courses distributed as follows:

|  |  |
| --- | --- |
| **Courses Type** | **Number of Credit Hours** |
| University Requirements | 21 |
| College Requirements | 29 |
| Major Requirements | 68 |
| Free Elective Courses | 10 |
| **Total** | **128** |

**Major Physics/Minor Electronics Requirements: (68 Credit Hours)**

Compulsory Courses for Major Physics/Minor Electronics: (62 Credit Hours) of the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Code** | **Course Title** | **Course Prerequisite** |
| PHYS112 | General Physics Lab. 2 | PHYS111 and PHYS132 (or Concurrent) |
| PHYS211 | General Physics Lab. 3 | PHYS111 and PHYS231 (or Concurrent) |
| PHYS212 | Modern Physics Lab. | PHYS112 and PHYS232 (or Concurrent) |
| PHYS231 | General Physics 3 | PHYS141 |
| PHYS232 | Modern Physics | PHYS231 and MATH2311 |
| PHYS236 | Physics of Vibrations and Waves | PHYS141 and MATH331 (or Concurrent) |
| PHYS330 | Methods of Mathematical Physics | MATH331 |
| PHYS331 | Electromagnetic Theory 1 | MATH331 |
| PHYS332 | Electromagnetic Theory 2 | PHYS331 |
| PHYS333 | Mechanics 1 | MATH331 |
| PHYS411 | Seminar in Physics | Department Approval |
| PHYS430 | Advanced Physics Lab. | PHYS212 and PHYS336 |
| PHYS433 | Quantum Mechanics 1 | PHYS232 and PHYS333 |
| MATH2311 | Calculus and Analytical Geometry 3 | MATH1321 |
| MATH234 | Introduction to Linear Algebra | MATH1321 |
| MATH331 | Ordinary Differential Equations | MATH1321 |
| CHEM112 | General Chemistry Lab. 2 | CHEM111 and CHEM132 (or Concurrent) |
| ENEE2102 | Circuits Lab | PHYS112 and ENEE2305 (or Concurrent) |
| ENEE2301 | Network Analysis 1 | PHYS132 |
| ENEE2303 | Electronics 1 | ENEE2301 |
| ENEE2305 | Network Analysis 2 | ENEE2302  (or Concurrent) |
| ENEE3102 | Electronics Lab | PHYS112 or ENEE2409 or ENEE3304 (or Concurrent) |
| ENEE3304 | Electronics 2 | ENEE2303 |
| ENCS211 | Digital Electronics And Computer Organization Lab | ENCS238 or ENCS336  (or Concurrent) |
| ENCS234 | Digital Systems | COMP132 or COMP230 or COMP142 or COMP133 |
| ENCS238 | Computer Organization | ENCS234 |

Elective Courses for Major Physics/Minor Electronics: (6 Credit Hours): 3 Credits of other PHYS courses (any level) and 3 Credits of ENEE43X or ENEE53X courses or the course titled: ENCS338 “MICROPROCESSOR-BASED SYSTEMS”

**FOURTH: Major Physics/Minor Computer Science**

**Program Requirements:**

Student must successfully complete 128 credit hours of courses distributed as follows:

|  |  |
| --- | --- |
| **Courses Type** | **Number of Credit Hours** |
| University Requirements | 21 |
| College Requirements | 29 |
| Major/Minor Requirements | 66 |
| Free Elective Courses | 12 |
| **Total** | **128** |

**Major Physics/Minor Computer Science Requirements: (66 Credit Hours)**

Compulsory Courses for Major Physics/Minor Computer Science: (57 Credit Hours) of the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Code** | **Course Title** | **Course Prerequisite** |
| PHYS112 | General Physics Lab. 2 | PHYS111 and PHYS132 (or Concurrent) |
| PHYS211 | General Physics Lab. 3 | PHYS111 and PHYS231 (or Concurrent) |
| PHYS212 | Modern Physics Lab. | PHYS112 and PHYS232 (or Concurrent) |
| PHYS231 | General Physics 3 | PHYS141 |
| PHYS232 | Modern Physics | PHYS231 and MATH2311 |
| PHYS236 | Physics of Vibrations and Waves | PHYS141 and MATH331 (or Concurrent) |
| PHYS330 | Methods of Mathematical Physics | MATH331 |
| PHYS331 | Electromagnetic Theory 1 | MATH331 |
| PHYS333 | Mechanics 1 | MATH331 |
| PHYS336 | Analog Electronics | PHYS112 and PHYS132 |
| PHYS411 | Seminar in Physics | Department Approval |
| PHYS430 | Advanced Physics Lab. | PHYS212 and PHYS336 |
| PHYS433 | Quantum Mechanics 1 | PHYS232 and PHYS333 |
| MATH2311 | Calculus and Analytical Geometry 3 | MATH1321 |
| MATH234 | Introduction to Linear Algebra | MATH1321 |
| MATH331 | Ordinary Differential Equations | MATH1321 |
| CHEM112 | General Chemistry Lab. 2 | CHEM111 and CHEM132 (or Concurrent) |
| COMP231 | Advanced Programming | COMP132 or COMP230 or COMP142 or COMP133 |
| COMP242 | Data Structure | COMP231 |
| COMP333 | Database Systems | COMP242 or COMP2321 |
| COMP334 | Web Applications and Technology | COMP333 |
| COMP433 | Software Engineering | COMP333 |

Elective Courses for Major Physics/Minor Computer Science: (9 Credit Hours): 3 Credits of other PHYS courses, (any level) and 6 Credits of other COMP courses (level 3 and above).

**FIFTH: Minor Physics**

**Program Requirements:** (21 credit hours) of the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Code** | **Course Title** | **Course Prerequisite** |
| PHYS112 | General Physics Lab. 2 | PHYS111 and PHYS132 (or Concurrent) |
| PHYS211 | General Physics Lab. 3 | PHYS111 and PHYS231 (or Concurrent) |
| PHYS212 | Modern Physics Lab. | PHYS112 and PHYS232 (or Concurrent) |
| PHYS231 | General Physics 3 | PHYS141 |
| PHYS232 | Modern Physics | PHYS231 and MATH2311 |
| PHYS236 | Physics of Vibrations and Waves | PHYS141 and MATH331 (or Concurrent) |
| PHYS331 | Electromagnetic Theory 1 | MATH331 |
| PHYS333 | Mechanics 1 | MATH331 |
| PHYS336 | Analog Electronics | PHYS112 and PHYS132 |

**Courses Description (PHYS):**

**111 General Physics Lab I 1 cr. hr.**

Survey of basic laboratory techniques and methods; taking measurements, data evaluation and report writing with application to selected experiments in mechanics, heat, optics and electricity (Lab 3hrs.).

**112 General Physics Lab II 1 cr. hr.**

Experiments in electricity and magnetism including electrostatics, magneto-statics, DC and AC circuits and applied electric circuits (Lab 3hrs.).

*Prerequisite: PHYS111, PHYS132 or concurrent.*

**141 General Physics I 4 cr. hrs.**

Newton’s laws of motion and their applications; mechanical conservation laws; motion of rigid bodies; fluid mechanics, oscillations and the law of universal gravitation (Lecture 2hrs, Discussion 2hrs).

*Prerequisite: MATH1411 or concurrent*

**132 General Physics II 3 cr. hrs.**

Electrostatics; Magnetic field and induction; direct and alternating current circuits; dielectrics; magnetic materials; Introduction to Maxwell’s equations and electromagnetic waves and geometrical optics (Lecture 2hrs, Discussion 1hr).

*Prerequisite: PHYS141, MATH1321 or concurrent*

**211 General Physics Lab III 1 cr. hr.**

Experiments in mechanics, heat, waves and fluids (Lab 3hrs).

*Prerequisite: PHYS111, PHYS231 or concurrent*

**212 Modern Physics Lab 1 cr. hr.**

Experiments in modern physics and physical optics including atomic spectra, radioactivity and various quantum phenomena (Lab 3hrs).

*Prerequisite: PHYS112, PHYS232 or concurrent*

**2201 Principles of Biomechanics 2 cr. hr.**

Concepts and Information relevant to human movement, three-dimensional analysis of human structure and musculoskeletal system

**231 General Physics III 3 cr. hrs.**

Waves and sound, physical optics, heat the laws of thermodynamics and the kinetic theory of gases, introduction to modern physics including relativistic kinematics and the quantum theory.

*Prerequisite: PHYS141*

**232 Modern Physics 3 cr. hrs.**

Wave-particle duality, Schrödinger equation, atomic structure and many-electron atoms, introduction to solid state physics, relativistic dynamics, nuclear physics and elementary particles and instruments used in their study.

*Prerequisite: PHYS231, MATH2311*

**233 Astronomy 3 cr. hrs.**

The Earth and its atmosphere, the solar system, stars, light dispersion, galaxies, cosmic physics, instruments used in astronomy.

*Prerequisite: PHYS141*

**234 Medical Physics 3 cr. hrs.**

Applying physics to hearing, vision and nervous systems in the human body, use of ultrasonic waves, lasers, X-rays and nuclear radiation for imaging, diagnosis and treatment.

*Prerequisite: PHYS132*

**235 Meteorology 3 cr. hrs.**

Atmosphere structure and components, winds, clouds, rain, and snow, effects of temperature, pressure, and humidity, measurement instruments and weather forecasting.

*Prerequisite: PHYS141*

**236 Vibrations and Waves 3 cr. hrs.**

Simple Harmonic Motion, Coupled oscillations and Natural Vibrations, Vibrations in continuous media, Interference of Waves.

*Prerequisite: PHYS141, MATH331 or concurrent*

**330 Methods of Mathematical Physics 3 cr. hrs.**

Complex variables; Calculus of Residues; Vector Analysis; Linear Integrals; Green, Gauss and Stokes Theorems; Fourier Transform; Series Solutions of Ordinary Differential Equations; Legendre and Hermite Polynomials; Bessel and Laguerre Functions and their Applications; Inhomogeneous Partial Differential Equations and Green Functions

*Prerequisite: MATH331*

**331 Electromagnetic Theory I 3 cr. hrs.**

Electrostatics, solutions of Poisson’s and Laplace’s equations, dielectric media; electrostatic energy, magnetic induction and Ampere’s law, magnetic properties of matter and magnetic energy, electromagnetic induction, Maxwell’s equations and the wave equation.

*Prerequisite: MATH331*

**332 Electromagnetic Theory II 3 cr. hrs.**

Slowly varying currents, propagation of electromagnetic waves in infinite and bounded media, microscopic theory of dielectrics, magnetic materials and optical dispersion, radiation emission and electrodynamics, Lorentz covariant formulation of electrodynamics, superconductivity, plasma physics.

*Prerequisite: PHYS331*

**333 Mechanics I 3 cr. hrs.**

Kinematics and dynamics of a particle in one, two and three dimensions with emphasis on the oscillator and central force problems, Lagrangian formulation and Hamilton’s equations.

*Prerequisite: MATH331*

**334 Mechanics II 3 cr. hrs.**

Motion of a system of particles and rigid bodies’ gravitation; waves in continuous media; moving coordinate systems and relativistic dynamics.

*Prerequisite: PHYS333*

**335 Optics 3 cr. hrs.**

Electromagnetic waves, matrix methods in geometrical optics, reflection, refraction and propagation of light, waveguides, interference, diffraction and polarization, Fourier optics, coherence theory and an introduction to lasers.

*Prerequisite: PHYS231, MATH2311*

**336 Analog Electronics 3 cr. hrs.**

Transistors (BJTs and FETs) and their uses in amplifier circuits, multistage amplifier circuits, operational amplifiers, feedback circuits and their uses in amplification and oscillator circuits, power supplies (Lecture 2hrs, Lab 3hrs).

*Prerequisite: PHYS112, PHYS132*

**338 Computational Physics 3 cr. hrs.**

An introduction to the utility of computers in physics, numerical methods in physics including numerical differentiation and integration, systems of linear equations, solutions to ordinary and partial differential equations, modeling and simulations, Molecular dynamics and Monte Carlo methods.

*Prerequisite: MATH331, COMP132*

**411 Seminar in Physics 1 cr. hr.**

Papers and talks on selected topics in physics prepared and given by the students under the supervision of the physics staff, students are introduced to physics journals and specialized texts, ethics of scientific research.

*Prerequisite: Department approval*

**430 Advanced Physics Lab 3 cr. hrs.**

Selected advanced level experiments from various fields of physics aiming at giving the student more experience in experimental work and exposing him to the methods and techniques of modern experimental research (Lecture 1hr, Lab 6hrs).

*Prerequisite: PHYS212, PHYS336*

**431 Thermal and Statistical Physics 3 cr. hrs.**

Statistical description of systems of particles; statistical thermodynamics with application to macroscopic thermodynamics, foundations of statistical mechanics with applications, quantum statistics and ideal gases, kinetic theory and transport phenomena.

*Prerequisite: PHYS232*

**433 Quantum Mechanics I 3 cr. hrs.**

Foundations and basic postulates of the quantum theory, Schroedinger’s wave equation with applications to one dimensional problems, coordinate and momentum representation, the formal structure of quantum mechanics, angular momentum, central forces and matrix representation.

*Prerequisite: PHYS232, PHYS333*

**4332 Quantum Mechanics II 3 cr. hrs.**

Methods of approximation in quantum mechanics, angular momentum coupling schemes in atoms and molecules, hyperfine structure of energy levels, vibrational and rotational spectra Stark effect and experimental methods in spectroscopy.

*Prerequisite: PHYS433*

**435 Nuclear Physics and Elementary Particles 3 cr. hrs.**

Strong and weak nuclear forces, theories of alpha beta decays and gamma transitions and decay constants, elementary particles and fundamental interactions, Standard Model and symmetry principles, experiments and high energy accelerators.

*Prerequisite: PHYS433 or concurrent*

**436 Solid State Physics 3 cr. hrs.**

Crystal structure and diffraction, phonons and lattice vibrations, the free electron model; energy bands in solids, semi-conductors, Fermi surfaces, magnetic properties of crystals and superconductors.

*Prerequisite: PHYS433 or concurrent.*

**437 Independent Study in Physics 3 cr. hrs.**

Independent study or research conducted by the student under the guidance of a staff member. A written report is required.

*Prerequisite: Fourth year standing and department approval*

**438 Special Topic in Physics 3 cr. hrs.**

Study of topics in physics selected according to the interests and needs of students and availability of staff (Lecture 3hrs).

*Prerequisite: Department approval*

## Department of Chemistry

**Department of Chemistry**

The Department of Chemistry offers the following undergraduate degrees:

1. Bachelor in Chemistry Major

2. Major in Chemistry/Minor Business Administration

3. Major in Chemistry/Minor Marketing

4. Major in Chemistry/Minor in Biochemistry, and

5. Minor in Chemistry.

The department also offers the following graduate degree: Master in Applied Chemistry.

**First: Bachelor in Chemistry Major.**

**Admission requirements**

1. Pass CHEM111, CHEM112, CHEM141, and CHEM132 courses with a minimum average of 70%
2. The department approval depending on space availability.

**Academic Requirements**

The academic requirements for the Bachelor in Chemistry Major consists of 128 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirements** | **Credit Hours** |
| University requirements | 21 |
| Faculty of Science requirements | 29 |
| Major program requirements | 63 |
| Elective courses | 15 |
| Total | 128 |

**Major in Chemistry courses (63 credit hours):**

Constitute the following:

1. Required courses (57 credit hours)

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| CHEM 112 | General Chemistry Lab II | CHEM 111, CHEM 132 or concurrent |
| CHEM 233 | Organic Chemistry Lab | CHEM 112, CHEM 242 or concurrent |
| CHEM 234 | Analytical Chemistry I | CHEM 112, CHEM 132 |
| CHEM 241 | Organic Chemistry I | CHEM 132 |
| CHEM 242 | Organic Chemistry II | CHEM 241 |
| CHEM 331 | Physical Chemistry I | CHEM 132, MATH 2311 or department consent |
| CHEM 332 | Physical Chemistry II | CHEM 331 |
| CHEM 333 | Inorganic Chemistry I | CHEM 132,MATH 2311or concurrent |
| CHEM 335 | Physical Chemistry Lab | CHEM 332 or concurrent |
| CHEM 3361 | Instrumental Analysis Principles | CHEM234 |
| CHEM 339 | Spectroscopy Principles | CHEM 242, CHEM 333 or concurrent |
| CHEM 411 | Seminar in Chemistry | Department consent |
| CHEM 426 | Instrumental Analysis Lab | CHEM 336 |
| CHEM 432 | Systematic Identification of Organic Compounds | CHEM 233 |
| CHEM 434 | Inorganic Chemistry II | CHEM 333 |
| CHEM 435 | Quantum Chemistry | CHEM 332, and MATH 2311 |
| CHEM 436 | Inorganic Chemistry Lab | CHEM 434 or concurrent |
| BIOL 111 | Biology Lab | BIOL 131 or concurrent |
| PHYS 112 | General Physics Lab II | PHYS 111, PHYS 132 or concurrent |
| PHYS 211 | General Physics Lab III | PHYS 111, PHYS 231 or concurrent |
| PHYS 231 | General Physics III | PHYS 132 |
| MATH 2311 | Calculus III | MATH 1321 |

1. Elective courses, 6 credit hours from the following

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| BIOL 331 | Biochemistry I | BIOL 11, CHEM 230 or CHEM 242 or concurrent |
| CHEM 330 | Industrial Chemistry | CHEM 242 |
| CHEM 430 | Bioinorganic Chemistry | BIOL 434 or concurrent |
| CHEM 433 | Metabolic Chemistry | CHEM 242, BIOL 331 |
| CHEM 437 | Independent Study in Chemistry | Fourth level and department consent |
| CHEM 438 | Special Topics | Department consent |

**Second: Major in Chemistry/Minor in Business Administration**

**Admission requirements**

1. Pass CHEM111, CHEM112, CHEM141, and CHEM132 courses with a minimum average of 70%
2. The department approval depending on space availability.

**Academic requirements**

The academic requirements for the Major in Chemistry/Minor in Business Administration consists of 128 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirement** | **Credit Hours** |
| University requirements | 21 |
| Faculty of Science requirements | 29 |
| Program requirements | 65 |
| Elective courses | 13 |
| Total | 128 |

Major in Chemistry/Minor in B.A courses (65 credit hours)

1. Required courses in Chemistry (36 credit hours)

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| CHEM 112 | General Chemistry Lab II | CHEM 111, CHEM 132 or concurrent |
| CHEM 233 | Organic Chemistry Lab | CHEM 112, CHEM 242 or concurrent |
| CHEM 234 | Analytical Chemistry I | CHEM 112, CHEM 132 |
| CHEM 241 | Organic Chemistry I | CHEM 132 |
| CHEM 242 | Organic Chemistry II | CHEM 241 |
| CHEM 331 | Physical Chemistry I | CHEM 132,MATH2311 or department consent |
| CHEM 332 | Physical Chemistry II | CHEM 331 |
| CHEM 333 | Inorganic Chemistry I | CHEM 132,MATH 2311 or concurrent |
| CHEM 3361 | Principles of Instrumental Analysis | CHEM234 |
| CHEM 411 | Seminar in Chemistry | Department consent |
| CHEM 434 | Inorganic Chemistry II | CHEM 333 |
| BIOL 111 | Biology Lab | BIOL 131 or concurrent |
| PHYS 112 | General Physics Lab II | PHYS 111, PHYS 132 or concurrent |
| MATH 2311 | Calculus III | MATH 1321 |

1. Elective courses in Chemistry, 6 credit hours from the following

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| CHEM 335 | Physical Chemistry Lab | CHEM 332 or concurrent |
| CHEM 426 | Instrumental Analysis Lab | CHEM 336 |
| CHEM 339 | Spectroscopy Principles | CHEM 242, CHEM 333 or concurrent |
| CHEM 432 | Systematic Identification of Organic Compounds | CHEM 233 |
| CHEM 436 | Inorganic Chemistry Lab | CHEM 434 or concurrent |
| CHEM 438 | Special Topics | Department consent |

1. Required courses in Business Administration (18 credit hours)

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| BUSA 130 | Introduction To Business Administration |  |
| BUSA230 | Principles of Management | BUSA130 |
| BUSA 232 | Business Communication | BUSA230 |
| BUSA 236 | Small Business Management | BUSA230 |
| BUSA 330 | Human Resources Management | BUSA230 |
| BUSA 3301 | Introduction To Business Law | BUSA230 |

1. Elective courses, 6 credit hours from the Business Administration Department.

**Third: Major in Chemistry/Minor in Marketing**

**Admission requirements**

1. Pass CHEM111, CHEM112, CHEM141, and CHEM132 courses with a minimum average of 70%
2. The department approval depending on space availability.

**Academic requirements**

The academic requirements for the Major in Chemistry/Minor in Marketing consists of 128 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirement** | **Credit Hours** |
| University requirements | 21 |
| Faculty of Science requirements | 29 |
| Program requirements | 65 |
| Elective courses | 13 |
| Total | 128 |

Major in Chemistry/Minor in Marketing courses (65 credit hours)

1. Required courses in Chemistry (36 credit hours)

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| CHEM 112 | General Chemistry Lab 2 | CHEM 111, CHEM 132 or concurrent |
| CHEM 233 | Organic Chemistry Lab | CHEM 112, CHEM 242 or concurrent |
| CHEM 234 | Analytical Chemistry 1 | CHEM 112, CHEM 132 |
| CHEM 241 | Organic Chemistry 1 | CHEM 132 |
| CHEM 242 | Organic Chemistry 2 | CHEM 241 |
| CHEM 331 | Physical Chemistry 1 | CHEM 132,MATH 2311 or department consent |
| CHEM 332 | Physical Chemistry 2 | CHEM 331 |
| CHEM 333 | Inorganic Chemistry 1 | CHEM 132,MATH2311 or concurrent |
| CHEM 3361 | Principles of Instrumental Analysis | CHEM234 |
| CHEM 411 | Seminar in Chemistry | Department consent |
| CHEM 434 | Inorganic Chemistry 2 | CHEM 333 |
| BIOL 111 | Biology Lab | BIOL 131 or concurrent |
| PHYS 112 | General Physics Lab 2 | PHYS 111, PHYS 132 or concurrent |
| MATH 2311 | Calculus 3 | MATH 1321 |

1. Elective courses in Chemistry, 6 credit hours from the following

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| CHEM 335 | Physical Chemistry Lab | CHEM 332 or concurrent |
| CHEM 426 | Instrumental Analysis Lab | CHEM 336 |
| CHEM 339 | Spectroscopy Principle | CHEM 242, CHEM 333 or concurrent |
| CHEM 432 | Systematic Identification of Organic Compounds | CHEM 233 |
| CHEM 436 | Inorganic Chemistry Lab | CHEM 434 or concurrent |
| CHEM 438 | Special Topics | Consent of Department |

1. Required courses in Marketing (18 credit hours)

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| MKET130 | Principles of Marketing 1 |  |
| MKET 230 | Principles of Marketing 2 | MKET130 |
| MKET 330 | Marketing Management | MKET 230 |
| MKET 332 | Sales Management | MKET 230 |
| MKET 334 | Consumer Behaviour | MKET 230 |
| MKET 335 | International Marketing | MKET 230 |

1. Elective courses, 6 credit hours from the Marketing Department.

**Fourth: Major in Chemistry/Minor in Biochemistry**

**Admission requirements**

1. Pass CHEM111, CHEM112, CHEM141, and CHEM132 courses with a minimum average of 70%
2. The department approval depending on space availability.

**Academic requirements**

The academic requirements for the Major in Chemistry/Minor in Biochemistry consists of 128 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirement** | **Credit Hours** |
| University requirements | 21 |
| Faculty of Science requirements | 29 |
| Program requirements | 62 |
| Elective courses | 16 |
| Total | 128 |

Major in Chemistry/Minor in Biochemistry courses (62 credit hours)

1. Required courses, Major in Chemistry (36 credit hours)

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| CHEM 112 | General Chemistry Lab 2 | CHEM 111, CHEM 132 or concurrent |
| CHEM 233 | Organic Chemistry Lab | CHEM 112, CHEM 242 or concurrent |
| CHEM 234 | Analytical Chemistry 1 | CHEM 112, CHEM 132 |
| CHEM 241 | Organic Chemistry 1 | CHEM 132 |
| CHEM 242 | Organic Chemistry 2 | CHEM 241 |
| CHEM 331 | Physical Chemistry 1 | CHEM 132,MATH 2311 or department consent |
| CHEM 332 | Physical Chemistry 2 | CHEM 331 |
| CHEM 333 | Inorganic Chemistry 1 | CHEM 132,MATH 2311 or concurrent |
| CHEM 3361 | Principles of Instrumental Analysis | CHEM234 |
| CHEM 411 | Seminar in Chemistry | Department consent |
| CHEM 434 | Inorganic Chemistry 2 | CHEM 333 |
| BIOL 111 | Biology Lab | BIOL 131 or concurrent |
| PHYS 112 | General Physics Lab 2 | PHYS 111, PHYS 132 or concurrent |
| MATH 2311 | Calculus 3 | MATH 1321 |

1. Elective courses, Major in Chemistry, 6 credit hours from the following

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| CHEM 335 | Physical Chemistry Lab | CHEM 332 or concurrent |
| CHEM 426 | Instrumental Analysis Lab | CHEM 336 |
| CHEM 339 | Spectroscopy Principles | CHEM 242, CHEM 333 or concurrent |
| CHEM 432 | Systematic Identification of Organic Compounds | CHEM 233 |
| CHEM 436 | Inorganic Chemistry Lab | CHEM 434 or concurrent |
| CHEM 438 | Special Topics | Department consent |

1. Minor in Biochemistry (21 credit hours)
2. Required courses, 12 credit hours

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| BIOC 311 | Biochemistry Lab 1 | BIOC331 or concurrent |
| BIOC 312 | Biochemistry Lab 2 | BIOC311, BIOC332 or concurrent |
| BIOC 331 | Biochemistry 1 | BIOL 111, CHEM 230 or concurrent, or CHEM 242 or concurrent |
| BIOC 332 | Biochemistry 2 | BIOC331 |
| BIOC 413 | Clinical Biochemistry Lab | BIOC432 or concurrent |
| BIOC 432 | Clinical Biochemistry Methods | BIOC311, (CHEM221 or CHEM234) or concurrent |

1. Elective courses: 9 credit hours from the following courses or any other chemistry course of third level or above.

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| BIOL 243 | General Microbiology | BIOL111 |
| BIOL 244 | Cell Biology | BIOL 111 |
| BIOC 434 | Enzymology | BIOC332 |
| BIOC 435 | Endocrinology | BIOC332 |
| BIOC 438 | Special Topic in Biochemistry | Fourth level and department consent |
| CHEM 430 | Bioinorganic Chemistry | BIOL 434 or concurrent |
| CHEM 433 | Metabolism Chemistry | CHEM 242, BIOL 331 |

**Fifth: Minor Program in Chemistry**

The program requires completing 24 credit hours as follows:

1. Required courses in Chemistry (21 credit hours)

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| CHEM 112 | General Chemistry Lab II | CHEM 111, CHEM 132 or concurrent |
| CHEM 233 | Organic Chemistry Lab | CHEM 112, CHEM 242 or concurrent |
| CHEM 234 | Analytical Chemistry I | CHEM 112, CHEM 132 |
| CHEM 241 | Organic Chemistry I | CHEM 132 |
| CHEM 242 | Organic Chemistry II | CHEM 241 |
| CHEM 331 | Physical Chemistry I | CHEM 132, MATH 2311 or department consent |
| CHEM 333 | Inorganic Chemistry I | CHEM 132,MATH2311 or concurrent |

1. Elective courses, 3 credit hours from the following

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| CHEM 332 | Physical Chemistry II | CHEM 331 |
| CHEM 335 | Physical Chemistry Lab | CHEM 332 or concurrent |
| CHEM 3361 | Principles of Instrumental Analysis | CHEM234 |
| CHEM 434 | Inorganic Chemistry II | CHEM 333 |
| CHEM 438 | Special Topics | Department Consent |

**Course Description:**

**CHEM 111: General Chemistry Lab I, (1 credit hour)**, includes several experiments which cover the material studied in CHEM 141.

Prerequisite: CHEM 141

Concurrent: CHEM 141

**CHEM 112: General Chemistry Lab II**, **(1 credit hour),** includes several experiments which cover the material studied in CHEM 132.

Prerequisite: CHEM 132 and CHEM 111

Concurrent: CHEM 132

**CHEM 113: General Chemistry Lab**, **(1 credit hour),** includes several experiments which cover the material studied in CHEM 133.

Prerequisite: CHEM 133

Concurrent: CHEM 133

**CHEM 133: General Chemistry, (3 credit hours),** basic principles in chemistry including atomic structure, chemical bonds, principles of chemical reactions in aqueous solutions, properties of solutions, reaction stoichiometry, thermochemistry, reaction kinetics, chemical equilibrium and its applications, precipitation reactions, acids and basis, Ionic and complex reactions.

**CHEM 141: General Chemistry I**, **(4 credit hours),**  introduction to general chemistry and some of its history, comprehensive description of the basic principles and concepts in chemistry including the physical and chemical properties, chemical models, atomic masses, mole, stoichiometry of formulas and equations, chemical reactions, acids and bases, oxidation-reduction reactions, gases, thermochemistry, atomic structure and quantum theory, molecules and their shapes, models of chemical bonding, molecular orbitals, changes of state and intermolecular forces, and various laws in chemistry are covered.

**CHEM 132: General Chemistry II**, **(3 credit hours),** continuation of CHEM 141. Properties of solutions, chemical kinetics, thermodynamics, chemical equilibria, acid–base equilibria, ionic equilibria and the transition elements and theories that account for their complexes.

Prerequisite: CHEM 141, CHEM 111

Concurrent: CHEM 112

**CHEM 143: Chemistry for Engineering Students, (4 credit hours),** introduction to chemical principles, measurements, chemical reactions, equilibria and stoichiometry, atomic structure, bonding and compounds, gases and their properties, solids and liquids, solutions and their colligative properties, material science and a study of some non–metals and their compounds. The experimental part includes familiarization with lab techniques and an introduction to simple glass blowing techniques, properties of gases, reactions and stoichiometry, titration, colligative properties of solutions, chemical equilibrium and equilibrium constant, a study of physical properties of some elements and compounds. Three lecture hours and one three hours lab per week.

**CHEM 221: Organic Chemistry Lab**, **(2 credit hours)** a study of laboratory techniques of organic chemistry including preparation, separation and identification of various classes of organic compounds, extraction of some chemical compounds from their natural sources (no credits for chemistry students), one lecture hour and three hours lab per week.

Prerequisite: CHEM 230.

**CHEM 230: Principles of Organic Chemistry**, **(3 credit hours),** a concise one semester course for Biology nutrition and nursing students. An introduction to the main functional groups in organic chemistry. The study includes alkanes, alkenes, alkynes, aliphatic, cyclic and aromatic compounds, halides, alcohols, ethers, phenols thiols, carbonyls, amines and carboxylic acids and their derivatives. Stereochemistry of organic compounds and their reactions..

Prerequisite: CHEM 132 or 133.

**CHEM 233: Organic Chemistry Laboratory, (3 credit hours)** experiments on the preparation, isolation and identification of various organic compounds including alcohols, ketones, aldehydes, acids, esters, amides, amines and aromatic compounds. One lecture hour and two three hours lab per week.

Prerequisite: CHEM 242 or

Concurrent: CHEM 242

**CHEM 234: Analytical Chemistry I**, **(3 credit hours)** fundamentals of quantitative analytical chemistry with emphasis on gravimetric analysis and various classes of titrimetric methods. The spectrophotometric and pH-metric determinations. Experiments that covers the theoretical part of the material. Two lecture hours and four hours lab per week.

Prerequisite: CHEM 112, CHEM 132.

**CHEM 241: Organic Chemistry I, (4 credit hours)** physicochemical properties, energy of activation, transition states, reactions and preparation of various organic compounds. Study of substitution, elimination and addition reactions and mechanisms as applied to alkanes, alkenes, alkynes, alkyl halides, alcohols, ethers and dienes. Stereochemistry of carbon compounds. Oxidation and reduction reactions of organic compounds. Structural studies of organic compounds employing I.R., U.V. NMR, spectroscopic techniques, and mass spectrometry.

Prerequisite: CHEM132

**CHEM 242: Organic Chemistry II**, **(4 credit hours),** a study of free radical reactions, conjugation and resonance. Structure and reactions of benzene and dienes. Physicochemical properties, preparation and reactions of aromatic compounds, aldehydes, ketones, amines and carboxylic acids and their derivatives. The chemistry of phenols, aryl halides, polymers and heterocycles. Reaction mechanisms and their use in the synthesis of various compounds.

Prerequisite: CHEM241.

**CHEM 330: Industrial Chemistry**, **(3 credit hours)** introduction to chemical industries, the role of the chemist, a study of industrial chemicals, flow charts, unit operations and chemical calculations as applied to manufacture of gases and liquids, theoretical study of a number of chemical industries such as water conditioning, industrial gases, salts, ceramics, cement, glass, vegetable oils, soaps, detergents, fertilizers, plastics, paints, perfumes and paper. Prerequisite: CHEM 242

**CHEM 331: Physical Chemistry I**, **(3 credit hours)** A study of ideal and real gases, kinetic theory of gases and equipartition of energy. A comprehensive study of the laws of thermodynamics; heat capacities, internal energy, entropy, and free energy. Physical transformations of pure substances. Thermodynamics of simple mixtures.

Prerequisite: CHEM132 and MATH 2311 or consent of department.

**CHEM 332: Physical Chemistry II**, **(3 credit hours),** Phase equilibria and phase diagrams. Chemical equilibrium and electrochemistry. A comprehensive study of chemical kinetics for simple and complex reactions. Special topics. Prerequisite: CHEM 331.

**CHEM 333: Inorganic Chemistry I**, **(3 credit hours),** introduction to inorganic chemistry and its history, reviews of the atomic orbital theory and chemical bonding. Emphasizes on molecular orbitals, the use of symmetry and group theory throughout. The use of symmetry and application in molecular vibrations and chirality. Extension to the uses of molecular orbitals. Comprehensive description of acids and bases.

Prerequisite: CHEM 132, MATH 2311

Concurrent: MATH 2311

**CHEM 335: Physical Chemistry Lab**, **(3 credit hours)**, a group of practical experiments in physical chemistry. The thermodynamics of solutions and solids, reaction kinetics, calorimetry, spectroscopy, phase diagrams, electrochemistry, adsorption, nanotechnology, and modern theoretical quantum computations. Development of some essential transferable skills such as scientific writing and advanced data analysis techniques. One lecture hour and two three hours lab per week.

Prerequisite: CHEM 332

Concurrent: CHEM 332

**CHEM 3361: Principles of Instrumental Analysis (3 credit hours)**, principles of instrumental methods commonly used in quantitative chemical analysis including instrument components and the physical and chemical processes associated with their operation. Emphasis will be given on optical methods (spectrophotometry, fluorescence and atomic spectrometry), electroanalytical methods (potentiometry, coulometry, amperometry and voltammetry), extraction and sample preparation and chromatographic methods of analysis (GC and HPLC).

Prerequisite: CHEM 234.

**CHEM 339: Spectroscopy Principles**, **(3 credit hours),** modern and advanced methods used in organic and inorganic structure elucidation, including NMR, MS, UV-Visible and IR (among others). The fundamental physical and chemical principles of each method are discussed. The major emphasis is on structure determination by way of interpreting the data in the form of spectra that each method provides.

Prerequisite: CHEM 242, CHEM 333.

**CHEM 411: Seminar in Chemistry**, **(1 credit hour),** selected readings and discussions of a number of research articles in the various fields of chemistry. Presentation and discussion of the research ethics guidelines and honesty in scientific research. Preparation and submission of a well-researched topic in one of the areas of chemistry based on the interest of the student. Presentation and discussion of the paper in a seminar attended by the students and faculty members and rewriting the paper as may be needed based on the discussions.

Prerequisite: Department consent

**CHEM 426: Instrumental Analysis Lab**, **(4 credit hours)** quantitative analysis laboratory course based on the instrumental methods presented in CHEM 3361. Selected experiments will be carried out in spectrophotometry, fluorescence, atomic spectrometry, potentiometry, coulometry, amperometry as well as chromatographic methods (GC and HPLC). One lecture hour and one 4 hours lab per week.

Prerequisite: CHEM 3361.

**CHEM 430: Bioinorganic Chemistry**, **(3 credit hours)**, various metal containing systems such as hemoglobin, myoglobin and biological cobalamines, iron -sulfur proteins, role of metal ions in biochemical reactions with emphasis on the electronic and stereo chemical structures of these ions. Prerequisite: CHEM 434

Concurrent*.* CHEM 434

**CHEM 432: Systematic Identification of Organic Compounds**, **(3 credit hours)** physical, chemical and spectroscopic methods for characterization and identification of "Unknowns" from 6 different classes of organic compounds. One lecture hour and two four hours lab per week. Prerequisite: CHEM 233.

**CHEM 433: Chemistry of Xenobiotic Metabolism**, **(3 credit hours)** presentation of the current principles and methods for studying the metabolic transformation and disposition of xenobiotics, detailed examination of the chemistry of oxidation, reduction, hydrolysis and conjugation reaction from a mechanistic and empirical viewpoint and the importance of these reactions in the generation and removal of toxic intermediates. The role of structure, bonding, molecular configuration and physicochemical factors in the enzymatic reaction is assessed. Interaction of intermediates and metabolites with cellular macromolecules and possible toxic manifestations will be discussed.

Prerequisite: CHEM 242 and BIOC 331.

**CHEM 434: Inorganic Chemistry II**, **(3 credit hours)**, introduction to the field of coordination chemistry including: structure, isomers, bonding, electronic spectra, reaction mechanisms and organometallic chemistry. Prerequisite: CHEM 333.

**CHEM 435: Quantum Chemistry**, **(3 credit hours)**, application of quantum mechanics to atoms and molecules with emphasis on wave functions of diatomic molecules and study of resonance.

Prerequisite: CHEM 332, MATH 2311.

**CHEM436: Inorganic Chemistry Lab**, **(3 credit hours),** preparation of main group compounds, transition metal coordination complexes and organometallic compounds, using advanced techniques and instrumentation to study their physical and chemical properties. One lecture hour and two three hours lab per week.

Prerequisite: CHEM434or concurrent.

**CHEM 437: Independent Study in Chemistry**, **(3 credit hours)**, research conducted by the students under the guidance of a staff member: A written report is required..

Prerequisite: Fourth year standing and department consent.

**CHEM 438: Special Topics in Chemistry**, **(3 credit hours),** study of a specified topic in chemistry selected according to the interests and needs of students and availability of staff.

Prerequisite: department consent.

**GENS 132: Physical Science**, **(3 credit hours)**, *(for non-science students)* Study of some of the basic principles of physics, chemistry and geology, and their applications to environmental issues such as pollution, global warming, renewable energy sources, pesticides, acid rain etc.. A brief study of astronomy and meteorology. Two lecture hours and one discussion hour per week.

Faculty of Business and Economics

# Faculty of Business and Economics Study Plans

The Faculty of Commerce and Economics was established in 1978 and the name was changed to the Faculty of Business and Economics in the 2012/2013 Academic year

The Faculty is comprised of the following departments:

* Department of Economics
* Department of Business Administration and Marketing
* Department of Accounting
* Department of Finance and Banking

The Faculty's academic programs award Bachelor's degrees in the following majors:

* Economics
* Business Economics
* Business Administration
* Marketing
* Accounting
* Finance and Banking

The Faculty also offers the University's students the opportunity to register for a minor in the above mentioned categories to complement their major field of study.

The Faculty is dedicated to promoting the professional development of its students and graduates in both the public and private institutions, in a comprehensive and cohesive manner that emphasizes relevant and differentiated skills and capabilities.

Starting in 1996, the Faculty has engaged local companies and organizations within Palestinian society through the establishment of "Training and Employment Unit" to facilitate opportunities for the Faculty's graduates.

Admission to the Faculty of Business and Economics that is awarded through passing the general secondary exam (tawjihi) with an average determined based on that specific year, then submitting a request for a major, either directly upon admission or being undeclared within the faculty, given the conditions and stipulations of the major itself.

Requirements for students of the Faculty of Business and Economics are outlined as follows:

**Faculty Requirements:**

Students having completed the Tawjihi scientific stream or its equivalent are required to complete 29 credit hours

Students having completed the Tawjihi literary stream or its equivalent are required to complete 32 credit hours

1. **Required Courses**:

The following courses address the 26-29 credit hours required:

|  |  |  |
| --- | --- | --- |
| Course Number | Course Title | Prerequisite(s) |
| ECON131 | Principles of Macroeconomics | None |
| ECON235 | Research Methodology | STAT2361 |
| BUSA130 | Introduction to Business | None |
| ACCT130 | Principles of Financial Accounting I | None |
| FINN130 | Introduction to Finance and Banking | None |
| MKET130 | Principles of Marketing | None |
| MATH1351 | General Mathematics | Not Applicable for scientific stream |
| MATH2351 | Math for Business and Economics Students | MATH1351 or scientific stream |
| STAT2361 | General Statistics | MATH1351 or scientific stream |
| COMP121 | Introduction to Computer Skills | None |

1. **Elective Courses:**

Three hours are required from the following courses

|  |  |  |  |
| --- | --- | --- | --- |
| **Credit hours** | **Course No.** | **Name of the course** | **Prerequisite** |
| 3 Credit hours of the following courses | GENS131 | Life Science |  |
| GENS132 | Physical Science |  |

## Department of Economics

The economics department offers two academic programs that lead to a BA degree in economics and a BA in business economics. The department also offers a minor program in in economics.

**First: Economics program**

Admission requirements

1. A minimum of 70% in each of following courses: ECON131, ECON132.
2. A minimum of 70% in each of other Economics courses that the student has taken.
3. Department approval based on its absorptive capacity.

**Academic plan**

The academic plan consists of 120 credit hours distributed as follows:

|  |  |
| --- | --- |
| Type of requirement | Credit hours |
| University requirements | 21 |
| Faculty of business and economics requirements | 29-32 |
| Major requirements | 60 |
| Free elective courses | 7-10 |
| Total | 120 |

**Major requirements in economics (60 credit hours)**

1. **Mandatory courses**

42 credit hours including the following courses:

|  |  |  |
| --- | --- | --- |
| Number of the course | Name of the course | Course prerequisite |
| ECON132 | Principles of Macroeconomics | ECON131 |
| ECON3311 | Intermediate Microeconomics1 | ECON132, MATH23511 |
| ECON3321 | Intermediate Macroeconomics1 | ECON132, MATH23511 |
| ECON335 | The History of Economics Thought | ECON132 |
| ECON3361 | International Trade | ECON3311 |
| ECON338 | Money and Banking | ECON132 |
| ECON339 | Mathematical Economics | ECON3311, ECON3321 |
| ECON431 | Economic Development | 4th year students and department approval |
| ECON432 | Introduction to Econometrics | STAT2361 |
| ECON437 | Seminar in Economics | 4th year students and department approval |
| ACCT230 | Financial Accounting 2 | ACCT130 |
| BUSA230 | Principle of business Administration | BUSA130 |
| FINN230 | Principle of financial Administration | FINN130, ACCT230 |
| FINN330 | Intermediate financial Administration | FINN230 |

1. **Elective courses**

18 credit hours from the following courses:

1. 9 credit hours in Economics excluding ECON233, ECON337.
2. 3 credit hours from the Business Administration Department.
3. 3 credit hours from the Finance Department
4. 3 credit hours from the Accounting Department

**Second: Minor In Economics**

Requirements of the minor specialization in economics (24 credit hours):

1. **Mandatory Courses:**

18 credit hours including the following courses:

|  |  |  |
| --- | --- | --- |
| **Number of the courses** | **Name of the courses** | **Course prerequisite** |
| ECON 131 | Principles of Microeconomics |  |
| ECON132 | Principles of Macroeconomics | ECON131 |
| ECON3311 | Intermediate Microeconomics I | ECON132, MATH2351 |
| ECON3321 | Intermediate Macroeconomics I | ECON132, MATH2351 |
| ECON335 | The History of Economics Thought | ECON132 |
| ECON3361 | International Trade | ECON3311 |

1. **Elective courses:**

6 credit hours from the following:

|  |  |  |  |
| --- | --- | --- | --- |
| **Credit hours** | **Course No.** | **Name of the course** | **Prerequisite** |
| 3 Credit hours of the following courses | ECON 338 | Money and Banking | Econ 132 |
| ECON 339 | Mathematical Economics | Econ 3311 |
| 3 Credit hours of the following courses | ECON 431 | Economic Development | 4th level students |
| ECON 432 | Introduction to Econometrics | STAT2361 |

**Course Description**

***ECON 131 PRINCIPLES OF MICROECONOMICS***

The economic problem, demand and supply, elasticities, the consumer theory, production and cost, perfect competition, monopoly, monopolistic competition, oligopoly, inputs markets.

***ECON 132 PRINCIPLES OF MACROECONOMICS***

National income accounts, theories of national income determination, the business cycle, unemployment, inflation, aggregate demand and supply, money and the banking system, monetary and fiscal policies, introduction to international trade. (Prerequisite: Econ131)

***ECON 231 AGRICULTURAL ECONOMICS***

Nature and features of the agricultural sector; demand on the agricultural yields; economies of agricultural production; markets for agricultural yields and organization of these markets; agricultural policies; agricultural lending and financing. (Prerequisite: ECON 132)

***ECON 233 GENERAL ECONOMICS (FOR NON-BUSINESS STUDENTS)***

The economic problem; demand and supply; costs and production; forms of markets; national income; inflation and unemployment; money and banks; balance of payments; foreign exchange rate.

***ECON 234 PALESTINIAN ECONOMICS***

Stages of Palestinian economic development; economic sectors: agriculture, industry, services, construction, governmental sector; uses of income; (consumption, investment, government expenditure, foreign trade); labor markets; public budget; economic policies and strategies of development; contemporary Palestinian economic problems. (Prerequisite: ECON 132).

***ECON 235 RESEARCH METHODS***

Defining scientific research; methods of scientific research; designing the research: identifying the problem, literature review, assumptions, information resources and documentation, collecting information and analyzing them, analyzing the research results, writing the research. (Prerequisite or simultaneous: STAT2361).

***ECON 236 ISRAELI ECONOMICS***

Stages of Israeli economic development; the role of immigration, external assistance and the occupation policies in the development of the Israeli economy; The economic sectors and changes in their roles: agriculture, industry, services, construction, tourism, governmental and semi-governmental sectors; uses of income: consumption, Investment, government expenditure, foreign trade; balance of payments; labor market; public budget, economic policies and strategies of development; The contemporary Israeli economic problems. (Prerequisite: ECON 132).

***ECON 237 ISLAMIC ECONOMICS***

The Islamic economic system; ethics of the Islamic economic system; ownership and means of production in Islam; the Islamic financial system; public budget; employment in Islam; Islamic banks; and investment and saving in Islam.

***ECON 330 THE ARAB WORLD ECONOMIES***

Economic characteristics of the Arab World; the basic economic sectors; inter-Arab trade; labor and capital market; oil and its role in the development of the Arab economy; attempts at Arab economic integration; and Arab economic institutions.

***ECON 3311 INTERMEDIATE ECONOMICS (MICRO)***

The theory of the price determination with focus on applications; theory of consumer behavior; indifference curves and their applications; the theory of the firm; production and costs functions; The firm equilibrium in free competition market; monopoly; oligopoly, monopolistic competition, introduction to the study of factors of production. (Prerequisite: ECON 132, MATH2351).

***ECON 3312 ANALYTIC MICROECONOMICS (II)***

Review of the market structure; inputs markets under perfect and imperfect competition; general equilibrium; economic welfare; public goods and externalities; cost and utility; time options; risk and uncertainly. (Prerequisite: ECON 3311).

***ECON 3321 INTERMEDIATE ECONOMICS (MACRO)***

National income accounting ; determining national income, equilibrium in goods market; money market (IS-LM Model), balance of payments and exchange rate; aggregate demand and supply; inflation and unemployment; monetary and fiscal policies; introduction to growth theory. (Prerequisite: ECON132, MATH2351).

***ECON 3322 ANALYTIC MACROECONOMICS (II)***

Theories of consumption and investment; foreign trade; demand and supply of money; economic stabilization policies; inflation and unemployment; economic growth models; theories of income distribution. (Prerequisite: ECON 3321).

***ECON 333 MARXIAN ECONOMICS***

Dialectical materialism; laws of development of human societies; commodity production, labor theory of value, surplus value, exploitation of the proletariat; capital accumulation the fall in the rate of profit, and capitalist crisis. (Prerequisite: ECON132)

***ECON 334 INDUSTRIAL ECONOMICS***

Defining the industrial economics; the structure – behavior – performance model; the institution theory; the monopolistic power; obstacles to entry; scale economies; industrial concentration; integration and merger; goods behavior; industrial laws; location of industry.

***ECON 335 THE HISTORY OF ECONOMIC THOUGHT***

The evolution of economic thought with focus on the mercantilist, classical, marginalism, Marxism, neo-classical, institutional, and Keynesian theory. In addition the curve will cover monetarist theory, supply side theory; and rational expectations theory. (Prerequisite: ECON132).

***ECON 3361 INTERNATIONAL TRADE***

Traditional theories of international trade: mercantilists, classicals, Hecksher-Ohlein Theory and their derivatives; new theories after Leontief; paradox, tests of the international trade policies; international trade organizations and agreements, The contemporary economic unions trade policies; theories trade and economic growth. (Prerequisite: ECON 3311).

***ECON 3362 INTERNATIONAL FINANCE***

Balance of payments; national income and the balance of trade, theory and systems of foreign exchange rate; theories of the balance of payments; international monetary institutions; economic policies and foreign exchange rates; international reserves; public debt and the developing countries. (Prerequisite: ECON 3321).

***ECON 337 ENGINEERING ECONOMICS (FOR ENGINEERING STUDENTS ONLY)*** A primary exposure to some economic fundamentals including an analysis of demand and supply; costs and production; interests rates and their relation to time, economic methods for feasibility studies of proposed project;, selection among different alternatives, and economic evaluation of public projects.

***ECON 338 MONEY AND BANKING***

Money and its functions; financial institutions and markets; interest theories and calculating interest rate; policies of commercial banks, the central bank and demand &supply of money; (monetary theory; and monetary policy. (Prerequisite: ECON132).

***ECON 339 MATHEMATICAL ECONOMICS***

Matrices; functions; linear economic models; input output scheduling; consumer theory; the theory of the firm; market equilibrium; and theory of income and employment; and growth theories. (Prerequisites: ECON 3311, ECON 3321).

***ECON 430*** **MANAGERIAL ECONOMICS**

Analysis of consumer behavior; estimation of demand function, elasticity and forecasting; production function; cost estimation; market structure perfect competition, monopoly, monopolistic competition, and oligopoly; role of the government in the market; linear programming; and capital budgeting.

***ECON 431 ECONOMIC DEVELOPMENT***

A general introduction to development; development models; characteristics of the developing countries; poverty and inequality; unemployment; income and wealth distribution; trade; indebtedness; structural disequilibrium; Growth developmental strategies and policies; development planning.

***ECON432 INTRODUCTION TO ECONOMETRICS***

A review of probability theory; classical linear model; functional forms; general linear model, hypothesis testing; violations of the classical assumptions; auto correlation; heteroscedasticity and multicollinearity; and forecasting.

***ECON433 URBAN ECONOMICS***

Localization of population; development of urban locations; The location structure of urban regions; uses of land; organizational structure; urban regions, Changes in urban systems, and some problems in urban Economics. (Prerequisite: ECON 132)

***ECON434 PUBLIC FINANCE***

The public sector; public goods; public revenues and their sources; taxes and the tax system; public expenditures; public budget; public debt and its management; and fiscal policies. (Prerequisite: ECON 3311)

***ECON 435 FINANCIAL ECONOMICS***

Analysis of financial decision making in firms including dividend policy, initial public offerings of stocks and bonds, and the interaction between investment and financing decisions. The course also covers market imperfections, in particular the existence of an information gap between investors and managers and policies that deal with them.

***ECON436 LABOR ECONOMICS***

Characteristics of the labor force; labor demand and supply. theory of wages and employment; Income distribution; wage structure; participation rates; unemployment; employment migration; human resource development; labor relations labor organizations. (Prerequisite: ECON 3311)

***ECON437 SEMINAR IN ECONOMICS***

The writing of a research paper on a contemporary economic topic decided on in consultation with, and under the supervision of the instructor (Prerequisite: 4th year level student and approval of the department)

***ECON438 THE ECONOMICS OF PROJECT EVALUATION***

The importance of preparing economic feasibility studies; market analysis; determining project productivity, capacity; costs; time value of money; different methods for the evaluation of economic projects; choosing between alternatives; breakeven and analyzing sensitivity; analysis economic methods for evaluation of the public sector’s projects.

***ECON419 - ECON429 INDEPENDENT STUDY IN ECONOMICS***

An independent study on an economic topic proposed by the student and under the supervision of a faculty member. Evaluation of work is based on a written report by the student, and a written / oral examination. The number of credit hours, quality and quantity of the work, and the evaluation method are agreed upon beforehand. (Prerequisite: 4th year level, and with the approval of the department)

***ECON439 SPECIAL TOPICS IN ECONOMICS***

A detailed study in certain subjects of economics, global and / or local. The subjects are chosen to meet the needs and interest of both student and faculty. The subjects may be performed in seminars with the students’ participation. (Prerequisite: 4th year level in Economics and / or with departmental approval).

***ECON4391 Economics of entrepreneurship***

The process of setting up new businesses or ventures, the issues that face entrepreneurs during the startup process, innovation, business strategies, evaluating economic conditions, financing new ventures and or new products.

**Third Business Economics Program**

**Admission requirements**

1. A minimum of 70% in each of following courses: BUSA130, ECON131, ECON132.
2. A minimum of 70% in each of other economics courses that the student has taken.
3. Department approval based on its absorptive capacity.

Academic plan

The academic plan consists of 126 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Type of requirement** | **Credit hours** |
| University requirements | 21 |
| Faculty of business and economics requirement | 29-32 |
| Specialization requirement | 63 |
| Free elective courses | 10-13 |
| Total | 126 |

**Specialization requirements in economics (60 credit hours)**

1. Mandatory courses, 48 credit hours as follows:

|  |  |  |
| --- | --- | --- |
| Courses Number | Courses Name | Prerequisite |
| ECON132 | Principles of Macroeconomics | ECON131 |
| ECON3311 | Intermediate Microeconomics1 | ECON132, MATH2351 |
| ECON3321 | Intermediate Macroeconomics1 | ECON132, MATH2351 |
| ECON430 | Managerial Economics | ECON131, STAT2361 |
| ECON435 | Financial Economics | ECON3311 |
| ECON437 | Seminar in Economics | Student in the 4th year and department approval |
| ECON438 | Economic Project Evaluation | ECON3311 |
| BUSA230 | Principle of business Administration | BUSA130 |
| BUSA330 | Introduction of Commercial Laws | BUSA230 |
| BUSA332 | International Business | BUSA230 |
| BUSA333 | Organization of Behavior | BUSA230 |
| ACCT230 | Financial Accounting 2 | BUSA130 |
| ACCT331 | Cost Accounting | ACCT230 |
| FINN230 | Principle of financial Administration | FINN130, ACCT230 |
| FINN332 | Management of non-banking Institutions | FINN130 |
| MKET230 | Principle of Marketing 2 | MKET130 |

**B- Elective Courses:**

15 credit hours from the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| Credit Hours | No. of Course | Name of the Course | Course Prerequisite |
| 3 Credit hours of the following courses | ECON 234 | Palestinian Economics | ECON 132 |
|  | ECON 338 | Money and Banking | ECON 132 |
|  | ECON 434 | Public Finance | ECON 3311 |
| 3 Credit hours of the following courses | FINN233 | Insurance | FINN 130 |
|  | FINN330 | Intermediate Managerial Finance | FINN 230 |
|  | FINN 331 | Corporate Financial Analysis | FINN 330 |
| 3 Credit hours of the following courses | BUSA 331 | Organization Theory | BUSA 230 |
|  | BUSA 334 | Electronic Business | BUSA 230 |
|  | BUSA336 | Projects Management or Sales | FINN 230,BUSA230 |
| 3 Credit hours of the following courses | ACCT 332 | Principles of taxation | ACCT 230 |
|  | ACCT 333 | Managerial Accounting | ACCT 331 |
|  | ACCT 334 | Accounting for Financial Institutions | ACCT 230 |
| 3 Credit hours of the following courses | MKET 332 | Sales management | MKET 230 |
|  | MKET 333 | Advertising Management | MKET 230 |
|  | MKET335 | International Marketing | MKET 230 |

**Course Description**

**ECON 131 PRINCIPLES OF MICROECONOMICS**

The economic problem, demand and supply, elasticities, the consumer theory, product and cost, perfect competition, monopoly, monopolistic competition, oligopoly, inputs markets.

**ECON 132 PRINCIPLES OF MACROECONOMICS**

National income accounts, theories of national income determination, the business cycle, unemployment, inflation, aggregate demand and supply, money and the banking system, monetary and fiscal policies, introduction to international trade. (Prerequisite: Econ131)

**ECON 234 PALESTINIAN ECONOMY**

stages of the Palestinian economic development; economic sectors: agriculture, industry, services, construction, governmental sector; uses of income; (consumption, investment, government expenditure, foreign trade); labor markets; public budget; economic policies and strategies of development; contemporary Palestinian economic problems. (Prerequisite: ECON 132)

**ECON 3311 ANALYTIC MICROECONOMICS (I)**

The theory of the price determination with focus on applications; theory of consumer behavior; indifference curves and their different applications; the theory of the firm; production and costs functions; the firm equilibrium in free competition markets; monopoly; oligopoly, monopolistic competition, introduction to the study of factors of production. (Prerequisite: ECON 132, MATH 235)

**ECON 3321 MACROECONOMICS (I)**

National income accounting; determining national income, equilibrium in goods market; money market (IS-LM Model), balance of payments and exchange rate; aggregate demand and supply; inflation and unemployment; monetary and fiscal policies; introduction to the growth theory. (Prerequisite: ECON 132, MATH 235).

**ECON 338 MONEY AND BANKING**

Money and its functions; financial institutions and markets; interest theories and calculating interest rate; commercial banks policies; the central banking and money demand and supply of; monetary theory; the monetary policy. (Prerequisite: ECON 132)

**ECON430** **MANAGERIAL ECONOMICS**

Analysis of consumer behavior, estimation of demand function and elasticity, demand forecasting, production function and estimation, estimation of costs, market structure (perfect competition, monopoly, monopolistic competition, oligopoly), role of government in the market, linear programming, capital budgeting (Prerequisites: Econ 132, Stat 236)

**ECON434 PUBLIC FINANCE**

The public sector; public goods; externalities; public revenues and their sources; taxes and the tax system; public expenditures; public budget; public debt and its management; fiscal polices. (Prerequisite: ECON 3311)

**ECON435 FINANCIAL ECONOMICS**

This course provides students with basic microeconomic theory relevant to the financial analysis of the firm including: Asset valuation, risk analysis, term structure of interest rates, portfolio theory and management, and capital structure of the firm.

**ECON4371 SEMINAR IN BUSINESS ECONOMICS**

The writing of a research paper on a contemporary economic topic decided on an consultation with, and under the supervision of the instructor (Prerequisite: 4th year level student and approval of the

**ECON438 ECONOMIC FEASIBILITY STUDY**

Project background and history, product specification and justification, market study and plant capacity, materials and inputs, location site, project engineering technology and civil engineering works, organization chart, manpower, financial and economic evaluation. Economic evaluation of private projects using different economic methods, public project evaluation, using benefit / cost ratio method.

**BUSINESS:**

***BUSA 130*** **INTRODUCTION TO BUSINESS ADMINISTRATION:**

The various functions of business administration, forms of business ownership, scope and duties of business, the relationship between business and its environment.

***BUSA 230*****PRINCIPLES OF MANAGEMENT:**

Schools of management thought, functions of management, planning, organizing, directing and controlling, decision making and problem solving comparative management systems. **Prerequisite: BUSA130.**

***BUSA 330* HUMAN RESOURCE MANAGEMENT:**

**Manpower planning in organizations, personnel management, recruitment and staffing, job evaluation, performance appraisal, and employee relations. Prerequisite: BUSA 230.**

**BUSA 331 ORGANIZATION THEORY:**

Survey of the different theories of organizations, organizational structures, size, centralization, technology, bureaucracy, development, organizational effectiveness and temporary organization. Prerequisite: Business Administration 230.

**BUSA 332 INTERNATIONAL BUINESS:**

Multinational business firms, international marketing, international financial systems and transactions, problems in international business-management of multinational’s financing, staffing and communication issues. Prerequisite: Business Administration 237.

**BUSA 333 ORGANIZATIONAL BEHAVIOR:**

A survey of behavioral theories in organizations-individual behavior, group behavior, communication, conflicts, leadership theories, participation in decision-making, motivation and development of managerial behavior. Prerequisite: Business Administration 230.

**BUSA 334 CONSUMER BEHAVIOR*:***

Individuals’ behavior in the consumer market, effect of marketers on consumers environment, consumer behavior and marketing plans, consumer behavior theories, case studies on consumer behavior, consumer’s roles in purchasing. Prerequisite: Business Administration 237.

**BUSA 336 SALES MANAGEMENT*:***

Commodity sales programs, sales person, sales budgeting and accounting, effectiveness of sales activities, sales planning and execution. Prerequisite: Business Administration 237.

**ACCOUNTING:**

**ACCT130 FINANCIAL ACCOUNTING** I: Introduction to accounting, business transactions and the accounting cycle, trial balance, measuring income, the balance sheet, and closing entries, treatment of sales and purchases, cash, inventories, payables and receivables, plant and equipment.

**ACCT230 FINANCIAL ACCOUNTING II:** Introduction to accounting principles, accounting for partnerships and corporations, bonds payable and other long-term liabilities investments. Cash flow statement and financial ratios. Prerequisite: Accounting 130.

**ACCT331 COST ACCOUNTING:** Introduction to cost accounting, accounting for cost elements, job order costing, process costing, joint product costing, standard costing. Prerequisite: Accounting 230.

**ACCT332 PRINCIPLES OF TAXATION:** Introduction to taxation, definition of direct and indirect taxes, determination of taxable income, tax estimation and collection, adjustment of income for tax purpose. Prerequisite: Accounting 230.

**ACCT333 MANAGERIAL ACCOUNTING:** Introduction to accounting for managerial decisions, standard costing, cost volume profit analysis, budgeting and capital budgeting, performance evaluation and cost control. Introduction to differential analysis and managerial decision-making. Prerequisite: Accounting 331.

**ACCT334 ACCOUNTING FOR FINANCIAL INSTITUTIONS:** Fundamentals of accounting related to banks, insurance companies and investment organizations, practical implementations of accounting methods, preparation of financial statements, control in financial institutions. Prerequisite: Accounting 230.

**FINANCE:**

**FINN130 Introduction to Finance and Banking**

Principles of finance and banking, the banking system, financial and banking institutions, types of financial institutions, financial tasks and sources of financing, brief look at the financial markets.

**FINN 230 Principles of Financial Management**

Importance of financial management, goals of financial management, financial analysis using financial ratios, time value of money, cash planning, profit planning, working capital and current assets management, short-term and long-term financing, stocks and bonds, financial markets.

**Pre-requisites: FINN130,ACCT230**

**FINN233 Principles of Insurance**

Identifying and managing risks insurance companies, insurance operations and occupations, types of insurance, insurance contracts and policies, property and liability insurance, automobile insurance, fire insurance, life insurance, health and disability insurance, commercial property insurance, reinsurance and financial statement analysis for insurance companies.

**Pre-requisite: FINN 230**

**FINN330 Intermediate Managerial Finance**

Corporate financial management and its complications, risk and return tradeoff, assets valuation, capital structure, cost of capital, dividends policy, merger and acquisition, capital budgeting process, financial distress liquidation and reorganization, derivatives, and Leasing. **Pre-requisite: FINN230**

**FINN331 Corporate Financial Analysis**

Interpreting and analyzing corporate financial statements to make investment, credit and management decisions, analytical tools used to assess and forecast a firm’s financial performance, financial analysis and interested parties.

**Pre-requisite: FINN 330**

**FINN 332 Management of Non-Banking Institutions**

Defining financial non-depository institutions , financial rules and regulations management of financial institutions and intermediaries, insurance companies, pension funds, investment companies (mutual funds), leasing, key trends shaping financial institutions. **Pre-requisite: FINN230**

**MARKETING:**

**MKT 130         PRINCIPLES OF MARKETING :**

Concept of marketing, marketing activities and importance, product development, distribution, promotion, pricing, basis to segment the market, consumer behavior and competition.

**MKT 230 PRINCIPLES OF MARKETING*:***

The effect of external factors on consumer buying habits, importance of communication, packaging, dealing with the external environment: Prerequisite Marketing 130.

**MKT 332 SALES MANAGEMENT***:*

Personal selling role in marketing, the effects of internal and external factors on personal selling, sales budgeting and accounting, effectiveness of sales activities, sales planning and execution. Prerequisite: Marketing 230.

**MKT 333 ADVERTISING MANAGEMENT:**

Advertising contexts and types, the role of commercial advertising in promotion. Creativity in advertising, advertising media, managing advertising campaigns. Prerequisite: Marketing 230.

**MKT 335 INTERNATIONAL MARKETING :**

Identifying the important aspects of International marketing, development in international marketing activities and functions. Barriers to international marketing including market research, economic, cultural and environmental factors. Prerequisite: Marketing 230.

**MATHMATICAL:**

**Math 141 Calculus and Analytic Geometry I (4) major changes (2+2). Polynomials,** rational and radical expressions. Absolute value, inequalities. Functions: domain and range of functions, inverses, operations on functions, graphs and shifts. Exponential, logarithmic, and trigonometric functions. Limits and continuity. Differentiation. Maxima, minima and graphing techniques, L’Hopitals. Applications of derivatives. Integrations, definite and indefinite integrals, Fundamental Theorem of Calculus. Applications of integrations.

**Math 235 Mathematics for Business (3) major changes . Prereq: Math 135 or** Scientific stream. Linear models: equations and systems of linear equations, linear inequalities and linear programming. Matrices and matrix algebra. Nonlinear model: quadratic, exponential and logarithmic equations and functions. Differential Calculus: differentiation, bivariate functions and partial differentiation. Mathematics of finance. Emphasis on economic and business applications.

## Department of Business Administration and Marketing

The ***business administration and Marketing department*** offers two academic programs that lead to a bachelor degree in art. **The first program**, which offers a degree in **“Business Administration** “or “**Business Administration with Concentration in Human Resource”. The second program** offers degree **in “Marketing” .** The department offers also a minor degree in both fields for students from within the faculty of Business and Economics and any other interested students from Birzeit University.

**First : Bachelor Program in Business Administration**

Students accepted in the business program need to meet the following criteria:

1. Passing the BUSA 130 and BUSA 230 with an average of 70% for each.
2. The Business department’s approval which is granted according to its capacity to accept new students.

**Study Plan**

The study plan consist of 120 credit hours distributed as follows :

|  |  |
| --- | --- |
| **Requirements** | **Credit Hours** |
| University Requirement | 21 |
| Faculty Requirement | 29-32 |
| Specialization Requirement | 57 |
| University Free Electives | 10-13 |
| Total | 120 |

**Specialization Requirement (57 credit hours)**

1. **Compulsory Courses (45 Credit hours ) included the following**

**(for both general major in Business and /or with concentration )**

|  |  |  |
| --- | --- | --- |
| **PREREQISTE** | **COURSE NAME** | **COURSE NUMBER** |
| BUSA130 | PRINCIPLES OF MANAGEMENT | BUSA230 |
| BUSA230 | BUSINESS COMMUNICATION | BUSA232 |
| BUSA230 | SMALL BUSINESS MANAGEMENT | BUSA236 |
| BUSA230, COMP121 | INTRODUCTION TO MANAGEMENT INFORMATION SYSTEMS | BUSA238 |
| BUSA230 | HUMAN RESOURCES MANAGEMENT | BUSA330 |
| BUSA230 | ORGANIZATIONAL BEHAVIOR | BUSA333 |
| BUSA230,FINN230 | PROJECT MANAGEMENT | BUSA 336 |
| BUSA230 | INTRODUCTION TO BUSINESS LAW | BUSA3301 |
| BUSA230, STAT236 | PRODUCTION MANAGEMENT 1 | BUSA3371 |
| BUSA330,**4th year** | STRATEGIC MANAGEMENT | BUSA436 |
| ECON235, **4th year and department approval** | SEMINAR IN BUSINESS ADMINISTRATION | BUSA438  **Busa 4381 (for HR concentration)** |

**For General specialization go to B**

**For concentration HR go to C**

|  |
| --- |
| **B. Elective Courses (12 Gredit Hours) of the following** |
| 6 credit hours from Business |
| 3 Credit from Accounting Courses |
| 3 Credit Hour From Finance |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | C. Elective courses for concentration :12 Gredit Hours divided as follows | | | |
|  | **9 credit Hours in Human Resource Management** | | | |
| Number of hours |  | Prerequisite | Course Name | Course Number |
| 3 | **compulsory** | BUSA330 | Labor Relation | BUSA433 |
| 6 | **6**  **elective from these courses** | BUSA330 | Compensation and rewards | BUSA340 |
| BUSA330 | Planning for human Resources | BUSA341 |
| BUSA 330 | Training and Development | BUSA342 |
| BUSA330 | Special Topic in Human Resource | BUSA347 |
|  | **3 credit Hours from Accounting** | | | |

**Second: Bachelor Program in Marketing**

Students accepted in the Marketing program need to meet the following criteria:

1. Passing the MKET 130 and MKET. 230 with an average of 70% for each.
2. The Business and Marketing department’s approval which is granted according to its capacity to accept new students.

**Study Plan**

The study plan consist of 120 credit hours distributed as follows :

|  |  |
| --- | --- |
| **Requirements** | **Credit Hours** |
| University Requirement | 21 |
| Faculty Requirement | 29-32 |
| Specialization Requirement | 57 |
| University Free Electives | 10-13 |
| Total | 120 |

**Specialization Requirement (57 credit hours)**

1. **Compulsory Courses (45 credit Hours ) included the Following:**

|  |  |  |
| --- | --- | --- |
| **PREREQISTE** | **COURSE NAME** | **COURSE NUMBER** |
| MKET130 | PRINCIPLES OF MARKETING 2 | MKET230 |
| 230MKET | MARKETING MANAGEMENT | 330MKET |
| 230MKET | CUSTOMER RELATIONSHIP MANAGEMENT | 331MKET |
| 230MKET | SALES MANAGEMENT | 332MKET |
| 230MKET | ADVERTISING MANAGEMENT | 333MKET |
| 230MKET | CONSUMER BEHAVIOR | 334MKET |
| 230MKET | INTERNATIONAL MARKETING | 335MKET |
| 230MKET ،ACCT230 | PRICING STRATEGIES | 337MKET |
| MKET230/ STAT236 | MARKETING RESEARCH | 436MKET |
| / ECON235330MKET 4th year | SEMINAR IN MARKETING | 438MKET |
| 4th year | STRATEGIC MARKETING | ΜΚΕΤ439 |
| BUSA130 | PRICIPLES OF MANAGEMENT | BUSA230 |
| ECON131 | PRINCIPLES OF MACROECONOMICS | ECON132 |
| ACCT130 | FINANCIAL ACCOUNTING 2 | ACCT230 |
| FINN130/ ACCT230 | PRICIPLES OF FINANCIAL MANAGEMENT | FINN230 |

**B. Elective Courses (12 Credit Hours) of the following**

|  |  |  |  |
| --- | --- | --- | --- |
| Prerequisite | Course Name | Course Number | Credit Hours |
| ACCT230 | Cost Accounting | ACCT331 | **3** credit hours |
| ECON132,MATH235 | Principles of Microeconomic | ECON3311 | **3** credit hours from these courses |
| ECON132,MATH235 | Principles of Macroeconomics | ECON 3321 |
| ECON 132 | Palestinian economics | ECON 234 |
| **6** credit Hours of Marketing Courses | | | |

**Third : Minor Program in Business Administration**

Requirement in Minor Business (24 credit Hour):

1. **Compulsory Courses**

18 credit Hour from the following

|  |  |  |
| --- | --- | --- |
| **PREREQISTE** | **COURSE NAME** | **COURSE NUMBER** |
|  | INTRODUCTION TO BUSINESS ADMINISTRATION | BUSA130 |
| BUSA130 | PRINCIPLES OF MANAGEMENT | BUSA230 |
| BUSA230 | BUSINESS COMMUNICATION | BUSA232 |
| BUSA230 | SMALL BUSINESS MANAGEMENT | BUSA236 |
| BUSA230 | HUMAN RESOURCES MANAGEMENT | BUSA330 |
| BUSA230 | INTRODUCTION TO BUSINESS LAW | BUSA3301 |

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1. **Elective Course**

6 Credit Hours from Business Courses

**Fourth : Minor Program in Marketing**

Requirement in Minor Business (24 credit Hour):

1. **Compulsory Courses**

18 credit Hour from the following

|  |  |  |
| --- | --- | --- |
| **PREREQISTE** | **COURSE NAME** | **COURSE NUMBER** |
|  | PRINCIPLES OF MARKETING 1 | MKET130 |
| MKET130 | PRINCIPLES OF MARKETING 2 | MKET230 |
| 230MKET | MARKETING MANAGEMENT | 330MKET |
| 230MKET | SALES MANAGEMENT | 332MKET |
| 230MKET | ADVERTISING MANAGEMENT | 333MKET |
| 230MKET | CONSUMER BEHAVIOR | 334MKET |
| 230MKET | INTERNATIONAL MARKETING | 335MKET |

1. **Elective Course**

6 Credit Hours from Marketing Courses

**COURSE DESCRIPTION FOR THE EXISTING BUSINESS PROGRAM:**

BUSA 130 **INTRODUCTION TO BUSINESS ADMINISTRATION:**

The various functions of business administration, forms of business ownership, scope and duties of business, the relationship between business and its environment.

*BUSA 230* **PRINCIPLES OF MANAGEMENT:**

Schools of management thought, functions of management, planning, organizing, directing and controlling, decision making and problem solving comparative management systems. Prerequisite: BUSA130.

*BUSA 2301* **ENGINEERING MANAGEMENT**

Identifying the major features of the project, management functions, planning, organizing, leading, controlling, decision making, conducting feasibility studies, the factors that should be considered when evaluating the project, the financial requirements of the project, and finally, the sources of funds. (This course is not for Faculty of Business and Economics students)

*BUSA 231* **PUBLIC ADMINISTRATION:**

Nature of public administration, functions of management in the public sector, managing not-for-profit organizations and management systems in governments. Prerequisite: BUSA 230.

*BUSA 232* **BUSINESS COMMUNICATION:**

Report writing, questionnaire design, running business meetings, organizing exhibitions and giving presentations. Analysis of a variety of real world Case studies and exercises and finding the best solutions. Prerequisite: BUSA 230.

*BUSA 233* **ELECTRONIC BUSINESS**

Defining the major strategies of electronic business, and defining the role of the internet as strategic medium of exchange in everyday transactions, in addition to defining the role of electronic business in facilitating the exchange of information, and communication within the company itself, and with the different stakeholders. Prerequisite: BUSA 230.

*BUSA 236* **SMALL BUSINESS MANAGEMENT**

Identifying types of small business, sources of financial planning and choosing the location, special management duties, the organizational hierarchy, growth, and development of the business, financial, accounting and inventory control. Prerequisite: BUSA 230.

*BUSA 2361* **MANAGEMENT OF SMALL TOURISM ENTREPRISES**

Management Principles, tourism entrepreneurship, management of small tourism enterprises, building a small tourism facilities plan, strategic plans, marketing and financial plans, funding resources, site analysis of tourism facilities, organization structure, financial and administrative . performance, evolution methods of tourism facilities.(This course is not for Faculty of Business and Economics students)

*BUSA 238* **INTRODUCTION TO MANAGEMENT INFORMATION SYSTEMS:**

An introduction to MIS, the concept, theoretical and practical issues of MIS, the effect of MIS on management and organizations behavior.

Prerequisite: BUSA 230, Computer 121.

*BUSA 330* **HUMAN RESOURCE MANAGEMENT:**

Manpower planning in organizations, personnel management, recruitment and staffing, job evaluation, performance appraisal, and employee relations. Prerequisite: BUSA 230.

*BUSA 3301* **BUSINESS LAW**

Introduction to law, contracts, bankruptcy, legal forms of business firms and the Palestinian Corporate Law. Prerequisite: BUSA 230.

*BUSA 3302* **BUSINESS LAW:**

Bankruptcy (reorganization, creditors committee, trustee, core proceeding, non-core proceedings, bankruptcy estate, exempt property, fraudulent transfer, distribution of property fresh start), Banking system: (Deposit account, documentary accounts loans and advancer, discount, documentary credit, letter of credit, saving accounts, liquidity; Commercial Contracts: (Mortgage contract, agency contract, transport contract, sale contract, current accounts contract). Prerequisite: BUSA 3301.

*BUSA 331* **ORGANIZATION THEORY:**

Survey of the different theories of organizations, organizational structures, size, centralization, technology, bureaucracy, development, organizational effectiveness and temporary organization. Prerequisite: BUSA 230.

*BUSA 332* **INTERNATIONAL BUINESS**

Multinational business firms, international marketing, international financial systems and transactions, problems in international business-management of multinational’s financing, staffing and communication issues. Prerequisite: BUSA 230.

*BUSA 333* **ORGANIZATIONAL BEHAVIOR**

A survey of behavioral theories in organizations-individual behavior, group behavior, communication, conflicts, leadership theories, participation in decision-making, motivation and development of managerial behavior. Prerequisite: BUSA 230.

*BUSA 334* **ELECTRONIC COMMERCE**

Identifying the importance of electronic commerce in selling and purchasing the different products and or services, the role that electronic commerce play in the international market. The importance of electronic commerce in finding solutions to increase accessibility to customers, and in enhancing the selling process. Prerequisite: BUSA 230,233.

BUSA 3341 **COMPENSATION SYSTEM**

Developing and managing compensation system and benefits to attract, retain, and motivate qualified employees. understanding the theories underlying pay system design and hands-on experience, important current social issues and controversies that arise as they relate to pay and benefits . Prerequisite: BUSA330

*BUSA 335* **BUSINESS ETHICS**

The importance of business ethics as one of the organization’s social responsibility dimensions. Exploring the magnitude of ethics and social responsibly in the managerial work. The importance of having and establishing common rules and policies when making decisions bearing in mind the social welfare of the society. Prerequisite: BUSA 230.

BUSA3351 **HUMAN RESOURCE PLANNING**

Challenges confronted by human resource professionals when planning and forecasting the staffing needs of an organization. Topics covered may include aligning human resource practices with organizational objectives, succession planning, redesign of work systems, and the impact of human resource practices on organizational outcomes. Prerequisite: BUSA330

*BUSA 336* **PROJECT MANAGEMENT**

The main concepts that relate to planning and managing projects. Identifying different ways to gather the necessary resources to reach the goal given the time and resources available. Conducting feasibility studies for any project and identifying the major steps that must be taken to achieve the study, bearing in mind the product features, design, the market, and competitors. Prerequisite: BUSA 230,FINN230

BUSA 3361 **TRAINING AND DEVELOPMENT**

Understanding the processes and practices of developing human capital, how organizations train and develop their employees(need assessment ), designating training objectives using different training tools and technique Prerequisite: BUSA330

*BUSA 337* **ENTERPRISE RESOURCE PLANNING (ERP)**

Actively planning for the resources of the enterprise. Coordinating the different tasks of the enterprise that relate to manufacturing, sales, marketing, finance and human resources through one database. The role of ERP in improving the managerial system, and increasing the efficiency and effectiveness of the enterprise. Prerequisite: BUSA 233,238.

*BUSA 3371*  **OPERATIONS MANAGEMENT 1**

Analysis of the various production systems in companies and projects-site location, organization, technology, production and methods, economics of production management, effectiveness and safety of elements of production. Prerequisite: BUSA 230,STAT2361

*BUSA 3372* **QUANTITATIVE ANALYSIS**

Introduction to quantitative analysis in managerial functions, probability theory, decision theory, expected value theory, linear programming. Prerequisite: STAT2361

*BUSA 339* **ADVANCED MANAGEMENT INFORMATION SYSTEM**

In-depth analysis of the management information system that helps in improving and enhancing the decision making process. Identifying the different data bases and project management tools, system analysis, and effective design of management information system. Prerequisite: BUSA 238

*BUSA 419-42* **INDEPENDENT STUDY IN BUSINESS ADMINSITRATION**

An independent study in a field of business administration. The student conducts the study and is assisted by an advisor. Evaluation is based on the results of a term paper, an oral exam or a written exam. Assigned credit hours, work-load and type, and method of evaluation are set in advance. Prerequisite: Fourth-year standing and department’s approval.

*BUSA 432* **LEADERSHIP**

Traditional and contemporary leadership theories, transactional and transformational leaders, basis and rules used in successful leaderships, decision making, planning and communicating in leadership, group leading, motivational leading and relations, trust, vision and charisma. Prerequisite: BUSA 230.

*BUSA 433* **LABOR RELATIONS MANAGEMENT**

Introduction to the Palestinian labor law; labor organization; motivation to organize, conflicts and resolution, negotiations, collective bargaining, contracts, comparative system. Prerequisite: BUSA330

*BUSA 434* **QUALITY CONTROL**

What is quality, tools for improving quality, control schedules, quality costs, the use of computers in quality control, the use of sample system in quality control. Prerequisite: BUSA 3371

*BUSA 435* **TOTAL QUALITY MANAGEMENT**

Defining TQM historical review and requirement leadership, satisfying consumers, workers’ participation, continuous improving of production, performance appraisal, the tools (experiencing and controlling the operations statistically, ISO 9000, transfer of distinctive experience, extending the quality base, implementation techniques. Prerequisite: BUSA 3371

*BUSA 4351* **OPERATIONS MANAGEMENT II**

Production programming, production scheduling and capacity, effectiveness and efficiency of production operations, quality control, materials and supplies, comprehensive and partial planning. Prerequisite: BUSA 3371.

*BUSA 436* **STRATEGIC MANAGEMENT**

The concept of strategy, SWOT analysis, strategy formulation, steps in formulating strategy, strategy implementation, and evaluation, cases. Prerequisite: BUSA 330 and fourth-year standing.

*BUSA 437* **SPECIAL TOPIC IN BUSINESS ADMINISTRATION**

A study of selected topic in business administration based on the interests of the faculty members and students needs. The course may take the form of a seminar. Prerequisite: Fourth-year standing and department approval.

BUSA 4373 **SPECIAL TOPICS IN HUMAN RESOURCE MANAGEMENT**

A study of selected topic in Human Resources Management  based on the interests of the faculty members and students needs. The course may take the form of a seminar. Prerequisite: BUSA330, Fourth-year standing and department approval

*BUSA 438* **SEMINAR IN BUSINESS ADMINISTRATION**

In-depth study of some topics in business administration. Selection of the topics is based on the interest of the faculty members and student’s needs. Prerequisite: ECON 235, fourth-year standing, and department’s approval.

*BUSA 4381* **SEMINAR IN HUMNA RESOURCE MANAGEMNT**

In-depth study of some topics in Human resources management .Selection of the topics is based on the interest of the faculty members and student’s needs. Prerequisite: ECON 235, fourth-year standing, and department’s approval

**COURSE DESCRIPTION FOR THE MARKETING PROGRAM:**

MKT *130* **PRINCIPLES OF MARKETING**

Concept of marketing, marketing activities and importance, product development, distribution, promotion, pricing, basis to segment the market, consumer behavior and competition.

MKT *230* **PRINCIPLES OF MARKETING**

The effect of external factors on consumer buying habits, importance of communication, packaging, dealing with the external environment: **Prerequisite MKET 130.**

MKT *231* **PUBLIC RELATIONS**

Public relations importance and development, its role as a promotional tool of the company, the influence on public opinion, managing relationship with the public, law and ethics, written and international public relations, web and networking. **Prerequisite MKET 130.**

MKT *234* **SERVICE MARKETING**

Characteristics and classifications of services, identifying the difference between marketing a product and marketing a service. The different strategies that are used internally and externally to market a service, identifying pre and post purchase strategies. The importance of marketing communication and its effect on customers. Preparing and analyzing a marketing plan of a service. **Prerequisite: MKET 230**.

MKT *238* **RETAILING**

The concept of retail sales, its importance and types, selling decisions, the use of marketing mix in retail sales, location, appropriate administration for retail sale concentrating on profit through integrating accounting operations, finance, marketing and economics as primary and essential elements to retail sales. **Prerequisite: MKET 230**.

MKT *239* **WHOLESALLING**

Concentrating on the concept of wholesaling, functions and importance, role in marketing, appropriate administration, identifying the important factors that lead to a successful wholesaling system. **Prerequisite: MKET 230**.

MKT *330* **MARKETING MANAGEMENT**

In-depth analysis of the various marketing strategies, opportunity/ threat analysis, planning and decision-making, marketing programs, market research. **Prerequisite: MKET 230**.

MKT *331* **CUSTOMER RELATIONSHIP MANAGEMENT(CRM)**

Analyzing the importance of identifying and retaining good customers, different retention strategies, integration of different data bases, data warehousing & data mining, generating fundamental reports needed for decision making, CRM applications, CRM role in minimizing cost and enhancing profits. **Prerequisite: MKET 230**.

MKT *332* **SALES MANAGEMENT**

Personal selling role in marketing, the effects of internal and external factors on personal selling, sales budgeting and accounting, effectiveness of sales activities, sales planning and execution. **Prerequisite: MKET 230**.

MKT *333* **ADVERTISING MANAGEMENT**

Advertising contexts and types, the role of commercial advertising in promotion. Creativity in advertising, advertising media, managing advertising campaigns. **Prerequisite: MKET 230**.

MKT *334* **CONSUMER BEHAVIOR**

Individuals’ behavior in the consumer market, effect of marketers on consumers environment, consumer behavior and marketing plans, consumer behavior theories, case studies on consumer behavior, consumer’s roles in purchasing. **Prerequisite: MKET 230**.

MKT *335* **INTERNATIONAL MARKETING**

Identifying the important aspects of International marketing, development in international marketing activities and functions. Barriers to international marketing including market research, economic, cultural and environmental factors. **Prerequisite: MKET 230**.

MKT 336 **SUPPLY CHAIN MANAGEMENT (SCM)**

Supply chain management, analyzing the different phases that the product encounters through its distribution process, strategies of direct and indirect distribution and the nature of retailing and wholesaling. **Prerequisite: MKET 230**.

MKT 337 **PRICING STRATEGIC**

Pricing strategies, penetration strategies, , pricing discounts, pricing methods for products and services including advertising costs. **Prerequisite: ACCT230 ,MKET230**

MKT 432**MARKETING FOR GOVERNMENTAL AND NOT FOR PROFIT ORGANIZATIONS**

Implementing the marketing efforts in fields such as: governmental healthcare institutions, social security organizations, fundraising for charitable purposes, and the educational sectors. **Prerequisite: MKET 230**.

MKT *434* **BRAND NAME MANAGEMENT**

Brand name managers’ tasks and responsibilities, challenges and obstacles that face brand managers in dealing with their products’ brand names, especially when engaging with different customers, merchants, competitors and industries. **Prerequisite: MKET 230**.

MKT *435* **PRODUCT DEVELOPMENT MANAGEMENT**

Planning for the development of new products, identifying the challenges that face managers in the process of product initiation, development and management in the real market. Major phases that the new product idea goes through and the different methods of gathering the needed information about the product. **Prerequisite: MKET 330**.

MKT *436* **MARKET RESEARCH**

Introduction in market research, designing market research, process of gathering information, information analysis and data presentation, preparing the final report, communicating results. **Prerequisite: MKET 330,STAT2361**

MKT *437* **SELECTED TOPICS IN Marketing**

A study of selected topics in marketing based on the interests of the faculty members and students needs. The course may take the form of a seminar. **Prerequisite: MKET 330. Fourth-year standing and department approval.**

MKT *438* **SEMINAR IN MARKETING**

In-depth study and research of some topics in marketing. Selection of the topics is based on the interest of the faculty members and student’s needs. **Prerequisite: Econ 235, MKET 330, Fourth-year standing, and department approval.**

## Department of Finance and Banking

The Department of Finance and Banking offers an academic program that leads to a bachelor degree in Finance and Banking. Students must fulfill all core requirements of the specialization and then they must choose one of the following three concentrations: financial management banking, insurance. The Department also offers a minor specialization in Finance and Banking.

First: Bachelor of Finance and Banking Program.

Conditions for acceptance in major

1. Students must obtain a grade not less than 70% in the following courses Finn 130, Finn230.
2. Students must obtain a grade not less than 70% in other finance courses completed.
3. Intake capacity of the department.

**Advisory plan**

Student must successfully complete 120 credit hours distributed as follows

|  |  |
| --- | --- |
| **Type of Requirement** | **Credit Hours** |
| University requirements | 21 |
| Faculty of Business and Economics requirements | 29-32 |
| Major requirements | 57 |
| Elective courses | 10-13 |
| Total | 120 |

**First: Major in Finance and Banking**

Major requirements (57 credit hours)

1. Core courses

33 credit hours which include the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Pre-requisite** |
| FINN 230 | Principles of Financial Management | FINN 130,ACCT 230 |
| FINN 233 | Principles of Insurance | FINN 230 |
| FINN 234 | Financial and Banking Legislations | FINN 230 |
| FINN 238 | Math for Risk Management | MATH 2351, STAT 2361 |
| FINN 330 | Intermediate Managerial Finance | FINN 230 |
| FINN 333 | Commercial Bank Management | FINN 230 |
| FINN 3391 | Money and Capital Markets | FINN 330 |
| BUSA 230 | Principles of Management | BUSA 130 |
| ACCT 230 | Financial Accounting 2 | ACCT 130 |
| ACCT 332 | Principles of Taxation | ACCT 230 |
| ECON 132 | Principles of Macroeconomics | ECON 131 |

**B. Elective courses:**

24 credit hours distributed according to the chosen concentration as follows:

1. Must complete all courses in one of the following blocks as follows: (15 credit hours)

|  |  |  |  |
| --- | --- | --- | --- |
| **Credit hours** | **Course number** | **Course name** | **Pre – requisite** |
| Financial management concentration | Finn 331 | Corporate Financial Analysis | Finn 330 |
| Finn 4301 | Advanced Financial Management | Finn 238, Finn 330 |
| Finn 431 | Investment Management | Finn 238, Finn 3391 |
| Finn432 | International Financial Management | Finn 238, Finn 3391 |
| Finn4381 | Seminar in Financial Management | ECON 235, Finn 4301, Finn 431 |
| Banking concentration | Finn 3331 | Bank Risk Management | Finn 238, Finn 330, Finn 333 |
| Finn 334 | Management of Islamic Banks | Finn 333 |
| Finn 4331 | International Risk Management in Banks | Finn 3391, Finn 3331 |
| Finn 435 | Banking Strategies | Finn 4331 |
| Finn 4382 | Seminar in Banking | ECON 235, Finn 4331 |
| Insurance concentration | Finn 3336 | Risk Management and Types of Insurance | Finn 238, Finn233 |
| Finn 3337 | Risk Management and Insurer Operations | Finn 3336 |
| Finn 4320 | Insurance and International Risk Management | Finn 3337, Finn 3391 |
| Finn 4322 | Risk management and Islamic Insurance | Finn 3337 |
| Finn 4383 | Seminar in Insurance | ECON 235, Finn 4320 |

1. Must complete 9 credit hours from one the following blocks according to the chosen concentration

|  |  |  |  |
| --- | --- | --- | --- |
| **Credit hours** | **Course numbers** | **Course name** | **Pre-requisite** |
| Financial management concentration | ECON 338 | Money and Banking | ECON 132 |
| FINN 232 | Real Estate Financing | FINN 230 |
| FINN 3301 | Islamic Financial Management | FINN 330 |
| FINN 338 | Personal Finance | FINN 230 |
| FINN 434 | Financial Derivatives and Future Markets | FINN 238, FINN3391 |
| FINN 4340 | Mergers and Acquisitions | FINN 4301 |
| FINN 436 | Investment Portfolio Management | FINN 431 |
| Banking concentration | ECON 338 | Money and Banking | ECON 132 |
| FINN 232 | Real State Financing | FINN 230 |
| FINN 331 | Corporate Financial Analysis | FINN 330 |
| FINN 332 | Management of Non-Banking Institutions | FINN 230 |
| FINN 335 | Marketing of Financial and Banking Services | FINN 230, MKET 130 |
| FINN 336 | Credit Analysis | FINN 238, FINN 333 |
| FINN 338 | Personal Finance | FINN 230 |
| FINN 434 | Financial Derivatives and Future Markets | FINN 238, FINN 3391 |
| FINN 4340 | Mergers and Acquisitions | FINN 4301 |
| Insurance concentration | ECON 338 | Money and Banking | ECON 132 |
| FINN 232 | Real Estate Financing | FINN 230 |
| FINN 3301 | Islamic Financial Management | FINN 330 |
| FINN 331 | Corporate Financial Analysis | FINN 330 |
| FINN 332 | Management of Non-Banking Institutions | FINN 230 |
| FINN 338 | Personal Finance | FINN 230 |
| FINN 434 | Financial Derivatives and Future Markets | FINN 238, FINN 3391 |
| FINN 4340 | Mergers and Acquisitions | FINN 4301 |
| FINN 4360 | Risk Management and Employee Benefits Program | FINN 4320 |

**Second: Minor in Finance and Banking**

Minor requirements (27 credit hours)

1. **Core courses**

21 credit hours, those include the following courses:

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course name** | **Pre- requisite** |
| FINN 130 | Introduction to Finance and Banking |  |
| FINN 230 | Principles of Financial Management | FINN 130, ACCT 230 |
| FINN 233 | Principles of Insurance | FINN 230 |
| FINN 330 | Intermediate Managerial Finance | FINN 230 |
| FINN 331 | Corporate Financial Analysis | FINN 330 |
| FINN 333 | Commercial Bank Management | FINN 230 |
| FINN 3391 | Money and Capital Markets | FINN 330 |

1. **Elective courses**

6 credit hours chosen from the following courses:

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course name** | **Pre- requisite** |
| ECON 338 | Money and Banking | ECON 132 |
| FINN 232 | Real Estate Financing | FINN 130, ACCT 230 |
| FINN 3301 | Islamic Financial Management | FINN 330 |
| FINN 332 | Management of Non-Banking Institutions | FINN 230 |
| FINN 335 | Marketing of Financial and Banking Services | FINN 230, MKET 130 |
| FINN 338 | Personal Finance | FINN 230 |
| FINN 4301 | Advanced Financial Management | FINN 238, FINN 330 |

**FINN130 Introduction to Finance and Banking**

Principles of finance and banking, the banking system, financial and banking institutions, types of financial institutions, financial tasks and sources of financing, brief look at the financial markets.

**FINN 230 Principles of Financial Management**

Importance of financial management, goals of financial management, financial analysis using financial ratios, time value of money, cash planning, profit planning, working capital and current assets management, short-term and long-term financing, stocks and bonds, financial markets.

**Pre-requisites: FINN130,ACCT230**

**FINN232 Real Estate Financing**

Financial principles related to real estate, financing direct property ownership versus income producing property, financing real estate development , secondary mortgage markets, taxes and real estate financing. **Pre-requisite: FINN230**

**FINN233 Principles of Insurance**

Identifying and managing risks, insurance companies, insurance operations and occupations, types of insurance, insurance contracts and policies, property and liability insurance, automobile insurance, fire insurance, life insurance, health and disability insurance, commercial property insurance, reinsurance and financial statement analysis for insurance companies.

**Pre-requisite: FINN 230**

**FINN234 Financial and Banking Legislations**

Local financial and banking laws and policies, commercial papers: checks and promissory notes, insurance legislations, securities law, central bank laws, banking law, public debt law, foreign currency control act, money changer licensing and supervision law, law on the encouragement of investment and other financial and banking laws. **Pre-requisite: FINN 230.**

**FINN238 Math for Risk Management**

Mathematical and statistical applications for risk management including linear algebra, matrix algebra, probabilities, univariate and multivariate analysis, linear regression models, normal distribution, correlation and covariance, central limit theory, hypothesis testing, Chi-square distribution, and distribution function.

**Pre-requisites: STAT 2361, MATH 2351**

**FINN330 Intermediate Managerial Finance**

Corporate financial management and its complications, risk and return tradeoff, assets valuation, capital structure, cost of capital, dividends policy, merger and acquisition, capital budgeting process, financial distress liquidation and reorganization, derivatives, and Leasing. **Pre-requisite: FINN230**

**FINN3301 Islamic Financial Management**

The Islamic economic system, ownership and property management in Islam. public budget, Islamic institutions, investments and savings in Islam.

**Pre-requisite: FINN330**

**FINN331 Corporate Financial Analysis**

Interpreting and analyzing corporate financial statements to make investment, credit and management decisions, analytical tools used to assess and forecast a firm’s financial performance, financial analysis and interested parties.

**Pre-requisite: FINN 330**

**FINN 332 Management of Non-Banking Institutions**

Defining financial non-depository institutions , financial rules and regulations management of financial institutions and intermediaries, insurance companies, pension funds, investment companies (mutual funds), leasing, key trends shaping financial institutions. **Pre-requisite: FINN230**

**FINN333 Commercial Bank Management**

The role of Commercial banks in the economy, organizational structure of commercial banks, commercial banks’ balance sheet and income statement, assets, liabilities and working capital management, deposits and loans , pricing and developing commercial banks’ services, mergers of commercial banks.

**Pre-requisite: FINN230**

**FINN3331 Bank Risk Management**

Defining risk, identifying, measuring, monitoring and controlling the most prominent risks within banking institutions, the impact of risks on banks’ growth and sustainability, central bank policies dealing with risks.

**Pre-requisites: FINN238,FINN330,FINN333**

**FINN3336 Risk Management and Types of Insurance**

Liability exposure of insurance companies to insurable risks, products and policies such as automobile insurance, property insurance, workers compensation insurance, fire and theft insurance, marine and transportation insurance, legal liability insurance, health insurance and life insurance.

**Pre-requisites: FINN233, FINN238**

**FINN 3337 Risk Management and Insurer Operations**

Insurance companies operations and management, insurable events, insurance contracts, insurance companies’ regulations, financial assessment of insurable events, insurance underwriting, assigning the fair insurance premium for insurance policies, insurance marketing and distribution, and claims settlements. **Pre-requisite : FINN3336**

**FINN334 Management of Islamic Banks**

The history of Islamic banking, Islamic depository institutions, Islamic banks’ operations, Islamic banks’ balance sheet and income statement, types of deposits, fields of investment, Islamic products such as: musharaka, murabaha, mudaraba, Islamic banks and central bank, future of Islamic banks. **Pre-requisite: FINN333**

**FINN335 Marketing of Financial and Banking Services**

Identifying the difference between marketing a product and marketing a service, the history of marketing of banking services and marketing strategies, market research, product/service strategies, pricing strategies, distribution channels strategies, promotion strategies, case studies.

**Pre-requisites: FINN230,MKET130.**

**FINN336 Credit Analysis**

The definition of credit analysis, cash flow analysis, financial ratios, evaluation of management and the industry, credit terms and conditions, case studies.

**Pre-requisite: FINN238, FINN333.**

**FINN337 Management of Short-term Financing**

The role of working capital, inventory management, account receivables and account payables management, liquidity analysis, cash management, cash projections and money market, short term investments, strategic financial management, and international cash flow management. **Pre-requisite: FINN 330**

**FINN338 Personal Financial Management**

The importance of personal financing, personal financial planning, spending and investing decisions, personal savings**. Pre-requisite:FINN230**

**FINN3391 Money and Capital Markets**

Money markets, financial securities traded in money markets, equity markets, debt markets, financial securities traded in capital markets, organized stock and over the counter markets, capital markets indices, the influential role of both government and private sectors on financial markets.

**Pre-requisite : FINN330**

**FINN430 Strategic Financial Decisions**

Economic and legal factors affecting financial planning such as monopoly policies and anti-monopoly policies, organizational and behavioral factors affecting decision making, the role of information systems and accounting policies, the risky decisions and its effect on investment valuation, case studies.

**Pre-requisite:FINN3391**

**FINN4301 Advanced Financial Management**

Evaluating corporations’ financial position , financial planning, calculating the cost of capital, time value of money, risk and return calculation, financial asset valuation , project analysis, dividend policy and financial management decisions. **Pre-requisites: FINN238,FINN330**

**FINN431 Investment Management**

Presenting financial markets and instruments, trading in equity and debt securities, portfolio management, introducing investment theories, fundamental concepts of expected return, risk, risk aversion and diversification, techniques for evaluating investments .

**Pre-requisites: FINN 238 and FINN 3391**

**FINN432 International Financial Management**

International Monetary System, international financial markets, international financial trade, international lending and country risk analysis, international banking, financial management of international firms, cash management of multinational firms. **Pre-requisites: FINN238,FINN3391**

**FINN4320 Insurance and International Risk Management**

Types of international insurance policies, international risk management and the principles of reinsurance, reinsurance benefits, reinsurance arrangements, reinsurance underwriting, and reinsurance for reinsurers "retrocession".

**Pre-requisites: FINN3337,FINN3391**

**FINN4322 Risk Management and Islamic Insurance**

The concept of Islamic insurance( Takaful) , principles of Islamic insurance, the legitimate perspective for insurance, insurance regulations, insurance contracts and procedures, Islamic insurance social and economic value, the difference between Islamic and private insurance markets, reinsurance concepts, methods, mechanisms and legitimacy from an Islamic perspective.

**Pre-requisite : FINN 3337**

**FINN4331 International Risk Management in Banks**

Identifying risks within banking institutions (currency exchange risk, Interest rate risk, economic risk, political risk), their impact on banks’ continuous operations and performance, examining regulatory framework of supervision of central banks and governments to monitor and support the local and foreign banks operating in the country, hedging and the use of financial instruments to reduce risks such as options and futures, Basel Accord.

**Pre-requisites: FINN3331,FINN3391**

**FINN 434 Financial Derivatives and Future Markets**

Option and derivative markets , history and structure of option and derivative markets, usage of future and option contracts in speculation and hedging by local and multinational companies ,analyzing the factors that affect the prices of future and option contracts. **Pre-requisites: FINN238, FINN3391.**

**FINN4340 Mergers and Acquisitions**

Corporate policies and strategies regarding mergers and acquisitions, valuation, structuring, financing and negotiating merger and acquisition transactions, evaluating and pricing acquisitions, post-merger restructuring and divestitures.

**Pre-requisite: FINN4301**

**FINN435 Banking Strategies**

Commercial Banks and its operations, relationships with other banks, borrowing strategy, cost of borrowing, measuring the value added of bank services.

**Pre-requisite: FINN4331**

**FINN436 Investment Portfolio Management**

Analyzing different investment risks risk and return, objectives and barriers to investment, investment portfolio policies, asset allocation control and valuation of portfolios, essential management and technical skills needed for portfolio managers. **Pre-requisite: FINN431**

**FINN 4360 Risk Management and Employee Benefits Program**

Risk management of employee benefits programs, such as: group life insurance, group health insurance, disability insurance, government laws, tax policies and regulations.

**Pre-requisite: FINN4320**

**FINN437 Special Topics in Finance and Banking**

Studying of special topics in finance and banking, chosen based on the faculty’s interests and the students’ needs. **Pre-requisites: FINN238,FINN3391**

**FINN4381 Seminar in Financial Management**

Writing in-depth a research about concepts and practices in financial management, reviewing a sufficient number of studies related to the chosen topic, reading and analyzing published researches in accredited journals, discussing the meaning and consequences of plagiarism, presenting and discussing the research results with classmates and the instructor, modifying the research according to given notes.

**Pre-requisites: ECON235,FINN4301,FINN431**

**FINN4382 Seminar in Banking**

Writing in-depth a research about concepts and practices in banking, reviewing a sufficient number of studies related to the chosen topic, reading and analyzing published researches in accredited journals, discussing the meaning and consequences of plagiarism, presenting and discussing the research results with classmates and the instructor, modifying the research according to given notes. **Pre-requisites: ECON235,FINN4331**

**FINN4383** **Seminar in Insurance**

Writing in-depth a research about concepts and practices in insurance, reviewing a sufficient number of studies related to the chosen topic, reading and analyzing published researches in accredited journals, discussing the meaning and consequences of plagiarism, presenting and discussing the research results with classmates and the instructor, modifying the research according to given notes. **Pre-requisites;ECON235,FINN4320**

## Department of Accounting

The Accounting Department offers an academic program that leads to a bachelor degree in accounting. The department also offers a minor degree in Accounting.

**First: Bachelor degree in Accounting**

**Admission Requirements:**

1. Successfully passing, with a minimum grade of 70%, each of the following courses: ACCT130, ACCT230.
2. Successfully passing, with a minimum grade of 70%, all other specialization courses.
3. The accounting department’s approval in accordance with its intake capacity.

**Academic Plan:**

The Academic plan consists of 120 credit hours distributed as follows:

|  |  |
| --- | --- |
| Requirement Type | Credit Hours |
| University Requirements | 21 |
| Business and Economics Faculty Requirements[[11]](#footnote-11) | 29-32 |
| Specialization Requirements | 57 |
| Elective courses [[12]](#footnote-12) | 10-13 |
| **Total** | 120 |

**Specialization Requirements (57 credit hours):**

1. Compulsory Courses:

42 credit hours, compromised of the following courses:

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Perquisite |
| ACCT230 | Principles of Accounting 2 | ACCT130 |
| ACCT331 | Cost Accounting | ACCT230 |
| ACCT332 | Principles of Taxation | ACCT230 |
| ACCT333 | Managerial Accounting | ACCT331 |
| ACCT335 | Intermediate Accounting 1 | ACCT230 |
| ACCT336 | Intermediate Accounting 2 | ACCT335 |
| ACCT339 | Principles of Auditing | ACCT335 |
| ACCT432 | Advanced Accounting | ACCT336 |
| ACCT434 | Accounting Information Systems | ACCT331 |
| ACCT437 | Seminar in Accounting | ECON235 and Fourth Year Standing |
| BUSA230 | Principles of Management | BUSA130 |
| BUSA3301 | Introduction to Business Law | BUSA230 |
| ECON132 | Principles of Macro Economics | ECON131 |
| FINN230 | Principles of Financial Management | FINN130, ACCT230 |

1. **Elective courses:**

15 credit hours from the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| Credit Hours | Course Number | Course Name | Perquisite |
| 6 credit hours from the following courses: | ECON3311 | Analytical Microeconomics 1 | ECON132, MATH2351 |
| ECON3321 | Analytical Macroeconomics 1 | ECON132, MATH2351 |
| ECON3361 | International Trade | ECON3311 |
| ECON3362 | International Finance | ECON3321 |
| ECON338 | Money and Banking | ECON132 |
| ECON434 | Public Finance | ECON3311 |
| ECON438 | Project Evaluation | ECON3311 |
| 3 credit hours from Business Administration or Marketing courses | | | |
| 6 credit hours from Accounting courses | | | |

**Second: Minor in Accounting:**

Minor Specialization Requirements (24 credit hours):

1. Compulsory Courses:

21 credit hours, compromised of the following courses:

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Perquisite |
| ACCT130 | Principles of Accounting 1 | . |
| ACCT230 | Principles of Accounting 2 | ACCT130 |
| ACCT331 | Cost Accounting | ACCT230 |
| ACCT332 | Principles of Taxation | ACCT230 |
| ACCT333 | Managerial Accounting | ACCT331 |
| ACCT335 | Intermediate Accounting 1 | ACCT230 |
| ACCT336 | Intermediate Accounting 2 | ACCT335 |

1. **Elective courses:**

3 credit hours from Accounting courses

**COURSE DESCRIPTION FOR THE EXISTING ACCOUNTING PROGRAM**

**ACCT130 FINANCIAL ACCOUNTING 1*:***

Introduction to accounting, accounting cycle which includes journalizing and posting of the economic events, preparing the trial balance, and preparing the financial statements. In addition to accounting issues that is related to the valuation of fixed and current assets.

***ACCT230* FINANCIAL ACCOUNTING 2*:***

Accounting principles and assumptions, accounting for partnerships, accounting for corporations, accounting issues related to current and long-term liabilities in terms of management and valuation, issues related to stockholders’ equity, preparation of the Statement of Cash Flows, introduction to cost accounting.

Prerequisite: ACCT130.

**ACCT331 COST ACCOUNTING:**

Cost accounting principles, accounting for manufacturing costs to calculate the cost of the product, job order costing, process costing, joint products and by products, and introduction to standard costing

Prerequisite: ACCT230.

**ACCT332PRINCIPLES OF TAXATION:**

Principles of taxation, characteristics and types of direct and indirect taxes, determination of taxable income, tax estimation and collection, adjustment of income for tax purpose according to tax laws.

Prerequisite: ACCT230.

**ACCT333MANAGERIAL ACCOUNTING*:***

Introduction to the basics of accounting for the purpose of decision-making, managerial accounting applications on business enterprises, standard costing, breakeven analysis, budgeting and capital budgeting, performance evaluation and cost control.

Prerequisite: ACCT331.

**ACCT334ACCOUNTING OF FINANCIAL INSTITUTIONS (Not for Accounting Students)**

Fundamentals of accounting related to banks, insurance companies and investment organizations, practical implementations of accounting methods, preparation of financial statements and control in financial institutions.

Prerequisite: ACCT230.

**ACCT335INTERMEDIATE ACCOUNTING 1*:***

Detailed study of the accounting principles and the accounting cycle, preparation of the Income statement and the Balance Sheet, accounting issues related to current assets, investments, and liabilities.

Prerequisite: ACCT230.

**ACCT336INTERMEDIATE ACCOUNTING 2:**

The study of accounting issues related to fixed assets and intangible assets, long-term liabilities, stockholders’ equity, return and distribution of profits, change in price levels, and final statements.

Prerequisite: ACCT335.

**ACCT337INTERNAL AUDITING AND RISK MANAGEMENT*:***

Tools and techniques of internal auditing through presenting the steps of the internal auditing process, preparing the preliminary survey, designing audit programs, preparing working papers, identifying and evaluating audit evidences, writing the elements of the audit report and its results, the foundations of good governance with risk management and auditing as its forefront.

Pre-requisite (ACCT335).

**ACCT338ACCOUNTING FOR NOT-FOR-PROFIT ORGANIZATIONS*:***

Applying accounting principles to the government sector, municipalities and not-for-profit entities such as charitable societies, hospitals, clubs, colleges and universities, accounting cycle, accounting for revenues and expenditures, fund accounting, preparing financial statements, the role of budgeting in planning and control, and types of budgets.

Pre-requisite (ACCT230).

**ACCT339AUDITING 1*:***

Ethical and legal regulations for accounting profession, auditing standards and procedures, auditing regulations and applications, internal control evaluation, computerized auditing, statistical sampling and auditing reports.

Prerequisite: ACCT335.

**ACCT409INTERNSHIP IN ACCOUNTING*:***

Training in practices of accounting profession in business enterprises or auditing firms under the supervision of one of the department academic member.

Prerequisite: Fourth year standing and department approval.

**ACCT419-429 INDEPENDENT STUDY IN ACCOUNTING:**

An independent study in one of the accounting areas under supervision of one of the department academic members.

Prerequisite: Fourth year standing and department approval.

**ACCT430FRAUD EXAMINATION AND ANALYSIS*:***

Principles and methodology of fraud examination and detection, fraud deterrence, cash misappropriation, whether before or after transaction recording, billing schemes, check tampering, noncash misappropriation, corruption, cash disbursement schemes, salaries and payroll, the relationship between accounting principles and fraud, and fraudulent financial statements.

Pre-requisite (ACCT339).

**ACCT432ADVANCED FINANCIAL ACCOUNTING**

Accounting for partnerships, accounting for branches, business combinations and consolidations, installment sales, consigned goods, accounting for multi-national corporations.

Prerequisite: ACCT 336.

**ACCT433FINANCIAL STATEMENT ANALYSIS**

Methods used in analyzing financial information for different companies to show the strong and weak factors of these companies, balance sheet analysis, profit and loss analysis, cash flow statement analysis. Prerequisite: ACCT335.

**ACCT434ACCOUNTING INFORMATION SYSTEMS*:***

Basic principles of AIS, steps in evaluating accounting system, accounting system inputs, reports procedures, manual accounting system, electronic accounting system, the work of computerized accounting system in relation to accounting stages, and internal control issue.

Prerequisite: ACCT331.

**ACCT435ACCOUNTING THEORY**

Detailed study of accounting science development, accounting basis and rules, traditional accounting and its counterparts, discussion of loans and accounting principles related to current assets, fixed assets, intangible assets, liabilities, stockholders’ equity, and final accounts.

Prerequisite: ACCT336.

**ACCT436AUDITING 2*:***

Auditing current assets, fixed assets, investments, liabilities, long-term loans, stockholders’ equity, auditor’s final report.

Prerequisite: ACCT339.

**ACCT437SEMINAR IN ACCOUNTING*:***

In-depth study of selected topics in Accounting, reviewing enough literatures about the topic, research presentation and discussion in class. Research modification in light of notes and class discussions, reading, analyzing and discussing a number of researches published in peer-reviewed journals, Discussion on issues related to academic integrity and ethics in preparing research papers.

Prerequisite: ECON235 and Fourth Year Standing

**ACCT438SPECIAL TOPIC:**

Study of selected topics in Accounting based on interest of the academic members and student needs.

Prerequisite: Fourth year standing and department approval.

**ACCT439 INTERNATIONAL ACCOUNTING*:***

International accounting environment, international financial reporting standards, comparative accounting practices, accounting for foreign currency transactions, translation of financial statements for multinational entities, preparation of consolidated financial statements for multinational entities, hedging against exchange rate fluctuation risks, international taxation, financial statement analysis for multinational companies, international transfer pricing.

Pre-requisite (ACCT336).

Faculty of Engineering and Technology

# Faculty of Engineering and Technology Study Plans

The Faculty of Engineering was established in 1979. Since its establishment, the Faculty has contributed to the graduation of highly skilled engineers who are rich with knowledge and technical skills in the differed fields of engineering. The Faculty constantly seeks to improve its programs and curriculums in order to keep up with the constant advancements in technologies and knowledge.

The Faculty of Information Technology was established in 2006. It was established in an effort to keep up with the rapid advancements in the field of information technology through investing in its existing human and technical resources. The Faculty's main objective is to create an environment that promotes research and encourages its students to be influential in the field of Information Technology.

The Faculties of Engineering and Information Technology were merged into one faculty under the name of Faculty of Engineering and Technology in 2014.

The Faculty of Engineering and Technology comprises of the following departments:

* Department of Electrical and Computer Engineering
* Department of Civil Engineering
* Department of Mechanical and Mechatronics Engineering
* Department of Architectural Engineering
* Department of Computer Science

The study period for the faculty programs is from 4 to 5 years according to the specific program in addition to practical training.

The Faculty facilities include engineering labs and workshops in addition to drawing and computer labs which represent an important part of the academic curriculum focusing on the practical applications in engineering and information technology.

The Faculty has strong ties with local organizations and companies forged by cooperation agreements and joint activities.

Admission requirements are based on student achievement in Tawjihi or its equivalence and are published by the University at the beginning of each academic year. Students can apply for direct admission to all academic programs or general admission to the Faculty of Engineering and Technology.

**Civil Engineering Program Admission Requirements**

1. Student must successfully complete and obtain a cumulative average of 70% or more in the following courses:

MATH1411, MATH1321, PHYS141, PHYS132, ENME121

1. Department approval based on its capacity. In the case the number of applicants exceeds the enrolment capacity of the Department, only those with the highest overall competitive average grade will be admitted. The average grade will be calculated based on the grades of all course attempts.

**Computer Science Program Admission Requirements**

1. Successfully completing and obtaining a cumulative average of 70% or more in the following courses:

      MATH1411, MATH1321, PHYS141, PHYS132

1. Student must successfully complete and obtain a grade of 70% or more in either Comp142 or Comp230.
2. Department approval based on its capacity. In the case the number of applicants exceeds the enrolment capacity of the Department, only those with the highest overall competitive average grade will be admitted. The average grade will be calculated based on the grades of all course attempts.

**Mechanical Engineering Program Admission Requirements**

1. Student must successfully complete and obtain a cumulative average of 70% or more in the following courses:

MATH1411, MATH1321, PHYS141, PHYS132, ENME121

1. Department approval based on its capacity. In the case the number of applicants exceeds the enrolment capacity of the Department, only those with the highest overall competitive average grade will be admitted. The average grade will be calculated based on the grades of all course attempts.

**Mechatronics Engineering Program Admission Requirements**

1. Student must successfully complete and obtain a cumulative average of 70% or more in the following courses:

MATH1411, MATH1321, PHYS141, PHYS132, ENME121

1. Department approval based on its capacity. In the case the number of applicants exceeds the enrolment capacity of the Department, only those with the highest overall competitive average grade will be admitted. The average grade will be calculated based on the grades of all course attempts.

**Electrical Engineering Program Admission Requirements**

1. Student must successfully complete and obtain a cumulative average of 70% or more in the following courses:

MATH1411, MATH1321, PHYS141, PHYS132, ENME121

1. Department approval based on its capacity. In the case the number of applicants exceeds the enrolment capacity of the Department, only those with the highest overall competitive average grade will be admitted. The average grade will be calculated based on the grades of all course attempts.

**Computer Systems Engineering Program Admission Requirements**

1. Student must successfully complete and obtain a cumulative average of 70% or more in the following courses:

MATH1411, MATH1321, PHYS141, PHYS132, ENME121

1. Student must successfully complete and obtain a grade of 70% or more in either Comp142 or Comp230.
2. Department approval based on its capacity. In the case the number of applicants exceeds the enrolment capacity of the Department, only those with the highest overall competitive average grade will be admitted. The average grade will be calculated based on the grades of all course attempts.

**Architectural Engineering Program Admission Requirements**

1. Successfully completing and obtaining a cumulative average of 70% or more in the following courses:

      MATH1411, MATH1321, PHYS141, PHYS131

1. Successfully completing and obtaining 70% or more in the following courses: ENAR 211 and

ENME 121.

1. The overall average grade will be computed based on 50% for the courses listed in item 1, 30% for ENAR211, and 20% for ENME121.
2. Department approval based on its capacity. In the case the number of applicants exceeds the enrolment capacity of the Department, only those with the highest overall competitive average grade will be admitted. The average grade will be calculated based on the grades of all course attempts.

**Spatial Planning Engineering Program Admission Requirements**

1. Successfully completing and obtaining a cumulative average of 70% or more in the following courses:

      MATH1411, MATH1321, PHYS141, PHYS131

1. Successfully completing and obtaining 70% or more in the following courses: ENAR 211 and ENME 121.
2. The overall average grade will be computed based on 50% for the courses listed in item 1, 30% for ENAR211, and 20% for ENME121.
3. Department approval based on its capacity. In the case the number of applicants exceeds the enrolment capacity of the Department, only those with the highest overall competitive average grade will be admitted. The average grade will be calculated based on the grades of all course attempts.

Faculty Requirements: students must successfully complete the following courses to fulfill the requirements for the Faculty of Engineering and Technology:

**Faculty Requirements for Civil Engineering, Electrical Engineering, Mechanical Engineering, and Mechatronics Engineering (30 credit hours)**

|  |  |  |
| --- | --- | --- |
| **Course ID** | **Course Title** | **Pre-requisite** |
| MATH1411 | CALCULUS AND ANALYTICAL GEOMETRY 1 | \_ |
| MATH1321 | CALCULUS AND ANALYTICAL GEOMETRY 2 | MATH1411 |
| PHYS111 | GENERAL PHYSICS LAB 1 | \_ |
| PHYS112 | GENERAL PHYSICS LAB 2 | PHYS111, PHYS132 or concurrent |
| PHYS141 | GENERAL PHYSICS 1 | MATH1411 or concurrent |
| PHYS132 | GENERAL PHYSICS 2 | PHYS141 , MATH1321 or concurrent |
| CHEM143 | CHEMISTRY FOR ENGINEERING STUDENTS | \_ |
| ENCE232 | STATICS | PHYS141 |
| ENME120 | WORKSHOP | \_ |
| ENME121 | ENGINEERING DRAWING | \_ |
| COMP230 | COMPUTER AND PROGRAMMING | \_ |

**Faculty Requirement for Architectural Engineering &** [**Spatial Planning Engineering**](https://ritaj.birzeit.edu/hemis/courses?term=1151&bu=8295&lang=en&mode=CB) **(30 credit hours)**

|  |  |  |
| --- | --- | --- |
| **Course ID** | **Course Title** | **Pre-requisite** |
| MATH1411 | CALCULUS AND ANALYTICAL GEOMETRY 1 | \_ |
| MATH1321 | CALCULUS AND ANALYTICAL GEOMETRY 2 | MATH1411 |
| PHYS111 | GENERAL PHYSICS LAB 1 | \_ |
| PHYS112 | GENERAL PHYSICS LAB 2 | PHYS111, PHYS132 or concurrent |
| PHYS141 | GENERAL PHYSICS 1 | MATH1411 or concurrent |
| PHYS132 | GENERAL PHYSICS 2 | PHYS141 ,MATH1321 or concurrent |
| CHEM143 | CHEMISTRY FOR ENGINEERING STUDENTS | \_ |
| ENCE232 | STATICS | PHYS141 |
| ENME120 | WORKSHOP | \_ |
| ENME121 | ENGINEERING DRAWING | \_ |
| ENAR211 | VISUAL COMMUNICATION 1 | \_ |
| ENAR220 | Drawing USING COMPUTER | Department Approval |

**Faculty Requirements for Computer Systems Engineering (33 credit hours)**

|  |  |  |
| --- | --- | --- |
| **Course ID** | **Course Title** | **Pre-requisite** |
| MATH1411 | CALCULUS AND ANALYTICAL GEOMETRY 1 | \_ |
| MATH1321 | CALCULUS AND ANALYTICAL GEOMETRY 2 | MATH1411 |
| MATH234 | INTRODUCTION TO LINEAR ALGEBRA | MATH1321 |
| PHYS111 | GENERAL PHYSICS LAB 1 | \_ |
| PHYS112 | GENERAL PHYSICS LAB 2 | PHYS111, PHYS132 or concurrent |
| PHYS141 | GENERAL PHYSICS 1 | MATH1411 or concurrent |
| PHYS132 | GENERAL PHYSICS 2 | PHYS141  MATH1321 or concurrent |
| COMP142 | COMPUTER AND PROGRAMMING | \_ |
| COMP233 | DISCRETE MATHEMATICS | MATH1411 |
| ENME120 | WORKSHOP | \_ |
| ENME121 | ENGINEERING DRAWING | \_ |
| BUSA2391 | ENGINEERING MANAGEMENT | \_ |

**Faculty Requirements for** [**Computer Science**](https://ritaj.birzeit.edu/hemis/courses?term=1151&bu=605&lang=en&mode=CB) **(32 credit hours)**

|  |  |  |
| --- | --- | --- |
| **Course ID** | **Course Title** | **Pre-requisite** |
| MATH1411 | CALCULUS AND ANALYTICAL GEOMETRY 1 | \_ |
| MATH1321 | CALCULUS AND ANALYTICAL GEOMETRY 2 | MATH1411 |
| PHYS111 | GENERAL PHYSICS LAB 1 | \_ |
| PHYS112 | GENERAL PHYSICS LAB 2 | PHYS111, PHYS132 or concurrent |
| PHYS141 | GENERAL PHYSICS 1 | MATH1411 or concurrent |
| PHYS132 | GENERAL PHYSICS 2 | PHYS141 ,MATH1321 or concurrent |
| BIOL111 | GENERAL BIOLOGY LAB | BIOL131 or concurrent |
| BIOL131 | GENERAL BIOLOGY | \_ |
| COMP131 | INTRODUCTION TO COMPUTERS AND COMPUTING ETHICS | \_ |
| COMP133 | COMPUTER AND PROGRAMMING | COMP131 |
| COMP233 | DISCRETE MATHEMATICS | MATH1411 |
| STAT2311 | BASIC STATISTICS | \_ |

## DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Electrical and computer engineering department offers two academic programs leading to the bachelor degree. The first one is electrical engineering in one of the following specializations: communications, computer, control and power, or without a specialization (general track). The second program is computer systems engineering.

**First: Bachelor of Electrical Engineering**

**- Admission requirements**

1. Achieving a cumulative average of at least 70% in the following courses:  
   ENME121, PHYS141, PHYS132, MATH1411, MATH1321
2. Department approval depending on its capacity.

**- Study Plan**

The plan consists of 160 credits distributed as follows:

|  |  |
| --- | --- |
| **Compulsory Courses** | **Credits** |
| University Requirements | 21 |
| Faculty Requirements | 30 |
| Specialization Requirements | 103 |
| Free Elective Courses | 6 |
| Total | 160 |

Specialization Requirements (103 credits):

1. Compulsory Courses

87 credits as follows:

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Prerequisite** |
| MATH231 | CALCULUS AND ANALYTICAL GEOMETRY 3 | MATH1321 |
| MATH234 | INTRODUCTION TO LINEAR ALGEBRA | MATH1321 |
| MATH330 | NUMERICAL METHODS | MATH, 234 MATH330  COMP or 132 COMP or 230  COMP or 133 COMP or 142 MATH310 |
| MATH331 | ORDINARY DIFFERENTIAL EQUATIONS | MATH1321 |
| ENME232 | DYNAMICS | ENCE232 |
| ENME333 | THERMODYNAMICS | PHYS141 |
| ENCS211 | DIGITAL ELECTRONICS AND COMPUTER ORGANIZATION LAB | (ENCS 238 or ENCS 336) or concurrent |
| ENCS234 | DIGITAL SYSTEMS | COMP132 or COMP142 or COMP230 or COMP133 |
| ENCS238 | COMPUTER ORGANIZATION | ENCS234 |
| ENCS338 | MICROPROCESSOR-BASED SYSTEMS | ENCS238 |
| ENCS411 | COMPUTER DESIGN LAB | ENCS338, ENCS211 |
| ENEE2102 | CIRCUITS LAB | (ENEE2305 or concurrent) , PHYS112 |
| ENEE2301 | NETWORK ANALYSIS 1 | PHYS132 |
| ENEE2302 | SIGNALS AND SYSTEMS | MATH331 |
| ENEE2303 | ELECTRONICS 1 | ENEE2301 |
| ENEE2305 | NETWORK ANALYSIS 2 | ENEE2302 or concurrent |
| ENEE2307 | PROBABILITY AND ENGINEERING STATISTICS | MATH1312 |
| ENEE2408 | ELECTRICAL MACHINES | ENEE2301 |
| ENEE3101 | ELECTRICAL MACHINES LAB | ENEE2102, ENEE2408, |
| ENEE3102 | ELECTRONICS LAB | PHYS112, or ENEE2409  (or concurrent ENEE3304) |
| ENEE3303 | PRINCIPLES OF COMMUNICATION SYSTEMS | ENEE2302,  (ENEE2307 or concurrent) |
| ENEE3304 | ELECTRONICS 2 | ENEE2303 |
| ENEE3305 | POWER ELECTRONICS | ENEE أو 2303 ENEE236 |
| ENEE3306 | MODERN COMMUNICATION SYSTEMS | ENEE2307, ENEE3303 |
| ENEE3408 | ELECTROMAGNETICS 1 | PHYS132, MATH2311 |
| ENEE4000 | TRAINING | Fourth year student + Department permission |
| ENEE4103 | COMMUNICATION LAB | ENEE339  (ENEE3306 or concurrent) |
| ENEE4104 | ENGINEERING SIMULATION LAB | ENEE2408, ENEE3304 |
| ENEE4105 | CONTROL AND POWER ELECTRONICS LAB | ENEE4302, ENEE3305 |
| ENEE4202 | ELECTRICAL INSTALLATION AND DRAWING | ENEE2301 |
| ENEE4302 | CONTROL SYSTEMS 1 | ENEE2305, ENEE2302 |
| ENEE4304 | DEVICES AND MEASUREMENTS | ENEE3304,  (ENCS238 or concurrent) |
| ENEE4403 | POWER SYSTEMS | ENEE2408 |
| ENEE5200 | INTRODUCTION TO GRADUATION PROJECT | Finishing of 115 credits and Department approval |
| ENEE5300 | GRADUATION PROJECT | ENEE5200, ENEE4000 |

1. Optional courses:

16 credit hours as chosen from the following:

|  |  |  |  |
| --- | --- | --- | --- |
| **Group** | **Course Number** | **Course Name** | **Prerequisite** |
| 1. Specialization students: have to finish all of the courses at one group (10 credit hours) plus 6 optional credit hours from the following. 2. General Path (No Specialization): have to finish 16 credit hours including a lab (5 courses + lab) from the following: | | | |
| Group one:  Specialization of Communication | ENEE5101 | ADVANCED LAB IN COMMUNICATION | ENEE4103, ENEE5302 |
| ENEE5302 | ELECTROMAGNETICS 2 | ENEE3408 |
| ENEE5304 | INFORMATION AND CODING THEORY | ENEE3306 or ENEE339 |
| ENEE5305 | WIRELESS COMMUNICATION | ENEE5302 |
| Group two:  Specialization of Computer | ENCS339 | OPERATING SYSTEMS | ENCS238 or ENCS336 |
| ENCS413 | COMPUTER NETWORKS LAB | ENCS433 or ENCS436 |
| ENCS436 | COMPUTER NETWORKS | ENEE339 or ENEE3306 |
| ENCS437 | COMPUTER ARCHITECTURE | ENCS336 or ENCS238 |
| Group three:  Specialization of Control and Power | ENEE5102 | POWER ELECTRONICS LAB | ENEE4403,  (ENEE5303 or concurrent) |
| ENEE5303 | ELECTRICAL MACHINES AND SPECIAL ELECTRICAL MACHINES MANAGEMENT | ENEE2408,  ENEE3305 |
| ENEE5306 | PROTECTION AND AUTOMATION IN ELECTRICAL POWER SYSTEMS | ENEE4403 |
| ENEE5307 | RENEWABLE ENERGY AND PHOTOVOLTIC POWER SYSTEMS | ENEE3305,  ENEE2408 |
| Group four:  More optional Courses | ENEE5311 | SPECIAL TOPIC IN COMMUNICATION ENGINEERING | Fourth year and department approval |
| ENEE5312 | SPECIAL TOPIC IN COMPUTER ENGINEERING | Fourth year and department approval |
| ENEE5313 | SPECIAL TOPIC IN POWER ENGINEERING | Fourth year and department approval |
| ENEE5308 | CONTROL SYSTEMS 2 | ENEE4302 |
| ENCS531 | REAL TIME AND EMBEDDDED SYSTEMS | ENCS339,  ENCS313 |
| ENCS539 | SPECIAL TOPIC IN COMPUTER ENGINEERING | Fourth year and department approval |

**Second: Bachelor's Degree in Computer Systems Engineering**

**- Admission requirements**

The admission is direct in case of the achievement of the minimum high school graduate average that is announced on the enrollment application time.

**- Study Plan**

The study plan consists of 160 credited hours distributed according to the following table:

|  |  |
| --- | --- |
| **Requirement Type** | **Credited Hours** |
| University requirements | 21 |
| Faculty requirements | 33 |
| Specialization Requirements | 101 |
| Free Elective Courses | 5 |
| Total | 160 |

|  |  |  |
| --- | --- | --- |
| **Course Prerequisites** | **Course Title** | **Course No.** |
| MATH234,  COMP230 or COMP132 or COMP133 or MATH320 or  COMP142 | NUMERICAL METHODS | MATH330 |
| MATH1321 | ORDINARY DIFFERENTIAL EQUATIONS | MATH331 |
| COMP230 or COMP132 or  COMP142 | ADVANCED PROGRAMMING | COMP231 |
| COMP230 or COMP132 or  COMP142 | DATA STRUCTURES | COMP2321 |
| COMP2321 or COMP232 | DATABASE SYSTEMS | COMP333 |
| COMP333 | SOFTWARE ENGINEERING | COMP433 |
| PHYS112, ENEE236 | CIRCUITS AND ELECTRONICS LAB | ENEE2103 |
| PHYS132  (or concurrent MATH331) | CIRCUIT ANALYSIS | ENEE2304 |
| ENEE2304 or ENEE2301 | ANALOG ELECTRONICS | ENEE236 |
| MATH1321 | PROBABILITY AND ENGINEERING STATISTICS | ENEE2307 |
| ENEE2304, ENEE2302 | COTROL SYSTEMS | ENEE3302 |
| MATH331 | SIGNALS AND SYSTEMS | ENEE2302 |
| ENEE2302, ENEE2307 | COMMUNICATION SYSTEMS | ENEE339 |
| ENEE339 or ENEE3306 (or concurrent ENEE3306) | COMMUINCTIONS LAB | ENEE4103 |
| ENCS336 or ENCS432 (or concurrent ENCS238) | DIGITAL ELECTRONICS AND COMPUTER ORGANIZATION LAB | ENCS211 |
| COMP142 or COMP132 or COMP133 or COMP230 | DIGITAL SYSTEMS | ENCS234 |
| ENCS234 | COMPUTER ORGANIZATION | ENCS238 |
| ENCS238 | ASSEMBLY LANGUAGE LABORATORY | ENCS311 |
| COMP230 or COMP132 or COMP142 | LINUX LABORATORY | ENCS313 |
| ENCS234, ENEE236 | DIGITAL INTEGRATED CIRCUITS | ENCS333 |
| ENCS238 | MICROPROCESSOR BASED SYSTEMS | ENCS338 |
| ENCS336 or ENCS238 | OPERATING SYSTEMS | ENCS339 |
| 4th year level | PRACTICAL TRAINING | ENCS401 |
| ENCS338, ENCS211 | COMPUTER DESIGN LAB | ENCS411 |
| ENCS438 | INTERFACING LABORATORY | ENCS412 |
| ENCS433 or ENCS436 | COMPUTER NETWORKS LABORATORY | ENCS413 |
| ENEE2302, (ENCS238 or ENCS336) | DIGITAL SIGNAL PROCESSING | ENCS431 |
| COMP233, (COMP230 or COMP142) | ARTIFICIAL INTELLIGENCE | ENCS434 |
| ENEE339 or ENEE3306 | COMPUTER NETWORKS | ENCS436 |
| ENCS238 or ENCS336 | COMPUTER ARCHITECTURE | ENCS437 |
| ENEE236, ENCS338 | INTERFACING TECHNIQUES | ENCS438 |
| ENCS531 | REAL-TIME SYSTEMS LAB | ENCS514 |
| Passing 115 credited hours and department approval | ADVANCED COMPUTER SYSTEMS ENGINEERING LABORATORY | ENCS515 |
| Passing 115 credited hours and department approval | INTRODUCTION TO GRADUATION PROJECT | ENCS520 |
| 4th year lever | COMPUTER ENGINEERING ETHICS | ENCS521 |
| ENCS520, ENCS401 | GRADUATION PROJECT | ENCS530 |
| ENCS339, ENCS313 | REAL-TIME APPLICATIONS AND EMBEDDED SYSTEMS | ENCS531 |
| ENCS436 (or concurrent ENCS436) | DATA AND NETWORK SECURITY | ENCS532 |
| ENCS238 | ADVANCED DIGITAL SYSTEMS DESIGN | ENCS533 |

|  |  |  |
| --- | --- | --- |
| **Course Prerequisites** | **Course Title** | **Course No.** |
| ENCS339, COMP2321 | DISTRIBUTED SYSTEMS AND ALGORITHMS | ENCS5311 |
| ENCS313, ENCS339 | PROGRAMMING OF SYSTEMS | ENCS5312 |
| ENCS333 | HIGH DENSITY INTEGRATED CIRCUITS | ENCS5313 |
| ENCS436 | WIRELESS NETWORKS | ENCS5314 |
| ENCS434, ENEE3302 | FUZZY LOGIC AND NEURAL NETWORKS | ENCS5315 |
| ENCS437 | PARALLEL COMPUTING | ENCS5316 |
| ENCS436 | MULTIMEDIA | ENCS5317 |
| ENCS338 or ENCS432 | ROBOTS | ENCS5318 |
| 4th year level and department approval | SPECIAL TOPIC IN COMPUTER SYSTEMS ENGINEERING | ENCS539 |

**Electrical Engineering Courses Description (ENEE):**

ENEE2101 BASIC ELECTRICAL ENGINEERING LAB

(For Mechanical Engineering Students)  
Basic concepts and laws for DC circuits, network theorems, concept of impedance, measurement of phase difference for electrical circuits composed of resistors, capacitors and inductors (RLC circuits), power analysis and power factor, transformers, magnetic circuits, diodes characterization and applications (Lab 3hrs).  
Prerequisites: ENEE2301, PHYS112

ENEE2102 CIRCUITS LAB

Faults in electrical circuits, application of electrical network theorems, pulse response for first and second order electrical circuits, bridges and their applications, filter circuits, two-port circuits, resonance circuits, three-phase circuits, electrical transformers (Lab 3hrs).  
Prerequisites: PHYS112,  (ENEE2305 or concurrent)

ENEE2103 Circuits and Electronics Lab

(Computer Systems Engineering Students)              
Application of electrical network theorems, step response for first and second order electrical circuits, filter circuits, Transistor characteristics and biasing, amplifier circuits,  frequency response of amplifiers,  operational amplifiers, oscillators, voltage regulators  (Lab 3hrs).  
Prerequisites: (PHYS 112 or concurrent), ENEE236

ENEE2301 NETWORK ANALYSIS 1

Introduction to electrical engineering, electrical quantities and the basic elements of electrical circuits, dc circuit analysis, energy storage elements, first and second order circuits, sinusoidal steady state response, AC power and power factor correction, three phase circuits, magnetically coupled circuits and transformers, different applications in the electrical engineering. Using simulation tools for analysis and design of  electric circuits.    
Prerequisites: PHYS132

ENEE2302 SIGNALS AND SYSTEMS

The concept of system, and its input and output signals, classification of systems and signals, linear time invariant systems and convolution theorem. System characterization by the impulse response, periodic signals and their Fourier series representation. Response of Linear time invariant systems to periodic input signals, Fourier transform, frequency response, and use of Fourier transform in system analysis. Applications of Fourier transform in communications. Sampling theorem, Laplace transform, Z-transform, Application of Laplace transform and z-transform in systems characterized by differential and difference equations. State space representation.   
Prerequisite: MATH331

ENEE2303 ELECTRONICS 1

Semiconductor materials and PN junction, diode circuit applications, bipolar junction transistor structure and operation, BJT biasing circuits, small signal BJT amplifiers (CB, CE, and CC).  Field effect transistor structures and operations, FET biasing circuits small signal FET amplifiers (CG, CS, CD), multistage amplifiers, frequency response of amplifiers, PnPn and other devices, using simulation tools for the design, and analysis of electronic circuits   
Prerequisite: ENEE2301

ENEE2304 CIRCUIT ANALYSIS

(Computer Systems Engineering Students)  
Electrical quantities and the basic elements of electrical circuits, DC circuit analysis, energy storage elements, first and second order circuits, sinusoidal steady state response, AC power, Power factor correction, three phase circuits, Laplace transform in circuit analysis, filter circuits’ analysis and design, two port networks. Using simulation tools for analysis and design of electric circuits.  
Prerequisites: PHYS132,  (Math331 or concurrent)

ENEE2305 NETWORK ANALYSIS 2

Operational amplifier, Laplace transform analysis and circuit application, network functions, frequency selective circuits, Active filters analysis and design, two port networks, circuit topology and general circuit analysis, Using simulation tools for analysis and design of electric circuits.  
Prerequisite: ENEE2301, (EE2302 or concurrent)

ENEE2307 PROBABILITY AND ENGINEERING STATISTICS

Set operations, axioms of probability, Bayes' theorem, independent events, the random variable, probability density function, examples of discrete probability distributions (Binomial, Poisson, geometric, hyper-geometric, multinomial), examples of continuous probability distributions (Normal, uniform, Log-normal, Gamma, Beta, Weibell), multivariate probability density functions, normal approximation to the Binomial distribution, population and sampling, unbiased estimators, sampling distribution of the mean with known and unknown variance, point and interval estimation, elements of hypothesis testing, linear correlation linear regression, least squares, the random process, stationarity and ergodicity, Gaussian random processes.   
Prerequisite: MATH132

ENEE236 ANALOG ELECTRONICS

(Computer Systems Engineering)   
Semiconductor material and p-n junction, diode circuit applications, bipolar junction transistor (BJT); BJT biasing and small signal analysis, field effect transistor (FET); FET biasing and small signal analysis, multistage amplifiers, amplifier frequency response, applications of operational amplifiers, voltage regulation, thyristors and triggering circuits.  
Prerequisite: ENEE2301 or ENEE2304

ELECTRICAL MACHINES

DC and AC magnetic circuits and their solution by application of electromagnetic field theory, electromechanical energy conversion. Single and three phase transformers theory Synchronous Generators, construction, principle of operation and control. Synchronous motors principle of operation and applications. Single and Three-phase induction motors, types, principle of operation, characteristics. DC generators and motors types and principle of operation. Practical control circuits for AC and DC motors.  
Prerequisite: ENEE2301

ENEE2409 **ANALOG ELECTRONICS**(For Mechatronics students)

Semiconductor material and p-n junction, diode circuit applications, Structure, operation and properties of bipolar junction and field effect transistors, analysis and design of transistors bias circuits, small signal models of the transistors, basic amplifier configurations, amplifier frequency response, multistage amplifiers, audio frequency power amplifiers and heat sinking, differential amplifier, operational amplifier and their applications, oscillators and wave shaping, linear and switching voltage regulators, thyristors, trigger devices and application, using computer software to analyze and design electronics circuits.  
Prerequisite: ENEE2301

**Level 3**

ENEE3101 ELECTRICAL MACHINES LAB

Selected experiments in the field of DC electrical machines (all types of motors and generators), single-phase and three-phase transformers, AC machines, three-phase induction machines, three-phase synchronous machines, single phase AC motors, contactors and relays application (Lab 3hrs).  
Prerequisites: ENEE2102, ENEE2408

ENEE3102 ELECTRONICS LAB

Selected experiments on diode characteristics and applications, Transistor characteristics and biasing, amplifier circuits, multi-stage amplifier design, frequency response of amplifiers, differential amplifiers, operational amplifiers, power amplifiers, feedback amplifiers, oscillators, voltage amplifiers, thyristors (Lab 3hrs).   
Prerequisites: PHYS112, ENEE2409 or (ENEE3304 or concurrent)

ENEE3301 LIGHTING AND ACOUSTICS ENGINEERING

(For Architecture Engineering Students)  
Lighting sources (natural and industrial), lighting calculations inside and outside buildings, lighting fixtures, laminar calculation and design, electrical drawings, acoustics principles, controlling of sound, suitable material for walls and ceilings that affect sound, design and measure of acoustic systems.  
Prerequisite: ENAR237

ENEE3302 CONTROL SYSTEMS

(Computer Systems Engineering Students)  
Introduction to automatic control concepts. Multi-input and multi-output systems. Control system fundamentals. Response of linear time invariant systems, frequency response. Stability, Introduction to state space representation, Introduction to discrete and computerized control.   
Prerequisites: ENEE2304، ENEE2302

ENEE3303 PRINCIPLES OF COMMUNICATION SYSTEMS

Review of Fourier analysis, bandwidth definitions, time-bandwidth relations and rise time, Amplitude Modulation Systems: Normal AM, DSBSC, SSBSC, Vestigial sideband modulation systems, frequency and phase modulation systems, modulation and demodulation of narrow band and wide band FM signals, FM bandwidth, preview of super heterodyne receiver, the sampling theorem, pulse amplitude, pulse width, and pulse position modulation, random processes: stationary and ergodicity, transmission of a random process through a linear filter, power spectral density, Gaussian processes, noise and narrow band noise representation, noise in AM receivers, noise in FM receivers, pre-emphasis and de-emphasis, comparison between AM and FM systems in terms of performance in a noisy channel, sampling theorem, pulse code modulation, quantization and encoding, delta modulation, differential pulse code modulation, base band data transmission.  
Prerequisites: (ENEE2307 or concurrent), ENEE2302

ENEE3304 ELECTRONICS 2

Audio-frequency linear power amplifiers and heat sinks, current sources and their applications in IC, integrated differential and operational amplifier, applications of operational amplifiers, feedback amplifiers, discrete and integrated oscillators, voltage regulators, using simulation tools for the design, and analysis of electronic circuits.  
Prerequisite: ENEE2303

ENEE3305 POWER ELECTRONICS

Semiconductors, principles of modern power electronic devices and their characteristics, power diodes, Triacs and power Transistors, power MOSFETs and IGBTs.  Thyristors and their operation, protection, triggering and commutation circuits.  Principles of power electronic circuits (converters) that convert between different types of voltages: AC-AC converters including frequency changing converters (cycloconverters), AC-DC converters (controlled and uncontrolled rectifiers), DC-AC converters (inverters), and DC-DC converters (choppers), applications of power electronics in to controlling either power systems or AC and DC machines.​  
Prerequisites: ENEE2303 or ENEE236

ENEE3306 MODERN COMMUNICATION SYSTEMS

The matched filter receiver, probability of error due to noise, intersymbol interference (ISI), Nyquist criterion for distortionless baseband data transmission, baseband M-ary PAM transmission, equalization, digital passband transmission, coherent detection of signals in noise, coherent binary PSK and FSK, coherent quadric-phase shift keying, non-coherent binary FSK, differential PSK, signal-space concept, M-ary modulation techniques, M-ary PSK, M-ary QAM, M-ary FSK, computing the probability of error of some band pass systems. Multiple Access Techniques; Frequency Division Multiple Access, Time Division Multiple Access, Code Division Multiple Access, Hybrid systems. Spread Spectrum Communication Systems.  
Prerequisite: ENEE2307, ENEE3303

ENEE339 COMMUNICATION SYSTEMS

(Computer Systems Engineering Students)  
Concepts of transmission of information via communication channels. Modulation techniques for transmission of continuous-time signals. Analog-to-digital conversion and pulse code modulation. Transmission of digital data. Effects of random signals and noise on communication. Optimum detection systems in the presence of noise. Elementary information theory.  
Prerequisites: ENEE2307, ENEE2302.

ENEE3408 ELECTROMAGNETICS 1

Introduction to vector analysis and coordinate systems, static electric field, electric field intensity vector, the curl and divergence, Coulombs Law, Gauss's law in differential and integral forms, the potential integral, gradient of the potential function, Maxwell's equations in integral and differential form, conductor properties, boundary conditions, solution of Poisson and Laplace equations, the theory of images, steady electric current, conservation of charge and the continuity equation, force and torque on current-carrying circuits, boundary conditions, Poynting theorem, retarded potentials, wave equation, uniform plane wave propagation, the uniform damped and undamped plane waves, the skin effect, reflection of plane waves (conductors and dielectrics), the normal incidence case, transmission lines, telegraph equations, TEM waves along the transmission line, current relations.  
Prerequisites: PHYS132, MATH231

**Level 4**

ENEE4000 PRACTICAL TRAINING

Practical training during summer in a specialized institute for not less than 6 weeks.   
Prerequisite: Third or fourth year standing and department approval

ENEE4101 ELECTRICAL MACHINES AND POWER ELECTRONICS LAB

(For Mechanical Engineering and Mechatronics Engineering Students)      
Selected experiments in the field of DC and AC single-phase and three-phase electrical machines, experiments on single-phase and three-phase transformers, special types of electrical machines motors, experiments on Thyristors, Triacs and their triggering circuits and applications, Power transistors and their applications (Lab 3hrs).  
Prerequisites: ENEE2101, ENEE4301

ENEE4103 COMMUNICATIONS LAB

Experiments on AM and FM modulation demodulation, experiments on sampling and multiplexing, Pulse Code Modulation (PCM), Delta Modulation (DM) and Sigma Modulation, experiments on noise in modulation techniques (digital and analog), digital carrier modulation, selected experiments on microwave, demonstration on transmission lines (Lab 3hrs).   
Prerequisite: (ENEE3306 or concurrent)  or ENEE339

ENEE4104 ENGINEERING SIMULATION LAB

In this lab the student will be equipped with the necessary skills to design and implement integrated engineering projects starting with engineering simulation packages and ending with design of print circuit boards (PCB) (Lab 3hrs).  
Prerequisites: ENEE2408, ENEE3304

ENEE4105 CONTROL AND POWER ELECTRONICS LAB

Selected experiments in the field of control systems, power electronics, speed control for electrical machines using power electronics, different methods for the design of electrical circuits for speed control of motors (voltage method, frequency method, ...etc.), AC-to-DC and DC-to-AC power conversion (Lab 3hrs).  
Prerequisite: ENEE4302, ENEE3305

ENEE4202 ELECTRICAL INSTALLATION AND DRAWING

Introduction to electrical design in building, electrical loads and their types, electrical illuminations, single phase and three phase conductors, alarm systems, safety systems, control and protection systems, earthing systems, introduction to elevator and escalator systems, design and drawing of electrical installation systems using software packages, introduction to mechanical drawing practical experiments on electrical installations in buildings.  
Prerequisite: ENEE2301

ENEE4301 ELECTRIC MACHINES AND POWER ELECTRONICS

(For Mechanical and Mechatronics Engineering Students)  
Theory of electromagnetic conversion from electrical to mechanical and inversely, Transformers theory and Applications. Theory of DC electrical machines, operation and applications. Theory of AC electrical machines synchronous and asynchronous, operation and applications. Power electronic devices; diodes, thyristors, triacs, power transistors and their characteristics, triggering circuits of SCRs and power electronic converters.  
Prerequisite: ENEE2301

ENEE4302 CONTROL SYSTEMS 1

(Not For Computer Systems Engineering Students)  
System modeling with emphasis on controlled electrical systems, differential equation and transfer function models of linear time-invariant systems, response of first- and second-order linear systems, stability, Routh’s stability criterion, performance and stability of feedback control systems, the root locus method, frequency response and Bode plots, Nyquist’s stability criterion, compensation of control systems using root locus and frequency response, control of unstable systems.   
Prerequisites: ENEE2302, ENEE2305

ENEE4304 INSTRUMENTATION AND MEASUREMENT

Elements and applications of measurement systems, instrument types and performance characteristics, errors and noise during measurement process and how to treat them, grounding techniques, types of bridges and their applications, sensors/transducers: basic characteristic and selected practical examples of transducers. Analog vs. digital measurements, analog to digital conversion (ADC) and digital to analog conversion (DAC) techniques and problems, basics of sampling. Various types of indicating instruments, structure and basic components of different measuring instruments, oscilloscopes, electronic measurement, data acquisition systems (DAS) using computers, case study of a selected data acquisition card.  
Prerequisite: ENEE3304, (ENCS238 or concurrent).

ENEE4403 POWER SYSTEMS

The structure of electric power networks, generation, transmission and distribution subsystems, application of basic electromagnetics to transmission line power transfer calculations, relation between current, voltage and power in short, medium and long transmission lines, modeling of electric power networks as single-line systems, the per-unit system for power system quantities, steady-state modeling using circuit analogies, the power flow or load flow equations and their analysis and numerical solution, optimal economic dispatch of electric power networks, symmetrical components, symmetric and non-symmetric fault calculations. Simulation of power systems using computer packages.  
Prerequisite: ENEE2408

**Level 5**

ENEE5101 ADVANCED LAB IN COMMUNICATIONS

Selected experiments in digital modulation schemes such as ASK, PSK, FSK, digital signal processing techniques and computer simulation, selected experiments on antennas in high frequency region such as (gain, band width, radiation pattern, etc), selected experiments on optical communication (Lab 3hrs).  
Prerequisites:  ENEE4103, ENEE5302

ENEE5102 POWER LAB

Selected experiments of training on power systems and power network calculations, analysis, solution of low power factor, reactive power and drop of voltage, study of the stability of the system, controlling of power networks using different approaches. DC and AC motor Drives, Choppers and Inverters, Programmable Logic Controllers (PLC) Application (Lab 3hrs).  
Prerequisites: ENEE4403, (ENEE5303 or concurrent)

ENEE5200 INTRODUCTION TO GRADUATION PROJECT

Introduction to the final graduation project, the main aim is to gather the necessary information and materials about the final project, students present at the end of the semester the ongoing steps to be applied during the following semester.   
Prerequisites: ENEE4000, fifth year standing, registered in student’s penultimate semester

ENEE5300 GRADUATION PROJECT

Final graduation project, students should either design and implement a system related to the electrical engineering field or do research on a particular subject under supervision of an electrical engineering department member.  
Prerequisite: ENEE5200

ENEE5301 ELECTRICAL DRIVE

(Mechatronics Engineering Students)  
Introduction to drive principles, selecting the proper motor for doing a specific job, Special purpose motors, types of motors used in computer controlled processes and their control, power electronic converters, DC and AC motor Drives. Programmable Logic Controllers (PLC), real time control of motors.   
Prerequisites: ENEE4301, (ENCS432 or concurrent)

ENEE5302 ELECTROMAGNETICS 2

Solution of Maxwell's equations in space, wave equation and wave propagation, propagation of electromagnetic waves in free-space, the uniform undamped and damped plane waves, reflection and refraction of electromagnetic waves, metallic waveguides and waveguide devices, elements of antennas and its properties, dipole antenna, antenna array theory, Microwaves, S-parameter, attenuators, Microwave Components, Microwave Measurements. Fiber optics, fiber optic types, single mode fiber optics, multi-mode fiber optics, maximum allowable data rate, capacity of the fiber-optical channel.  
Prerequisite: ENEE3408

ENEE5303 ELECTRICAL MACHINE DRIVES AND SPECIAL MACHINES

Special purpose and single-phase fractional horsepower motors and their applications in light industry, types of motors used in computer controlled processes and their control. Selecting the proper motor for doing a certain job. DC and AC motors control and drives. Power Electronics applications for AC and DC motor drive; soft starting, speed control and Soft Braking. Conventional and advanced control (microcomputer control). Programmable Logic Controllers (PLCs) and their applications.   
Prerequisites: ENEE2408, ENEE3305

ENEE5304 INFORMATION AND CODING THEORY

Information measure, information sources, entropy, source coding, unique optimal codes, the first Shannon's theorem, discrete channels, mutual information, conditional entropy, channel capacity, Shannon’s second theorem, error detection and correction codes, transmission strategies, linear block codes, cyclic codes, convolutional codes, Trellis.  
Prerequisites: ENEE3306 or ENEE339

ENEE5305 WIRELESS COMMUNICATIONS

Mobile Radio Signal Propagation, Path Loss and Channel Models, Large Scale Path Loss, Small Scale Path Loss, Modulation Techniques for Wireless Communication, Multiplexing, Multiple Access Techniques, Channel Equalizers, Cellular Concept and Cellular System Fundamentals, Trunking, Cell Splitting and Sectoring, Multipath Propagation, Diversity and Combining Techniques, Capacity of Cellular Communications, Wireless Generations and Standards, Global System for Mobile Communication (GSM), Code Division Multiple Access (CDMA) System, Multiple-Input Multiple-Output (MIMO) System, Modern Communications Systems  
Prerequisites: ENEE5302

ENEE5306 PROTECTION AND AUTOMATION IN ELECTRICAL POWER SYSTEMS

Transient Stability analysis of power systems, dynamic modeling and the swing equations. The protection system and its elements (current transformers, voltage transformers, circuit breakers, re-closers, fuses, relays), fault analysis (short circuit current calculation, selection of protection components), Relay operating principles, over-current, differential, distance, and pilot protection, digital relays. Protection of generators, motors, transformers, bus-bars and transmission lines. Systems for the automatic regulation of voltage, reactive power and frequency (AVR, ALFC and AFR).   
Prerequisite: ENEE4403

ENEE5307 RENEWABLE ENERGY AND PHOTOVOLTIC POWER SYSTEMS

Energy Fundamentals, review of conventional power systems, overview of renewable energy sources and systems, photovoltaic “PV” fundamentals, detailed study of PV systems, comparison of solar cell technologies, PV system components and design, wind resources, wind  energy systems  and their  basic components, electrical generators  for wind energy systems, site survey and pre-planning, standalone and grid-connected systems, system sizing and economic aspects  
Prerequisite: ENEE2408, ENEE3305

ENEE5308 CONTROL SYSTEMS 2

The concept of state, state-space linear models and their solution in the time and frequency domains, stability analysis with linear state space models in terms of system poles, controllability of linear systems and controllability tests, observability of linear systems and observability tests.  State feedback and state estimation, pole placement method for SISO and MIMO systems, linear systems observers. Optimal control systems. Non linear models and linearization,  Lyapunov's methods for stability analysis of nonlinear systems, transformation of linear state-space models into transfer functions , the concept of system internal representation. Introduction to discrete control.   
Prerequisite: ENEE4302

ENEE5311 SPECIAL TOPIC IN COMMUNICATION ENGINEERING

Study of a particular subject related to Communications depending on students' needs and instructors interests.  
Prerequisite: Fourth year standing and department approval

ENEE5312 SPECIAL TOPIC IN COMPUTER ENGINEERING

Study of a particular subject related to Computers depending on students' needs and instructors interests.  
Prerequisite: Fourth year standing and department approval

ENEE5313 SPECIAL TOPIC IN POWER ENGINEERING

Study of a particular subject related to power systems depending on students needs and instructors interests.  
Prerequisite: Fourth year standing and department approval

**Computer Systems Engineering Courses Description (ENCS):**

ENCS211 Digital Electronics and Computer Org. Lab 1 cr. hr.

Selected experiments on Logic gates, bi-stables, registers, counters, adders, design of combinational and sequential systems, design and implementation of ALUs including floating-point adders and multipliers, memory devices, processing units (3 practical hours).

Prerequisite: (ENCS238 or ENCS336) or concurrent.

ENCS234 Digital Systems 3 cr. hrs.

Number Systems. Boolean Algebra. Logic gates. Design of Combinational Logic. Logic families, interfacing between logic families. Sequential logic: latches, flip-flops, state diagrams and excitation tables. Design of registers, counters, and sequential systems, derivation of state tables and state diagrams. Memory devices. Intro to Programmable Logic Devices, and Hardware Description Languages. Overview on digital Integrated circuits.

Prerequisite: COMP132 or COMP142 or COMP230

ENCS238 Computer Organization 3 cr. hrs.

Basic Computer Organization, computer structure and machine language, processing and input/output units, registers, principal machine instruction types and their formats, character representation, program control, fetch, indirect, execute, and interrupt cycles, timing, input/output operations, register transfer and micro operations, hardware implementation and sequencing of instruction fetch, address construction and instruction execution, data flow and control block diagram of simple processor, Central Processing Unit Organization, bus organization, ALU, stack, addressing modes, instruction formats, instruction types, interrupts, Micro-program Control Organization, concept of microprogramming, control memory, microinstruction formats, Input/Output Organization, peripheral devices, modes of data transfer. Assembly Language and programming.

Prerequisite: ENEE 234

ENCS 311 Assembly Language Lab 1 cr. hr.

Internal representation of data, addressing modes. Arithmetic operations and logic statements. Machine instructions. Assembler directives and macro definitions. Subroutine linkage and data-structures. I/O programming, exception processing and interrupts and traps. Experiments on hardware control through assembly language to provide speedy analysis and decision making in response to on-going system changes (3 practical hours)

Prerequisite: ENCS238 or concurrent.

ENCS 313 Linux Lab 1 cr. hr.

Fundamental concepts about UNIX and Linux. File system, Process Control, System Administration. Editors, shells and debuggers. Shell scripting. Graphics and advanced topics. (3 practical hours)

Prerequisite: COMP132 or COMP142 or COMP230

ENCS 333 Digital Integrated Circuits 3 cr. hrs.

Analysis and design of digital integrated circuits; MOS logic circuit families; logic gate construction, modeling MOS devices - equations and SPICE models, MOS invertors; voltage transfer characteristics; noise margin; propagation delay; MOS logic circuits; static logic; transfer gates; clocked static circuits; dynamic logic; pre-charged logic; domino CMOS; buffer and I/O circuits; high capacitance drivers; semiconductor memories - DRAM, SRAM, ROM. A set of laboratory experiments will provide hands-on experience.

Prerequisite: ENEE 236, ENCS 234.

ENCS 336 Computer Organization and Assembly Language 3 cr. hrs.

(For Computer Science Students)

Basic Computer Organization, computer structure and machine language, processing and input/output units, registers, principal machine instruction types and their formats, character representation, program control, fetch, indirect, execute, and interrupt cycles, timing, input/output operations. Memory hierarchy, Cache memory, Internal memory, External memory. Assembly Language and programming: data representation, arithmetic and logic operations, instructions, interrupt processing.

Prerequisite: ENEE 234

ENCS338 Microprocessor-Based Systems 3 cr. hrs.

Microprocessor systems: microprocessor (MP), memory, input/output, interfacing devices, bus architecture. Bus loads and level conversion, clock frequency and data transfer rate. Interrupts. General Purpose programmable peripheral devices, serial and parallel input/output, study of the following controllers: 8255, 8259, 16550, ADC, DAC. Design of complete microprocessor-based systems.

Prerequisite: ENCS 238

ENCS 339 Operating Systems 3 cr. hrs.

The role of an Operating System in computer operations, memory management and virtual memory, process management, multiprogramming and multiprocessor systems, interrupt processing, input/output management and spooling, information management and security, introduction to distributed and networked operating systems, a comparative study of selected operating systems.

Prerequisite: ENCS 338.

ENCS 401 Practical Training

Practical training in a specialized institution. The training may take place during summer or a regular semester. Please consult with department regulations.

Prerequisite: Finishing a minimum of 110 credit hours.

ENCS 411 Computer Lab 1 cr. hr.

Using computers for process control and operation timing. Serial interfacing terminals. Parallel interfacing. Peripheral devices. Applications of microprocessors. Advanced experiments in HDL. (3 practical hours)

Prerequisite: ENCS211, ENCS338

ENCS412 Interfacing Lab 1 cr. hr.

Concepts and techniques for microcontroller-based systems to gather data and control peripheral devices, DAC, ADC, stepper motors, LCD, GPIP, PSOC and PIC. Experiments on different DAS systems and sensor interfacing. (3 practical hours)

Prerequisite: ENCS438

ENCS 413 Computer Network Lab 1 cr. hr.

Experiments on administration, security, integration, UNIX and other operating systems like windows, UNIX system administration, Network administration, switching, advanced IP routing, securing the network. (3 practical hours).

Prerequisite: ENCS 433 or ENCS 436

ENCS 431 Digital Signal Processing (DSP) 3 cr. hrs.

Modeling of discrete systems in time domain and frequency domain, discrete convolution, DFT and FFT algorithms, design and implementation of FIR and IIR digital filters, Structures and implementation of digital filters.

Prerequisite: ENEE3202

ENCS 432 Computer Organization and Microprocessor Interface 3 cr. hrs.

(For Mechanical Engineering Students)

Basic Concepts of Microprocessor programming and interfacing with analog devices. Contains digital control using microprocessors and microcontrollers. Computer components and functions, including bus transfer, memory, Input/output devices, serial communications, machine language and assembly language.

Prerequisite: ENCS 234

ENCS433 Communications and Computer Networks 3 cr. hrs.

(For Computer Science Students)

Introduction to data transmission and signal encoding techniques. Data link control and multiplexing. Circuit switching, packet switching, and routing in switched networks. LAN overview and high speed LANs. Introduction to wireless LANs.

Prerequisite: ENCS 234

ENCS 434 Artificial Intelligence 3 cr. hrs.

A study of what is required to produce intelligent, human-like behavior in a computer system. Fundamental issues in intelligent systems. Search and optimization methods. Knowledge representation and reasoning. Learning. Agents. Multi-agent systems. Game theory and auctions.

Prerequisite: (COMP142 or COMP230), COMP 233

ENCS 436 Computer Networks 3 cr. hrs.

Data communication networks and open system standards, layered network architecture, local area networks (LANs), high-speed and Bridge LANs, wide area networks (WANs), internetworking, transport protocols, error detection and correction, ARQ strategies, framing, identification and addressing, M/M/1 queuing system, multiple access communication, routing and flow control.

Prerequisite: ENEE 434 or ENEE 339

ENCS 437 Computer Architecture 3 cr. hrs.

Traditional computer architectures, architecture of micro-programmed computer, pipeline systems, array systems, multi-processor systems, multi-computer systems, technology impact on computer system architecture, modular computers, adaptable architectures, parallel network processors associative processors, dedicated architectures, mixed architectures, mixed architectures, distributed processing, client-server systems, case studies.

Prerequisites: ENCS 238 or ENCS 336

ENCS438 Interfacing Techniques 3 cr. hrs.

Sensor types and characteristics. Examples on Temperature, displacement, pressure, strain, force, torque, etc. measurement will be studied. Analog signal conditioning circuit design and filtering. Advanced topics in Analog to Digital conversion and Digital to Analog converters and selection criteria. Speed versus hardware cost tradeoffs. Data Acquisition Systems (DAS), comparison and selection of DAS. Data acquisition and processing using serial, parallel, and USB ports. Microcontroller types and application

Prerequisite: ENEE 236, ENCS 338

ENCS510 Microcomputer Control Lab 1 cr. hr.

(For Mechanical Engineering Students)

Digital circuits, computer interfacing control and sensing circuits, electromechanical devices control using programmable microcontrollers, low level programming of microcontrollers, data acquisition systems (3 practical hours).

Prerequisite: ENCS 432

ENCS 514 Real-Time System Lab 1 cr. hr.

Design and implementation of embedded microprocessor based systems and real-time applications. Experiments on the concepts of timing, concurrency, inter-process communication, and input/output. (3 practical hours)

Prerequisite: ENCS 531

ENCS 515 Advanced Computer Systems Engineering Lab 1 cr. hr.

Selected experiments on smart systems and robotics, experiments on small devices using the new web technologies and its application in developing innovative solutions in computer systems engineering field (3 practical hours).

Prerequisite: ENCS 514

ENCS520 Introduction to Graduation Project 2 cr. hr.

Data, information and material collection and analysis in area of study under the supervision of a faculty member, student presentations of findings and procedures and actions to be applied to complete the project in the following semester.

Prerequisite: Fourth year standing

ENCS 521 Computer Engineering Ethics 2 cr. hr.

Introduction to Professionalism, Ethical Dilemmas, Choices, and Codes of Ethics. Moral Frameworks for Engineering Professionalism. Safety and Risk Engineer Responsibilities and Rights. Copyright and Licensing Issues, Censorship and the Internet, Information Privacy Issues. Cautious Optimism and Moral Leadership.

Prerequisite: Fourth year standing

ENCS530 Graduation Project 3 cr. hrs.

Final graduation project. Students should either design or implement a system related to the computer system engineering field or do research on a particular subject under supervision of a faculty staff members.

Prerequisite: ENCS 401, ENCS 520

ENCS 531 Real-Time applications and Embedded Systems 3 cr. hrs.

Variety of issues regarding the real-time application of embedded microprocessor systems, problems of real-time computer applications in process control or similar areas, digital processing, the physics of sensors and transducers, signal representation, and system design and software development, applications on automotive control, biomedical instrumentation, communication systems, speech processing, data compression and audio processing.

Prerequisite: ENCS 313, ENCS 339, ENCS 438

ENCS 532 Data and Network Security 3 cr. hrs.

Theory and practice of computer security. Security aspects of the web and Internet. Cryptographic tools used to provide security, symmetric encryption, public key encryptions, hashes and message digests, key exchange, and digital signature. It then covers the usage of these cryptographic tools in Internet protocols and applications such as Transport Layer security (TLS).

Prerequisite: ENCS 436

ENCS533 Advanced Digital Systems Design 3 cr. hrs.

Advanced features of a Hardware Description Language (HDL). CAD tools; logic synthesis and optimization, timing simulation, design flow, and examples from HDL code. Digital systems design; building block circuits, case studies from the building blocks of ALU and control unit. Asynchronous sequential circuits, race conditions and hazards. Testing logic circuits.

ENCS5311 Distributed Systems and Algorithms 3 cr. hrs.

Fundamentals of distributed systems and algorithms. Problems, methodologies and paradigms for understanding and designing distributed applications. Distributed systems and algorithms. Fault tolerance application design. Practical applications from modern distributed systems.

Prerequisite: COMP 2321, ENCS 339

ENCS5312 System Programming 3 cr. hrs.

Design and implementation of various system software components including assembler, macro processor, compiler, loader, client-server applications, debuggers, mail servers, browsers. Analysis of modern software engineering practice for multi-person projects; methods for requirements specification, design, implementation, verification, and maintenance of large software systems.

Prerequisite: ENCS 313, ENCS 339

ENCS5313 VLSI 3 cr. hrs.

Introduction to CMOS and MOSFETs, their characteristics and use in analog and digital circuit design, static and dynamic circuits, CMOS VLSI design methodology, full-custom design, circuit and system levels, extensive use of Mentor Graphics CAD tools for IC design, simulation and IC verification, specific techniques for designing high-speed, low-power, and easily testable circuits, introduction to fault modeling, fault testing, fault locating, and testability.

Prerequisite: ENCS 333

ENCS5314 Wireless Networks 3 cr. hrs.

Wireless Communications, Radio Propagation, and Spread spectrum technology, Media Access. Infrastructure Wireless network: Cellular network, wireless LANs/WANs. Mobile I P. Wireless Internet. Infrastructure less network: mobile ad hoc network, wireless sensor network, blue tooth and IR.

Prerequisite: ENCS 436

ENCS5315 Fuzzy Logic and Neural Networks 3 cr. hrs.

Neuron Model, Learning Function Approximation, Error Correction Algorithms (LMS), Hebbian learning, Perception.  Pattern classification and its Implementation, regression, approximation, time series models. Feed-forward multi-layer Perception. Nonlinear optimization. Back-propagation training. Clustering. Bayesian Network. Fuzzy set theory. Fuzzy Reasoning. Fuzzy Inferencing. Fuzzy Logic Control.

Prerequisite: ENCS 434, ENEE 332

ENCS5316 Parallel Computing 3 cr. hrs.

The course is centered on three concepts: Architectures, Algorithms and Programming. Parallel architectures: parallel computers taxonomy, examples of parallel computers, fundamental communication operations, and performance metrics. Parallel algorithms: design and analysis of parallel algorithms with emphasis on sorting, matrix problems, and graph problems. Parallel programming: types of parallelism, parallel programming paradigms, message passing programming, data parallel programming, and shared-address space programming in threads.

Prerequisite: ENCS 437

ENCS5317 Multimedia Systems 3 cr. hrs.

Creating multimedia information systems. Design and effectiveness of multimedia information applications. Programming techniques for integrating video, sound, animation, and graphics, and design strategies for multimedia information systems. Compression and decompression. Multimedia servers and file systems. Networked and distributed multimedia systems.

Prerequisite: ENCS 436

ENCS5318 Robotics 3 cr. hrs.

Defining Robots. Current issues in robotics and embedded intelligent systems. How to combined sensing, action and planning in an uncertain and changing world. Mapping, localization and path planning. Survey the kinds of mechanical and electronic systems that constitute a robot today. Emphasis on algorithms, inference mechanisms and behavior strategies.

Prerequisite: ENCS 338 or ENCS 432

ENCS539 Special Topic in Computer Engineering 3 cr. hrs.

Study of a particular subject related to computer systems engineering depending on students' needs and instructors' interests.

Prerequisite: Fourth year standing and department approval

## Department of Civil Engineering

The Department of Civil Engineering offers an academic program leading to Bachelor degree in Civil Engineering. Student can choose one of the following specializations: Structures, Water and the Environment, and Transportation and Highway. Student can also graduate without a specific specialization in the civil engineering.

**Major Civil Engineering**

**Program Admission Requirements**

1. Student must successfully complete and obtain a cumulative average of 70% in the following courses:

MATH1411, MATH1321, PHYS141, PHYS132, ENME121

1. Department approval based on its capacity.

**Program Requirements**

Student must successfully complete **160** **credit** hours of courses distributed as follows:

|  |  |
| --- | --- |
| **Type of the Courses** | **Credit Hours** |
| University Courses | 21 |
| Engineering & Technology Courses | 30 |
| Core Courses | 104 |
| Elective Courses | 5 |
| **Total** | **160** |

**Core Courses (104 credit hours):**

1. Compulsory courses: 89 credit hours covering these courses:

|  |  |  |
| --- | --- | --- |
| **Course #** | **Course Name** | **Prerequisite** |
| MATH234 | Introduction to Linear Algebra | MATH1321 |
| MATH330 | Numerical Analysis | MATH234, COMP230 |
| MATH331 | Ordinary Differential equations | MATH1321 |
| ENME232 | Dynamics | ENCE232 |
| ENME312 | Fluid Mechanics Lab. | ENME335 |
| ENME335 | Fluid Mechanics 1 | ENME232 |
| ENEE2301 | Network Analysis 1 | PHYS132 |
| ENEE2307 | Probability and Eng. Statistics | MATH1321 |
| ENAR339 | Building Construction | ENCE234 |
| ENCE215 | Construction Materials Lab. | ENCE234 or concurrent |
| ENCE234 | Construction Materials | None |
| ENCE231 | Engineering Geology | CHEM143 |
| ENCE233 | Mechanics of Materials | ENCE232 |
| ENCE311 | Soil Mechanics Lab. | ENCE331 or concurrent |
| ENCE318 | Structural Mechanics Lab | ENCE3331 or concurrent |
| ENCE338 | Civil Engineering Drawing | ENAR339 |
| ENCE337 | Surveying for Civil Engineering | ENME121 |
| ENCE331 | Soil Mechanics | ENCE231, ENCE233 |
| ENCE316 | Surveying lab for Civil Engineering | ENCE337 or concurrent |
| ENCE3331 | Structural Analysis I | ENCE233 |
| ENCE3341 | Structural Analysis II | ENCE3331 |
| ENCE335 | Concrete Design I | ENCE3331 |
| ENCE401 | Practical Training | 90 credit hours and above, Dept. approval |
| ENCE411 | Civil Engineering Seminar | 4th year level |
| ENCE419 | Sanitary & Environmental Lab. | ENCE439 or concurrent |
| ENCE421 | Contracts, Specifications and Quantity Surveying | ENCE335, ENAR339 |
| ENCE431 | Transportation Engineering | ENCE337 |
| ENCE432 | Foundation Engineering | ENCE331, ENCE335 or concurrent |
| ENCE4331 | Construction Management 1 | ENEE2307, ENCE421 |
| ENCE435 | Hydrology & Hydraulics | ENME335 or concurrent |
| ENCE436 | Concrete Design II | ENCE3341, ENCE335 |
| ENCE437 | Steel Structure I | ENCE3331, MATH331 or concurrent |
| ENCE438 | Highway Engineering | ENCE431 |
| ENCE439 | Water Supply & Sanitation | ENME335 |
| ENCE520 | Introduction to Graduation project | ENCE401, 115 credit hours |
| ENCE530 | Graduation Project | ENCE520 |

1. Elective Courses: (15 Credit Hours )
2. Student shall choose one of the following groups based on his specializations. Student with no specialization, he/she can choose any three courses from the list below (9 Credit Hours):

|  |  |  |  |
| --- | --- | --- | --- |
| **Credit Hours** | **No. of Course** | **Name of Course** | **Prerequisite** |
| 1st Group:  Structures | ENCE5365 | Structural Analysis III | ENCE3341 |
| ENCE5361 | Reinforce Concrete Design III | ENCE335 |
| ENCE5362 | Steel Structure II | ENCE437 |
| 2nd Group:  Water and the Environment | ENCE5370 | Groundwater Engineering | ENCE435 |
| ENCE5371 | Wastewater Engineering | ENCE439 |
| ENCE5372 | Water Resources Planning & Management | ENME335 |
| 3rd Group:  Transportation and Highway | ENCE5350 | Traffic Engineering | ENCE431, ENEE2307 |
| ENCE5351 | Pavement Design | ENCE438 or concurrent |
| ENCE5352 | Transportation Planning | ENCE431, ENEE2307 |

1. Student shall choose two course courses from the list below (6 Credit Hours):

|  |  |  |
| --- | --- | --- |
| **No. of Course** | **Name of Course** | **Prerequisite** |
| ENCE5315 | Maintenance Restoration of Buildings | ENCE436 |
| ENCE5316 | Construction Management II | ENCE4331 or ENCE532 |
| ENCE5353 | Urban Transportation Design | ENCE431 |
| ENCE5354 | Pavement Maintenance & Management | ENCE438 or concurrent |
| ENCE5363 | Prestressed Concrete | ENCE436 |
| ENCE5364 | Earthquake Engineering | ENCE436 |
| ENCE5373 | Water Treatment | ENCE439 |
| ENCE5374 | Solid Waste | 100 credit hours & Dept. approval |
| ENCE538(x) | Special Topics in Civil Eng. | Department approval |

**Civil Engineering Courses Description (ENCE)**

**ENCE215 CONSTUCTION MATERIALS LABORATORY**

Aggregate tests, sieve analysis, cement tests, mortar tests, tests for tiles, wood, and steel, asphalt tests, asphalt and concrete mix design, non-destructive tests, tests on beam models for shear and flexure, hardness measurement for metals. (3 practical hours)

Prerequisite: ENCE234 or concurrent

**ENCE223 | MECHANICS 1**

(for architectural engineering students)

Stress and strain of axially loaded members, stresses in flexure and torsion, shear stress, deflection of simple beams, buckling of columns.

Prerequisite: ENCE232

**ENCE231 | ENGINEERING GEOLOGY**

Geology and civil engineering, history of earth and its internal structure, minerals versus rocks, composition and structure of minerals, physical features of earth, composition and structure of rocks, weathering and soils, geological maps and their engineering applications, groundwater, earthquakes, plate tectonics.

Prerequisite: CHEM143

**ENCE232 | STATICS**

Vectors, equilibrium of static particles and rigid bodies, equivalent force systems, center of gravity and moment of inertia, equilibrium of structural systems, forces in beams and frames, force and moment diagrams, friction.

Prerequisite: PHYS141

**ENCE233 | MECHANICS OF MATERIALS**

Stress and strain resulting from axial force, stress and strain relationship, stress and strain resulting from torsion, shear and flexure, compound stresses, Mohr’s circle, column stability.

Prerequisite: ENCE232

**ENCE234 CONSTRUCTION MATERIALS**

Materials which are used in buildings (spacifications and tests): building stones, aggregates, cement, blocks, steel, ceramic, wood, cementing materials, asphalt, insulation materials, asphalt, and plastic materials, rehabilitation materials, concrete and its properties, mix design for concrete and asphalt, durability, non-destructive tests, pavement processes, field tests and quality control.

Prerequisite: None

**ENCE311 | SOIL MECHANICS LAB**

Laboratory tests and report preparation, determination of water content, sieve analysis, hydrometer analysis, specific gravity, liquid limit test, plastic limit test, shrinkage limit test, determination of field unit weight, standard Proctor compaction test, modified Proctor compaction test, constant head permeability test, falling head permeability test, consolidation test, direct shear test, unconfined compression test, tri-axial tests, California bearing ratio (CBR), modified free swell index.

Prerequisite: ENCE331 or concurrent

**ENCE316 SURVEYING LAB FOR CIVIL ENGINEERING**

Practical applications in chain surveying, closed-circuit leveling, angle and distance measurements, tachometric surveying, topographical surveying, traverse surveying, route surveying, global positioning system (GPS). (3 practical hours).

Prerequisite: ENCE337 or concurrent

**ENCE317 SURVEYING LAB FOR ARCHITECTURAL ENGINEERING**

Practical applications in chain surveying, closed-circuit leveling, distance and angle measurements, tachometric surveying, topographical surveying, traverse surveying. (3 practical hours)

Prerequisite: ENCE327 or concurrent

**ENCE318 STRUCTURAL MECHANICS LAB**

Experiments on theories related to material and structural behavior due to axial loading, bending, and torsion using physical and numerical models, experiments on behavior of structural elements under different types of load with emphasis on basic principles of engineering mechanics in the elastic and plastic range.

Prerequisite: ENCE3331 or concurrent

**ENCE323 | MECHANICS 2**

(for architectural engineering students)

Structural behaviour under loads, simple and continuous beams, arches, cables, and trusses; internal forces in beams, trusses, and simple frames, introduction to determinate and indeterminate structures, selecting the suitable structural system, introduction to three-dimensional structural systems.

Prerequisite: ENCE223

**ENCE327 SURVEYING FOR ARCHITECTURAL ENGINEERING**

Principles of chain surveying and its applications, theory of errors and adjustments, principles of differential leveling and its applications, angle and distance measurement instruments, tacheometry surveying, topographical surveying, horizontal coordinate geometry, traverse surveying and its applications, areas and volumes, introduction to global positioning system (GPS).

Prerequisite: ENME121

**ENCE331 | SOIL MECHANICS**

Soil formation, weight-volume relationships, plasticity and structure of soil, classification of soil, flow of water in soil (permeability and seepage), capillary action, effective stress concepts, stresses in soil, compressibility of soil, shear strength of soil, soil compaction, slope stability, subsoil exploration.

Prerequisites: ENCE231, ENCE233

**ENCE3331 | STRUCTURAL ANALYSIS 1**

Analysis of statically determinate structures: beams, trusses, frames, cables, and arches, deflection of statically determinate structures, moment-area methods, conjugate beam, virtual and real work, principles of analysis of indeterminate structures using approximate methods, introduction to the exact analysis of indeterminate structures using the force method, influence lines and their use in structural analysis.

Prerequisite: ENCE233

**ENCE3341 STRUCTURAL ANALYSIS II**

Analysis of statically indeterminate systems using force and displacement methods, flexibility and stiffness coefficients, slope-deflection equations, moment distribution method, introduction to structural analysis using the matrix method, direct stiffness method for analysis of trusses, beams, and frames, numerical applications using digital computers.

Prerequisite: ENCE3331

**ENCE335 | REINFORCED CONCRETE DESIGN 1**

Characteristics of concrete constituents and steel reinforcement, properties of reinforced concrete, design codes, stresses and strains in beams under bending, design of beams for flexure and shear, steel reinforcement limits, design of continuous beams and one-way slabs, deflection, development of reinforcement.

Prerequisite: ENCE3331

**ENCE336 | CONCRETE TECHNOLOGY AND REINFORCED CONCRETE DESIGN**

(For architectural engineering students)

Basic properties of concrete constituents, workability and fresh concrete admixtures, transport, cast, and curing of concrete, compression strength test, principles of reinforced concrete design: rectangular sections under flexure and shear, introduction to one- and two-way slabs, details of reinforcement in beams and slabs, short columns under concentric loads.

Prerequisite: ENCE323

**ENCE337 SURVEYING FOR CIVIL ENGINEERING**

Theory of errors and adjustments, principle of differential leveling and its applications, angle and distance measurement instruments, tacheometry surveying, topographical surveying, horizontal coordinate geometry, traverse surveying and its applications, topographical mapping, areas and volumes, mass haul diagram, route surveying. Introduction in geodetic surveying, photogrammetric surveying, global positioning system (GPS).

Prerequisite: ENME121

**ENCE338 CIVIL ENGINEERING DRAWING**

Drawing and communicating technical information, drafting techniques and standardization, types of drawing sets, working drawings, essentials of drafting and detailing, drawing sheet layout and content, symbols, keys, legends, and abbreviations, lettering and dimensioning, details and construction drawings for structural elements, standard detailing for reinforced concrete elements and joints, working drawings for steel members and bolted and welded connections, drawings for ground works and road construction. (Lecture 2 hrs, drawing lab 3 hrs).

Prerequisite: ENAR339

**ENCE401 | PRACTICAL TRAINING**

Practical training in an approved engineering consulting or contracting office for a minimum period of six weeks, a typed report which includes description of the nature of training activities carried out by the student must be submitted towards the end of training.

Prerequisite: Min. 90 hrs.

**ENCE411 | SEMINAR IN CIVIL ENGINEERING**

Scientific research methods, academic ethics, technical writing, presentation techniques and skills, study of selected topic in civil engineering.

Prerequisite: Forth year standing

**ENCE419 | SANITARY AND ENVIRONMENTAL ENGINEERING LAB**

Water and wastewater characteristics, turbidity, PH, color odor, suspended solids, nitrogen, phosphate, dissolved oxygen, biochemical oxygen demand, chemical oxygen demand, bacteria fecal coli form, total coli form.

Prerequisite: ENCE439 or concurrent

**ENCE 421 CONTRACTS, SPECIFICATIONS AND QUANTITY SURVEYING**

Contracting process, elements of contracts, types of construction contracts, FIDIC conditions of contracts, tendering and methods of contract awarding, bid preparation and bid evaluation, types of specifications, standard and special specifications, performing quantity takeoffs for civil works, understanding plans and specifications, standard forms.

Prerequisites: ENCE335, ENAR339

**ENCE431 | TRANSPORTATION ENGINEERING**

Importance and needs of transportation, transportation modes: highways, railroads, airports, and seaports, the effects of transportation on social, economic and environmental aspects of communities, introduction to traffic engineering and urban public transport.

Prerequisites: ENCE337

**ENCE432 | FOUNDATION ENGINEERING**

Types of foundations, bearing capacity of shallow foundations, stress distribution, site improvement for foundation, isolated footings, combined footings, mat foundation, settlement of foundation, lateral earth pressure, introduction to deep foundation, project.

Prerequisites: ENCE335 or concurrent, ENCE331

**ENCE4331 CONSTRUCTION MANAGEMENT**

Introduction to construction management, project definition, components, objectives, introduction to engineering economy, operational research and construction, linear programming and its applications, cost and time estimations, project planning, scheduling, linear and repetitive projects, resource management, project monitoring and control, project scheduling using PERT, cost and time trade-off, computer applications in project planning and control.

Prerequisites: ENCE421, ENEE2307

**ENCE435 | HYDROLOGY AND HYDRAULICS**

Hydrological cycle, precipitation, infiltration, evaporation, evapo-transpiration, surface water, rainfall-runoff relationships, flood hydrology, hydrograph analysis, reservoir and river flood routing, probability distributions applicable to hydrologic events, analysis of extremes, floods and droughts, uniform flow in open channels, non uniform flow in open channels, characteristic and shapes of water curves in non uniform flow, design of open channels, flow through simple and compound pipes.

Prerequisite: ENME335 or concurrent

**ENCE436 | REINFORCED CONCRETE DESIGN 2**

Short columns supporting axial loads and uniaxial and biaxial bending, long columns, two-way slabs on beams and flat slabs (DDM and EFM analysis approaches), torsion in beams, design project.

Prerequisites: ENCE3341, ENCE335

**ENCE437 | STRUCTURAL STEEL 1**

Properties of structural steel, design philosophies, bolted and welded connections, tension members, compression members, rolled beams, design project.

Prerequisites: MATH331 or concurrent, ENCE3331

**ENCE438 | HIGHWAY ENGINEERING**

Basic principles of roadway design, route location, economy visibility studies of recommended design alternatives, geometric design involving vertical and horizontal alignment, roadway drainage design, design of flexible and rigid pavements, asphalt concrete mix design.

Prerequisite: ENCE431

**ENCE439 | WATER SUPPLY AND SANITATION**

Water and wastewater quantities, hydraulic design of wastewater and rainwater collection, water distribution systems, pumps and pumping stations, chemical and biological characteristics of water and wastewater, introduction to wastewater treatment.

Prerequisite: ENME335

**ENCE520 | INTRODUCTION TO GRADUATION PROJECT**

Preparatory studies of literature and data collection for graduation project in a particular area of concentration and under the supervision of one or more faculty members.

Prerequisites: ENCE401, Min. 115 hrs.

**ENCE530 | GRADUATION PROJECT**

Continuation of the graduation project started in ENCE 520 course under supervision of one or more faculty members.

Prerequisite: ENCE520

**ENCE532 | CONSTRUCTION MANAGEMENT**

(for architectural engineering students)

Importance of planning and management in project construction, definition of activities and calculation of execution time periods, relationship between cost and logical time of project execution, linear and grid planning, reserve time periods, Critical Path Method, quantity survey, financial and feasibility issues.

Prerequisite: ENAR442

**ENCE5315 | MAINTENANCE AND REHABILITATION OF BUILDINGS**

Causes of structural deterioration, structural assessment, appropriate repair and reconstruction techniques, structural implications of extensions to existing buildings e.g. increase of plan area or number of stories and related problems.

Prerequisites: ENCE436

**ENCE5316 | CONSTRUCTION MANAGEMENT 2**

Analytical methods of management science, principles of management control, human resources management and analysis, construction law (contracts procedure and tender), quantity surveying techniques, feasibility analysis methods, evaluation of existing projects.

Prerequisites: ENCE532 or ENCE4331

**ENCE5350 | TRAFFIC ENGINEERING**

Elements of traffic engineering, principles of speed, traffic volume, accident studies, parking studies, capacity studies, traffic signs, marking, and intersection signal timing design.

Prerequisites: ENCE431, ENEE2307

**ENCE5351 | PAVEMENT DESIGN**

Analysis of pavement loads, stresses, and deflections using the elastic theory approach for a multi-layer pavement system, design of flexible and rigid pavements for roads and airports, properties and specifications of pavement materials, and introduction to pavement maintenance and rehabilitation.

Prerequisite: ENCE438 or concurrent

**ENCE5352 | TRANSPORTATION PLANNING**

Factors affecting transportation planning techniques, social and environmental factors in transportation demand, influences of existing and future transportation modes, transportation demand, statistical analysis and prediction models for trip generation, distribution, modal split and traffic assignment, methods for regional and local transportation planning.

Prerequisites: ENCE431, ENEE2307

**ENCE5353 | URBAN TRANSPORTATION DESIGN**

Types and development of urban public transport, public transport features, design performance criteria for modes of various urban settings, management of public transport networks and selection of service efficiency criteria.

Prerequisite: ENCE431

**ENCE5354 | PAVEMENT MANAGEMENT AND MAINTENANCE**

Pavement testing and evaluation, maintenance, treatments and rehabilitation strategies, performance trends and prediction models, life-cycle cost analysis, priority maintenance schedules based on defined decision policy, design of a Pavement Management System (PMS).

Prerequisite: ENCE438

**ENCE5365 STRUCTURAL ANALYSIS III**

Principles of matrix and finite element methods in static analysis, formulation using direct equilibrium equations, formulation using variational principles, mathematical models of trusses, beams, and frames, programming the finite element method for the analysis of trusses, beams, and frames, introduction to structural dynamics.

Prerequisite: ENCE3341

**ENCE5361 | REINFORCED CONCRETE DESIGN 3**

Deep beams, corbels, joints, retaining walls design, water-retaining tanks design, yield line theory and applications to two-way slabs, introduction to shell structures.

Prerequisite: ENCE335

**ENCE5362 | STRUCTURAL STEEL 2**

Behaviour and design of bolted and welded moment resistant connections, design of plate girders and composite steel-concrete beams.

Prerequisite: ENCE437

**ENCE5363 | PRESTRESSED CONCRETE**

Introduction to prestressed concrete, production technology, prestressing techniques, material properties, prestress losses, analysis and design of simple and continuous beams and slabs under flexure and shear.

Prerequisite: ENCE436

**ENCE5364 | EARTHQUAKE ENGINEERING**

Basic structural dynamics, earthquake ground motion, response spectra, equivalent lateral statics force methods, architectural considerations, confinement of concrete, ductility, seismic design of reinforced concrete and steel structures (frames, shear walls, columns).

Prerequisite: ENCE436

**ENCE5370 | GROUND WATER ENGINEERING**

Characteristics of groundwater aquifers, groundwater flow in aquifers, groundwater flow to wells, pumping tests, hydrochemistry, introduction to groundwater modelling, groundwater pollution, groundwater resources management, investigations of groundwater, artificial recharge of groundwater, well design, intrinsic vulnerability, hazard and risk mapping for Karst aquifers.

Prerequisite: ENCE435

**ENCE5371 | WASTEWATER ENGINEERING**

Methods of wastewater treatment, sludge treatment, introduction to industrial wastewater treatment, low cost wastewater treatment and wastewater reuse in agriculture and artificial recharge.

Prerequisite: ENCE439

**ENCE5372 | WATER RESOURCES PLANNING AND MANAGEMENT**

Concepts of Integrated Water Resource Management, assessment of surface and groundwater resources, assessment of domestic, agricultural and industrial demands, balancing water supply and demand, water demand management, optimization methods in water resources management, multi-criteria decisions in water management, management of shared water resources, effects of climate change on water, health and gender, adaptation of climate change, draught management.

Prerequisite: ENME335

**ENCE5373 | WATER TREATMENT**

Composition of ground and surface water and comparison with drinking water standards, chemical and biological water treatment processes including removal of iron, manganese, ammonia, fluoride, bacteria, etc. Development of treatment scheme and design of treatment processes depending on raw water quality and water standards.

Prerequisite: ENCE439

**ENCE5374 | SOLID WASTE**

Sources of solid waste, composition and characteristics of solid waste, collection, storage, transport and treatment of solid waste; principles of burying solid waste, design, operation and management of landfills, treatment of leachate, methods for protection from solid waste pollution, benefits from gases released from solid waste, solid waste reuse.

Prerequisites: Min. 100 hrs., Dept. approval

**ENCE538x | SPECIAL TOPIC IN CIVIL ENGINEERING**

Topic selection is based on academic program requirements and faculty members’ specialization; **such as:**

**ENCE5381| Building Information Modelling (BIM)**

Basic knowledge and skills in Geographic Information System (GIS), cartography, presentation of spatial data, spatial database creation and development, joining\relating spatial and non-spatial data, spatial queries, converting of hard copies maps to digital, digitizing of spatial data, coordinate systems and conversions, spatial data analysis (vector and raster), spatial models development, location-allocation model, spatial interaction model, spatial data interpolation, network analysis, multi-criteria evaluation (MCE) method, weights derivation using pairwise comparison approach, practical applications in the area of water, planning, transportation, surveying and environment.

Prerequisite: ENCE4331

**ENCE5382| Applied GIS for Civil Engineers**

Introductory knowledge and skills in Geographic Information System, cartography, spatial database development, spatial data analysis, and practical application in the area of water, planning transportation, surveying and environment.

Prerequisite: ENCE316

**ENCE5383| Environmental Impact Analysis**

Background and introduction to the environmental system and EIA processes, the Palestinian environmental assessment policy, terms of references for environmental studies, basic information on impacts, types and characteristics, direct and indirect impacts, constraints and benefits of an EIA, screening and scoping methods, introduction to methods for assessment of socio-economic impacts and other important systems such as ecosystem, water, air and noise environment, essential features of an EIA report, preparing and evaluating an EIS and EIA case studies.

Prerequisites: Min. 100 hrs., Dept. approval

## Department of Architectural Engineering

The Department of Architectural Engineering offers two academic programs leading to Bachelor degree in Architectural Engineering with a concentration in Architectural Design, Urban Planning or General concentration, and Bachelor degree in Spatial Planning Engineering

**Bachelor Degree in Architectural Engineering**

**Program Admission Requirements**

* Student must pass the following courses: PHYS 141, PHYS 131, MATH 141, MATH 132 with a cumulative average no less than 70%
* Passing and obtaining no less than 70% in the both ENAR211 and ENME 121
* Department approval based on intake

**Program Requirements**

Student must successfully complete a minimum of 107 credit hours of courses distributed as follows:

1. Compulsory Courses (93 credit hours) distributed as follows:

1. (13 credit hours) ENCE 223,323, 330, 336, 532

2. (3 credit hours) ENME 430

3. (3 credit hours) ENEE 330

4. Core courses (74 credit hours) ENAR 213, 214, 221, 231, 232, 233, 234, 235, 236, 237, 323, 324, 330, 334, 335, 341, 342, 401, 421, 431, 433, 434, 436, 441, 442, 511, 520, 530

1. Electives Courses (14 credit hours) distributed as follows:

1. Must finish all courses (11 credit hours) in one of the following concentrations, or for the general track, students can choose from the following list and should include ENAR 543 or ENAR 541:

* Architectural Design: ENAR 412, 539,5391, 541
* Urban Planning: ENAR 413, 535, 536, 543

2. Elective course (3 credit hours) from the following list or from the previous concentration courses: ENAR 531, 532, 533, 534, 537,538

**Academic plan for Bachelor degree in Architectural Engineering**

Academic plan consisted of (164 credit hours) distributed as follows :

|  |  |
| --- | --- |
| **Requirement type** | **Credit hours** |
| **University requirements** | **21** |
| **Engineering faculty** | **30** |
| **Program requirements** | **107** |
| **Elective courses** | **6** |
| **SUM** | **164** |

**Program Requirements**

(107 Credit Hours)

1. Compulsory Courses (93 credit hours) distributed as follows:

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Name** | **Prerequisite** |
| ENCE223 | Mechanics I | ENCE232 |
| ENCE323 | Mechanics II | ENCE223 |
| ENCE 330 | Surveying I | ENME121 |
| ENCE336 | Concrete | ENCE323 |
| ENCE532 | Management | ENAR442 |
| ENME430 | Sanitary | ENAR335 |
| ENEE330 | Lighting and Acoustics | ENAR237 or concurrent |
| ENAR213 | Visual communication II | ENAR211 |
| ENAR214 | Visual communication III | ENAR213 |
| ENAR221 | Descriptive Geometry | ENME121 |
| ENAR231 | Design I | *Department approval* |
| ENAR232 | Design II | ENAR231 |
| ENAR233 | Architectural presentation and perspective | ENME 121 |
| ENAR 234 | History of architecture I | *Department approval* |
| ENAR 235 | History of architecture II | ENAR 234 |
| ENAR 236 | Building construction I | *Department approval* |
| ENAR 237 | Building construction II | ENAR 236 |
| ENAR 323 | Theories of architecture I | ENAR 235 |
| ENAR 324 | Theories of architecture II | ENAR 323 |
| ENAR 330 | Field School on Local Palestinian Architecture | ENAR 324 |
| ENAR 334 | History of Architectural in Islam | ENAR 235 |
| ENAR 335 | Building construction III | ENAR 237 |
| ENAR 341 | Design III | ENAR 232 |
| ENAR 342 | Design IV | ENAR 341 |
| ENAR 401 | Practical Training | ENAR 442 |
| ENAR 421 | Computer Visualization and Modeling | ENAR 220 |
| ENAR 431 | Environmental Architecture | ENAR 342 |
| ENAR 433 | Principles of Planning I | ENAR 324 |
| ENAR 434 | Principles of Planning II | ENAR 433 |
| ENAR 436 | Landscape Architecture | ENAR 433، ENAR 441 |
| ENAR 441 | Deign V | ENAR 342 |
| ENAR 442 | Design VI | ENAR 441 |
| ENAR 511 | Advanced Skills | Fifth year / second semester |
| ENAR 520 | Introduction to Graduation Project | ENAR 401، ENAR 442  Or fifth year level |
| ENAR 530 | Graduation Project | ENAR 520، ENAR 541 or ُENAR543 |

1. Electives Courses (14 credit hours) distributed as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Credit Hours** | **Course No.** | **Course Name** | **Prerequisite** |
| Student must finish all courses (11 credit hours) in one of the following concentrations, or for the general track, students can choose from the following list and should include ENAR 543 or ENAR 541 | | | |
| Group 1:  Architectural Design | ENAR 412 | Seminar in Architectural Design | ENAR441 |
| ENAR 539 | Interior Design | ENAR442 |
| ENAR 5391 | History of Art | *Department approval* |
| ENAR 541 | Advanced Architectural Design | ENAR442 |
| Group 2:  Urban Design | ENAR 413 | Seminar in Urban Planning | ENAR433 |
| ENAR 535 | Community Architecture | *Department approval* |
| ENAR 536 | Geographic Information Systems-[GIS] | *Department approval* |
| ENAR 543 | Advanced Urban Design | *Department approval* |
| 3 credit Hours from the following courses or the previous mentioned courses | ENAR 531 | Theories of architecture III | ENAR 324 |
| ENAR 532 | Principles of planning III | *Department approval* |
| ENAR 533 | Housing | ENAR 434 |
| ENAR 534 | Building Rehabilitation | ENAR 330 + ENAR431 |
| ENAR 537 | Selected Topic in Architectural Design | *Department approval* |
| ENAR 538 | Selected Topic in Urban Planning | *Department approval* |

**Bachelor Degree in Spatial Planning Engineering**

The Spatial Planning Engineering program at the department of Architectural Engineering and Spatial Planning aims for the preparation of distinguished planning engineers, who combine between the knowledge and skills of planning and the knowledge of other engineering discipline, in order to ensure coherence and integration necessary for the application of the profession; by maintaining its customs and traditions while working to consolidate the values of the new civilization and upgrading it to stay updated with the varieties through the years.

The program also aims for the training of planning engineers adept to initiative, competition, freethinking, responsibility, and interaction with community issues.

**Admission Requirements:**

Students will be admitted competitively for direct specialization according to their Palestinian scientific stream average (TAWJIHI) or its equivalent.

**Graduation Requirements:**

Student must complete the following requirements:

|  |  |
| --- | --- |
| **Course type** | **Credit hours** |
| University Requirements | 21 |
| Faculty of Engineering Requirements | 30 |
| Specialization Compulsory courses | 101 |
| Specialization electives | 6 |
| University Electives | 6 |
| Total | 164 |

1. **Compulsory Courses: (21) credit hours of courses include the following:**

|  |  |  |
| --- | --- | --- |
| **Course ID** | **Course Title** | **Credit hours** |
| ARAB135 | Arabic 1 | 3 |
| ARAB136 | Arabic 2 | 3 |
| ENGC141 | English Communication 1 | 4 |
| ENGC231 | English Communication | 3 |
| CULS331 | Cultural Studies 1 | 3 |
| CULS332 | Cultural Studies 2 | 3 |
| PHED120 | Physical Education | 2 |

1. **Faculty of Engineering Requirements:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course ID** | **Course Title** | **Credit hours** | **Pre-requisite** |
| MATH 141 | Mathematics 1 | 4 | - |
| MATH132 | Mathematics 2 | 3 | MATH141 |
| PHYS 111 | Physics Lab 1 | 1 | - |
| PHYS 112 | Physics Lab 2 | 1 | PHYS111 + PHYS132 |
| PHYS 141 | Physics 1 | 4 | MATH141 |
| PHYS 132 | Physics 2 | 1 | MATH132 + PHYS141 |
| CHEM143 | Chemistry 1 | 4 | - |
| ENCE232 | Statics | 3 | PHYS141 |
| ENME120 | Engineering Workshop | 2 | - |
| ENME121 | Engineering Drawing | 2 | - |
| ENAR211 | Visual Communication 1 | 1 | - |
| ENAR220 | Computer Aided Design | 2 | Department Approval |

1. **Specialization courses: those are divided into Specialization Compulsory courses (101 credit hours) , and Specialization Electives (6 credit hours)**
   1. Specialization Compulsory courses (101 credit hours)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course ID** | **Course Title** | **Credit hours** | **Theoretical hours** | **Practical hours** | **Pre-requisite** |
| ENCE 223 | Mechanics 1 | 2 | 2 |  | ENCE232 |
| ENCE 330 | Survey 1 | 3 | 2 | 3 | ENME121 |
| ENCE 431 | Transportation Engineering | 3 | 3 |  | ENCE 330, ENPL334 |
| ENAR 229 | History of Architecture | 2 | 2 |  | Acceptance to the program |
| ENAR231 | Principles of Architectural Design 1 | 3 | 1 | 6 | Acceptance to the program |
| ENAR243 | Architectural Presentations and Perspective | 3 | 1 | 9 | ENME121, ENAR211 |
| ENAR329 | Theories of Architecture (for Planning Student) | 2 | 2 |  | ENAR229 |
| ENAR330 | Field School on Local Architecture | 3 | 2 | 3 | ENAR329 |
| ENAR339 | Building Construction(For Civil & Planning Engineering Students | 3 | 2 | 3 | Civil engineering students- ENCE22: Planning students: ENAR231 |
| GEOG230 | Human Geography | 3 | 3 |  | - |
| GEOG232 | Cartography | 3 | 3 |  | GEOG230 |
| SOCI333 | Urban Sociology | 3 | 3 |  | ENPL333 |
| ENPL231 | Open Spaces Design | 3 | 1 | 6 | ENAR231 |
| ENPL232 | Landscape Design | 3 | 1 | 6 | ENPL231 |
| ENPL234 | History of Spatial planning and Landscape | 3 | 3 |  | ENAR229 |
| ENPL236 | Horticulture and Ecology | 3 | 3 |  | ENPL231 |
| ENPL331 | Housing Design | 3 | 1 | 6 | ENPL231 |
| ENPL332 | Urban Development and Revitalization | 3 | 1 | 6 | ENPL331 |
| ENPL333 | Principles of Spatial Planning 1 | 3 | 2 | 3 | ENPL234 |
| ENPL334 | Principles of Spatial Planning 2 | 3 | 2 | 3 | ENPL333 |
| ENPL335 | Legislation and Laws of Planning | 3 | 3 |  | ENPL333 |
| ENPL336 | Theories of Spatial Planning and Landscape | 3 | 3 |  | ENPL234 |
| ENPL338 | GIS | 3 | 2 | 3 | GEOG232, ENAR220 |
| ENPL401 | Practical Training | 0 |  |  | ENPL434, 437 |
| ENPL412 | Advanced Skills | 1 |  | 3 | 4th year students |
| ENPL414 | Seminar in Spatial Planning | 1 | 2 |  | ENPL336 |
| ENPL421 | Environmental Planning | 2 | 2 |  | ENPL334 |
| ENPL422 | Planning Statistics | 2 | 2 |  | ENPL333 |
| ENPL425 | Landscape Ecology | 2 | 1 | 3 | ENPL234,236 |
| ENPL433 | Introduction to Infrastructural Planning | 3 | 3 |  | ENPL334 |
| ENPL434 | Road Planning and Development | 3 | 2 | 3 | ENPL421 |
| ENPL437 | Rural Planning and Development | 3 | 1 | 6 | ENPL332,335 |
| ENPL438 | Management of Planning Projects | 3 | 3 |  | ENPL332,334 |
| ENPL520 | Introduction to Graduation Project | 2 |  |  | ENPL401,437, 5th year students |
| ENPL530 | Graduation Project | 3 |  |  | ENPL520 |
| ENPL531 | Advanced Spatial Planning | 3 | 1 | 6 | ENPL437 |
| ENPL537 | Principles of Regional Planning | 3 | 2 | 3 | ENPL336 |
| ENPL539 | Land Administration | 3 | 3 |  | ENPL335 |

* 1. Specialization Electives (6 credit hours)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course ID** | **Course Title** | **Credit hours** | **Theoretical hours** | **Practical hours** | **Pre-requisite** |
| GEOG335 | Introduction to Remote Sensing | 3 | 3 |  | ENPL338,GEOG232 |
| ECON337 | Engineering Economy (for engineering students only) | 3 | 3 |  | ENPL333 |
| ENPL431 | Rehabilitation of Historical Sites | 3 | 2 | 3 | ENAR330, ENPL 332 |
| ENPL432 | Forestry | 3 | 3 |  | Department approval |
| ENPL532 | Planning and Gender | 3 | 3 |  | Department approval |
| ENPL534 | Visual Culture of Space | 3 | 3 |  | Department approval |
| ENPL536 | Principle of Spatial Planning 3 (Spatial Planning in Palestine) | 3 | 2 | 3 | ENPL334 |
| ENPL538 | Special Topics in Spatial Planning | 3 | 3 |  | Department approval |

1. Elective courses: The student to take 6 credit hours from the university courses

**Courses Description**

**Architectural Engineering courses (ENAR)**

**ENAR 211 Visual Communication I 1 cr. hrs.**

Freehand drawing using main presentation mediums and skills (including pencil, charcoal, and Chinese ink), applications on different freehand drawing techniques, graphic materials and tools as instruments to develop a visual perception of shapes, masses and void, spaces, still life composition, landscape and architectural elements in the surrounding environment, approach to different means of harmony (proportions, rhythm, balance, scale, etc.) through freehand drawing. (Studio 3hrs)

**ENAR 213 Visual Communication II 1 cr. hrs.**

Architectural presentation using different mediums of colors and graphic (color pencils, watercolors, pastel colors, etc.), understanding the surrounding environment through color, developing the students understanding of the theory of color, understanding the architectural environment and its visual elements though color and texture and the development of the skills to analyze and document these element through color. (Studio 3hrs). *Prerequisite: ENAR211*

**ENAR 214 Visual Communication III 1 cr. hrs.**

Introduction to the elements of visual composition (line, color, form, space, area and texture), development of their properties and fundamentals of their applications through creative works, studio exercises developing the visual perception visual definitions and relationships, applications in two-dimensional and three-dimensional expressions. (Studio 3hrs). *Prerequisite: ENAR213*

**ENAR 220 Computer Aided Design 2 cr. hrs.**

Introduction to the principles of computer aided drawing, drawing two-dimensional drawings and three-dimensional compositions using computer aided design software, organizing information for input, output and preview. Applications of CAD programs to comprehensive architectural project (Lab 6hrs). *Prerequisite: Department approval*

**ENAR 221 Descriptive Geometry 2 cr. hrs.**

Points, lines and planes in space and multi-view drawings, true length of lines, true shape of planes, parallelism and perpendicularity, intersection of lines, planes and solids, development. (Lecture 1hr, Studio 3hrs). *Prerequisite: ENME 121*

**ENAR 231 Design I 3 cr. hrs.**

An introduction to the theory and practice of two-dimensional and three-dimensional compositions and their location in space, architectural application of the foundations of design and architectural compositions, interplay of form and space and means of harmony, proportion, and circulation elements, the course requires practical application of the theory mentioned and a perception of the indoor and outdoor spaces and the relationship between them, the principles of their organization, and their relationship to human behavior through the development of a basic architectural projects on a simple topographic sites. (Lecture 1hr, Studio 6hrs). *Prerequisite: Department approval*

**ENAR 232 Designs II 3 cr. hrs.**

Specific factors of architecture, natural and social environment as fundamental factor for architectural design, site analysis, functional relationships, outdoor and indoor spatial requirements, conceptualization and generation of forms and spaces and circulation, design studio aims to create small experimental projects which emphasize influence of different aspects relating to architectural design with a focus on the functional, constructional, and aesthetic aspects (Lecture 1hr, Studio 6hrs). *Prerequisite: ENAR 231*

**ENAR 233 Architectural Presentation and Perspective 3 cr. Hrs.**

Terms, symbols, and architectural diagrams used for architectural presentation, lettering, instrumental drawing in pencil and ink, dimensioning and scaling, rendering architectural projects emphasizing on sites, plans, elevation, sections and adding architectural symbols, understanding perspective, types and applications, different methods of drawing perspectives, shortcuts for drawing perspectives, understanding shade and shadows, application of shades and shadows on architectural elevations, three-dimensional objects and perspectives (Lecture 1hr , Studio 6hrs). *Prerequisite: ENME 121*

**ENAR 234 History of Architecture I 3 cr. hrs.**

A survey and analysis of historical development of architecture and human settlements during the Prehistoric, Egyptian, Mesopotamian, Greek and Roman civilizations within a historic, cultural and technical framework, analysis of issues of art of architecture and building within its human context, architectural style in terms of morphology, construction, and formation. (Lecture 3hr) *Prerequisite: Department approval*

**ENAR 235 History of Architecture II 3 cr. hrs.**

A Survey and analysis of Architecture from early Christian period to end of Renaissance period, interaction between Byzantine and Islamic architecture, analysis of historical, cultural, and technical differences during different ages, comparative analysis of architectural styles till the Neo-classical period. (Lecture 3hr) *Prerequisite: ENAR 234*

**ENAR 236 Building Construction I 3 cr. hrs.**

An introduction to building construction, building materials: their properties, uses and performance in different environments (wood, clay, metals, stone, glass, etc.), the preparation of the building material, and their effect under moisture and underground water, different kinds of walls, floors, and roofing systems, study of stairs and elevators, and a practical introduction to working drawings through drawing building material symbols and using architectural terminology, and drawing details for the various architectural elements being discussed. (Lecture 2hrs , Studio 3hrs). *Prerequisite: Department approval*

**ENAR 237 Building Construction II 3 cr. hrs.**

Introduction to various building construction systems, expansion, contraction and settlement joints, insulation materials (heat, noise, moisture, etc.), internal finishing materials, kitchens and bathrooms, fireplaces, techniques used for protection against environmental forces ( umbrellas, louvers, malkaf, etc.), introduction to precast architecture, focus through the practical application on increasing the understanding of presenting working drawings and details done by producing working drawings for a medium scale building with all of the symbols and architectural details. (Lecture 2hrs, Studio 3hrs). *Prerequisite: ENAR 236*

**ENAR 323 Theories of Architecture I 2 cr. hrs.**

Architectural trends in the world from Industrial Revolution to present, review and analysis of philosophic origins and cultural, social, economic, political and technical factors, works of pioneer architects and their relevance to the region (Lecture 2hrs). *Prerequisite: ENAR 235*

**ENAR 324 Theories of Architecture II 2 cr. hrs.**

Architectural trends in the Arab and Islamic countries in the twentieth century, problem of heritage and modernity in works of Arab architects, The philosophical, cultural, social and technical approaches that have determined the method of handling this problem (Lecture 2hrs). *Prerequisite: ENAR 323*

**ENAR 330 Field School on Local Palestinian Architecture 3 cr. hrs.**

Field work during the summer semester for 45 day aiming for the introduction to the Palestinian architectural heritage and its analysis, the course includes lectures, studio work and field work where the students are distributed to various sites in Palestinian villages and cities, the students work during a specific time frame to survey and document the site and provide alternatives for its development. *Prerequisite: ENAR 324*

**ENAR 334 History of Architectural in Islam 3 cr. hrs.**

Art and Architecture of the Islamic civilization from its beginning to the downfall of Ottoman empire, survey and analysis of major periods and trends in historical, cultural, social and technical context, comparative study concerning houses and schools in the Islamic world, analysis of fundamental elements such as mashrabiat, pedestrian zones, decorative element (Lecture 3hrs). *Prerequisite: ENAR 235*

**ENAR 335 Building Construction III 3 cr. hrs.**

Preparation of complete set of working drawings, large scale projects, working details with a focus on new building technologies including precast concrete and long span roofing systems, full details for architectural, mechanical, sanitary, and electrical work done specifically for projects being submitted for tender. (Lecture 1hr, Studio 6hrs). *Prerequisite: ENAR 237*

**ENAR 341 Design III 4 cr. hrs.**

The Philosophy and methodology of Architectural design, Analysis of major parameters of architectural style, nature and shape and their influence on buildings for residential purposes, Design studio on medium scale projects with complete architectural programs on medium topographic sites, emphasizing certain philosophical approach and following up a clear design methodology that deals with issues like architectural style, image and nature. (Lecture 1hrs, Studio 9hrs). *Prerequisite: ENAR 232*

**ENAR 342 Design IV 4 cr. hrs.**

Principles of buildings design for public commercial, administrative and educational buildings, as well as their relationship to the surrounding urban fabric, The impact of architectural design of these buildings on human behavior in visual and functional approach, Analysis of international architectural projects, Design studio on similar projects with will defined programs and located at the centers or suburbs of the cities on medium topographic sites, Interior design of some major elements within the project. (Lecture 1hr, Studio 9hrs). *Prerequisite: ENAR341*

**ENAR 401 Practical Training 0 cr. hrs.**

Professional training during summer course for a period of six weeks at a specialized engineering institution. *Prerequisite: ENAR 442*

**ENAR 412 Seminar in Architectural Design 1 cr. hr.**

The course consists of lectures that focus on reviewing research papers in the field of architectural design, It aims to train students to use library resources and review and analyze published research papers in the field of architectural design, The students will write a research paper in the field of architectural design, and each student will present and discuss his research paper in class, This research paper will enable the students to prepare and submit a well structured research proposal for the graduation project course. (Discussion once a week). *Prerequisite: ENAR 441*

**ENAR 413 Seminar in Urban Planning 1 cr. hr.**

The course consists of lectures that focus on reviewing research papers in the field of urban planning, It aims to train students to use library resources and review and analyze published research papers in the field of urban planning, The students will write a research paper in the field of urban planning, and each student will present and discuss his research paper in class, This research paper will enable the students to prepare and submit a well structured research proposal for the graduation project course. (Discussion once a week). *Prerequisite: ENAR 433*

**ENAR 421 Computer Visualization and Modeling 2 cr. Hr.**

Introduction to modern computer applications in the field of architectural presentation (such as 3D software), aiming to improve the design sense for better visual appreciation, Three-dimensional applications as means of architectural communication, Introduction to visual reality, Practical applications to produce three dimensional models for architectural project (Studio 6hrs). *Prerequisite: ENAR220.*

**ENAR 431 Environmental Architecture 3 cr. hrs.**

Buildings and outdoor environment, study of climatic and environmental factors and their influence on buildings, traditional architectural treatments such as: building materials and structures, orientation of buildings, courtyards, wind tower, water surfaces and vegetation, modern technical approaches: solar energy, construction materials, and their use in architecture (Lecture 2hrs, Studio 3hrs). *Prerequisite: ENAR 342*

**ENAR 433 Principles of Planning I 3 cr. hrs.**

An introduction to planning principles and planning theories and the institutions involved in the process, introduction to urban planning as a scientific methodology, strategic planning approaches, decision making mechanisms, the methodological levels for the development of urban planning programs in the inhabitance, or transportation, or public spaces or other fields, the introduction to the goals and constraints, learning field surveying and analysis, placing guidelines, providing suggestions and options and learning to choosing the best of the options, learning the various planning policies and strategies through working with cases either individually or in a team. (Lecture 2hrs, Studio 3hrs). *Prerequisite: ENAR 324*

**ENAR 434 Principles of Planning II 3 cr. hrs.**

Developed theoretical understanding of the main topics with regards to land use (scattered construction, smart growth, new urban developments, and land management etc.) to develop a full in-depth methodology for future urban plans, the study of the elements, techniques, and models used for urban development including land use limits, land use placement, transfer of ownership and land division, looking at the legal background for land ownership and creating master plans, working on actual cases to create master plans found within the architectural spaces. (Lecture 2hrs, Studio 3hrs). *Prerequisite: ENAR 433*

**ENAR 436 Landscape Architecture 3 cr. hrs.**

Concept of landscaping, overview of regional and environmental landscaping, brief history of gardens and landscaping including the Islamic civilization, overview of plants, their types, description and maintenance, site design of national, regional, private and public parks, housing projects and landscaping, planting design, studio design with different scale and nature (Lecture 1hr, Studio 6hrs). *Prerequisite: ENAR 441, ENAR 433*

**ENAR 441 Design V 4 cr. hrs.**

The principles for designing public, cultural, health, and sports buildings with the focus on the diversity of the spaces according to the spatial and functional needs of each project and its impact on the architectural composition, the relationship between the building and the surrounding urban fabric, in depth analysis of the architectural, artistic and technical systems specific for the architectural type give, analysis of international architectural projects, practical application of theory through various projects with different functions and urban placement, interior design to some specific spaces in the project (Lecture 1hr, Studio 9hrs). *Prerequisite: ENAR 342*

**ENAR 442 Design VI 4 cr. hrs.**

The integration between urban design and the built and natural environment, designing large scale complex buildings that look at realistic design problems and takes into account building regulations, and deals with electrical, mechanical, and sanitary regulations, aims to include the requirements for the special needs and the safety and emergency requirements, an introduction to the design of agricultural and industrial architecture in terms of planning, infrastructure and production lines requirements taking into consideration matters of safety, emergency and fire, The general design parameters and their impact on the physical configuration of these buildings, analysis of international architectural projects (Lecture 1hr, Studio 9hrs). *Prerequisite: ENAR 441*

**ENAR 511 Advanced Skills 1 cr. hrs.**

Studio course in the field of architectural design and urban planning, concentrating on developing students skills and ability to develop conceptual design ideas in a short and limited timeframe. (Studio 6hrs, every two weeks). *Prerequisite: fifth year standing*

**ENAR 520 Introduction to Graduation Project 2 cr. hrs.**

Introduction to data collection, preliminary studies, site selection and site analysis with guidance and approval of a faculty member in order to prepare a comprehensive research document that serves as design program for the course ENAR 530. *Prerequisite: fifth year standing, ENAR 401,ENAR 442*

**ENAR 530 Graduation Project 3 cr. hrs.**

Full comprehensive project that reflects the knowledge accumulated by the student during his studies, the project includes a detailed presentation of the site, and design of the interior and exterior spaces, and the relationship between elements of the project using structural and environmental systems, and the project is being prepared under the supervision of a faculty in the department faculty members. *Prerequisite: ENAR 520, (ENAR 541 or ENAR 543)*

**ENAR 531 Theories of Architecture III 3 cr. hrs.**

Architectural identity in Palestine and problem of modernity since the rise of modern architecture in the twentieth century; a comprehensive analysis of the historical, political, cultural, social, economic and technical factors that in modern architectural movement in Palestine. *Prerequisite: ENAR 324*

**ENAR 532 Principles of Planning III 3 cr. hrs.**

Urban planning in Palestine, formation of urban structures, evolution of urban fabric from the Ottoman Empire till present time, population growth and distribution, social, economic, environmental and urban planning issues in Palestine, (Lecture 2hrs, Studio 3hrs). *Prerequisite: Department approval*

**ENAR 533 Housing 3 cr. hrs.**

The concept of human settlement and its development, the social and economic dimension and its impact on the availability of adequate housing, the role of the private and public sectors in dealing with the issues of housing, the methods of dealing with the scattered housing and historic sites, etc., and how to address these issues within the social perspective. *Prerequisite: ENAR 434*

**ENAR 534 Building Rehabilitation 3 cr. hrs.**

principles of documenting and recording urban and architectural features, Building rehabilitation, maintenance and adaptation to modern requirements, Principles of choosing and using appropriate materials and technologies for rehabilitation, Interior space in old buildings and its functional, visual and structural problems.  (Lecture 2hrs, Lab 3hrs). *Prerequisite: ENAR 330, ENAR 431*

**ENAR 535 Community Architecture 3 cr. hrs.**

The relationship between architecture and community development through the application to real project to upgrade residential and living environment, cooperation with local community, applying adequate design principles (Lecture 2hrs, Lab 3hrs*) Prerequisite: Department approval*

**ENAR 536 Geographic Information Systems-[GIS] 3 cr. hrs.**

Detailed survey of basic GIS principles, implementations in urban design, landscaping, planning and restoration problems, applications on different computer software programs available in this field, focusing on its importance as a tool (Lecture 2hrs, Studio 3hrs). *Prerequisite: Department approval*

**ENAR 537 Selected Topic in Architectural Design 3 cr. hrs.**

Study of a selected problem in the field of architectural design, topic depends on the needs of the students in the architectural design field and faculty’s interests *Prerequisite: Department approval*

**ENAR 538 Selected Topic in Urban Planning 3 cr. hrs.**

Study of a selected problem in the field of urban planning, topic depends on the needs of the students in the urban planning field and faculty’s interests *Prerequisite: Department approval*

**ENAR 539 Interior Design 3 cr. hrs.**

Fundamentals of interior design, Indoor space perception: functional, visual, structural and esthetical, analysis of relationship between outdoor and indoor spaces, , survey of history of interior design and furniture through ages, materials used in interior design and their applications, studio design on selected projects or buildings prepared previously by students (Lecture 2hrs, Studio 3hrs). *Prerequisite: ENAR 442*

**ENAR 5391 History of Art 3 cr. hrs.**

The development of artistic taste and refinement of sensory perception and aesthetic through recognition of human creative production throughout the ages, Especially the art of painting, sculpture and applied arts, architecture, the contribution of the intellectual, social and political influences, In addition to the scientific discoveries and technology in the emergence of a distinct artistic movements with a focus on ancient Egypt Arts and Mesopotamia and the Levant, the Islamic Arts, revolutionary changes in the arts of the twentieth century and its impact on Palestinian art.. *Prerequisite: Department approval*

**ENAR 541 Advanced Architectural Design 4 cr. hrs.**

Study of contemporary trends in Architecture through the analysis of main trends in architectural thought in the end of 20th century, studio design of projects integrated technically and dealing with the topics of contemporary issues in architecture and the effect of modern technology on design methodology (Lecture 1hrs, Studio 9hrs). *Prerequisite: ENAR 442*

**ENAR 543 Advanced Urban Design 4 cr. hrs.**

Philosophy and fundamentals of architecture, analysis of basic trends in architectural thought, elements of urban design and its decisive factors, urban style and individuality, studio design of comprehensive project/projects that deal with the problem of harmony, existing urban identity and structures, the impact of philosophical, functional, social, economic and aesthetical factors on urban design (Lecture 1hrs, Studio 9hrs). *Prerequisite: ENAR 442, ENAR 434*

**Spatial Planning Engineering Courses (ENPL):**

**ENPL 231 Design of Open Spaces 3 cr. hrs.**

Introduction to principles and concepts of space design. Develop the ability of students to understand the patterns and forms of spaces. Projects related to Site analysis, space design. Evaluation of existing projects and designing a small projects of space design. (Lecture 1hr+ Studio 6 hrs.).

Prerequisite: ENAR231

**ENPL 232 Landscape Design 3 cr. hrs.**

Landscape and public space design with concentration on planting design and planting material. Introduction to the types of home and neighborhood gardens and small parks in addition to the types and design of streets and public open spaces including pedestrian zones. Understanding the socio-economic and cultural meaning of the place through relevant site analysis. (lecture1hr + studio 6 hrs.)

Perquisite: ENPL 231

**ENPL 234 History of Spatial Planning and landscape 3 cr. hrs.**

A review of the historical development of spatial planning overtime due to major political and socioeconomic processes, Space transformation through history with a particular focus on the period between post– 18th century and the emergence of the industrial revolution until the present days, History of gardens through different eras: prehistory, classicism, medieval, Islamic, Chinese, Japanese, renaissance, modern. Landscape conservation and national parks. (Lecture 3 hrs.)

Perquisite: ENAR 229

**ENPL 236 Horticulture and Ecology 3 cr. hrs.**

Plant identification, plant growth, kinds, and plant parts and their properties. Plant needs and requirements like soil, light, water, nutrition, fertilizers, pesticides, and maintenanceو Introduction to interior plants, lawns, rock plants, alpine, and aquatic plantsو The role of plants and plant communities in the design, planning and management of the land, The ecology and dynamics of native plant communities including plant geomorphology, plant/ soil/ water relationship, plant community succession, forest ecosystem dynamics, plant/ wildlife relationship and invasive non-native plants. (Lecture 3hrs)

Prerequisite: ENPL231

**ENPL 331 Design of Open Spaces 3 cr. hrs.**

Introduction to principles and concepts of space design. Develop the ability of students to understand the patterns and forms of spaces. Projects related to Site analysis, space design. Evaluation of existing projects and designing a small projects of space design. (Lecture 1hr+ Studio 6 hrs.).

Prerequisite: ENAR231

**ENPL 332 Landscape Design 3 cr. hrs.**

Landscape and public space design with concentration on planting design and planting material. Introduction to the types of home and neighborhood gardens and small parks in addition to the types and design of streets and public open spaces including pedestrian zones. Understanding the socio-economic and cultural meaning of the place through relevant site analysis. (lecture1hr + studio 6 hrs.)

Perquisite: ENPL 231

**ENPL 333 Principles of Spatial Planning I 3 cr. hrs.**

Introduction to principles of spatial planning and theories at the local, regional and national levels, Different scientific and strategic planning approaches, Decision making mechanisms, Sectoral planning, Field surveys and data analysis, Development of planning alternatives for selected urban area, An overview on planning policies and planning practices in Palestine as well as on the different institutions involved in this process, Studio work concentrating on contemporary spatial planning issues. (lecture2hrs + Studio 3hrs)

Prerequisite: ENPL234

**ENPL 334 Principles of Spatial Planning II 3 cr. hrs.**

A review of contemporary planning issues such as: urban sprawls, smart growth, land management, sustainable development…etc, The development of structural plans and comprehensive planning strategies for future urban developments, A study of an urban fabric, its elements and characteristic, legal issues of land ownership and land division, Studio work focusing on genuine urban issues. (Lecture 2hr, Studio 3hrs).

Prerequisite: ENPL333

**ENPL 335 Legislation and Laws of Spatial Planning 3 cr. hrs.**

Legal organization of land sector in Palestine, Land administration in Palestine, Impact of successive legislative policies on land sector in Palestine, Palestinian legislative policies for organization of the land sector, Planning and administration of land ownership in Palestine, Environmental laws for planning, Land physical boundaries, land law in Palestine and the successive colonial administrations, current issues in the Palestinian law policies and practices. (Lecture 3hrs)

Prerequisite: ENPL 333

**ENPL 336 Theories of Spatial Planning and Landscape 3 cr. hrs.**

A review of critical theory in urban planning that corresponds to the local discourse in landscape and planning practices, The political, economical and social changes that led to the formation of the spatial planning, The main changes in the postindustrial world: Modernity and contemporary thought, Definition of landscape, Landscape conservation and modern parks movements, housing, cultural landscape, landscape change in relation to the multidisciplinary set of related theories from social, political, economical and environmental sciences, landscape perception, landscape assessment. (Lecture 3 hrs.)

Prerequisite: ENAR 234

**ENPL 338 Geographic Information Systems 3 cr. hrs.**

Detailed survey of basic GIS principles and their use to solve urban design, landscape, planning and rehabilitation problems, Applications on different computer software programs available in this field. (Lecture 2hrs, Studio 3hrs).

Prerequisite: ENAR220, GEOG232

**ENPL 401 Practical Training No credit**

Professional training at a specialized establishment in Spatial Planning during the summer course and for a period of six weeks.

Prerequisite: ENPL434, ENPL437

**ENPL 412 Advanced Skills in Spatial Planning 1 cr. hr.**

This course introduction to more advanced skills in design. Solving design problems by using various tools and media (digital media, video productions, layout and poster design, and three-dimensional simulations and modeling)و Developing the students’ ability to communicate their skills within a limited period of time. (Studio 3hrs).

Prerequisite: fourth year level

**ENPL 414 Seminar in Spatial Planning 1 cr. hr.**

Seminar series on various topics of current issues in spatial planning, presented by the students with faculty supervision, the seminar aims to enhancing students’ skills in research writing and structure including referencing, citations, methodologies and PowerPoint presentation techniques, as well as to develop their research and discussion abilities and capabilities (lecture 2hrs).

Prerequisite: ENPL 336

**ENPL 421 Environmental Planning 2 cr. hrs.**

Students are introduced to notions of environment and environmental sustainability, to build an understanding of the evolution and practice of urban/rural and environmental planning, Students are introduced to various topics of sustainable development and other technical dimensions such as land development, land use, and environmental quality, Methods and techniques of use of renewable energy and natural resources such as solar energy, water, and wind, Climatic change and its implication on the living environment. (Lecture 2hrs).

Prerequisite: ENPL334

**ENPL 422 Planning Statistics 2 cr. hrs.**

An introduction on the practice of statistical analysis, the basic techniques of descriptive and inferential statistics that are used by practicing planners, the distinction between descriptive and inferential statistics and training on how to calculate measures of central tendency and dispersion, identifying the basic theoretical assumptions that underlie inferential statistics, perform simple linear and multivariate regression and interpret regression results, Use of the SPSS/PASW computer package to perform basic statistical analysis. (Lecture 2hrs).

Prerequisite: ENPL333

**ENPL 425 Landscape Ecology 2 cr. hrs.**

Students will be introduced to landscape-ecological concepts; landscape structures, functions and change. They will learn how to measure and quantify landscapes, how to define patches and quantify their characteristics such as size, shape, edge characteristics, pattern, connectedness etc. the ecological and human consequences of landscape processes including fragmentation, connectivity, grain size, etc. The role of landscape ecology in wildlife management The effects of landscape structure on wildlife populations and communities. (Lecture 1hrs+ Studio 3hrs)

Prerequisite: ENPL234, ENPL 236

**ENPL 431 Rehabilitation of Historical Sites 3 cr. hrs.**

Understanding concepts of rehabilitation, ordinance creation, legal aspects of rehabilitation, technical and contemporary issues and controversies in the field of heritage rehabilitation. Projects focus on the philosophy and current issues in the rehabilitation of the historic centers of Palestinian towns and villages. (Lecture 2 hrs + Studio 3 hrs).

Perquisite: ENAR330, ENPL332 Understanding concepts of rehabilitation, ordinance creation, legal aspects of rehabilitation, technical and contemporary issues and controversies in the field of heritage rehabilitation. Projects focus on the philosophy and current issues in the rehabilitation of the historic centers of Palestinian towns and villages. (Lecture 2 hrs + Studio 3 hrs).

Perquisite: ENAR330, ENPL332

**ENPL 432 Forestry 3 cr. hrs.**

Types of forests, natural and economical. The spectrum of functions related to forest in terms of tourism, recreation, sports, science and other fauna flora related activities. Forests in Palestine, history, morphology and the indigenous species of trees, batha, and shrubs forming the different types of forests. The different vegetal zones and the change of plant species that form forests. (Lecture 3hrs)

Perquisite: Department approval

**ENPL 433 Introduction to Infrastructure Planning 3 cr. hrs.**

Policy and planning for the provision of water supply and sanitation services. Electricity and telephone network and supply. Review of available technologies with emphasis on planning and policy processes including economic, social, environmental, and health issues. Considerations of financing, pricing, institutional structure, consumer demand, and community participation in the planning process. Evaluation of policies and projects through local case studies. (Lecture 3hrs)

Prerequisite: ENPL334

**ENPL 434 Road Planning and Development 3 cr. hrs.**

Road planning and development project that focuses on new proposals for regional and local road including rural and agricultural roads. Projects that pursue the type, layout and course of the road within its natural and built environments. Planning considerations to land use regulations, environmental policies, existing infrastructural plans, design standards and aesthetics (lecture 2hrs + studio 3 hrs).

Prerequisite: ENPL 421

**ENPL 436 Landscape Architecture (For Architecture Students) 3 cr. hrs.**

The concept and meaning of landscape architecture, An over view of regional & environmental Landscaping, A brief about the history of Gardens and landscape through different eras, including the Islamic era, Overview on horticulture, plants, their types, description and maintenance, Site analysis and design of national, regional, private and public parks, Housing projects and landscape, Planting design, Studio work emphasizing on sites with different scale and nature (Lecture 1hr, 6hrs Studio).

Prerequisite: ENPL 333, ENAR441

**ENPL 437 Rural Planning and Development 3 cr. hrs.**

Planning and development of rural areas including agricultural land, natural landscapes, recreational sites and rural built up spaces. Conservation and protection of natural landscape and agricultural lands as well as historic sites in and surround rural areas. Understanding the socio economic structures of rural areas and the shift in the function of rural areas within their regions. Large scale project (lecture 1hr + Studio 6 hrs).

Perquisite ENPL 332, ENPL 335

**ENPL 438 Management of Spatial Planning Projects 3 cr. hrs.**

Introduction to management of urban and rural projects at different planning and administrative levels. Students will be introduced to bids, Terms of reference, and bills and quantities preparation and evaluation processes.

Techniques of practical project management required for planners and consultants with focus on mechanisms of time activities and human and financial management. (Lecture 3 hrs).

Prerequisite: ENPL332, 334

**ENPL 520 Introduction to Graduation Project 2 cr. hrs.**

Project selection is based on the real needs of local society, data gathering, site selection and analysis with the guidance and approval of a faculty member in order to prepare a comprehensive research document that serves as design program for the course ENPL 530.

Prerequisite: 5th level, ENPL401, ENPL437

**ENPL 530 Graduation Project 3 cr. hrs.**

Individual resolution of the graduation project defined and programmed in course ENAR 520, development of comprehensive design proposal involving all parameters of planning, urban design and landscape architecture. The final presentation consists of a complete set of drawings, model and written report. The work is prepared under the supervision of a faculty member, and is presented in a formal public jury.

Prerequisite: ENPL 520

**ENPL 531 Advanced Spatial Planning 3 cr. hrs.**

An integrated development project intonating multi-sectoral planning. Focus on designing new cities, suburbs and industrial zones. Relevant socio-economic and environmental analysis that shape the direction, concepts and forms of development (Lecture1 hr + Studio 6hrs).

Prerequisite: ENPL437

**ENPL 532 Planning and Gender 3 cr. hrs.**

Concept of gender in relation to planning, explaining the influence of gender on people’s behavior and needs and how this influence the physical form of the environment (urban and rural), clarifying gender role in preparing the designs and the plans for our environments, relationship between gender and sustainability of planning. (Lecture 3hrs)

Prerequisite: Department approval

**ENPL 534 Visual Culture of Space 3 cr. hrs.**

Understanding, analyzing and critiquing the different modes of visual representations in urban space by investigating the technologies of govern-mentality and modes of resistance manifested in the shaping of cities, public spaces, and the language of architecture within the modern era.(Lecture 3hrs)

Prerequisite: Department approval

**ENPL 536 Principle of Spatial Planning 3 (Spatial Planning in Palestine) 3 cr. hrs.**

Urban planning in Palestine, Evolution of urban structures and the formation of urban fabrics in Palestine from Ottoman Period till now, Population growth and Distribution, Social, economical, environmental and planning problems of urban fabrics in Palestine. (Lecture 2hr, Studio 3hrs).

Prerequisite: ENPL334

**ENPL 537 Principles of Regional Planning 3 cr. hrs.**

Examination of factors shaping a region with a focus on the role of metropolitan planning organizations. Review of several international regional planning models with a comparative examination of the local regional planning discourse. (Lecture 2hrs + Studio 3hrs).

Prerequisite: ENPL 336

**ENPL 538 Special Topics in Spatial Planning 3 cr. hrs.**

A study of a selected spatial problem within a contemporary setting. A multi-sectoral analytical view on the selected topic; traditional and non-traditional approaches to problem definition and solution, techniques for understanding the spatial processes that shape the physical environment. (Lecture 3hrs).

Prerequisite: Department approval

**ENPL 539 Land Administration 3 cr. hrs.**

Introducing the main land tenure systems worldwide and understanding deeply the land tenure system in Palestine as well as the legal and institutional framework regulating land administration in Palestine; Demonstrating knowledge of the land registration process in Palestine and means of maintaining land information; Discuss international case studies of land administration systems; Exploring the role of land administration in managing land use. (Lecture3hrs).

Prerequisite: ENPL 335

## Department of Mechanical and Mechatronics Engineering

The Mechanical and Mechatronics Engineering Department provides two academic programs leading to two bachelor degrees. The first is in mechanical engineering with options in three tracks: general, power, or design and production. The second program is in mechatronics.

**I : The Mechanical Engineering Program**

**Admission Requirements:**

1. A grade point average of at least 70% in the following courses:

MATH1411, MATH1321, PHYS141, PYHS132, ENME121.

1. The approval of the department based on the program capacity.

**Study Plan:**

The study plan of the Mechanical Engineering Program consists of 160 credit hours, distributed as follows:

|  |  |
| --- | --- |
| **Requirement Type** | **Credit Hours** |
| University Requirements | 21 |
| Faculty of Engineering & Technology Requirements | 30 |
| Program Requirements | 103 |
| Elective Courses | 6 |
| **Total** | 160 |

**Program Requirements (103 Credit Hours):**

**Compulsory Program Courses:**

Consist of eighty seven (87) credit hours for the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Code** | **Course Name** | **Prerequisites** |
| MATH2311 | CALCULUS AND ANALYTICAL GEOMETRY 3 | MATH1321 |
| MATH234 | INTRODUCTION TO LINEAR ALGEBRA | MATH1321 |
| MATH330 | NUMERICAL METHODS | MATH234 COMP230 or COMP132 or MATH310 or COMP 133 or COMP142. |
| MATH331 | ORDINARY DIFFERENTIAL EQUATIONS | MATH1321 |
| ENEE2101 | BASIC ELECTRICAL ENGINEERING LAB | PHYS112, ENEE2301 |
| ENEE2301 | NETWORK ANALYSIS 1 | PHYS132 |
| ENEE2307 | PROBABILITY AND ENGINEERING STATISTICS | MATH1321 |
| ENCS234 | DIGITAL SYSTEMS | COMP132 or COMP133 or COMP142 or COMP230 |
| ENEE4101 | ELECTRICAL MACHINES AND POWER ELECTRONICS LAB | ENEE2101, ENEE4301 |
| ENEE4301 | ELECTRIC MACHINES AND POWER ELECTRONICS | ENEE2301 |
| ENCE233 | MECHANICS OF MATERIALS | ENCE232 |
| ECON337 | ENGINEERING ECONOMICS | - |
| ENME223 | Mechanical Drawing | ENME121 |
| ENME232 | DYNAMICS | ENCE232 |
| ENME312 | Fluid Mechanics Lab | ENME335 |
| ENME321 | Measurements Lab | PHYS112 |
| ENME331 | Material Science | CHEM143 |
| ENME332 | Machine Dynamics | ENME232 |
| ENME333 | Thermodynamics | PHYS141 |
| ENME334 | Applied Thermodynamics | ENME333 |
| ENME335 | Fluid Mechanics I | ENME232 |
| ENME401 | Practical Training | Finishing 90 credits and department consent |
| ENME411 | Mechanical Engineering Lab | ENME312, ENME321, ENME431 |
| ENME421 | Mechanical Engineering Tools | ENME223 |
| ENME431 | Heat Transfer | ENME333, ENME335 |
| ENME432 | Refrigeration and Air conditioning | ENME431, ENME334 |
| ENME433 | Production processes 1 | ENME331 |
| ENME435 | Machine Design I | ENCE233, ENME223 |
| ENME436 | Machine Design II | ENME435, ENME332 |
| ENME438 | Control Theory | MATH331 |
| ENME520 | Introduction to Graduation Project | ENME401, Finishing 115 credits and department consent |
| ENME530 | Graduation Project | ENME520 |
| ENME535 | INTERNAL COMBUSTION ENGINES | ENME334 |
| ENME537 | FLUID POWER CONTROL | ENME438 |

**Elective Courses:**

Sixteen credit hours from the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| **Field** | **Course Code** | **Course Name** | **Prerequisites** |
| 10 credit hours from one of the following tracks. Alternatively, for the general track students can select 10 credit hours from either of the power or design and production tracks and must include one laboratory course. | | | |
| **Power Track** | ENME437 | Fluids Mechanics II | ENME335, MATH331 |
| ENME511 | Power Lab | ENME321, ENME334 |
| ENME531 | Energy Conversion | ENME334 |
| ENME534 | Design and operation of power stations | ENME334, ECON337 |
| **Design and Production Track** | ENME434 | Manufacturing Processes II | ENME433 |
| ENME512 | Design and Production Lab | ENME411 |
| ENME536 | Computer-Aided Design | ENME436 |
| ENME538 | Advanced Dynamics and Vibrations | ENME332 |
| **6 Credit Hours from the following Courses or from the above track courses.** | | | |
|  | ENME5311 | Refrigeration Engineering | ENME432 |
| ENME5312 | Finite Element Methods | ENCE233,  MATH330 |
| ENME5313 | Robotics | ENME438, ENME332 |
| ENME5321 | Environmental Aspects in Mechanical Engineering | ENME531 |
| ENME5322 | Automotive Engineering | ENME436 |
| ENME5331 | Special Topic in Power ENGINEERING | Department consent |
|  |  |  |
| ENME5333 | Special Topic in Mechatronics | Department consent |
| ENEE5301 | ELECTRICAL DRIVE | ENEE4301,(ENCS432 or concurrent) |

**II : Mechatronics Engineering Program**

**Admission Requirements:**

The student is accepted in the program starting from the first year according to his/her grade in TAWJIHI exam at the corresponding year.

**Study Plan:**

The study plan of the Mechatronics Engineering Program consists of 160 credit hours, distributed as follows:

|  |  |
| --- | --- |
| **Requirements Type** | **Credit Hours** |
| University Requirements | 21 |
| Faculty of Engineering & Technology Requirements | 30 |
| Program Requirements | 102 |
| Elective Courses | 7 |
| **Total** | 160 |

**Program Requirements (102 Credit Hours):**

**Compulsory Courses:**

Consist of a total of ninety nine(99) credit hours that includes the following courses:

|  |  |  |
| --- | --- | --- |
| **Course Code** | **Course Name** | **Prerequisites** |
| MATH231 | CALCULUS AND ANALYTICAL GEOMETRY 3 | MATH1321 |
| MATH234 | INTRODUCTION TO LINEAR ALGEBRA | MATH1321 |
| MATH330 | NUMERICAL METHODS | COMP230 or COMP132, MATH234  COMP142 or COMP133 or MATH310. |
| MATH331 | ORDINARY DIFFERENTIAL EQUATIONS | MATH1321 |
| ENCE233 | MECHANICS OF MATERIALS | ENCE232 |
| ENEE2101 | BASIC ELECTRICAL ENGINEERING LAB | PHYS112, ENEE2301 |
| ENEE2301 | NETWORK ANALYSIS 1 | PHYS132 |
| ENEE2409 | ANALOG ELECTRONICS | ENEE2301 |
| ENEE3102 | ELECTRONICS LAB | PHYS112, ENEE2409 or (ENEE3304 or concurrent) |
| ENEE2307 | PROBABILITY AND ENGINEERING STATISTICS | MATH1321 |
| ENEE4101 | ELECTRICAL MACHINES AND POWER ELECTRONICS LAB | ENEE2101, ENEE4301 |
| ENEE4301 | ELECTRIC MACHINES AND POWER ELECTRONICS | ENEE2301 |
| ENEE5301 | ELECTRICAL DRIVE | ENEE4301, (ENCS432 or concurrent) |
| ENCS211 | DIGITAL ELECTRONICS & COMPUTER ORGANIZATION LAB | (ENCS238 or ENCS336 or ENCS432) or concurrent |
| ENCS234 | DIGITAL SYSTEMS | COMP132 or COMP133 or COMP230 or COMP142 |
| ENCS432 | COMPUTERS ORGANIZATION AND MICROPROCESSOR INTERFACE | ENCS234 |
| ENCS510 | MICROCOMPUTER CONTROL LAB | ENCS432 |
| ENME223 | Mechanical Drawing | ENME121 |
| ENME232 | DYNAMICS | ENCE232 |
| ENME321 | Measurements Lab | PHYS112 |
| ENME331 | Material Science | CHEM143 |
| ENME332 | Machine Dynamics | ENME232 |
| ENME333 | Thermodynamics | PHYS141 |
| ENME335 | Fluid Mechanics I | ENME232 |
| ENME433 | Production processes i | ENME331 |
| ENME435 | Machine Design I | ENCE233, ENME223 |
| ENME436 | Machine Design II | ENME435, ENME332 |
| ENME438 | Control Theory | MATH331 |
| ENME537 | FLUID POWER CONTROL | ENME438 |
| ENMC333 | THERMAL APPLICATIONS FOR MECHATRONICS | ENME335, ENME333 |
| ENMC401 | Practical Training | Finishing 90 credits and department consent |
| ENMC411 | THERMAL FLUID LABORATORY | ENMC333 |
| ENMC431 | VIBRATIONS AND DYNAMIC MODELING | ENME332, MATH331 |
| ENMC433 | TRANSDUCERS AND SIGNAL ANALYSIS | ENCS432 |
| ENMC511 | MECHATRONICS LABORATORY | ENME438 |
| ENMC512 | CONTROL LABORATORY | ENME438, ENMC431 |
| ENMC520 | Introduction to Graduation Project | ENMC401, Finishing 115 credits and department consent |
| ENMC530 | Graduation Project | ENMC520 |
| ENMC531 | ADVANCE CONTROL SYSTEMS | ENME438 |
| ENMC532 | ROBOTICS | ENME332, ENME438 |

**Elective Courses:**

Selecting three (3) credit hours from the following course

|  |  |  |
| --- | --- | --- |
| **Course Code** | **Course Name** | **Prerequisites** |
| ENMC534 | Special Topic IN MECHATRONICS | Department consent |
| ENMC535 | CAD/CAM/ CNC | ENME433, Math330 |

**Course Description for Mechanical Engineering Program (ENME)**

ENME 120 Workshop

Introduction to properties of Engineering materials, introduction to basic operations in manufacturing, measuring instruments, manual tools and their use in metals and wood, electrical wiring, the application of machine tools in manufacturing processes, welding processes. (Lecture 1hr, Workshop 3hrs).

ENME 121 Engineering Drawing

Instruments and their use, lettering, geometric construction, sketching, theory of projection, multi-view projection, pictorial representation, axonometric, oblique, sectioning, dimensioning (Lecture 1hr, Lab 3hrs ).

ENME 223 Mechanical Drawing

Drawing of typical mechanical pieces, surface finish, tolerance and allowance, fitting of assembled bodies, dimensioning, assembly drawings, CAD applications (Lecture 1hr, Lab 3hrs).

Prerequisite: ENME121.

ENME 232 Dynamics

Kinematics of particles, absolute and relative motion, coordinates systems, fixed and moving ones, Newton's laws, linear, impulse and momentum, energy and work, angular momentum, motion of rigid body, and Euler’s equations.

Prerequisite: ENCE232.

ENME 312 Fluid Mechanics Lab

Center of Pressure, stability, Venturi meter, Orifice, impact of a Jet, flow measuring apparatus, flat plate boundary layer, radial pump, friction losses, drag and lift measurement (Lab 3hrs).

Prerequisites: ENME335.

ENME 321 Measurements Lab

Reports writing and analysis of results, principles of measurement of distance, velocity, acceleration, pressure, force, stress and strain, and temperature using mechanical, electrical, and electronic devices, industrial applications of measurements techniques and their instrumentation (Lecture 1hr, Lab 3hrs).

Prerequisites: PHYS112.

ENME 331 Material Science

Structure of Engineering materials, metals, ceramics and plastics, imperfections and dislocations of crystal, ferrous and non- ferrous alloys, phase diagrams, heat treatments and introduction to corrosion.

Prerequisite: CHEM143.

ENME 332 Machine Dynamics

Freedom, mechanisms, instant centers, graphical and analytical calculations of velocity and acceleration of linkages, analysis by complex numbers, cams, gear trains, inertia forces in machines, balancing of rotating masses.

Prerequisite: ENME232.

ENME 333 Thermodynamics

Thermodynamic concept and definitions, pure substances and their properties, work and heat, first law and its applications, second law and its applications, thermodynamic cycles.

Prerequisite: PHYS141.

ENME 334 Applied Thermodynamics

Analysis of thermodynamics power and refrigeration cycles, availability and irreversibility, mixtures and psychrometry, thermodynamic relations, combustion processes and equilibrium, compressor.

Prerequisite: ENME333.

ENME 335 Fluid Mechanics I

Properties of fluids, fluid statics, equilibrium of floating and submerged bodies, principals and equations of fluid flow, viscosity and compressibility and their effect on flow, dimensional analysis and similitude, fluid measurements, fluid friction in pipe flow, selection of pumps, laminar flow, introduction to differential relation in fluid dynamics.

Prerequisites: ENME232.

ENME 401 Practical Training

Practical training during summer in an approved firm for a period of not less than six weeks and in the field of student concentration.

Prerequisite: Finishing 90 credit hours and department consent.

ENME 411 General Mechanical Engineering Lab

Experiments related to machine dynamics, thermodynamics, fluid mechanics, production engineering, heat transfer, control, and vibration (Lab 3hrs).

Prerequisite: ENME321,ENME431,ENME312.

ENME 421 Mechanical Engineering Tools

Utilizing Computer software tools such as (Matlab), in solving mechanical engineering problems applications such as statics, dynamics and heat transfer .Design of machines using CAD software such as (solid works, pro-engineer),construction prototypes in Engineering workshop (Lecture 1hr, Lab 3hrs).

Prerequisites: ENME223

ENME 430 Sanitary and Mechanical Engineering (For Architectural Engineering students)

Sanitary fixtures and its installation, domestic hot and cold water supply networks, solid and liquid waste disposal, fire fighting systems, heating ventilation and air conditioning systems, thermal insulation.

Prerequisite: ENAR237.

ENME 431 Heat Transfer

One dimensional steady state conduction, fins, transient conduction, principles of forced convection, free convection, principles of radiation, heat transfer, introduction to heat exchangers. Prerequisites: ENME333, ENME335.

ENME 432 Refrigeration and Air conditioning

Refrigeration cycles, heating and cooling load calculations, psychrometry, heating and cooling systems and equipment, design of water systems, selection of pumps, design of air ducts and selection of fans.

Prerequisite: ENME431,ENME334

ENME 433 PRODUCTION Processes I

Casting and metal powder processing, properties of plastics and plastic processing, traditional metal removal processes, welding processes, measurement, inspection and quality control. Prerequisites: ENME331.

ENME 434 PRODUCTION Processes II

Special casting processes, mechanics of metal cutting, tool wear and tool life, tool design, grinding and other abrasive processes, nontraditional machining processes, economics of machining processes, design for manufacturing guidelines, manufacturing systems and automation, Introduction to CAD/CAM.

Prerequisites: ENME433.

ENME 435 Machine Design I

Design theories and basic design principles, surface durability, stress and failure, fatigue loading and failure, design of screws, design of welded joints, mechanical springs.

Prerequisites: ENME223, ENCE233.

ENME 436 Machine Design II

Rolling contact bearings, design of spur, bevel and worm gears, clutches and brakes, transmission of power through flexible elements, lubrication of journal bearings, shafts and axles. Prerequisite: ENME435, ENME332.

ENME 437 Fluids Mechanics II

Boundary layer theorems, use of computational techniques to solve boundary layer problems, viscous internal channel flow, one-dimensional compressible flow in nozzles and ducts, normal shock waves, channel flow with friction or heat transfer, turbo machinery, jet propulsion. Prerequisites: ENME335, MATH331.

ENME 438 Control Theory

Principles of feedback control system, modeling of system signal flow graph, feedback control system characteristics and performance, Routh-Hurwits stability criterion, Root Locus method, stability in the frequency domain, design and compensation of feedback control systems Prerequisite: MATH331.

ENME 511 Power Lab

Experiments related to energy conversion, turbomachinery, internal combustion engines, and refrigeration and air conditioning (Lab 3hrs).

Prerequisite: ENME321, ENME334.

ENME 512 Design and Production Lab

Selected experiment in engineering mechanics, production, machine design, and vibrations (Lab 3hrs).

Prerequisite: ENME411.

ENME 520 Introduction to Graduation Project

Topic selection, preparation of literature, material and equipment survey for senior project, supervised by one or more faculty members.

Prerequisite: ENME401, Finishing115 credit hours and department consent.

ENME 530 Graduation Project

Project design or research in mechanical engineering supervised by one or more faculty members.

Prerequisite: ENME520.

ENME 531 Energy Conversion

Conventional energy sources and its utilization, nuclear energy, environmental impact of energy conversion, introduction to renewable energy resources, direct energy conversion, energy storage, energy management and rational use of energy.

Prerequisite: ENME334.

ENME 533 ELECTROMECHANICAL INSTRUMENTATION

Theory and application of wide range of sensors in modern industrial environments, general sensor technologies: laser, optical, inductive, piezo-electric and ultrasonic, introduction to machine vision, software for part recognition, roles of sensors in computer-integrated and flexible manufacturing, measuring fundamental properties: transducers for measuring position, velocity and acceleration, fluid flow, temperature, pressure, initial signal conditioning and problems: noise, shielding, bridges, passive filtering, operational amplifiers, integrators, differentiators, analog to digital conversion and digital to analog conversion, actuators for controlling position, velocity and acceleration, microprocessor applications.

Prerequisites: ENCS432, ENME438.

ENME 534 Design and operation of power stations

Overview of different types of power stations, their components, features and applications, economic studies, load curves, station performance, selection of station, energy rates. Prerequisite: ECON337, ENME334.

ENME 535 INTERNAL COMBUSTION ENGINES

Air standard cycles, combustion processes in internal combustion engine, compression ignition engines, spark ignition engines, engine parts design, supercharging, engine tests and performance.

Prerequisite: ENME334.

ENME 536 Computer-Aided Design

Geometric modeling, historic developments, wire frame models, hidden line removed models, polyhedral models, surface models and solid models, constructive solid geometry; boundary representation and decomposition modeling, hybrid models, data structures and their role in modeling, curves and surfaces in modeling, geometric models and the role of engineers, parametric and feature-based design, applications in solid modeling on PC-based CAD packages (Lectures 2hrs, Lab 2hrs).

Prerequisites: ENME436.

ENME 537 FLUID POWER CONTROL

Properties of hydraulic fluids, design and function of conventional hydraulic and pneumatic circuits, characteristics of flow and pressure control valves, speed control in fluid power circuits, performance of pumps and fluid motors, hydrostatic and hydrokinetic transmission systems, principles of sealing, filtration and heat control in hydraulic circuits, industrial applications of fluid power systems.

Prerequisites: ENME438.

**ENME 538 Advanced Dynamics and Vibrations**

Balancing of rigid rotors, single plane and two-plane balancing, analytical and experimental field balancing methods, balancing of reciprocating machines, single cylinder shaking forces, multicylinder engines and compressors of different configurations, vibration of single-mass systems, free vibration characteristics, harmonic forcing, frequency response functions, applications to vibration isolation and transmissibility, shaft whirl, and vibration transducer, Fourier series solutions for periodic forcing, multi-mass systems, frequencies and modes for undamped systems, matrix methods, orthogonality of modes and iteration methods, beam and shaft vibration, Euler’s equation, frequencies and modes for classical boundary conditions, critical speeds of shafts.

Prerequisites: ENME332.

ENME 5311 Refrigeration Engineering

The refrigeration systems, the refrigerants, multi-pressure and multi-temperature refrigeration, absorption refrigeration, design of refrigeration equipment, load calculation and design of cold storage rooms.

Prerequisite: ENME432.

ENME 5312 Finite Element Methods

Fundamental principles of conventional finite element analysis in Mechanical Engineering, domain discretization, interpolation and shape functions, element derivation and types, element stiffness and property equations, assembly procedure, boundary conditions, solution methods for algebraic equation system, applications in heat transfer, fluid flow, and stress analysis, applications using software packages for problem solving.

Prerequisites: ENCE233, MATH330.

ENME 5313 Robotics

Background of industrial robotic manipulators, kinematics, dynamics, and control of robots, mechanical aspects, introduction to kinematics configuration, coordinate transforms, manipulator geometry, position solution strategy, velocity and acceleration, Jacobian Matrix, path planning, rigid body dynamics, Newton-Euler equations, actuators and drives, DC motor, position and force equations, sensors vision and advanced automation concepts.

Prerequisites: ENME438, ENME332.

ENME 5321 Environmental Aspects in Mechanical Engineering

Environment and pollution, air pollutants, air quality and pollution control, thermal pollution, pollution from internal combustion engines, pollution from power stations, production processes and pollution, material recycling, waste disposal.

Prerequisites: ENME531.

ENME 5322 Automotive Engineering

Automotive mechanics, vehicle power trains manual and automatic transmissions, design of disc and drum brake systems, braking performance, principles of antilock braking systems, vehicle traction and engine power requirements, study of automobile and truck suspension systems, design of suspension components such as springs (coil, leaf and torsion bar), shock absorbers, rubber bushings, control arms and stabilizer bars, vehicle ride, stability, steering drive lines, axles, frames, bodies and cabs, problems of performance and economy.

Prerequisites:ENME436.

ENME 5331 Special Topic in Power engineering

Selected topic in power, topic chosen according to student needs and faculty staff availability. Prerequisite: Department consent.

ENME 5332 Special Topic iN DESIGN AND PRODUCTION

Selected topic in design and production, topic chosen according to student needs and faculty staff availability.

Prerequisite: Department consent.

ENME 5333 Special Topic in Mechatronics

Selected topic in mechatronics, topic chosen according to student needs and faculty staff availability.

Prerequisite: Department consent.

**Course Description for Mechatronics Engineering Program (ENMC):**

enmc 333 THERMAL APPLICATIONS FOR MECHATRONICS

Principles of heat transfer: steady state conduction and fins, forced and natural convection, cooling of electronic components. Air- water vapor mixtures, some power and refrigeration cycles. Combustion and ICE. Fans and compressors.

Prerequisite ENME333, ENME335.

enmc 401 PRACTICAL TRAINING

Practical training during summer in approved firms for a period of not less than six weeks and in the field of student concentration.

Prerequisite: Finishing 90 credit hours and department consent.

enmc 411  THERMAL FLUID LABORATORY

Selected experiments in the subjects of fluid mechanics, thermodynamics and heat transfer. (Three hours lab per week).

Prerequisite ENMC333.

enmc 431  VIBRATIONS AND DYNAMIC MODELING

Free and forced vibration of one degree of freedom system. Two degrees of freedom systems, Vibration isolation, transmissibility. Eigenvalues and Eigenvectors. Lumped mass systems. Lagrange equations. Normal mode vibration of continuous systems. Mathematical modeling and simulation of dynamical systems; translational and rotational mechanical systems, electrical systems, electromechanical systems, fluid Systems, and thermal systems. Model representations; block diagram, input-output, and state space.

Prerequisites: MATH331,ENME332.

enmc 433  TRANSDUCERS AND SIGNAL ANALYSIS

Introduction to transducers. System modeling and analysis. Analog and digital data acquisition and conversion. Transduction mechanisms. Introductions to piezoelectricity, electromagnetism and laser interferometry. Sensors for measuring: force, displacement, velocity, acceleration, temperature, pressure and fluid flow. Force and displacement actuators, DC and stepper motors. Applications. Team project on design and implementation of a mechatronic system.

Prerequisites: ENCS432

enmc 511  MECHATRONICS LABORATORY

Robotic Programming and Simulation. Different sensors interfacing. Computer and PLC controlled systems. Pneumatic and Hydraulic performance and control. Automation and material handling systems. Integrated manufacturing systems. (3 hour lab)*.*

Prerequisite: ENME438.

enmc 512  CONTROL LABORATORY

Open and closed loop control systems as: level and flow of fluids, electrical, electromechanical, and thermal systems. Position and speed Control. Servo mechanism principles. System performance under proportional, integral, derivative, and compensation controllers. Various types of controllers. Time and frequency response measurement. Computer Simulation of control systems and Stability tests.

Prerequisite: ENME438, ENMC431.

enmc 520 INTRODUCTION TO GRADUATION PROJECT

Topic selection, preparation of literature material and equipment survey for senior project. Supervision by one or more faculty members.

Prerequisite: ENMC401, Finish115 credit hours and department consent.

enmc 530  GRADUATION PROJECT

Project design or research in a mechanical engineering subject. Supervision by one or more faculty members.

Prerequisite: ENMC 520.

enmc 531  ADVANCE CONTROL SYSTEMS

Difference equations, z-transform, sampling and reconstruction, Jury and Schure-Cohn tests, State Space models, analysis and design of control systems using State models, Controllability and Observability, Stability and Robustness techniques, Lyaponov Stability, Compensation and Controller Design and Simulation. Case studies.

Prerequisite: ENME438.

enmc 532  ROBOTICS

Robot classification. Robotic systems; actuators, transmission elements, and sensors. Description of object location. Kinematics of manipulator position; joints, links, coordinate frames, A matrices, homogeneous transformation, direct and inverse kinematics. Kinematics of manipulator motion; velocity, acceleration, differential motion, Jacobian. Trajectory generation. Static; compliance, inserting a peg into a hole. Dynamics; Lagrange formulations, Newton-Euler recursive formulations. Control; linear and nonlinear methods, position and force control. Programming languages.

Prerequisites: ENME438, ENME332.

enmc 534  Special Topic in Mechatronics

Selected topic in mechatronics. Topic is chosen according to student needs and faculty availability.

Prerequisite: Department Consent.

enmc 535  CAD/CAM/CNC

Definition of CAD/CAM. Geometric Modeling Techniques. Interactive computer graphics. Solid modeling data structure. Application of CAD models in design and manufacturing. Concurrent engineering and rapid prototyping. Machining theory and process control. Development a new CAD/CAM application using ATIA software. Introduction to CNC machining.Integrated manufacturing planning and control. Automated Material handling. FMS and group technology.

Prerequisite: MATH330, ENME433.

## Department of Computer Science

The computer science department offers an academic program that leads to a bachelor’s degree in computer science as a single major. The computer science department also offers a minor specialization in computer science.

Admission Requirements: Student can enroll only through direct admission based on the Tawjihi average and based on the minimum grade announced at that time.

1. Bachelor degree in computer science

* Program plan:

The program plan is composed of 128 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Type** | **Credit Hours** |
| University Requirements | 21 |
| Faculty Requirements | 32 |
| Program Requirements | 69 |
| Free Electives | 6 |
| Total | 128 |

* Faculty Requirements (32 Credit Hours):

|  |  |  |
| --- | --- | --- |
| **Course ID** | **Course Title** | **Pre-requisite** |
| MATH1411 | CALCULUS AND ANALYTICAL GEOMETRY 1 |  |
| MATH1321 | CALCULUS AND ANALYTICAL GEOMETRY 2 | MATH1411 |
| PHYS111 | GENERAL PHYSICS LAB 1 |  |
| PHYS112 | GENERAL PHYSICS LAB 2 | PHYS111,  PHYS132 or concurrent |
| PHYS141 | GENERAL PHYSICS 1 | MATH1411 or concurrent |
| PHYS132 | GENERAL PHYSICS 2 | PHYS141 ,MATH1321 or concurrent |
| BIOL111 | GENERAL BIOLOGY LAB | BIOL131 or concurrent |
| BIOL131 | GENERAL BIOLOGY |  |
| COMP131 | INTRODUCTION TO COMPUTERS AND COMPUTING ETHICS |  |
| COMP133 | COMPUTER AND PROGRAMMING | COMP131 |
| COMP233 | DISCRETE MATHEMATICS | MATH1411 |
| STAT2311 | BASIC STATISTICS |  |

* Program Requirements (69 Credit Hours)
  + Core Courses (54 Credit Hours)

|  |  |  |
| --- | --- | --- |
| **Prerequisite** | **Course Name** | **Course No** |
| COMP133 or COMP132 or COMP142 or COMP230 | Advanced Programming | COMP231 |
| COMP231 | Data Structures | COMP242 |
| Consent of the department + Completing a minimum of 80 credit hours | Practical Training | COMP301 |
| COMP132 or COMP133 or COMP142 or COMP230 | Linux Operating Systems Lab | COMP311 |
| COMP242 or COMP2321 | Database Management Systems | COMP333 |
| COMP333 | Web Application and Technology | COMP334 |
| COMP242 or COMP2321 | Analysis of Algorithms | COMP336 |
| Comp233 and (Comp242 or Comp2321) | Artificial Intelligence | COMP338 |
| Comp336+Comp433 + Consent of the department | Introduction to Graduation Project | COMP4200 |
| COMP4200 + COMP301 | Graduation Project | COMP4300 |
| Comp311 and (Comp242 or Comp2321) | Operating Systems | COMP431 |
| COMP311 and (COMP242 or COMP2321) | Computer Security | COMP432 |
| COMP333 | Software Engineering | COMP433 |
| Comp233 and (Comp242 or Comp2321) | Translators and Programming Languages | COMP439 |
| ENCS336 or ENCS238 | Digital Electronics and Computer Organization Lab | ENCS211 |
| COMP133 or COMP132 or COMP142 or COMP230 | Digital Systems | ENCS234 |
| ENCS433 or ENCS436 | Computer Networks Lab | ENCS413 |
| ENCS336 | Communication and Computer Networks | ENCS433 |
| ENCS234 | Computer Organization and Assembly Language | ENCS336 |
| MATH1321 | Linear Algebra | MATH234 |
| MATH234 and (MATH310 or COMP142 or COMP133 or COMP132 or COMP230) | Numerical Methods | MATH330 |

* + Elective Courses (15 Credit Hours)

|  |  |  |
| --- | --- | --- |
| **Prerequisite** | **Course Name** | **Course No** |
| COMP231 | Human Computer Interaction | COMP332 |
| MATH234 and (COMP242 or COMP2321) | Operations Research | COMP337 |
| COMP242 or COMP2321 | Image Processing and Pattern Recognition | COMP339 |
| COMP233 and COMP333 | Introduction to Knowledge Discovery and Data Mining | COMP430 |
| COMP433 | Advanced Software Engineering | COMP4331 |
| COMP333 | Management Information Systems | COMP434 |
| COMP242 or COMP2321 | Computer Graphics & User Interface | COMP435 |
| Department consent | Independent Study in Computer Science | COMP437 |
| Department consent | Special Topics in Computer Science | COMP438 |

1. Minor specialization in computer science (22 Credit Hours)

* Core Courses (16 Credit Hours)

|  |  |  |
| --- | --- | --- |
| **Prerequisite** | **Course Name** | **Course No** |
| COMP133 or COMP132 or COMP142 or COMP230 | Advanced Programming | COMP231 |
| COMP231 | Data Structures | COMP242 |
| COMP242 or COMP2321 | Database Management Systems | COMP333 |
| COMP333 | Web Application and Technology | COMP334 |
| COMP333 | Software Engineering | COMP433 |

* Elective Courses (6 Credit Hours)

The student must take 6 credit hours from computer science courses (3rd an 4th year level).

**Course Description For the Computer Science Courses**

**COMP121 – Introduction to Computer: (**ForNone-(Science, Engineering, IT) Students)):

Computer organization, binary system, data representation, computer and society, operating systems, computer networks, Applications including: word processors, databases, spread sheets, presentation and internet browsers.

*(2 credit hours: one lecture + three hours Lab.)*

**COMP131 Introduction to Computers and Computing Ethics**

The course gives an overview of computer science such as computer system hardware, Internet, data representation, algorithms, Application development in a high level programming language such as Java scripts and HTML. In addition to some ethical concepts such as Privacy, Intellectual property, Software piracy.

*(3 credit hours: 2 lectures + Three hours Lab.)*

**COMP132 - Introduction to Computer and Programming: (**ForScience Students**):**

(Computer organization; data representation; various types of computers; computer networks and telecommunications). Programming in a high level language. Applications, (Including: Operating systems spread sheets and word processors mathematical and statistical tools; Internet).

*(3 credit hours: 2 lectures + Three hours Lab.)*

**COMP133- Computer & Programming**

Programming in one of high level language basically (C); Basic structures of programming tools: language elements (variable names and data types), control statements, functions, arrays, pointers, strings memory management, file processing, and structure definition and applications.

*(3 credit hours: 2 lectures + three hours Lab.)*

***Prerequisite:*** *Comp131*

**COMP142 – Computer & Programming (**ForComputer Engineering Students **):**

Computer components, number systems, data representation, using of an operating systems, programming in one of high level language, language elements, control statements, functions, arrays, pointers, file processing, and structure definition and applications.

*(4 credit hours: 3 lectures + three hours Lab.)*

**COMP230 - Computer & Programming: (**ForEngineering Students **):**

Computer components, number systems, data representation, using of an operating systems, programming in one of high level language, language elements, control statements, functions, arrays, pointers, file processing, and structure definition and applications. (3 credit hours)

*(3 credit hours: 2 lectures + Three hours Lab.)*

**COMP231 - Advanced Programming:**

Object Oriented Analysis, Design, Programming, and Applications. The theory behind OOP will be examined, analyze, and design programs using one of the Object Oriented language. Structure of the language (classes & interface), language syntax and features, input/output, events handlers and applications, using GUI library (swings), and threads.   
*(3 credit hours: 2 lectures + Three hours Lab.)*

***Prerequisite:*** *Comp133 or Comp132 or Comp142 or Comp230.*

**COMP242 – Data Structures (**ForComputer Science Students**):**

Data type and structures; Abstract data types and encapsulation; Recursion; Proof of correctness of algorithms. Complexity of algorithms (BigO) Linked Lists; Stacks; Queues, trees; Binary trees; heap, Hashing, Sorting and Searching, Graphs,. Traversing, shortest path; and File organization. Software related applications.

*(4 credit hours: 3 lectures + Three hours Lab.)*

***Prerequisite:*** *Comp231.*

**COMP2321 – Data Structures (**ForComputer Engineering Students **):**

Data type and structures; Abstract data types and encapsulation; Recursion; Proof of correctness of algorithms. Complexity of algorithms (BigO). Linked Lists; Stacks; Queues, trees; Binary trees; heap, Hashing, Sorting and Searching, Graphs,. Traversing, shortest path; and File organization. Engineering related applications

(3 credit hours)

***Prerequisite:*** *Comp142 or Comp132 or Comp230.*

**COMP233 – Discrete Mathematics:**

Basic areas in discrete mathematics relevant to Computer Science. Uses of logic in programming, set theory. Functions and Relations. Mathematical Induction, Recursion. Introduction to Graph theory. Counting techniques, Combinatorics.

(3 credit hours)

**COMP301- Practical Training**

Training in one of the companies or corporations related to the field of study. Please check the regulations set by the department in this regard.

***Prerequisite:*** Consent of the department and Completing a minimum of 80 credit hours.

**COMP311 Linux Operating Systems Lab**

Introduction to Linux environment, text editing, file system structure, file types and metadata, shell usage and configuration, job and process management, text processing tools, regular expressions, shell scripts, programming under Linux, security and networking concepts.

***Prerequisite:*** COMP132 or COMP133 or COMP142 or COMP230

**COMP332 – Human Computer Interaction:**

An introduction to the abstract notions encountered in machine computation. Topics Basic introduction to human-computer interaction, understanding users as they use technology. Understanding the use of conceptual models, user interface design principle, user interface usability and evaluation. Coverage of interaction types, styles, establishing requirements, task analysis and interaction design. Prototypes and evaluation frameworks. . (3 credit hours)

***Prerequisite:*** *Comp231*

**COMP333 – Database Management Systems:**

Overview of database system, introduction to database design, Relational model , Relational algebra , Query language , Normalization , Connectivity with a programming language, overview of storage and indexing, Query evaluation and optimization , Transactions.

***Prerequisite:*** *Comp242 or Comp2321*

**COMP334 – Web Application and Technology:**

This course covers Internet applications and concepts from client/server programming to 3-tier architectures. HTML is introduced for information layout and transfer, as well as, Java script, including elements of the Document Object Model, and basic HTTP. XML, DTD’s and Cascading Style Sheets, illustrate methods for exchanging, structuring and presenting information. Server-side language (like PHP) are used to implement 3-tier applications. (3 credit hours)

***Prerequisite:*** *Comp333.*

**COMP336 – Analysis of Algorithms:**

Techniques for efficient implementation and precise analysis of algorithms. Time and space requirements are applied on programs. Various sorting, searching and other algorithms are analyzed. ( 3 credit hours)

***Prerequisite:*** *Comp242 or Comp2321*

**COMP337 – Operations Research:**

Introduction to operation research, linear programming, geometric examples, simplex method, optimal solutions, transportation problem, assignment problem, network, revised simplex method. ( 3 credit hours)

***Prerequisite:*** *Math 234 and (Comp242 or Comp2321)*

**COMP338 - Artificial Intelligence**

This course expose students to concepts and techniques that enable them to build smart applications including search strategies, agents, machine learning, planning, knowledge representation reasoning, lexical semantics and linguistic resources, information retrieval, natural language processing and computational linguistics.

***Prerequisite****: Comp233 and (Comp242 or Comp2321)*

**COMP339 – Image Processing and Pattern Recognition:**

Introduction to theoretical concepts and practical issues associated with image processing and pattern recognition, image acquisition and preprocessing, image segmentation and analysis, feature extraction, classification algorithms, post processing, features training, supervised/ unsupervised learning. (3 credit hours)

***Prerequisite:*** *Comp242 or Comp2321.*

**COMP4200 – Introduction to Graduation Project:**

Fact gathering and visioning stage. Report and presentation. (One credit hours)

**Prerequisite:** Comp336+Comp433+ Consent of the department.

**COMP4300 - Graduation Project:**

Research conducting or software construction stage. Dissertation and presentation or software, report and presentation. (Two credit hours)

***Prerequisite:***Comp301 + *Comp4200.*

**COMP430– Introduction to Knowledge Discovery and Data Mining**

Overview of probability and basic statistics,  data pre-processing and analysis techniques, data visualization, data warehousing design, online analytical processing (OLAP). Basic concepts, tasks, methods, and techniques in knowledge discovery and data mining. Application of data mining techniques in solving real problems.  
***Prerequisite:*** *Comp233 & Comp333*

**COMP431 - Operating Systems:**

Organization and implementation of operating systems, including time and space management. Multi-tasking systems. Processes, process, management, concurrent processes and synchronization. Memory allocation, segmentation and paging. Virtual memory. File systems, storage devices and 1/0 systems. Protection, security and privacy. (3 credit hours)

***Prerequisite:*** *Comp311 and (Comp242 or Comp2321)*

**COMP432 – Computer Security:**

Introduction to computer security; Authentication security policies, models, mechanisms of security; Basic cryptograph techniques, control and prevention of viruses; intrusion prevention, detection, correction; and legal social issues. (3 credit hours)

***Prerequisite:***COMP311, (COMP242 or COMP2321)*.*

**COMP433 - Software Engineering:**

Software Characteristics; introduction to modeling, abstraction and conceptualization; Software Process Models; waterfall model, iterative models and evolution models, increment models, agile software development; Software Development life cycle phase's; requirements engineering, software design, software construction, software validation; software evolution; Scenario-based approach for requirements gathering, use cases, UML, use case diagram, Object Oriented analysis, class diagram, sequence diagram, state chart diagram, activity diagram and collaboration diagram. Functional requirements and non-functional requirements. Software Requirement Specification Document, requirements management and validation. Determine design goals, System Design, Object oriented design; Design Pattern, software architecture; CASE Tools. (3 credit hours)

***Prerequisite:*** *Comp333*

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**COMP4331 – Advanced Software Engineering:**

Managing the software project, Team management and project tracking, risk analysis, cost estimation, change management and configuration management tools; Software design, Design Patterns; component based computing, component based software architecture, object brokers, middleware; Software validation; validation planning, testing, test plan and test case generation, testing techniques; unit testing; object oriented testing, Testing tools, performance analysis; Software Quality, Software Quality Assurance, software reliability evaluation; Software Maintenance; software maintenance process, maintenance measurement, reverse engineering, re-engineering. (3 credit hours)

***Prerequisite:*** *Comp433*

**COMP434 - Management Information Systems:**

Organizational and Technical foundations of Information systems. Building information system. Management and organizational support systems. Managing contemporary information systems. (3 credit hours)

***Prerequisite:*** *Comp333.*

**COMP435 - Computer Graphics & User Interface:**

Basic elements to computer graphics. Graphic output devices and their properties. Graphic primitives and their attributes. 2-D and 3-D primitives. Input Devices. Various alternatives to the design of the human computer interface. Human factors considerations. Algorithms for line, circle drawing. Geometric transformations. Clipping algorithms. Introduction of graphics standard. This course will include programming assignment with emphasis on the careful design of the user interface. (3 credit hours)

***Prerequisite:*** *Comp242 or Comp2321*

**COMP437 - Independent Study in Computer Science:**

An independent research project carried out by a student under the supervision of one of the faculty members. A report is submitted at the end of the study.

***Prerequisite:*** *Consent of the department*.

**COMP438 - Special Topics in Computer Science:**

A study of a specific topic in computer field. The subject of the course is chosen according to student needs and interests of faculty members.

***Prerequisite:*** *Consent of the department*.

**COMP439 - Translators and Programming Languages:**

Introduction to programming languages, programming languages features, paradigms, data types, control structures, data flow, runtime behavior. Programming languages syntax, grammars and ambiguous grammars. Lexical analysis and finite state automata. Parsing techniques and construction of efficient parses, error detection and recovery. Syntax -directed translation and code generation.

***Prerequisite****: Comp233 and (Comp242 or Comp2321)*

Faculty of Law and Public Administration

# Faculty of Law and Public Administration Study Plans

The Faculty of Law and Public Administration was established in 2004 to provide the Palestinian society needs for qualified graduates to work in the public and private sector institutions.

The Faculty includes the following departments:

* Department of Law
* Department of Public Administration
* Department of Political Science
* The Faculty offers programs leading to Bachelor degrees in:
* [Law](http://www.birzeit.edu/node/31080) , Bachelor Program
* [Major Political Science / Minor Women’s Studies](http://www.birzeit.edu/node/164571) , Bachelor Program
* [Major Political Science/Minor Economics](http://www.birzeit.edu/node/31093) , Bachelor Program
* [Major Political Science/Minor Philosophy](http://www.birzeit.edu/node/164572) , Bachelor Program
* [Major Political Science/Minor Public Administration](http://www.birzeit.edu/node/31094) , Bachelor Program
* [Public Administration](http://www.birzeit.edu/node/31105) , Bachelor Program
* [Public Administration/Minor Economics](http://www.birzeit.edu/node/164574) , Bachelor Program
* [Public Administration/Minor Political Science](http://www.birzeit.edu/node/164575) , Bachelor Program

The Faculty offers number of sub-disciplines in different fields which can be studied.

**Admission Requirements:**

Acceptance for the Faculty programs based on students achievement in high school according to the announced rate at the time.

**Terms of the conversion of another Faculties:**

1. Accomplished of 30 credit hours.
2. Obtained a cumulative grade average of at least 75%.
3. Obtained a cumulative grade average of at least 75% in the following courses required by the conversion program, and not less than 70% of each.

|  |  |
| --- | --- |
| Program | Courses |
| Law | JURI130, JURI135 |
| Public Administration | PUBA130, PUBA131 |
| Political Science | POLS231, POLS232 |

1. Obtained a grade in the high school of at least 5 points from the minimum which was accepted at the time.
2. Approval of the department upon its absorptive capacity.

**Terms of the conversion between programs in the faculty:**

1. Obtained a cumulative grade average of at least 73%.
2. Approval of the department upon its absorptive capacity.
3. Obtained a cumulative grade average of at least 75% in the following courses required by the conversion program, and not less than 70% of each.

|  |  |
| --- | --- |
| Program | Courses |
| Law | JURI130, JURI135 |
| Public Administration | PUBA130, PUBA131 |
| Political Science | POLS231, POLS232 |

* The following are the requirements of the Faculty of Law and the Public Administration of students enrolled in academic programs:

1. **The faculty requirements for Pubic Administration program except** [**Major Political Science/Minor Economics**](http://www.birzeit.edu/node/31093)**(29 credit hours):**
2. **Compulsory Courses:**

26 credit hours including these courses:

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| JURI130 | Introduction of Legal Science | - |
| PUBA130 | Introduction to Public Administration | - |
| POLS231 | Introduction to Political Science | - |
| COMP121 | Introduction to Computer | - |
| PHIL232 | Introduction to Logic | - |
| POLS236 | Palestinian Political System / Political System in Palestine | - |
| JURI132 | [Principles of Administrative Law](https://ritaj.birzeit.edu/course-specifications/?course%5fid=5833) | JURI130 |
| JURI230 | Constitutional Law | JURI130 |
| ECON233 | General Economics | - |

1. **Elective Courses:**

3 credit hours from the following courses:

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| SOCI131 | Introduction to Sociology | - |
| CULS230 | Democracy, human rights and international humanitarian law | - |
| POLS235 | Political Thought and Contemporary Political Theories | - |

1. **The faculty requirements for** [**Major Political Science/Minor Economics**](http://www.birzeit.edu/node/31093)**(26 credit hours):**
2. **Compulsory Courses:**

26 credit hours including these courses:

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| JURI130 | Introduction of Legal Science | - |
| PUBA130 | Introduction to Public Administration | - |
| POLS231 | Introduction to Political Science | - |
| COMP121 | Introduction to Computer | - |
| PHIL232 | Introduction to Logic | - |
| POLS236 | Palestinian Political System / Political System in Palestine | - |
| JURI132 | [Principles of Administrative Law](https://ritaj.birzeit.edu/course-specifications/?course%5fid=5833) | JURI130 |
| JURI230 | Constitutional Law | JURI130 |
| ECON131 | Principles of Microeconomics | - |

**Note**: If one of the elective courses is requirement for specialization it should be replaced by an alternative course from the faculty

1. **The faculty requirements for Law program (29 credit hours):**
2. **Compulsory Courses:**

26 credit hours including these courses:

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| JURI121 | Legal Informatics | JURI130 |
| JURI130 | Introduction of Legal Science |  |
| JURI132 | [Principles of Administrative Law](https://ritaj.birzeit.edu/course-specifications/?course%5fid=5833) | JURI130 |
| JURI230 | Constitutional Law | JURI130 |
| JURI235 | [Research Methodologies for Law Students](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13426) | JURI130 |
| JURI236 | Public International Law | JURI130 |
| PUBA130 | Introduction to Public Administration |  |
| POLS231 | Introduction to Political Science |  |
| POLS231 | Palestinian Political System / Political System in Palestine |  |

1. **Elective Courses:**

3 credit hours from the following courses:

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| SOCI131 | Introduction to Sociology | - |
| CULS230 | Democracy, human rights and international humanitarian law | - |
| POLS235 | Political Thought and Contemporary Political Theories | - |
| PHIL232 | Introduction to Logic | - |
| JURI133 | [Law and Society](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13419) | - |

**Note**: If one of the elective courses is requirement for specialization, it should be replaced by an alternative course from the faculty

1. **The faculty requirements for Political Science Program (29 credit hours):**
2. **Compulsory Courses:**

26 credit hours including these courses:

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| JURI130 | Introduction of Legal Science | - |
| PUBA130 | Introduction to Public Administration | - |
| POLS231 | Introduction to Political Science | - |
| COMP121 | Introduction to Computer | - |
| PHIL232 | Introduction to Logic | - |
| POLS236 | Palestinian Political System / Political System in Palestine | - |
| JURI132 | [Principles of Administrative Law](https://ritaj.birzeit.edu/course-specifications/?course%5fid=5833) | JURI130 |
| JURI236 | Public International Law | JURI130 |
| ECON233 | General Economics | - |

1. **Elective Courses:**

3 credit hours from the following courses:

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| SOCI131 | Introduction to Sociology | - |
| CULS230 | Democracy, human rights and international humanitarian law | - |
| POLS235 | Political Thought and Contemporary Political Theories | - |
| PHIL232 | Introduction to Logic | - |
| JURI133 | [Law and Society](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13419) | - |

## Department of Law

The Law department offers academic program leading to Bachelor degrees in law in one of the following concentrations: the profession public prosecution and the profession of law practice.

**Bachelor degrees program in law**

**Academic plan**

Academic plan for the program consists of 144 credit hours, distributed as follows:

|  |  |
| --- | --- |
| **Requirement Type** | **Credit Hours** |
| University Requirements | 21 |
| Faculty Requirements | 29 |
| Major Requirements | 88 |
| Elective Courses | 6 |
| **Total** | **144** |

**Major Requirements (88 Credit Hours)**

1. **Compulsory Courses: (73 credit hours distributed as follows)**

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Title** | **Prerequisites** |
| JURI 131 | [VOLUNTARY SOURCES OF OBLIGATION](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13418) | JURI 130 |
| JURI 134 | [PRINCIPLES OF CRIMINAL LAW](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13420) | JURI 130 |
| JURI 135 | [HISTORY OF LAW IN PALESTINE](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13421) | JURI 130 |
| JURI 231 | [INVOLUNTARY SOURCES OF OBLIGATION](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13422) | JURI 131 |
| JURI 2311 | [RULES OF OBLIGATION](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13423) | JURI 231 |
| JURI 232 | [ADMINISTRATIVE LAW](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6640) | JURI 132 |
| JURI 233 | [PRINCIPLES OF COMMERCIAL LAW](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6646) | JURI 131 |
| JURI 234 | [CRIMES AGAINST PERSONS](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13424) | JURI 134 |
| JURI 2341 | [CRIMES AGAINST PROPERTY](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13425) | JURI 134 |
| JURI 238 | [LAW OF PERSONAL STATUS 1](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13427) | JURI 131 |
| JURI 320 | [CODE OF PROFESSIONAL CONDUCT AND RESPONSIBILITIES](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13428) | Third Year Level |
| JURI 331 | [NOMINAL CONTRACTS](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13429) | JURI 2311 |
| JURI 3311 | [RIGHTS IN REM](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13430) | JURI 331 |
| JURI 332 | [ADMINISTRATIVE JUDICIARY](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6651) | JURI 232 |
| JURI 333 | [COMMERCIAL PAPERS AND BANKING OPERATIONS](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6652) | JURI 233 |
| JURI 334 | [CRIMINAL PROCEDURE LAW](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13431) | JURI 234&JURI 2341 |
| JURI 335 | [PRIVATE INTERNATIONAL LAW](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6654) | Third Year Level |
| JURI 336 | [INTERNATIONAL ORGANIZATIONS](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6655) | JURI 236 |
| JURI 337 | [LABOR LAW](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6656) | JURI 130 |
| JURI 338 | [LAW OF PERSONAL STATUS 2](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13432) | JURI 238 |
| JURI 339 | [CIVIL AND COMMERCIAL PROCEDURES LAW](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6658) | Third Year Level |
| JURI 421 | [LAW OF EXECUTION](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13440) | JURI 339 |
| JURI 431 | [LAW OF EVIDENCE](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13461) | JURI339  & 4th year standing |
| JURI 433 | [COMPANY LAW](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6641) | JURI 333 |
| JURI 438 | [SEMINAR IN LAW](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6141) | 4th year standing |

1. **Concentrations: 15 Credit Hours:**

**Concentration “A” (profession public prosecution):**

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Title** | **Prerequisites** |
| JURI 420 | [LEGISLATIVE DRAFTING](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13433) | 4th year standing |
| JURI 414 | [FORENSIC MEDICINE-BASED EVIDENCE AND CRIMINAL LABORATORIES](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13437) | JURI 334 |
| JURI 4141 | [CRIMINAL TRIAL SKILLS](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6662) | JURI 334 |
| JURI 4142 | [INTERROGATION AND EXAMINATION SKILLS](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13439) | JURI 334 |
| JURI 424 | [LEGAL EXAMINATION OF HUMAN RIGHTS](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13459) | JURI130 or CULS230 4th year standing& |
| JURI 4241 | [CRIMINOLOGY AND PENOLOGY](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13460) | 4th year standing |
| JURI 434 | [PHILOSOPHY OF LAW](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13464) | JURI 130, & 4th year standing. |
| 3 credit hours from other law courses | | |

**Concentration “B” (profession of law practice):**

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Title** | **Prerequisites** |
| JURI 420 | [LEGISLATIVE DRAFTING](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13433) | 4th year standing |
| JURI 411 | [MOCK TRIALS](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13434) | JURI 339 |
| JURI 4111 | [LAWYERING SKILLS](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13435) | 4th year standing |
| JURI 4112 | [LEGAL COUNSELLING](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13436) | 4th year standing |
| JURI 4211 | [INSURANCE LAW](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13457) | 4th year standing |
| JURI 4212 | [LAND LAW](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13458) | JURI 3311 |
| JURI 4311 | [ALTERNATIVE CONFLICT RESOLUTION MECHANISMS](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13462) | JURI 337 |
| 3 credit hours from other law courses | | |

**Courses Description:**

**JURI 121 LEGAL INFORMATICS**

IT and computer applications in the legal activity, including in judicial bodies, Public Prosecution, law firms, public administration agencies, Palestinian Legislative Council, faculties of law, and research centers, with a focus on the Palestinian Legal and Judicial System (AL-MUQTAFI).

**Prerequisite: JURI130**

**JURI 130 INTRODUCTION TO LEGAL SCIENCES**

The law; definition, origin and evolution, and the relation with other sciences. The legal rules (characteristics, classifications). Branches of law, its sources, implementation, and interpretation. The legal systems (Latin and Anglo-Saxon system). The rights (definition, types, sources, protection and use).

**Prerequisite: N/A**

**JURI 131** [**VOLUNTARY SOURCES OF OBLIGATION**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13418)

elaborates on and distinguishes between the nature of voluntary sources of obligation (contract and individual will). The contract (definition, composition, conditions of conclusion, validity, grades, effects, interpretation, elements of contractual liability, and dissolution of contractual bond). Individual will (nature, evolution, and theoretical and practical applications in the Palestinian legal system).

**Prerequisite: JURI130**

**JURI 132** [**PRINCIPLES OF ADMINISTRATIVE LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=5833)

Definition of administrative law, its origin, sources and characteristics, based on its scope of application. Legal personality, administrative organization (centralization and decentralization) and its applications in Palestine. Administrative control and its elements. Public utility, its elements and rules that govern it. A comparative study of forms of organization used in the world.

**Prerequisite: JURI130**

**JURI 133** [**LAW AND SOCIETY**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13419)

The relation between law and major social systems. Prevalent value system. Social parameters of legislation. The role of intertwined and conflicting social interests in shaping functions of legal systems. Conflict resolution mechanisms. Effective law enforcement agencies. The role of law as a tool of social reform, with a particular focus on the Arab World, especially Palestine.

**Prerequisite: NA**

**JURI 134** [**PRINCIPLES OF CRIMINAL LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13420)

Introduction to Criminal Law, including characteristics, sections, branches, and relation with other laws, such as Public International Law. Evolution of International Criminal Law. General theory and elements of crime. General theory of penalty, including definition, prevention measures, categorization, execution methods, aggravation and mitigation causes, penalty impediments, causes of exculpation. Expiration of penalty.

**Prerequisite: JURI130**

**JURI 135** [**HISTORY OF LAW IN PALESTINE**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13421)

Development of legislation and judiciary in Palestine since the Ottoman State, examining essential properties of each historical period in terms of the nature of major laws enacted as well as the constitutional framework in light of comparative legal doctrines. The course also introduces certain constitutional principles, including separation of powers in Palestinian constitutional instruments.

**Prerequisite: JURI130**

**JURI 230** [**CONSTITUTIONAL LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6645)

Origins of constitutions, different types, adoption mechanism. Depth study of state forms, political systems, judicial review, and study basic principles including separation of powers, rule of law, judicial review as well as human rights and public freedoms from theoretical and historical context. In depth study of constitutional documents in the Palestinian Territories.

**Prerequisite: JURI130**

**JURI 231** [**INVOLUNTARY SOURCES OF OBLIGATION**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13422)

Involuntary sources of obligation in Palestine (tort liability, beneficial act, and law). Tort liability includes responsibility for personal acts affecting property and persons, as well as responsibility for acts of third parties and objects. Conditions of tort liability to materialize and relevant consequences. Beneficial act as a cause of obligation (unjustified gains), including definition, conditions, and major applications (undue payment, residues, and satisfaction of a third party’s due debt). Law as an immediate and independent source of obligation in Palestine.

**Prerequisite: JURI131**

**JURI 2311** [**RULES OF OBLIGATION**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13423)

Rules of obligation, including means of voluntary execution (satisfaction, clearance, and combination of liabilities) or compulsory execution (in-kind execution or execution by means of indemnity). Legal methods to protect execution, including indirect action, mock action, and right to confinement. Characterizations amending effects of obligation, including conditions and deferred terms. Rules of joint liability between creditors and joint liability between debtors. Cases of terminated obligation, including release, impossible execution, and limitation causing dismissal of the action.

**Prerequisite: JURI231**

**JURI 232** [**ADMINISTRATIVE LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6640)

Public office and public employee according to the Palestinian Civil Service Law and Regulations. Administrative decision in terms of the concept, its issuance, application, implementation and end. Judicial implementations for administrative decision. Administrative Contract in terms of its concept, staff, application, implementation, and end. Study models of administrative contracts. Public money in terms of the concept and legal protection of public money.

**Prerequisite: JURI132**

**JURI 233** [**PRINCIPLES OF COMMERCIAL LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6646)

Definition of the commercial law, evolution, sources and features, commercial works and businesses, the merchant and the legal obligations, competition, commercial contracts (mortgage business, commercial agency, brokerage, shipping …etc), banking contracts and bankruptcy system.

**Prerequisite JURI131**

**JURI 234** [**CRIMES AGAINST PERSONS**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13424)

Models of crimes against persons under the Penal Law, which affect person’s life, health or integrity. Various types of homicides, including murder and manslaughter. Crimes of abortion and adultery. Crimes breaching public ethics, including rape and assault on honour. Crimes against individual freedoms. Crimes affecting honour and moral standing, such as libel, slander, and defamation.

**Prerequisite: JURI134**

**JURI 2341** [**CRIMES AGAINST PROPERTY**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13425)

Introduction to crimes against property, scope, differences and similarities, and statement of provisions addressing these crimes. For example, theft crimes, including elements, various forms of theft crime of fraud; dud cheques; breach of trust; and misappropriation.

**Prerequisite: JURI134**

**JURI 235** [**RESEARCH METHODOLOGIES FOR LAW STUDENTS**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13426)

Legal research elements, methodologies, schools, and requirements for success. How to select a research topic. Research paper title. How to compile an initial draft, including development of a research plan. How to deal with general and specific research sources. How to develop content of a research paper, document information sources; read and analyses provisions of legislation, address court judgments, and derive legal principles.

**Prerequisite: JURI130**

**JURI 236** [**PUBLIC INTERNATIONAL LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=5844)

Definition of public international law in the traditional and modern thought and its relationship to domestic law and the rules and courtesies of international morality. The nature of public international law and its development and its sources. Definition of the state as a subject of public international law. Recognition of the state. International treaty law in terms of the definition. Stages of the treaty-making, and health conditions, and effects, and the interpretation of treaties, modify, and terminate them.

**Prerequisite: JURI130**

**JURI 238** [**LAW OF PERSONAL STATUS I**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13427)

Betrothal and relevant provisions. Marriage, including definition, components, conditions, provisions, and types. Guardianship in the marriage contract. Representation. Fitness. Nushuz [The wife’s violation of marital duties] and relevant provisions. Obedience and respective implications. Divorce, including provisions, conditions, and types. ‘Iddah [A woman's legally prescribed waiting period after divorce from (or death of) the husband] and relevant provisions. Raj’ah [Recoverability of marriage or return to one’s divorced wife] and respective provisions. Mukhala’ah [Divorce in return for a monetary compensation to be paid by the wife to the husband], including legality, elements, and conditions. Separation and relevant forms. Lineage. Custodianship. Wet nursing. Maintenance of relatives. Relevant judicial applications.

**Prerequisite: JURI131**

**JURI 320** [**CODE OF PROFESSIONAL CONDUCT AND RESPONSIBILITIES**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13428)

Addressing moral values and code of professional conduct applicable to the legal and judicial community. Legal practices applicable to lawyers, prosecutors, legal advisors, and professors of law. Structure of legal professions as well as events and activities relating to the society. Balance to be stricken between personal professional interest, client’s interest, and public interest.

**Prerequisite: Third Year Level**

**JURI 331** [**NOMINAL CONTRACTS**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13429)

General rules and principles governing contracts in Palestine. Legal status of the contract of sale and lease, with a particular focus on practical issues. Examination of judicial decisions and models of certain contracts.

**Prerequisite: JURI2311**

**JURI 3310** [**LEGAL TEXTS (ENGLISH)**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6688)

Basic legal and judicial terminology in English; Arabic corresponding terms to English legal terminology, the study and comprehension of legal texts in English

**Prerequisite: JURI 130**

**JURI 3311** [**RIGHTS IN REM**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13430)

Principal and consequential rights in rem. Principal rights in rem include the right of property as well as dependent rights. Examination identifies the right of property, including characteristics, restrictions, acquisition, and special forms (e.g. common property). Consequential rights in rem include rights dependant on the right of property as well as rights to disposition, usufruct, use, residence, Musatahah [land/real-estate development lease], and easement. Consequential rights in rem also include (official) insurance mortgage and possessory mortgage, including establishment, effects, and expiration. Rights of lien

**Prerequisite: JURI331**

**JURI 332** [**ADMINISTRATIVE JUDICIARY**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6651)

Definition of the principle of legality, its guarantees, sources and the scope of its application. Judicial control over the management’s work in terms of its concept and its boundaries and comparison between them and the other control methods. Legal regulation of administrative judiciary in Palestine and the Supreme Court of Justice in Palestine. Cancellation case in terms of the conditions of acceptance, and the reasons for the appeal of administrative decision. Judge authority in the adjudication of administrative appeals filed before him, and authoritative judgments in the lawsuit.

**Prerequisite: JURI232**

**JURI 333** [**COMMERCIAL PAPERS AND BANKING OPERATIONS**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6652)

The definition of commercial instruments, their characteristics, establishment, types (Bill of exchange , Policy and check), circulation, guarantees of fulfillment of their value and the expiration of the commitment contained in it. Banks and its definition, the statement of its role in the economy and development, in foreign and domestic trade and terms of loans and interest and its types.

**Prerequisite: JURI233**

**JURI 334** [**CRIMINAL PROCEDURE LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13431)

The Palestinian Criminal Procedure Law. Procedures of criminal cases, including evidence collection, investigation, jurisdiction of courts in criminal matters, methods of objection against judgments, and executable judgments.

**Prerequisites: JURI234, JURI2341**

**JURI 335** [**PRIVATE INTERNATIONAL LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6654)

Treatment of nationality and the foreign, and the conflict of laws in the case of a legal dispute in a special national court with a foreign party. The circumstances in which the court exercised its jurisdiction. Conditions in which a foreign or international judgment is recognized or implemented by national courts. Rules that determine the law to be implemented and applied in disputes related to contracts and compensation.

**Prerequisite: Third Year Level**

**JURI 336** [**INTERNATIONAL ORGANIZATIONS**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6655)

Introduction to international organizations, types, and legal capacity. Consequences of recognizing the international juridical personality of an organization. Introduction to the League of Nations, including objectives, principles, membership, and public bodies. Introduction to the United Nations, including phases of establishment, objectives, principles, and public bodies. Introduction to international regional organizations, including the League of Arab of Nations and European Union.

**Prerequisite: JURI236**

**JURI 337** [**LABOR LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6656)

Palestinian Labor Law, its sources and scope of implementation as well as contracts of employment, their content, fulfillment, duration and the effects of the termination of such contracts; legal regime of collective labor agreements, mechanisms of dispute resolution, international standards on labor relations, a study of case law.

**Prerequisite: JURI130**

**JURI 338** [**LAW OF PERSONAL STATUS II**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13432)

Introduction to inheritance, including effective cause of legitimacy, rules and conditions, causes, and impediments. Rights relating to the estate (outfitting, debts, and bequests together with respective rules).Shares. Agnate relatives. Exclusion. Cognates [blood relatives]. Surplus redistribution and deficit redistribution. Share defragmentation. Takharuj [Compromise among the inheritors for a sum of money]. Inheritance dedicated to an unborn child and lost person. The course also addresses the obligatory bequest, including relevant rules, matters, and judicial applications.

**Prerequisite: JURI238**

**JURI 339** [**CIVIL AND COMMERCIAL PROCEDURES LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6658)

Introduction to the Civil and Commercial Procedure Law, including development, sources, relation to other laws. Organization of the judicial apparatus, including formation of courts, grades of litigation, judicial personnel, rules of jurisdiction, theory of the action, litigation proceedings.

**Prerequisite: 3rd year standing**

**JURI 411** [**MOCK TRIALS**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13434)

Introduction to and training on all trial procedures, including opening a trial session, challenges, direct examination, re-examination, counter-examination, examination of experts and children, etc.

(1hr-lecture, 45hr-practical training).

**Prerequisite: JURI339**

**JURI 4111** [**LAWYERING SKILLS**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13435)

Introduction to skills needed to practice the legal profession. Writing descriptive legal notes, stating strengths and weaknesses of cases in question. Identifying methods to support strengths and overcome weaknesses. Writing legal letters. Examining case facts by interviewing witnesses. Learning to write and submit litigants’ arguments.

(1hr-lecture, 45hr-practical training)

**Prerequisite: 4th year standing**

**JURI 4112** [**LEGAL COUNSELLING**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13436)

Foundation for recognizing and resolving legal, non-legal, and ethical issues in the process of interviewing and advising clients, theories and skills used by lawyers in identifying, analyzing and diagnosing legal issues and problems. Understanding client needs and desires, assisting the client to devise solutions and implement decisions, issues related to the lawyer’s limits of responsibility and the client’s rights.

(Lecture 1hr, Practical Training of 45hrs).

**Prerequisite: 4th year standing**

**JURI 414** [**FORENSIC MEDICINE-BASED EVIDENCE AND CRIMINAL LABORATORIES**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13437)

Practical course aims to introduce how to deal with evidences that legal persons get from forensic equipments and from Criminal Laboratory such as: fingerprints, genes, sudden death, deformities, burns, sexual intercourse, sexual molestation , rape, abortion, medical reports, prints, forgery from technical perspective, counterfeit currency, and similar topics .

(1hr-lecture, 45hr-practical training).

**Prerequisite: JURI334**

**JURI 4141** [**CRIMINAL TRIAL SKILLS**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6662)

Introduction to skills needed to follow up on cases before penal courts, including assessment of criminal evidence, examination, deliberation of evidence and counter-arguments. How to submit pre-trial petitions and initiatory and conclusive pleadings. Attendance of criminal trial sessions at the courthouse.

(1hr-lecture, 45hr-practical training)

**Prerequisite: JURI334**

**JURI 4142** [**INTERROGATION AND EXAMINATION SKILLS**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13439)

Introduction to skills and expertise of criminal interrogation. Various techniques used by criminologists and anthropologists with a view to identify criminal patterns, including skills to identify and inspect the crime scene.

(1hr-lecture, 45hr-practical training).

**Prerequisite: JURI334**

**JURI 420** [**LEGISLATIVE DRAFTING**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13433)

Introduction to fundamental principles of good legislative drafting, including methodology, techniques, technical aspects, and problems. Special attention is paid to legislative drafting skills, understanding legislative drafting in light of linguistic and intellectual techniques, particularly those applied by the Palestinian legislator.

**Prerequisite: 4th year standing**

**JURI 421** [**LAW OF EXECUTION**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13440)

Introduction to the Department of Execution, including organizational structure and capacities. Writ of execution and relevant procedures. Subject of execution and properties that may be seized. Problems and disputes associated with execution. Methods of execution (direct execution, execution by means of seizure, and confinement of the debtor).

**Prerequisite: JURI339**

**JURI 4211** [**INSURANCE LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13457)

Introduction to insurance, functions, and technical foundations. Insurance contract, including components, properties, and termination. Powers of the Palestinian Capital Market Authority in the regulation and control of the insurance sector. Subject of the insurance contract. Types of insurance and respective rules. National and foreign insurance companies. Insurance agencies, mediators, experts, and investigators. The Palestinian Road Accident Victims Compensation Fund. Provisions on the responsibility for compensation.

**Prerequisite: 4th year standing**

**JURI 4212** [**LAND LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13458)

Legal regulation of land in Palestine, including types, conveyance, possession disputes, land settlement, settlement courts, land registration system, disposition of settled and unsettled land, land boundary delineation, survey, valuation, removal of common property, sporadic registration, actions to quiet title and prevent opposition, pre-emption, precedence, and review of relevant Palestinian court judgments.

**Prerequisite: JURI3311**

**JURI 424** [**LEGAL EXAMINATION OF HUMAN RIGHTS**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13459)

Introduction to the development of human rights principles from customary rules into international laws and conventions. Overview of human rights principles under international conventions and practice. Enforcement mechanisms of human rights principles on the local and international levels.

**Prerequisite: JURI130 or CULS230 & 4th year standing**

**JURI 4241** [**CRIMINOLOGY AND PENOLOGY**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13460)

Introduction to criminology and relevant themes. Crime and penalty. Introduction to penology, purposes, schools, and relation to other disciplines. Criminal conduct in terms of factors and treatment. Forms of combating crime. Treatment of criminal conduct.

**Prerequisite: 4th year standing**

**JURI 431** [**LAW OF EVIDENCE**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13461)

Introduction to the Law of Evidence and Procedure in theory and practice through a descriptive and analytical examination of the provisions of the Laws of Evidence and Execution in parallel with a detailed explanation of themes in question. The course provides students with relevant forms of warrants, powers of attorney, or petitions. In addition to training on analysis of court decisions, students are required to compile brief legal reports on major problems associated with topics taught in the course

**Prerequisite: JURI339& 4th year standing**.

**JURI 4311** [**ALTERNATIVE CONFLICT RESOLUTION MECHANISMS**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13462)

Introduction to alternative conflict resolution mechanisms (arbitration, mediation, and conciliation). Particular attention is paid to arbitration, including relevance, major principles, legal status, types, distinction from other potentially contradictory terms. The course also addresses arbitration agreement, arbitrators, arbitration procedures, arbitration decisions, and objections.

**Prerequisite: JURI337**

**JURI 432** [**PUBLIC FINANCE AND TAXES**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13463)

Introduction to public finance from a legal perspective (evolution, development, relation to other disciplines). Public expenditures (dentition, elements, categories, and effects). Public revenues (taxes, particularly income tax; public price; and public loans). Public budget (preparation, approval, and implementation). Financial and judicial institutions concerned with public finance.

**Prerequisite: 3rd year standing**

**JURI 433** [**COMPANY LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6641)

Companies law (definition, sources, its relation with other branches of law). General approach of legal provisions of companies (formation, company’s contract, legal capacity, legal entity), companies’ types, the bankruptcy system of companies.

**Prerequisite: JURI333**

**JURI 434** [**PHILOSOPHY OF LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13464)

Introduction to the philosophy of law, relevance, and difference from general philosophy in general, and theory of law in specific. The course focuses on the philosophical foundation and generic rules that govern a set of concepts, including the notion of law and law enforcement, legal logic, rights and duties, justice, freedom, responsibility, contract, and relation of the law to society, state, sovereignty, ethics and religion.

**Prerequisite: JURI130**

**JURI 435** [**COMPARATIVE LEGAL SYSTEMS**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13465)

Introduction to various legal systems in the world, including Anglo Saxon, Latin and Islamic systems, including respective history, sources, institutions, and features. Themes under the private and public law in various systems with a view to understand differences in theory and practice.

**Prerequisite: JURI130**

**JURI 4351** [**PRINCIPLES OF ISLAMIC JURISPRUDENCE (USUL AL FIQH)**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13466)

Introduction to the Principles of Islamic Jurisprudence and relevance to legislators and legal practitioners. Disciplines and types of the legal ruling [value of Shari’a], along with a comparison to legal norms. Sources of legislation (Qur’an, Sunnah [Prophetic tradition], Ijma’ [consensus of opinion], Qiyas [analogical deduction], Istihsan [juristic preference, equity], Maslahah [unrestricted interest], Sadd ath Tharai’e [blocking of pretences], ‘Urf [custom], and Istishab [presumption of continuity]. Objectives of Shari’a. Implications of texts and relevant legal applications. Rules of conflicts of proofs or opinions and preference. Juristic rules from the Ottoman Mejelle.

**Prerequisite: 3rd year standing**

**JURI 4352** [**ENVIRONMENTAL LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13467)

Introduction to Environmental Law, including sources, scope of application, and general characteristics. International environment conservation problems, including transboundary pollution, protection of national nature reserves, and respective rules in Palestine under effective legislation.

**Prerequisite: JURI130**

**JURI 4353** [**LEGAL TERMINOLOGY IN ENGLISH**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13468)

Examination of English legal and judicial terms corresponding to Arabic. Translation of terms, first as single words and then as jurisprudent and legislative formulas. Terminology covers law, sections, and branches; rights and relevant categories; obligation and relevant sources in various legal systems.

**Prerequisite: JURI130**

**JURI 436** [**INTERNATIONAL HUMANITARIAN LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6686)

Introduction to International Humanitarian Law and development. Geneva Convention of 1864. Geneva Conventions of 1929. Four Geneva Conventions of 1949. Fundamental principles of International Humanitarian Law and scope of application. International and non-international armed conflicts. Victims of armed conflicts. Prisoners of war. Civilians. Applicability of International Humanitarian Law to the Palestinian territory.

**Prerequisite: JURI236**

**JURI 4361** [**DIPLOMATIC AND CONSULAR LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=13469)

Introduction to International Humanitarian Law and development. Geneva Convention of 1864. Geneva Conventions of 1929. Four Geneva Conventions of 1949. Fundamental principles of International Humanitarian Law and scope of application. International and non-international armed conflicts. Victims of armed conflicts. Prisoners of war. Civilians. Applicability of International Humanitarian Law to the Palestinian territory.

**Prerequisite: JURI236**

**JURI438** [**SEMINAR IN LAW**](https://ritaj.birzeit.edu/course-specifications/?course%5fid=6141)

To develop a legal research paper, applying legal research rules

**Prerequisite: 4th year standing**

**JURI439 SPECIAL TOPIC IN LAW**

Selecting a legal topic that is important and to study such topic. The selecting of the legal topic depends on the students’ needs and on the Academic committee’s interest and concerns.

**Prerequisite: the Approval of the Department**

## Department of Public Administration

The department of Public Administration offers students an interdisciplinary academic area of study. It aims to develop their conceptual abilities, knowledge base, and practical skills and to prepare them for work in public sector institutions and the not –for –profit organizations. It presents students with prospects to understand the tools available for management and policy analysis, and to develop a critical understanding of the key concepts used for policy analysis and management, and to apply this understanding to problems in the public sector in a realistic and sophisticated manner. This area of study covers a variety of topics important to public sector such as human resources, public budgeting and finance, administration and management, administrative regulations, private-public sector relations, administrative ethics, administrative law, local governance, and centralization versus de-centralization. Graduates will be prepared to hold a wide range of positions such as: human resource directors, nonprofit executive directors, policy and legislative analysts’, management consultants, college and university administrators, health administrators, nonprofit program managers, and municipal administrators and managers. Additionally, this program can provide graduates with excellent preparation for the pursuit of higher degrees.

The Department of Public Administration offers an academic program leading to Bachelor degree Major Public Administration.

**Major Public Administration**

**Condition for Continuing in Major**

1. A grade of not less than 70% in PUBA 130.
2. Student must successfully complete and obtain a cumulative average of 70% in the following courses: JURI 130, POLS 231
3. Student in Major must maintain a cumulative Major average of not less than 70%.

**Program Requirements**

Student must successfully complete a minimum of 67 credit hours of courses distributed as follows:

1. University Requirements (21 credit hours)
2. Faculty Requirements (29 credit hours)
3. Core courses (51 credit hours):

PUBA 131, 231, 232, 235, 236, 331,332, 334, 335, 337, 432, 435, 438, JURI 232, 337, MATH 135 (Literate Stream), STAT 236

1. Elective courses (16 credit hours) from the following list:

One credit hour from the following two courses: PUBA 311, 312

Three credit hours from the following courses: ENGC 332, FREN 335

Finishing 12 credit hours from the following:

Nine credit hours from the following courses: PUBA 238, 333, 338, 431, 433, 437, 437

Three credit hours from the following courses: PUBA 237, 330, 430, 436, 439

**Minor Public Administration**

**Program Requirements**

Student must successfully complete in Public Administration a minimum of 24 credit hours of courses distributed as follows with a cumulative average not less than 70%:

1. (18 credit hours) PUBA 130, 131, 232, 331, 334, 335
2. (6 credit hours) PUBA 332, 333, 337, 433

**Courses Description (PUBA):**

**130 Introduction to Public Administration 3 cr. hrs.**

What is Public Administration; the difference between Public sector organizations and those of the private sector. The major functions of the managerial work in public administration. Management of the nonprofit organizations. Importance of public Policy to Public Administration. Political Activity and delegation of Authority. Political and Administrative leadership. Public audit and control. Public Budgeting. Human Resource Management. Time Management.

**131 Organizational Theory and Design of Public Organizations 3 cr. hrs.**

It discusses managerial theories and their development, institutions, organizations and society, the organizational theory of public administration, the basic principles of managing the public sector, the basic principles of human resource management in the public sector, the formal organizational structure, informal relationships, specialization and work division, centralization and decentralization, bureaucracy, planning, organization, leadership, efficiency and effectiveness of public organizations, authority and supervision.

*Prerequisite: PUBA 130*

**231 Introduction to Governmental Accounting 3 cr. hrs.**

Introduction to Public Accounting. The accounting cycle and documentation of accounting transactions. Booking the various transactions and classifying them. Preparation of Balance Sheet, Preparing final Accounts. Comparison between government accounting and that of the Private sector. Functions and characteristics of governmental accounting. International Organizations concerned with Governmental Accounting; Defining the Accounting Unit.

**232 Introduction to Public Policy 3 cr. hrs.**

An overview of Public Policy key terms and its major principles. An assessment of the major methods of examining and analyzing Public Policies. Coverage of the various models used to describe and study Public policy and its stages. The relationship between Public Administration and Public Policy as well as other sciences. The strategic role of interest groups and/or lobbying groups in affecting public policy throughout its various stages.

*Prerequisite: PUBA 130*

**235 Research Methods in Public Administration 3 cr. hrs.**

This subject is an introduction to the quantitative and qualitative skills of scientific research, different research procedures, statistics, basics of data classification and categorization and the skills of conducting interviews and surveys. Definition of research problems and gathering relevant data. The relationship between theory and application and methods of analyzing and explaining data, preparation and presentation of data.

*Prerequisite: Statistics 236*

**236 Financial Management for the Public Sector 3 cr. hrs.**

It covers system of public budget and its relation with the fiscal policy of the government, the role of the budget in stabilization and development, systems and procedures of budget preparation, financing and taxation, government expenditures and their functional and economic roles, the organic law of the budget, the laws and regulations of the treasury, intergovernmental fiscal relations, financial planning. Case studies in financial planning in the public sector.

*Prerequisite: PUBA 231*

**237 Accounting for Public Sector and Nonprofit Organizations 3 cr. hrs.**

It discusses accounting principles and assumptions, recording commercial transactions, classifying the transactions, preparing closing accounts and the financial statements, preparing the cash flow. The accounting cycle in the governmental sector, municipalities and not-for-profit organizations, revenues and expenditures, preparing the public budget.

*Prerequisite: PUBA 231*

**238 Comparative Public Administration 3 cr. hrs.**

This class discusses the development of the Comparative Public Administration as a discipline and as a practice. It offers an overview of the evolution of public administration systems and experiences across varied public systems and settings. The course offers an overview of the various approaches to the CPA studies and their relevance. It also compares existing public administration models across different social/political/economic settings, such as the Anglo-Saxon, the continental models of Europe, the Canadian model, the Asian models, models from developing countries and the Arab world.

*Prerequisite: PUBA 131, 232*

**311 Public Administration Terminology in French 1 cr. hr.**

It focuses on definitions and terminology of public administration in French to facilitate the use of references and lectures in this language.

*Prerequisite: FREN 331*

**312 Public Administration Terminology in English 1 cr. hr.**

It focuses on definitions and terminology of public administration in English to facilitate the use of references and lectures in this language.

*Prerequisite: ENGL 231*

**330 Analytical Methods in Public Administration 3 cr. hrs.**

Use of analytical quantitative methods in administrative decision making, probability theory, decision theory, the expected benefit, linear programming, quality concepts and performance improvement, tables of controls and monitoring, costs of quality, use of the computer in quality control, sampling in quality control.

*Prerequisite PUBA 131, STAT 236*

**331 Strategic Management 3 cr. hrs.**

This topic defines strategic management from the following dimensions: the concept itself; the impact of the changing context of the public sector on strategic management and planning; the challenge of relating and harmonizing the individual, group and organizational goals; goals, mission, strategy and policies, the development model of the organizational systems. Strategic planning, setting the vision, mission and the strategic purpose. Analyzing the internal and the external environment. Formation of strategic goals and issues. Operational planning, monitoring and evaluating. The management of change.

*Prerequisite: PUBA 131, 232*

**332 Human Resources Management 3 cr. hrs.**

This is an introduction to the management of human resources, strategic management of human resources, determinants of success and failure in the management of human resources, models of human resource management, the environment of human resource management, functions and tasks of human resource management: planning, functional analysis, selection and training, labor relations and addressing issues of discrimination, claims and injustice, development of human resources, performance measurement and evaluation, compensations and awards, health and safety, general view of legislation on human resources in the public sector, managing individual differences.

*Prerequisite: PUBA 131*

**333 Leadership Skill Development 3 cr. hrs.**

Introduction to self development and essential leadership skills. Identifying personal mission and vision. An overview of the main literature regarding self-development Principles that guarantee success in life and work. How to discover your own strengths as a leader. Principles of NLP. Effective Communication Skills, Nonverbal cues and skills. How to work more effectively with others. Effective coaching skills… Time management and personal planning.

**334 Administrative/Organizational Behavior 3 cr. hrs.**

This course discusses behavioral theory, analysis of individual behaviors in the organization, cognition and learning, personality and individual differences, incentives, group behavior, team development, teamwork and its dynamics, organizational structure, leadership and supervision, power and authority, communication, organizational culture, conflict management and negotiation, management of change.

*Prerequisite: PUBA 131*

**335 Public Administration in Palestine 3 cr. hrs.**

The nature and the development of the Palestinian Public Sector (PPS). The structural and functional organization of the PPS. The three authorities and the relations among them as it relates to making and implementing public policy. The role of Palestinian Authority in developing the civil society and serving the public interest. Nature of public service and the obligation of public employees. The Nonprofit organizations and their relation to the central authority. The status of the PPS and the major challenges facing it. Future outlook to build and strengthen this sector.

*Prerequisite: PUBA 131*

**337 Administrative Audit and Control 3 cr. hrs.**

The concept of Audit and Control. Comparing the actual VS the planned implementation of the organization activities. Describing the deviation. Stages of Audit and Control. Identifying measures and control. Performance evaluation. Assessment of deviations and coming up with needed solutions. Types of audit/control: pre-current-post. Other types such as strategic audit and control such internal vs. external. Importance of Audit and Control. Quality Control, financial control.

*Prerequisite: PUBA 131, 3rd year level*

**338 Local Governance and Administration 3 cr. hrs.**

It covers a wide rang of issues related to local governance such as: the meaning of local government in public administration, the need of local governance, decentralization, principles of local government and local administration, interrelations between the central and local (or state level) governments, delegation of responsibilities of taxation and expenditure and its consequences, political processes in local governance (agenda, statement of policy, budget, implementation, and evaluation), comparative models in local government.

*Prerequisite: PUBA 131, 232*

**430 Financial Analysis for Public Budgeting 3 cr. hrs.**

An overview of major approaches to Financial Analysis. The goals of financial analysis to serve public decision-making. Various approaches to financial analysis.

*Prerequisite: STAT 236*

**431 Public Policy Analysis 3 cr. hrs.**

Identifying and analyzing key issues in public policy. Standards used to taking decisions relating to public policy. Evaluating alternatives. Key skills used in policy analysis. Various models and approaches used in policy analysis. Practical examples used to illustrate main points. Overview of major public policies such as anti-poverty policies/education, health, welfare policies, and others.

*Prerequisite: STAT 232, 331*

**432 Public Projects Management 3 cr. hrs.**

This topic concerns the nature of project management through relating organizational goals of public administration to the goals of specific projects and it focuses on: developing the project team, the roles of the project leaders and the team members, the cycle of project management, defining the project and analyzing the problem, studying the feasibility of the project, planning the project, sharing the project with stakeholders, principles of division of labor in the project and operational planning, scheduling the project through Gantt Chart, methods of planning, monitoring and evaluation, bids and contracts management, introduction to fund-raising, report writing.

*Prerequisite: PUBA 131, STAT 236*

**433 Management of Nonprofit Civil Organizations 3 cr. hrs.**

A comprehensive study of not-for-profit organizations as a comprehensive system of service delivery in the public sector. Relationship of these organizations with the central Government. Key skills required to manage these organizations. Their environment and key factors impacting them. Relationship with donors and other stakeholders. Financial practices and control mechanisms.

*Prerequisite: PUBA 131, 3rd year level*

**435 Transparency/Accountability in the Public Sector 3 cr. hrs.**

Principles of Transparency and accountability in the Public sector. The role of Transparency/accountability and control in administrative reforms efforts in various areas such as executive/legislative/legal. Strategies to strengthen T/A/C in public organizations. International/regional/local examples of anti-corruption efforts. The role of monitoring agencies in assuring T/A/C and strengthening good governance.

*Prerequisite: PUBA337*

**436 Electronic Government 3 cr. hrs.**

The concept of e-government. The history of e-government and its evolution. Major requirements for e-government. Relationship between E-G and administrative reform. Major benefits of E-G.

*Prerequisite: PUBA 131, 3rd year level*

**437 Organizational Development and Administrative Improvement 3 cr. hrs.**

Key terms in OD and Admin development. Requirements and guidelines that should be adhered to when developing OD/AD strategies. The relevance of OD/AD to the organization; Various approaches to OD/AD. Why do OD/AD efforts fail/ succeed. Impact of political environment on such efforts.

*Prerequisite: PUBA 131, 3rd year level*

**438 Seminar in Public Administration 3 cr. hrs.**

It studies a selected subject in public administration. Subjects are chosen according to faculty members’ interests and interests of the 4th year students, students are trained in a public organization or at NGOs during the summer course and after the student finishes 90 credit hours. Managerial problems within the sector are discussed. Students are required to prepare a written research which is presented to the academic members and classmates.

*Prerequisite: PUBA 131, STAT 236*

**439 Special Topic in Public Administration 3 cr. hrs.**

This course studies a specific subject in public administration; the subject is chosen according to the faculty member’s interests as well as the interests of students. Subject may be discussed in the form of a seminar.

*Prerequisite: 4th year level, department approval*

## Department of Political Science

The department of Political Science provides academic programs that lead to a BA Major degree in Political Science and a Minor degree either in Economics, Public Administration, Philosophy, Women Studies, or International Relations. The department also provides a Minor degree in Political Science.

**First: BA Major: Political science, Minor: Economics**

**Study Plan**

This plan consists of 122 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirements** | **Credit hours** |
| University Requirements | 21 |
| Faculty Requirements | 29 |
| Major Requirements | 42 |
| Minor Requirements | 21 |
| Free Electives [[13]](#footnote-13) | 9 |
| Total | 122 |

1. **Major Requirements** (42 credit hours):
2. **Mandatory Courses**: 24 credit hours include the following:

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Courses** |
| POLS232 | Research Methodology in Political Science | POLS231 |
| POLS233 | Introduction to Comparative Systems | POLS 231 |
| POLS234 | Introduction to International Relations | POLS231 |
| POLS235 | Political Thought and Contemporary Political Theories | . |
| POLS334 | The Palestinian Question 2 | . |
| POLS335 | Introduction to Political Economy and Globalization | POLS234 |
| POLS432 | Comparative Politics (International Regions) | POLS234,POLS233 |
| POLS438 | Seminar in Political Science | This course is intended for senior year students; recognition by the department is required |

1. **Elective Courses**: 18 credit hours include the following:

|  |  |  |  |
| --- | --- | --- | --- |
| **Credit Hours** | **Course No.** | **Course Title** | **Prerequisite Course** |
| 3 credit hours form the following courses | POLS237 | Political Theory in Islam | . |
| POLS238 | Theory of International Relations | POLS234 |
| POLS239 | Ancient and Medieval Political Thought | . |
| POLS330 | Advanced Research Methodology | POLS232 |
| 3 credit hours from the following courses | POLS331 | Political Systems in the Arab World | POLS 233 |
| POLS336 | Israeli Political System | POLS233 |
| POLS338 | Studies in Political Culture and Democracy | . |
| POLS339 | Political Transformations and Changes in the Arab World | POLS331 |
| POLS434 | The Arab World in International Affairs | POLS234 |
| 3 credit hours from the following courses | POLS337 | International Institutions and Organizations | POLS234 |
| POLS430 | Global Political Systems | POLS233 |
| POLS431 | European Union | POLS234 |
| POLS4311 | United States of America | POLS233 |
| POLS433 | Foreign Policy of Great Powers | POLS234 |
| 3 credit hours from the following courses | GEOG332 | Political Geography | . |
| SOCI332 | Political Sociology | SOCI131 |
| **6 Credit Hours of Political Science Courses for third and fourth year students** | | | |

1. **Minor Requirements** (21 credit hours)

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Course** |
| MATH2351 |  | MATH1351  or  TAWJIHI/SCIENCE |
| ECON3311 |  | ECON233, MATH2351 |
| ECON3321 |  | ECON233, MATH2351 |
| ECON335 |  | ECON233 |
| ECON3361 |  | ECON3311 |
| ECON431 |  | This course is intended for senior year students; recognition by the department is required |
| ECON434 |  | ECON3311 |

**Second: BA Major: Political Science, Minor: Public Administration**

**Study plan**

This plan consists of 122 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirements** | **Credit Hours** |
| University Requirements | 21 |
| Faculty Requirements | 29 |
| Major Requirements | 42 |
| Minor Requirements | 21 |
| Free electives | 9 |
| Total | 122 |

1. **Major Requirements** (42 credit hours):
2. **Mandatory Courses**: 24 credit hours include the following:

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Courses** |
| POLS232 | Research Methodology in Political Science | POLS231 |
| POLS233 | Introduction to Comparative Systems | POLS 231 |
| POLS234 | Introduction to International Relations | POLS231 |
| POLS235 | Political Thought and Contemporary Political Theories | . |
| POLS334 | The Palestinian Question 2 | . |
| POLS335 | Introduction to Political Economy and Globalization | POLS234 |
| POLS432 | Comparative Politics (International Regions) | POLS234,POLS233 |
| POLS438 | Seminar in Political Science | This course is intended for senior year students; recognition by the department is required |

1. **Elective Courses** 18 credit hours include the following:

|  |  |  |  |
| --- | --- | --- | --- |
| **Credit Hours** | **Course No.** | **Course Title** | **Prerequisite Course** |
| 3 credit hours form the following courses | POLS237 | Political Theory in Islam | . |
| POLS238 | Theory of International Relations | POLS234 |
| POLS239 | Ancient and Medieval Political Thought | . |
| POLS330 | Advanced Research Methodology | POLS232 |
| 3 credit hours from the following courses | POLS331 | Political Systems in the Arab World | POLS233 |
| POLS336 | Israeli Political System | POLS233 |
| POLS338 | Studies in Political Culture and Democracy | . |
| POLS339 | Political Transformations and Changes in the Arab World | POLS331 |
| POLS434 | The Arab World in International Affairs | POLS234 |
| 3 credit hours from the following courses | POLS337 | International Institutions and Organizations | POLS234 |
| POLS430 | Global Political Systems | POLS233 |
| POLS431 | European Union | POLS234 |
| POLS4311 | United States of America | POLS233 |
| POLS433 | Foreign Policy of Great Powers | POLS234 |
| 3 credit hours from the following courses | GEOG332 | Political Geography | . |
| SOCI332 | Political Sociology | SOCI131 |
| **6 Credit Hours of Political Science Courses for third and fourth year students** | | | |

1. **Minor Requirements** (21 credit hours):
2. **Mandatory Courses**: 15 credit hours include the following:

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Course** |
| PUBA131 |  | PUBA130 |
| PUBA232 |  | PUBA130 |
| PUBA331 |  | PUBA131, PUBA232 |
| PUBA334 | Organizational Behavior | PUBA131 |
| PUBA335 | Public Administration in Palestine | PUBA130 |

1. **Elective courses**: 6 credit hours including the following:

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Course** |
| PUBA332 |  | PUBA131 |
| PUBA333 |  | . |
| PUBA337 |  | PUBA131  This course is intended for third year students |
| PUBA433 |  | PUBA131  This course is intended for third year students |

**Third: BA Major: Political Science, Minor: Philosophy**

**Study plan**

This plan consists of 122 credit hours distributed as follows:

|  |  |
| --- | --- |
| **Requirements** | **Credit Hours** |
| University Requirements | 21 |
| Faculty Requirements | 29 |
| Major Requirements | 45 |
| Minor Requirements | 18 |
| Free electives[[14]](#footnote-14) | 9 |
| Total | 122 |

1. **Major Requirements** (42 credit hours):
2. **Mandatory Courses**: 24 credit hours include the following:

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Courses** |
| POLS232 | Research Methodology in Political Science | POLS231 |
| POLS233 | Introduction to Comparative Systems | POLS 231 |
| POLS234 | Introduction to International Relations | POLS231 |
| POLS235 | Political Thought and Contemporary Political Theories | . |
| POLS334 | The Palestinian Question 2 | . |
| POLS335 | Introduction to Political Economy and Globalization | POLS234 |
| POLS432 | Comparative Politics (International Regions) | POLS234,POLS233 |
| POLS438 | Seminar in Political Science | This course is intended for senior year students; recognition by the department is required |

1. **Elective Courses**: 18 credit hours include the following:

|  |  |  |  |
| --- | --- | --- | --- |
| **Credit Hours** | **Course No.** | **Course Title** | **Prerequisite Course** |
| 3 credit hours form the following courses | POLS237 | Political Theory in Islam | . |
| POLS238 | Theory of International Relations | POLS234 |
| POLS239 | Ancient and Medieval Political Thought | . |
| POLS330 | Advanced Research Methodology | POLS232 |
| 3 credit hours from the following courses | POLS331 | Political Systems in the Arab World | POLS233 |
| POLS336 | Israeli Political System | POLS233 |
| POLS338 | Studies in Political Culture and Democracy | . |
| POLS339 | Political Transformations and Changes in the Arab World | POLS331 |
| POLS434 | The Arab World in International Affairs | POLS234 |
| 3 credit hours from the following courses | POLS337 | International Institutions and Organizations | POLS234 |
| POLS430 | Global Political Systems | POLS233 |
| POLS431 | European Union | POLS234 |
| POLS4311 | United States of America | POLS233 |
| POLS433 | Foreign Policy of Great Powers | POLS234 |
| 3 credit hours from the following courses | GEOG332 | Political Geography | . |
| SOCI332 | Political Sociology | SOCI131 |
| **9 Credit Hours of Political Science Courses for third and fourth year students** | | | |

1. **Minor Requirements:** 18 credit hours include the following:

|  |  |  |  |
| --- | --- | --- | --- |
| **Credit Hours** | **Course No.** | **Course Title** | **Prerequisite Course** |
| 3 credit hours | PHIL231 |  |  |
| 3 credit hours from the following courses | PHIL233 |  |  |
| PHIL234 |  |  |
| 3 credit hours from the following courses | PHIL438 |  | PHIL231; recognition by the department is required |
| PHIL439 |  |  |
| **9 Credit Hours of Philosophy Courses for second, third, and fourth year students** | | | |

**Fourth: BA Major: Political Science, Minor: Women Studies**

**Study plan**

This plan consists of 122 credit hours distributed as follows:

|  |  |
| --- | --- |
| Requirements | Credit hours |
| University Requirements | 21 |
| Faculty Requirements | 29 |
| Major Requirements | 39 |
| Minor Requirements | 24 |
| Free electives [[15]](#footnote-15) | 9 |
| **Total** | 122 |

1. **Major Requirements** (39 credit hours):
2. Mandatory Courses: 24 credit hours include the following:

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Courses** |
| POLS232 | Research Methodology in Political Science | POLS231 |
| POLS233 | Introduction to Comparative Systems | POLS 231 |
| POLS234 | Introduction to International Relations | POLS231 |
| POLS235 | Political Thought and Contemporary Political Theories | . |
| POLS334 | The Palestinian Question 2 | . |
| POLS335 | Introduction to Political Economy and Globalization | POLS234 |
| POLS432 | Comparative Politics (International Regions) | POLS234,POLS233 |
| POLS438 | Seminar in Political Science | This course is intended for senior year students; recognition by the department is required |

1. **Elective Courses**: 15 credit hours include the following:

|  |  |  |  |
| --- | --- | --- | --- |
| **Credit Hours** | **Course No.** | **Course Title** | **Prerequisite Course** |
| 3 credit hours form the following courses | POLS237 | Political Theory in Islam | . |
| POLS238 | Theory of International Relations | POLS234 |
| POLS239 | Ancient and Medieval Political Thought | . |
| POLS330 | Advanced Research Methodology | POLS232 |
| 3 credit hours from the following courses | POLS331 | Political Systems in the Arab World | POLS233 |
| POLS336 | Israeli Political System | POLS233 |
| POLS338 | Studies in Political Culture and Democracy | . |
| POLS339 | Political Transformations and Changes in the Arab World | POLS331 |
| POLS434 | The Arab World in International Affairs | POLS234 |
| 3 credit hours from the following courses | POLS337 | International Institutions and Organizations | POLS234 |
| POLS430 | Global Political Systems | POLS233 |
| POLS431 | European Union | POLS234 |
| POLS4311 | United States of America | POLS233 |
| POLS433 | Foreign Policy of Great Powers | POLS234 |
| 3 credit hours from the following courses | GEOG332 | Political Geography | . |
| SOCI332 | Political Sociology | SOCI131 |
| **3 Credit Hours of Political Science Courses for third and fourth year students** | | | |

1. **Minor Requirements**: 24 credit hours include the following:
2. **Mandatory Courses**: 12 credit hours include the following:

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Course** |
| WOMS231 |  |  |
| WOMS232 |  |  |
| WOMS236 |  |  |
| WOMS438 |  | WOMS231 |

1. **Elective Courses**: 12 credit hours include the following:

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Course** |
| WOMS233 |  |  |
| WOMS234 |  |  |
| WOMS235 |  |  |
| WOMS331 |  |  |
| WOMS332 |  |  |
| WOMS333 |  |  |
| WOMS334 |  | WOMS231 |
| WOMS437 |  | WOMS231 |

**Fifth: BA Major: Political Science, Minor: International Relations**

**Minor Requirements** (27 credit hours):

1. **Mandatory Courses**: 18 credit hours include the following):

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Course** |
| POLS231 | Introduction to Political Science | POLS231 |
| POLS234 | Introduction to International Relations | POLS234 |
| POLS238 | Theory of International Relations | POLS234 |
| POLS332 | Introduction to Diplomacy | POLS234 |
| INRE331 | Contemporary International and Regional Issues | POLS234 |
| POLS433 | Foreign Policy of Great Powers | POLS234 |

1. **Elective Courses**: 9 credit hours include the following:

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Course** |
| INRE332 | The Art of Negotiations and Conflict Resolution | POLS234 |
| INRE334 | Advanced Diplomacy | POLS234, POLS332 |
| POLS337 | International Institutions and Organizations | POLS234 |
| INRE335 | Contemporary International Orders | POLS234 |
| INRE336 | International Relations and Technology | POLS234 |
| INRE431 | United States and the World | POLS234 |
| INRE432 | Strategies and Security Studies | POLS234 |
| INRE434 | The Arab World in International Affairs | POLS234 |
| INRE433 | War and Peace in Contemporary International Relations | POLS234 |
| POLS437 | International Economic System and Economic Cartels | POLS335 |
| INRE439 | Special Topic | This course is intended for senior year students; recognition by the department is required |

**Minor in Political Science**

**Mandatory Courses**: 24 credit hours include the following:

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Course** |
| POLS231 | Introduction to Political Science | . |
| POLS233 | Introduction to Comparative Systems | POLS231 |
| POLS234 | Introduction to International Relations | POLS231 |
| POLS235 | Political Thought and Contemporary Political Theories | . |
| POLS331 | Political Systems in the Arab World | POLS233 |
| POLS334 | Palestinian Question 2 | . |
| POLS432 | Comparative Politics (International Regions) | POLS233, POLS234 |
| POLS433 | Foreign Policy of Great Powers | POLS234 |

**Political Science Courses’ Descriptions (POLS)**

**Introduction to Political Science (231)**

This course aims to introduce students to the nature of Political Science as an area of study. It explores the main political concepts, as well as methodology of research and analysis. It explains various theories regarding the initiation of the State and its foundations, Sovereignty and the role of Law, and limits of Political Dominance. This course also focuses on the development of Political Thought Movements, Ideologies, and Doctrines.

**Research Methodology in Political Science (232)**

This course aims to equip students with various tools in Political Science Research. The first part of the course is an analysis of the main theories in this area of study. It covers the historical and modern development of these theories and their applications. The second part concentrates on Scientific Research Methodologies that are applied in Social Sciences, especially Political Science. It explains to the students how they can define the Research Problem and construct the Hypothesis, Research Plan, and Data Analysis.

**(Prerequisite: POLS231).**

**Introduction to Comparative Systems (233)**

This course explores the scope of Comparative Political Studies and its evaluation. It addresses the basic Methodologies in the Study of Political Systems, including the internal and external environmental framework. This course focuses on various comparative studies of the major international political systems such as the United States of America, the United Kingdom, France, Germany, Japan, China, and the Arab World. It also discusses Government Studies including the Separation of Authorities, Partnerships, Legitimacy, Partisan Political Organization, Role of Interest Groups, and the Opposition Political Participation. Finally, it addresses various major political issues such as the alliances within the state.

**(Prerequisite: POLS231, POLS232).**

**Introduction to International Relations** (**234)**

This course aims to introduce students to the major concepts and theories of International Relations as it explores the Global International System. It covers case studies of Conflicts, Integrations, and Cooperation in the international sphere. This course also emphasizes on the Foreign Policy of the major State Actors and International Active Powers discussing the means by which they try to achieve their goals.

**(Prerequisite: POLS231, POLS232)**

**Political Thought and Contemporary Political Theories (235)**

This course discusses the development of Political Thought as it emphasizes on the Contemporary Western Political Thought and its components. The course will explore various philosophical concepts such as Nationalism, Religion and the State, Colonialism, Marxism (and the Neo-Marxist Approach), Modernity (and Post Modernity), Power, Knowledge, and Globalization.

**The Palestinian Political System (236)**

This course investigates the Palestinian Political System and its formation while considering the background of its social, political, and cultural components. It analyzes the legality and legitimacy of the Palestinian Political System, especially in relevance to the Palestinian Liberation Organization (PLO). Also, it focuses on the period of Oslo Accords and the formation of the Palestinian Authority (PA), as it explores the Elections Processes, Political Parties, Laws, and the sects of Authority (executive, legislative, and judicial). The course discusses the major problems that confront the Palestinian Political System: the Israeli Occupation/Colonization and the Palestinian National Identity.

**(Prerequisite: POLS231).**

**Political Theory in Islam (237)**

This course aims to introduce students to the Islamic Political Thought. It explores the History of Islamic Thought and its development as it concentrates on the major Islamic doctrines: the Sunni, the Shiite, and the Khawarij. The course focuses on studying the major historical and contemporary Islamic Philosophers, such as Al Farabi, Ibn Rushd, Ibn Sina (Avicenna), Al Ghazali, Ibn Taymiyyah, and others; it explores their contributions in various issues regarding the State, the execution of Power, and Freedom. It also analyzes contemporary and current Islamic movements and their challenges.

**(Prerequisite: POLS231).**

**Theory of International Relations** (**238)**

This course aims to introduce students to the different theories regarding International Relations and Foreign Policy. It will discuss theories and concepts such as the Equilibrium of Forces, Realism, Liberalism, and Game Theory.

**(Prerequisite: POLS234).**

**Ancient and Medieval Political Thought (239)**

This course explores, in details, the Ancient and Medieval Political Thought. The first part emphasizes on the Political Philosophy of Ancient Greece, Rome, and early Christian thought. The second part explores the development of Political Thought in the Medieval ages while concentrating on the relationship between Religion and the State.

**Advanced Research Methodology (330)**

This course aims to equip students with various advanced tools in Political Science Research Methodologies and Theories. The course emphasizes on modern research criterias such as the Logical Selection Theory and Game theory. Also, the course will identify and explore various tools used to carry out Field Research and Empirical Data Analysis.

**(Prerequisite: POLS232).**

**Political Systems in the Arab World (331)**

This course discusses the most important historical, cultural, political, and social factors that constitutes the contemporary Arab Political Systems’ environment.  It investigates the classification criteria of Political Systems and its applications to the Arab States.  The course discusses basic concepts regarding Identity, Legitimacy, Ideology, Political Participation, and Civil Society. Finally, the course provides detailed comparative case studies on Arab Political Systems.

**(Prerequisite: POLS233).**

**Introduction to diplomacy** (**332)**

The course aims to associate students with the concepts of Diplomacy, its characteristics, and relation to other sciences. This will involve the study of Diplomatic History and development in the modern era. It will also explore the permanent diplomatic conventions and International Organizations. Also the course will discuss the definition of Diplomatic Profession (the basic law, appointing heads of diplomatic corps, appointing members of diplomatic corps, and the responsibilities of the diplomat). Consulate Systems will also be addressed in relation to its history, types of consulate missions, and their duties.

**(Prerequisite: POLS234).**

**The Palestinian Question, Part One (333)**

The course addresses the Palestinian Question through covering 4 main areas (the Palestinian, the Zionist and Israeli, the Arab, and the International). This course will review the conditions of the Palestinian society since the beginning of the Zionist invasion, as it subsequently tries to study the Zionist Movement through all its dimensions. The course then will study the aftermath of World War I on the Palestinian Question; transformations in Palestine under the British mandate; the struggle of the Palestinian people against the Zionist project. The course also reviews the Settlements’ Projects, the “Partition Plan” of 1947, and the major events of the Palestinian Catastrophe (Nakbah) in 1948.

**The Palestinian Question, Part Two (334)**

This course enables students to understand the political, social, demographic, and psychological outcomes and effects of the Palestinian catastrophe (Nakbah). It explores the shift of the Palestinian/Israeli conflict into an Arab/Israeli conflict. The course addresses the causes and effects of the 1967 war, and the Israeli-Zionist Crystallization strategy in the West bank and the Gaza Strip since then. The courses also explores major changes and developments of the PLO and Arab Regimes conflict resolution strategies. It will analyze the major events and agreements that shaped the Palestinian Question, as we know it today (the First Intifada, Oslo Accords, and Palestinian National Authority).

**Introduction in Political Economy and Globalization (335)**

This course will familiarize the students with the term Political Economy and its major theories (Liberalism, Marxism, Dependency, and Social Democracy). It reviews essential discussions about the characteristics of International Market Economies and the Global Political and Economic System. The course concentrates on the States’ role in the National Economy and its relations with regional and international variable players. Finally, it will try to explain the ability of the State to represent its peoples’ interests in the International Market.

**(Prerequisite: POLS 234).**

**The Israeli Political System (336)**

This course discusses the nature of the Israeli Political System. It will analyze its authorities, institutions and parties, and the military. It also investigates the structure of the Israeli Society, especially, the centrality of Immigration in Israel and its effect on racial and ethnic formations. The course analyzes the nature of the Israeli Political Economy and its’ impact on the structure of the regime. It will also review the status of Palestinians living inside Israel, other issues related to them, such as discrimination and political participation.

**(Prerequisite:** **POLS 233).**

**International Institutions and Organizations (337)**

This course reviews the creation of International Organizations and Institutions that were established after World War I, the emphasis will be on the motives and purposes behind their foundation. Hence, this course will present the contributions and efforts of these organization, especially the United Nations, in the achievement of International Stability and Security. It will discuss some of the Regional Organizations, such as League of Arab States, Organization of African Union, European Union, and others.

**(Prerequisite: POLS 234).**

**Studies in Political Culture and Democracy (338)**

This course explores the most important theoretical frameworks regarding the concepts of Political Culture and Democracy. It analyzes the historical basis of Democracy as a political system and its application in the European States. The course also addresses the evaluation of Democracy and its application through the writings of Robert Dahl and Joseph Schumpeter. Finally, the course reviews the application of various concepts, such as Freedom, Justice, Equality, and Human Rights.

**(Prerequisite: POLS236).**

**Political Transformations and Changes in the Arab World (339)**

This course aims to introduce students to the major International Political Transformations and Changes that affect the Arab World. It explores various theories regarding Political Transitions, such as the transition from an Authoritarian Autocratic System to a Democratic System. The course also explains the Arab National Movement, the Islamic Movements, and the Marxist-Socialists Movements that affects the Arab World on Regional and International levels. It discusses the role of these movements in the Political Systems of the Arab States.

**(Prerequisite: POLS331).**

**Global Political Systems (430)**

This course aims to introduce students to the nature and development of the major Global Political Systems and State Actors. It focuses on the period after World War II, with an emphasis on the Cold War Period. The course presents comparative studies regarding the major Political Systems of the United States, United Kingdom, France, Russia, Japan, Southeast Asia, China, India, and Latin America. It also discusses Liberation Movements in Asia and Africa in the specified time period.

**(Prerequisite: POLS233).**

**European Union (431)**

This course explores the emergence and development of the European Union. It traces  the most important historical events and agreements that developed the cooperation between the European States leading to what is known today as the European Union. The course discusses the role of the EU on the Regional and International levels.

**(Prerequisite: POLS234).**

**United States of America** (**4311)**

This course explores the Political, Social, and Economic American System. It focuses on the study of the Federal Institutions, States’ Institutions, and the Constitution. It addresses the role of the main Political Parties (the Democratic and the Republican) and other Interest groups in the United States’ political processes.

**(Prerequisite: POLS233).**

**Comparative Politics (International Regions) (432)**

This course aims to introduce students to various Regional and International Organizations, such as South-East Asia, East Europe, and Africa. It reviews the main political, economic, and social transformations that occurred in these regions. It will discuss these transformations in relevance to the effects of Globalization and the International Market on the development and integration of these Organizations. The course will also address the effects of these Regional and International Organizations on the Palestinian Question and the Arab World.

**(Prerequisite: POLS233, POLS 234).**

**Foreign Policy of Great Powers (433)**

This course aims to introduce students to the Foreign Policies of the major International State Actors, such as the United States of America, Russia, China, the United Kingdom,, France, Germany and Japan. It analyzes the internal and external factors that affect the development of these policies. The course includes the analysis of the various Diplomatic and Military tools applied in the International Relations of the major State Actors.

**(Prerequisite: POLS234).**

**The Arab World in the International Affairs (434)**

This course aims to introduce students to the position of the Arab World in the International Arena. It focuses on the development of Foreign Policies of the major International State Actors (e.g. United States of America) towards the Arab World, and the political attitudes of the Arab States in response to these policies. The course will also address various International Projects regarding the Arab States Region, such as the Middle Eastern Project, the Euro-Mediterranean Partnership, and the “Israeli” New Middle East project. It will analyze the effects of these projects on the Arab States Regional and International Relations, and the attitudes of Arab States concerning these projects. Finally, this course will equip students with tools that will help them develop possibilities of an alternative Arab World Project.

**(Prerequisite: POLS234).**

**The Palestinian Question in the International Arena (435)**

This course aims to introduce students to effects of International Policies on the Palestinian Question. It explores the historical and contemporary role of the Palestinian Question in the International Realm. This course analyzes the Palestinian Political and Social Movements since the 19th century, through the events of World War I and II, until today. It also analyzes the role of the Palestinian Liberation Organization (PLO) on the international level in relevance to the concepts of “Terror” and “Non-State Actors”. Finally, the course addresses the different political reconciliation and conflict resolution proposals.

**(Prerequisite: POLS234).**

**Theories of Conflict Resolution (436)**

This course explores various theories of Conflict Resolution and their development. It focuses on the application of these theories on the Arab-Israeli Conflict, while concentrating on the Camp David Accords (1978) and Oslo Accords (1993/95). This course will also include many comparative studies regarding the conflicts in North Ireland, South Africa, and former Yugoslavia.

**(Prerequisite: POLS234, POLS238).**

**International Economic System and Economic Cartels (437)**

This course aims to introduce students to the major Economic Developments that occurred in the International Arena. It focuses on exploring the studies of Globalization, Market Economies, and the Nation State’s ability to independently generate economic policies. This course also aims to introduce students to the competitive nature of International Economic Cartels in the International Market. In accordance, the course will further explore various Political Economy issues and theories.

**(Prerequisite: POLS335).**

**Special Subject (438)**

A special Research Subject on contemporary issues affecting either Palestine or the Arab World; the subjects are usually preselected by the Department and the Course Professor.

**Seminar (439)**

This course aims to prepare students for their research that regards various preselected political subjects. It includes the submission an Advanced Academic Scientific Research by each students; this will be supervised by the Professor and the Department as a whole.

**International Relations Courses’ Descriptions (INRE)**

**Contemporary International and Regional Issues (331)**

This course aims to introduce students to the main international and regional political issues and problems. It focuses on the dynamic interactions between these issues and how they affect the global international relations. This course also explores many political and legal solutions for the main international and regional problems we face today.

**(Prerequisite course: POLS234)**

**The Art of Negotiations and Conflict Resolution (332)**

This course aims to introduce students to the main principles of the science of Negotiations. It will focus on the essence of negotiations and the various theories regarding the negotiation process. It includes the study of negotiation’s strategies, tactics, power, and means of communication. This course also involves many case studies such as: Northern Ireland, Palestine, South Africa, and the Balkans.

**(Prerequisite course: POLS234)**

**Advanced Diplomacy (334)**

This course aims to introduce students to the various types of Multilateral Diplomacy, such as: The Diplomacy of International Conferences and The Diplomacy of International Organizations. It also explores the Diplomatic Law, Vienna’s International Relation Treaty (1961), and Vienna’s Consulates’ Relations Treaty (1963). It focuses on the Diplomatic Missions’ Protocols and the Diplomatic Relations’ Protocol applied in both International Organizations (e.g. United Nations) and International Conferences. This course also includes the study of diplomatic ceremony managements; these ceremonies occur when foreign official diplomats visit the Ministries of Foreign Affairs.

**(Prerequisite course: POLS234)**

**Contemporary International Orders (335)**

This course aims to introduce students to the nature of the International Order and its concepts. It focuses on the global transitions that occurred after the collapse of the Soviet Union and its impact on the United Nation’s role as a global force. This course also explores the main issues facing both the contemporary international order and the relations between the major states. It explores the main various international, regional, and civil wars as it focuses on the concepts of International Terrorism and the Weapon Industry.

**(Prerequisite course: POLS234)**

**International Relations and Technology (336)**

This course aims to introduce students to the Impact of Technology on the behavior of the states in the International Relations realm. It focuses on the impact of this Technology on the values, ideologies, and political cultures (Democracy, Liberalism, Equality, and Justice) of various political actors. This course also explores the impact of the Technology revolution phenomena and the Globalization phenomena on international military strategies.

**(Prerequisite course: POLS234)**

**United States and the World (431)**

This course aims to introduce students, in depth, to the United States’ Role and Foreign Policy since the 20th century. It focuses on the United States’ foreign policy towards Arab states; its history and determinative principles. This course also explores the inconstant and developing relations between the United States and other major states such as China, Russia, and the EU.

**(Prerequisite course: POLS234)**

**Strategies and Security Studies (432)**

This course aims to introduce students to the main various concepts regarding Strategy and Security, and their development as a result of the transitions that occurred in the International Order after the collapse of the Soviet Union (Unipolar Global System). It explores the theory of Realism that overshadowed International Relations for a long period of time. It also explores different concepts regarding Security, such as Collective Security and Democratic Peace Theory. This course focuses on the various types of Power used by various states in order to maintain their National Security, especially when the concepts of security vary from one state to another. Also, this course focuses on the State’s Strategic Decision Making Process as a holistic approach that links together Politics, Geography, Natural Resources, Economy, and Military Power. By the end of the course, students should be able to show understanding of the main contemporary issues regarding Strategy and Security and their impact on the international order.

**(Prerequisite course: POLS234)**

**War and Peace in Contemporary International Relations (433)**

This course aims to introduce students to the Current International Conflicts and their causes. It explores how several wars ended with “peaceful treaties” and the impact of these treaties on the diplomatic relations between states. It focuses on the main international wars and conflicts, such as World War I and World War II, Israeli Arab conflict, and the constant conflict between India and Pakistan. This course also focuses on the main international and regional treaties and agreements as part of the Peace processes in International Relations. Finally, this course aims to equip students with various peaceful tools for conflict and war resolutions.

**(Prerequisite course: POLS234)**

**Seminar (439)**

This course aims to prepare students for their research that regards the impact of current international issues on either the Palestinian Issue or the Arab States; this will be supervised by the Professor and the Department as a whole.

**(Prerequisite course: This course is intended for senior year students; their admission should be approved in advance by the department of Political Science.**)

Faculty of Pharmacy, Nursing and Health Professions

# Faculty of Pharmacy, Nursing and Health Professions

The Faculty of Pharmacy, Nursing and Health Professions was established in 2008 with the goal of building human capacities in the fields of Doctor of Pharmacy, Nursing and Nutrition and Dietetics, Audiology and Speech Therapy and Clinical Laboratory Sciences in order to contribute to raising the professional level and developing scientific research in these areas and to support comprehensive development in Palestine and the region.

**Faculty Goals**

* Prepare Doctor of Pharmacy, Nursing and Nutrition and Dietetics, Audiology and Speech Therapy and Clinical Laboratory Sciences graduates in order to raise the level of the private and public health sectors and other relevant sectors such as the food industry sector through distinguished competencies and capacities that are able to contribute to scientific development and professional training in the health field.
* Work on raising the professional level through training, observation, monitoring and follow-up.
* Encouraging scientific and applied research in the field of health professions in Palestine, and publishing and publicizing research locally and internationally.
* Providing a platform podium for interaction between academic researchers and workers in the health field and developing partnerships among them, creating development plans and policies to raise the health level in Palestine, and providing appropriate solutions for the problems of the health sector and other sectors.

The Faculty has the following departments:

* Department of Nursing
* Department of Nutrition and Dietetics
* Doctor of Pharmacy Program
* Department of Audiology and Speech Therapy

Faculty requirements for Nursing Program (35 credit hours)

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| CHEM133 | GENERAL CHEMISTRY |  |
| CHEM230 | FUNDAMENTAL ORGANIC CHEMISTRY | CHEM133 or CHEM132 |
| BIOL131 | GENERAL BIOLOGY |  |
| BIOL243 | GENERAL MICROBIOLOGY | BIOL131 or BIOL111 |
| BIOC233 | Nutritional toxicology | CHEM230 |
| PSYC236 | PHYSICS OF VIBRATIONS AND WAVES |  |
| COMP132 | INTRODUCTION TO COMPUTER AND PROGRAMMING |  |
| NURS130 | HUMAN ANATOMY AND PHYSIOLOGY | BIOL131 or concurrent |
| NURS142 | HUMAN ANATOMY & PHYSIOLOGY 2 | NURS130 |
| NUTD231 | FUNDAMENTALS OF HUMAN NUTRITION | CHEM230 or concurrent |
| NURS232 | NURSING BIOSTATISTICS AND EPIDEMIOLOGY |  |

Faculty requirements for Nutrition and Dietetics Program (33 credit hours)

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| CHEM113 | General Chemistry Lab | CHEM130 or concurrent |
| CHEM133 | General Chemistry |  |
| CHEM221 | Organic Chemistry Lab | (CHEM230 or CHEM242 or concurrent) and (CHEM112 or CHEM113) |
| CHEM230 | Principles of Organic Chemistry | CHEM132 or CHEM133 |
| BIOL111 | GENERAL BIOLOGY LAB | BIOL131 |
| BIOL131 | GENERAL BIOLOGY |  |
| BIOL243 | GENERAL MICROBIOLOGY | BIOL131, BIOL111 |
| BIOC233 | Principles of Biochemistry | CHEM230 |
| PSYC236 | PSYCHOLOGY FOR HEALTH PROFESSIONS |  |
| COMP132 | Introduction to Computer and Programming |  |
| NURS232 | Biostatistics and Epidemiology |  |
| MATH1431 | CALCULUS FOR HEALTH SCIENCES |  |

Faculty requirements for Audiology and Speech Therapy Program (27 credit hours)

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| BIOL131 | GENERAL BIOLOGY |  |
| COMP132 | INTRODUCTION TO COMPUTER AND PROGRAMMING |  |
| PSYC236 | PSYCHOLOGY FOR HEALTH PROFESSIONS |  |
| NURS130 | HUMAN ANATOMY AND PHYSIOLOGY | BIOL131 or concurrent |
| SPAU237 | FUNDAMENTALS OF LINGUISTICS | ENGC231 |
| NURS232 | NURSING BIOSTATISTICS AND EPIDEMIOLOGY |  |
| SPAU231 | INTRODUCTION TO SPECIAL EDUCATION |  |
| SPAU238 | FUNCTIONAL PHONETICS | SPAU237 |
| SPAU239 | PSYCHOLOGICAL COUNSELING | PSYC236 |

**Faculty Requirements for the Doctor of Pharmacy Program** (52 Credit Hours)

|  |  |  |
| --- | --- | --- |
| Course | Course Name | Prerequisite |
| BIOL111 | GENERAL BIOLOGY LAB | BIOL131 or concurrent |
| BIOL131 | GENERAL BIOLOGY |  |
| BIOL132 | GENERAL BIOLOGY 2 | BIOL131 |
| BIOL243 | GENERAL MICROBIOLOGY | BIOL111, BIOL131 |
| CHEM111 | GENERAL CHEMISTRY LAB 1 | CHEM141 or concurrent |
| CHEM112 | GENERAL CHEMISTRY LAB 2 | CHEM111, CHEM132 or concurrent |
| CHEM141 | GENERAL CHEMISTRY 1 |  |
| CHEM132 | GENERAL CHEMISTRY 2 | CHEM141 |
| CHEM221 | ORGANIC CHEMISTRY LAB |  |
| CHEM234 | ANALYTICAL CHEMISTRY 1 | CHEM112, CHEM132 |
| COMP132 | INTRODUCTION TO COMPUTER AND PROGRAMMING |  |
| MATH141 | CALCULUS AND ANALYTICAL GEOMETRY 1 |  |
| PHAR221 | Biostatistics and Epidemiology |  |
| CHEM 241 | ORGANIC CHEMISTRY 1 | CHEM112, CHEM132 |
| CHEM 242 | ORGANIC CHEMISTRY 2 | CHEM 241 |
| PHYS141 | GENERAL PHYSICS 1 | MATH141 or concurrent |
| PSYC231 | INTRODUCTION TO PSYCHOLOGY |  |
| ENGC332 | ENGLISH COMMUNICATION AND PUPLIC SPEAKING | ENGC231 |

## Department of Nursing

The department offer a bachelor degree program in nursing. The students have to complete 141 credit hours distributed as the following general components:

|  |  |
| --- | --- |
| Component | Credit Hours |
| **University Requirements** | 21 |
| **Faculty Requirements** | 35 |
| **Program Requirements** | 79 |
| Professional elective | 6 |
| Total | 141 |

Faculty requirements for Nursing Program (35 credit hours)

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| CHEM133 | General Chemistry Lab |  |
| CHEM230 | Principles of Organic Chemistry | CHEM133 or CHEM132 |
| BIOL131 | GENERAL BIOLOGY |  |
| BIOL243 | GENERAL MICROBIOLOGY | BIOL131 or BIOL111 |
| BIOC233 | Principles of Biochemistry | CHEM230 |
| PSYC236 | Social and Behavioral Sciences |  |
| COMP132 | Introduction to Computer and Programming |  |
| NURS130 | Human Anatomy and Physiology I | BIOL131 or concurrent |
| NURS142 | Human Anatomy and Physiology II | NURS130 |
| NUTD231 | Fundamentals of Human Nutrition | CHEM230 or concurrent |
| NURS232 | Biostatistics and Epidemiology |  |

Nursing program required courses (73 credit hours)

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| NURS131 | FUNDAMENTALS & HEALTH PROMOTION IN NURSING PRACTICE 1 |  |
| NURS141 | FUNDAMENTALS & HEALTH PROMOTION IN NURSING PRACTICE 2 | NURS131 |
| NURS220 | HEALTH ASSESSMENT | NURS141 |
| NURS230 | PATHOPHYSIOLOGY FOR NURSES | NURS142 |
| NURS231 | PHARMACOLOGY FOR NURSES | BIOC 233 or concurrent |
| NURS250 | ADULT HEALTH 1 | NURS231, NURS142, NURS141  or concurrent |
| NURS251 | ADULT HEALTH 2 | NURS250 |
| NURS330 | LEGAL AND ETHICAL ISSUES IN NURSING PRACTICE |  |
| NURS334 | SEMINAR IN NURSING RESEARCH AND EVIDENCE-BASED PRACTICE | NURS232 |
| NURS341 | CRITICAL CARE NURSING | NURS340 |
| NURS350 | ADULT HEALTH 3 | NURS251 |
| NURS351 | WOMEN'S AND MATERNAL HEALTH | NURS350 or concurrent |
| NURS352 | PEDIATRIC NURSING | NURS350 or concurrent |
| NURS353 | MENTAL HEALTH NURSING | NURS352, NURS351 |
| NURS430 | HEALTH POLICY AND ORGANIZATIONAL SYSTEMS |  |
| NURS431 | NURSING LEADERSHIP |  |
| NURS450 | COMMUNITY HEALTH NURSING | NURS430, NURS352, NURS351 or concurrent |
| NURS470 | REFLECTIVE PRACTICE (INTERNSHIP) | Level 4 and department approval |

Nursing program elective courses (6 credit hours)

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| NURS331 | MENTORSHIP |  |
| NURS332 | HEALTH COMMUNICATION |  |
| NURS333 | ONCOLOGY NURSING |  |
| NURS438 | Special Topic |  |

**Course Descriptions**

**NURS 140 Fundamentals and Health Promotion in Nursing Practice I**

This course focuses on the development of basic nursing knowledge and skills within the context of health promotion. Students develop the beginning skills needed to conduct age appropriate health assessments across the life span using a holistic approach that emphasizes wellness and prevention. To support health promoting activities students learn to access and apply research evidence about healthy lifestyle patterns and risk factors for disease (2 credits theory, 2 credits clinical).

**NURS 141 Fundamentals and Health Promotion in Nursing Practice II**

This course provides the opportunity for continued development of basic nursing knowledge within the context of health promotion. Students continue to develop the skills needed to conduct age appropriate health assessments across the lifespan including interpretation of health data, and screening for biological and psychosocial health risks. In this course students have the opportunity to practice their skills in a variety of settings such as nursing homes, pre-schools, and health fairs. Students are also expected to develop a plan of care for a patient that takes into account health risks and includes realistic and appropriate health promotion strategies (2 credits theory, 2 credits clinical. Prerequisite: NURS 140).

**NURS 130 Human Anatomy and Physiology I**

This course is the first in a two part series that provides an overview of human anatomy and physiology. Students learn about the structure and function of different body systems, mechanisms for maintaining homeostasis within the human body, and the ways in which different body systems interact. This course provides a review of the nervous, cardiovascular, respiratory, and musculoskeletal systems.

**NURS 142 Human Anatomy and Physiology II**

This course is the second in a two part series that provides an overview of human anatomy and physiology. Students learn about the structure and function of different body systems, mechanisms for maintaining homeostasis within the human body, and the ways in which different body systems interact. This course provides a review of the renal, reproductive, endocrine, gastrointestinal, integumentary and lymphatic systems. Study of the concepts of development, metabolism, fluid and electrolyte balance, and acid-base balance are also covered.

(Three credits theory and one lab. Prerequisite: NURS 130).

**NURS 230 Pathophysiology for Nurses**

This course presents information on specific interruptions in normal function of the major human physiological systems. It includes clinical manifestations of specific diseases and general principles guiding medical and nursing interventions for these diseases. Emphasis is on conceptual understanding of disease processes and common pathologies (3 credits theory. Prerequisite: NURS 142).

**NURS 231 Pharmacology for Nurses**

This course covers basic clinical pharmacology, focusing on principles and concepts of pharmacokinetics, pharmacodynamics, and pharmacotherapeutics. Pharmacotherapeutics is discussed as it relates to nursing process, routes and techniques of drug administration, patient education and the special needs of children, pregnant and lactating women, and older adults (Prerequisite: BIOC 331).

**NURS 232 Biostatistics and Epidemiology**

This is an introductory course in applied biostatistics and epidemiology for nursing students. In particular, the course focuses on the application of biostatistics and epidemiology principles to Palestinian public health problems. Students will learn to interpret data and understand various approaches used in epidemiologic investigations of disease.

**NURS 220 Health Assessment**

This course builds on the health assessment skills developed in NURS 141. The interactive effects of developmental, genetic, environmental, and other biopsychosocial influences on health are examined as part of the health assessment process. Demonstration of mastery and synthesis of the theoretical knowledge, communication, and psychomotor skills needed to conduct a comprehensive age appropriate health assessment is expected. Students are also expected to develop a plan of care that is family-centered, and culturally appropriate using evidence such as clinical guidelines and integrative literature reviews (1 credit theory, 1 credit lab. Prerequisite: NURS 141).

**NURS 240 Adult Health I**

This is the first course in a three part sequence that promotes the application of scientific knowledge in the diagnosis and management of human responses of adults and older adults to actual or potential alterations in health status. Patients include hospital-based, physiologically unstable adults with diverse characteristics as well as stable adults in clinic and community settings. Continuity of care across the trajectory of health and illness is emphasized. Emphasis is also placed on health restoration and maintenance, health promotion, and the continued development of the nurse-client relationship and critical thinking processes (3 credits theory, 1 credit clinical. Must be taken concurrently with NURS 230, 231, 232. Prerequisite: NURS 141).

**NURS 250 Adult Health II**

This is the second course in a three part sequence that promotes the application of scientific knowledge in the diagnosis and management of human responses of adults and older adults to actual or potential alterations in health status. Patients are primarily physiologically unstable adults with diverse characteristics. Students are expected to build on the knowledge and skills developed in NURS 240 to formulate, implement, and evaluate safe nursing care for adults with unstable physiological alterations in health status. Demonstration of critical thinking, optimal learning and communication skills, and professionalism to achieve high quality patient care is expected (3 credits theory, 2 credits clinical. Prerequisites: NURS 230, 231, 232 and 240).

**NURS 340 Adult Health III**

This is the third course in a three part sequence that promotes the application of scientific knowledge in the diagnosis and management of human responses of adults and older adults to actual or potential alterations in health status. Patients are primarily physiologically unstable adults with diverse characteristics. Students are expected to build on the knowledge and skills developed in NURS 250 to formulate, implement, and evaluate safe nursing care for adults with unstable physiological alterations in health status. Demonstration of critical thinking, optimal learning and communication skills, and professionalism to achieve high quality patient care is expected (3 credits theory, 2 credits clinical. Prerequisites: NURS 250).

**NURS 330 Legal and Ethical Issues in Nursing Practice**

This course introduces the student to the analysis of ethical issues and dilemmas that arise in the practice of nursing and in health care systems. Emphasis is on values clarification, models for ethical decision making, collaborative approaches to the analysis of ethical dilemma, relevant legal and regulatory issues, and professional documents that guide ethical nursing practice.

**NURS 331 Mentorship**

This course provides the opportunity for students to receive mentoring from an expert nurse. Emphasis is placed on developing a supportive professional network, strengthening inter-disciplinary communication skills, and career development (3 credits clinical).

**NURS 332 Health Communication**

This course focuses on the development of therapeutic communication abilities. Students explore multiple communication issues relevant to health including language, information processing, and the social construction of health and illness. Nurse-patient communication, and the mutually influential relationships among health care professionals, patients, friends and family members are also examined.

**NURS 333 Oncology Nursing**

This course focuses on the current concepts and cancer theories of cancer development and cancer epidemiology. It incorporates the pathophysiology of cancer, prevention and detection, cancer treatment modalities, and common co-morbidities related to cancer care. The integration of scientific knowledge and understanding into advanced nursing practice in the care of the oncology patient is emphasized.

**NURS 341 Critical Care Nursing**

This course focuses on the development and application of knowledge in the care of patients who are critically ill. Further development of critical thinking skills and the ability to provide direct and appropriate nursing care to critically ill patients and their families in a high technical environment is expected (2 credit hours theory, 2 credits clinical. Prerequisite: NURS 340).

**NURS 360 Maternal and Women’s Health Nursing**

This course focuses on women’s health including reproductive and maternity health care. Students will get experience in assessing maternal and fetal well-being, managing pain, labor coaching, and immediate postpartum care. Students will also learn about selected aspects of reproductive health including sexual transmitted infections, family planning, and menopause. The role of nursing in the promotion, maintenance and restoration of health in women will be emphasized. Scientific challenges, legal issues, research findings, socio-cultural differences and implications, and ethical issues important to nursing practice in the field of maternity/women's health will be also examined (4 credits theory, 2 credits clinical. Prerequisite: NURS 340).

**NURS 361 Infant, Child, and Adolescent Health Nursing**

This course focuses on the health of infants, children and adolescents using a family-centered holistic approach. Pediatric wellness and alterations in health status in the context of family will be explored. Emphasis is placed on family dynamics, growth and development, health promotion, and communication with children and families. Clinical placements will include community-based settings, clinics and pediatric inpatient units including PICU and NICU (4 credits theory, 2 credits clinical. Prerequisite: NURS 340).

**NURS 430 Health Policy and Organizational Systems**

This course analyzes health and social policy, and examines relationships among socio-cultural, political, economic, technologic, environmental, ethical, and legal factors as they impact nursing practice and health care delivery. Organization and financing of the health system in Palestine including the Ministry of Health, the private sector, NGOs, and UNRWA are explored. Health system integration, complexity, effectiveness, and ability to provide needed health services in response to population growth are considered. Nursing’s role in the development and implementation of health policy in response to contemporary health issues and innovative approaches to system change are also examined.

**NURS 431 Seminar in Nursing Research and Evidence-Based Practice**

The primary goal of this course is to promote an evidence-based approach to nursing practice. The course provides students with the skills needed to critically review research reports and discuss ethical issues related to research. Emphasis is on the application of research to improve patient outcomes (3 credit hours, Prerequisite: Statistics 232).

**NURS 432 Special Topics**

This course provides a forum to study contemporary issues relevant to nursing practice. Special Topics provide an opportunity for an individual or small group of students to systematically investigate, under faculty guidance, selected topics relevant to the health needs of individuals or groups. It may involve a case study or other project that provides an opportunity for increasing breadth or depth of knowledge or skill.

**NURS 440 Nursing Management and Leadership**

This course discusses the concepts of leadership, management, creativity, analysis, power, change, and evaluation. Students investigate, analyze, and conceptualize the different modalities of leadership, utilizing nursing management theories. Management skills include planning and design, strategic leadership, human resource and financial management, organizational development, conflict resolution, crisis management, evaluation of practice and continuous quality improvement in the context of organizational systems. Clinical placements allow students to apply leadership and management concepts and explore potential leadership roles and modalities in a variety of settings (3 credits theory, 1 credit clinical).

**NURS 450 Mental Health and Psychiatric Nursing**

The course provides a basic understanding of psychiatric and mental health nursing principles. Students are introduced to current research, theory, and biological foundations of mental disorders. The course examines factors predisposing individuals, families and groups to mental health problems, evidence-based treatment modalities, and legal implications of caring for mentally ill patients. Clinical placements include a variety of clinic and hospital settings and offer students the opportunity to engage with patients and their families and to interact with interdisciplinary teams in providing care (3 credit theory, 2 credits clinical. Prerequisite NURS 360 or 361).

**NURS 460 Community Health Nursing**

This course provides an introduction to the theories, principles, practices, and research relating to issues in the delivery of health care to a community and the environment of the community. Students are expected to engage in collaborative partnerships with other health care providers and members of the community to identify population health needs and develop a plan to effect change. Students will have the opportunity to observe and practice in a variety of community-based settings (4 credits theory, 2 credits clinical. Prerequisite: NURS 360, 361 and 430).

**NURS 470 Reflective Practice (Internship)**

This course provides opportunity for synthesis and evaluation of professional nursing role behaviors essential to care of patients experiencing complex care needs in a variety of settings. Emphasis is placed on refinement of critical thinking and communication skills and the integrations of a range of therapeutic interventions into nursing practice, including those appropriate to individual patients, their families/significant others, and relevant population-based groups (7 credits clinical. Prerequisites NURS 330, 360, 361, 430, 431, 450, 460).

## Department of Nutrition and Dietetics

The Department of Nutrition and Dietetics was established in the year 2007/2008 in an effort from Birzeit University to meet the needs of the Palestinian people for well-trained health professionals in nutrition and dietetics. The department started with a limited number of students and, because of the great interest of students in this specialization, the number increased to more than 150 in the year 2010/2011.

The department has contacts with several related institutions like hospitals, other universities, governmental and non-governmental institutions in its effort to enable students do the necessary studies and practical training.

The Nutrition and Dietetics department offers a bachelor's degree program aiming to graduate high caliber nutrition and dietetics professionals. The graduates of this program will have the scientific knowledge, abilities, and skills that enable them to work at various types of institutions such as hospitals, primary health care centers, food service organizations, schools, weight management centers and many others.

The students have to complete 129 credit hours distributed as the following general components:

|  |  |
| --- | --- |
| Component | Credit Hours |
| **University Requirements** | 21 |
| **Faculty Requirements** | 33 |
| **Program Requirements** | 69 |
| Professional elective | 6 |
| Total | 126 |

Faculty requirements for Nutrition and Dietetics Program (33 credit hours)

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| CHEM113 | General Chemistry Lab | CHEM130 or concurrent |
| CHEM133 | General Chemistry |  |
| CHEM221 | Organic Chemistry Lab | (CHEM230 or CHEM242 or concurrent) and (CHEM112 or CHEM113) |
| CHEM230 | Principles of Organic Chemistry | CHEM132 or CHEM133 |
| BIOL111 | GENERAL BIOLOGY LAB | BIOL131 |
| BIOL131 | GENERAL BIOLOGY |  |
| BIOL243 | GENERAL MICROBIOLOGY | BIOL131, BIOL111 |
| BIOC233 | Principles of Biochemistry | CHEM230 |
| PSYC236 | Social and Behavioral Sciences |  |
| COMP132 | Introduction to Computer and Programming |  |
| NURS232 | Biostatistics and Epidemiology |  |
| MATH1431 | CALCULUS FOR HEALTH SCIENCES |  |

Department of Nutrition and Dietetics required courses (57 credit hours)

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| NUTD231 | Fundamentals of Human Nutrition | CHEM 230 or concurrent |
| NUTD233 | Principles of Food Preparation | NUTD231 |
| NUTD234 | Institutional Food Services Management | NUTD233 |
| NUTD238 | Life Cycle Nutrition I | NUTD231 |
| NUTD239 | Life Cycle Nutrition II | NUTD231 |
| NUTD241 | Community Nutrition | NUTD232, NURS231 |
| NUTD321 | Introduction to Dietetics | NUTD231 |
| NUTD331 | Clinical Nutrition I | NUTD239, NUTD238 |
| NUTD332 | Clinical Nutrition II | NUTD239, NUTD238 |
| NUTD333 | Food & Food Composition | BIOC233, NUTD 231 |
| NUTD336 | Food Safety | BIOL243 |
| NUTD338 | Nutrient Metabolism | NUTD231, BIOC233 |
| NUTD339 | Bioethics |  |
| NUTD341 | Anatomy and Physiology | BIOL111 |
| NUTD343 | Food Microbiology | BIOL243 |
| NUTD411 | Seminar | Level 4 and department approval |
| NUTD431 | Communication and Nutritional Counseling | NUTD231, PSYC236 |
| NUTD436 | Practicum |  |
| NUTD439 | Dietary Planning | NUTD238, NUTD239 |

Elective Courses (12 credit hours)

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| NUTD235 | Contemporary Nutrition | NUTD231 |
| NUTD334 | Nutrient Deficiency Diseases | NUTD231 |
| NUTD335 | Nutrition and Culture: Dietary Habits in the Mediterranean | NUTD231 |
| NUTD337 | Sports Nutrition | NUTD231 |
| NUTD432 | Assessment of Nutritional Status: Research Methods | NUTD231, NURS232 |
| NUTD433 | Emergency Nutrition | NUTD231 |
| NUTD434 | Regulations in Food and Nutrition |  |
| NUTD435 | Nutritional Toxicology | BIOC233, NUTD 231 |
| NUTD437 | Independent Study | Level 4 and department approval |
| NUTD438 | Selected Topics in Nutrition | Level 4 and department approval |

**NUTD course descriptions: (NUTD)**

**NUTD 231: Fundamentals of Human Nutrition**

The study of nutrients and their food sources ; nutrient requirements and the effects of their deficiency ; nutrient digestion, absorption and metabolism; energy sources and energy requirements for a healthy body weight; the importance of balanced nutrition for good health; and methods in nutritional assessment. (Prerequisite: CHEM 230)

**NUTD 233: Principles of Food Preparation**

The study of the principles of food preparation that help conserve nutrients; the effect of cooking methods on the nutrient content; using recipes; learning weighing and measuring skills and the safe use of sharp tools; learning the basics of food purchasing, ingredient exchange and food hygiene; applying the theoretical material in the department cooking lab. (Prerequisite: NUTD 231)

**NUTD 234: Quantity Food Production Management**

Learning methods of quantity food production management with a focus on institutions systems management; planning of: menus, purchasing, production, distribution, service, and hygiene; learning human resources and financial management and strategic planning; the course includes applications in learned theoretical material. (Prerequisite: NUTD 233)

**NUTD 235: Contemporary Nutrition**

The course covers contemporary food and nutrition issues such as healthy weights and eating problems; food faddism; vegetarianism; nutrition facts on packaged food items; balanced eating and healthy lifestyles; genetically modified foods and their relation to health and the environment. (Prerequisite: NUTD 231)

**NUTD 238: Life Cycle Nutrition I**

Preconception nutrition, nutrition during pregnancy and lactation; infant nutrition with emphasis on the importance of breast feeding; nutrition of children ages 1-5 years; the course covers the effect of physiological changes during these stages on the nutritional requirements, international protocols and nutritional guidelines focusing on those of the WHO, and nutrition research findings. (Prerequisite: NUTD 231)

**NUTD 239: Life Cycle Nutrition II**

Nutrition of children after the age of five, nutrition during adolescence, adulthood, and old age; the course covers the effect of physiological changes during these stages on the nutritional requirements, the latest in nutrition research for these stages of life, and the inter-relationship between good nutrition, physical activity and health. (Prerequisite: NUTD 231)

**NUTD 241: Community Nutrition**

Defining community nutrition; learning basic skills in designing, implementing, evaluating, and marketing of community nutrition programs; learning methods of collecting data and specifying priorities in community nutrition; identifying the types of community nutrition programs such as educational and support programs; identifying ongoing community nutrition programs in Palestine and their supporting institutions; training in community nutrition proposal writing. (Prerequisite: NUTD 231; NURS 232)

**NUTD 321: Introduction to Dietetics**

This course introduces the profession of dietetics. It covers the development of the profession, the educational and experiential preparation in dietetics, the areas of practice at different sites, the roles and responsibilities of dietitians, the standards of professional practice, and professional code of ethics. (Prerequisite: NUTD 231)

**NUTD 331: Clinical Nutrition I**

Definition of clinical nutrition; assessment of the nutritional status of patients; patient nutritional requirements; the importance of dietary modification in health care; drug-nutrient interaction; food service systems in diet therapy; current research in diet therapy. (Prerequisite: NUTD 238; NUTD 239)

**NUTD 332: Clinical Nutrition II**

The course focuses on: the importance of diet therapy for patients in the acute and chronic phases of disease; nutrition support, nutritional management of patients suffering from diseases such as diabetes, cardiovascular diseases, kidney and liver disease, immune deficiency diseases, gastrointestinal diseases, cancer and other health problems; the course includes current research in clinical nutrition. (Prerequisite: NUTD 238; NUTD 239)

**NUTD 333 : Food; Types and Composition**

The study of edible food and drink concerning the physical and chemical properties, nutrient content, food fortification, and food preservation; the use of additives such as nutrients, colors, flavors, and preservatives; the effect of all processes on the nutritional value and health status. (Prerequisite: NUTD 231; BIOC 233)

**NUTD 334: Nutrient Deficiency Diseases:**

The study of nutrient deficiency diseases: causes, complications, therapy, and prevention. The course also discusses the nutrient deficiency diseases in Palestine and the nutrition intervention programs that are available. (Prerequisite: NUTD 231)

**NUTD 335: Nutrition and Culture: Dietary Habits in the Mediterranean**

The cultural effect on dietary habits; the major characteristics of dietary habits among peoples of the Middle East, north Africa, and south Europe; analysis of the nutrient content of the Mediterranean diets and their health effects; comparison of the Mediterranean diets with the dietary practices of other peoples in the world. (Prerequisite: NUTD 231)

**NUTD 336: Food Safety**

The study of the rules and regulations of food production, food safety, and food hygiene both domestically and in the food industry; the role of these rules and regulations in protecting people from food-borne illness and its complications. (Prerequisite: BIOL 243)

**NUTD 337: Sports Nutrition**

Athletes nutritional requirements: nutrition during exercise; nutrition before, during, and after athletic competition; the course covers the nutritional requirements in a variety of sports such as endurance sports , the physiology of athletes in the different types of sports is introduced to help understand the differences in nutritional requirements; sports as a factor in leading a healthy life style. (Prerequisite: NUTD 231; NUTD 341)

**NUTD 338- Nutrient Metabolism**

The utilization of nutrients by the human body is the main focus of this course; nutrient metabolism, the role of nutrients in the metabolic processes, and the consequences of nutrient deficiencies on human metabolism. Inborn metabolic disorders and their impact on metabolism are also covered. (Prerequisites: NUTD 231, BIOC 233)

**NUTD 339- Bioethics**

An introduction to ethical issues related to science, humans and the environment. The status of humans in nature and their ethical practices in applying scientific research on humans ,animals and plants such as genetic modification. Ethical behavior on the part of health professionals such as dietetics professionals and others is covered with the aim of raising students’ ethical awareness and promoting professional ethical practices.

**NUTD 341-Human Anatomy and Physiology**

The structural and functional aspects of the human body systems are covered in this course. Electrolyte balance, osmosis, acid-base balance, absorption, diffusion, and many more physiological processes in the human body are discussed in this course. The course also includes practical laboratory work that includes cadaver dissection. (Prerequisites: BIOL 111, BIOL 131)

**NUTD 343- Food Microbiology**

This course is a study of factors affecting microbial growth in food, microbes used in food manufacturing, microbes causing food borne illnesses and food spoilage. HACCP for management, quality, and safety of food production. The course also includes practical laboratory work. (Prerequisites: BIOL 243)

**NUTD 411-Seminar**

The student will be given the opportunity to research and study a certain pre-assigned/approved topic in nutrition and dietetics and present the results for his/her colleagues for discussion at the end of the seminar period. The course is a graduation requirement and is usually taken by the student in her/his senior year.

**NUTD 431- Nutrition Communication and Counseling**

This course covers basic theories in human communication skills. Motivational counseling and effective communication skills that help beneficiaries in managing their lifestyle and in adopting a healthy lifestyle are the pillars of this course. Students are trained in methods of nutritional counseling. (Prerequisites: NUTD 231, PSYC 236)

**NUTD 432- Assessment of Nutritional Status: Research Methods**

The principles and methods of nutritional assessment for individuals as well as populations are covered in this course. Clinical signs of the nutritional status using anthropometric measures, biochemical tests, and dietary evaluation are covered. The course also includes nutritional assessment survey techniques used to evaluate the nutritional status of populations. Prerequisites: NUTD 231, NURS 232.

**NUTD 433-Emergency Nutrition**

Nutrition during emergency situations, whether natural or manmade, is covered in this course. Effective delivery of nutrition & food basket preparation methods which are used to efficiently meet the caloric and nutrient needs of the affected population are discussed and presented. Strategies to cope with emergencies to prevent diseases of malnutrition are also covered in this course. (Prerequisites: NUTD 231)

**NUTD 434-Regulations in Food and Nutrition**

Local and international food regulations are covered in this course. International Food regulations and standards for safety and quality are covered through presenting important documents such as the Codex Alimentarius and the Food Code issued by the World Health Organization (WHO) and the Food and Drug Administration (FDA).

**NUTD 435-Nutritional Toxicology**

The effect of food additives on human health, food quality, nutritional value of foods, and the metabolism of food toxins are covered in this course. Current and up to date research on this sensitive topic will be covered. (Prerequisites: BIOC 233, NUTD 231)

**NUTD 436-Practicum**

Students will have the opportunity to gain practical hands on experience in clinical nutrition of inpatients and outpatients, as well as management in food and nutrition systems. Students will present a report describing their experiences and their understanding of the role of the nutrition professional in promoting the quality of life in society. A minimum of 160 hours of training is required.The training is preferably done during the summer that comes directly before the senior year.

**NUTD 437- Independent Study**

Student will have the opportunity to undergo an independent research in a certain nutrition and dietetics related topic after approval from the assigned faculty. Presenting the outcome of the study will be required at the end of the independent study duration. The independent study requires instructor and departmental consent. Senior level course

**NUTD 438- Selected Topics in Nutrition**

Selected topics in nutrition of students/faculty interests will be presented in this course while giving considerations to the local nutritional status. (Prerequisites: NUTD 231)

**NUTD 439- Dietary Planning**

This course focuses on developing students’ menu planning skills in health and disease. It covers the planning of modified and unmodified diets for individuals during all stages of life taking into consideration the physical and mental health status of beneficiaries. The role of dietary modification in the prevention and/or treatment of disease is also stressed, and the availability of food items in the local market is emphasized. (Pre-requisites: NUTD 238 & NUTD 239)

## Doctor of Pharmacy Program

The students have to complete 210 credit hours distributed as the following general components:

|  |  |
| --- | --- |
| Component | Credit Hours |
| **University Requirements** | 21 |
| **Faculty Requirements** | 52 |
| **Requirements Program** | 131 |
| Professional elective | 6 |
| Total | 210 |

**Faculty Requirements** (52 Credit Hours)

|  |  |  |
| --- | --- | --- |
| Course | Course Name | Prerequisite |
| BIOL111 | GENERAL BIOLOGY LAB | BIOL131 or concurrent |
| BIOL131 | GENERAL BIOLOGY |  |
| BIOL132 | GENERAL BIOLOGY 2 | BIOL131 |
| BIOL243 | GENERAL MICROBIOLOGY | BIOL111, BIOL131 |
| CHEM111 | GENERAL CHEMISTRY LAB 1 | CHEM141 or concurrent |
| CHEM112 | GENERAL CHEMISTRY LAB 2 | CHEM111, CHEM132 or concurrent |
| CHEM141 | GENERAL CHEMISTRY 1 |  |
| CHEM132 | GENERAL CHEMISTRY 2 | CHEM141 |
| CHEM221 | ORGANIC CHEMISTRY LAB |  |
| CHEM234 | ANALYTICAL CHEMISTRY 1 | CHEM112، CHEM132 |
| COMP132 | INTRODUCTION TO COMPUTER AND PROGRAMMING |  |
| MATH141 | CALCULUS AND ANALYTICAL GEOMETRY 1 |  |
| PHAR221 | Biostatistics and Epidemiology |  |
| CHEM 241 | ORGANIC CHEMISTRY 1 | CHEM112, CHEM132 |
| CHEM 242 | ORGANIC CHEMISTRY 2 | CHEM 241 |
| PHYS141 | GENERAL PHYSICS 1 | MATH141 or concurrent |
| PSYC231 | INTRODUCTION TO PSYCHOLOGY |  |
| ENGC332 | ENGLISH COMMUNICATION AND PUPLIC SPEAKING | ENGC231 |

**Program Requirements (**131 Credit Hours

|  |  |  |
| --- | --- | --- |
| Course | Course Name | Prerequisite |
| BIOC331 | BIOCHEMISTRY 1 | CHEM241 |
| PHAR231 | INTRODUCTION TO PHARMACY/CALCULATIONS |  |
| PHAR232 | PHYSICAL PHARMACY | PHAR231 |
| PHAR233 | HUMAN PHYSIOLOGY AND ANATOMY 1 | BIOL132 |
| PHAR243 | HUMAN PHYSIOLOGY AND ANATOMY 2 | PHAR233 |
| PHAR321 | PHARMACY SKILL LABORATORY | PHAR331 or concurrent |
| PHAR324 | Pharmacy Law *&* Ethics | PHAR231 |
| PHAR331 | PHARMACEUTICS 1 | PHAR232 |
| PHAR332 | PHARMACEUTICS 2 | PHAR331 |
| PHAR333 | Natural Products and Phytopharmacy | BIOC331, CHEM 242 |
| PHAR 334 | Medical Biochemistry | BIOC331 |
| PHAR341 | PH PHARMACOLOGY 1 | PHAR243, BIOC331 or concurrent  PHAR351 or concurrent |
| PHAR342 | PHARMACOLOGY 2 | PHAR341 |
| PHAR301 | Community Pharmacy Training | PHAR332, PHAR342, PHAR324, PHAR321 |
| PHAR322 | CLINICAL NUTRITION AND DIET THERAPY | BIOC331 |
| PHAR351 | PATHOPHYSIOLOGY/PATHOLOGY | PHAR243 |
| PHAR422 | PHARMACEUTICAL CARE PRACTICE | PHAR231, PHAR342 |
| PHAR431 | CLINICAL CHEMISTRY | PHAR334 |
| PHAR432 | MEDICINAL CHEMISTRY 1 | CHEM242, PHAR342 |
| PHAR433 | MEDICINAL CHEMISTRY 2 | PHAR432 |
| PHAR434 | BIOPHARMACEUTICS/ PHARMACOKINETICS | PHAR332 |
| PHAR437 | OVER THE COUNTER MEDICATION/SUPPLIES | PHAR422,PHAR 301 |
| PHAR441 | INDUSTRIAL PHARMACY | PHAR332 |
| PHAR421 | DRUG INFORMATION AND LITERATURE | PHAR221, PHAR342, |
| PHAR452 | Pharmacotherapy1 | PHAR342, PHAR351, PHAR431, PHAR421 |
| PHAR401 | Hospital Pharmacy Training | PHAR301 |
| PHAR522 | PHARMACY MANAGEMENT | PHAR301 |
| PHAR523 | RESEARCH PROJECT IN PHARMACY | PHAR452 |
| PHAR532 | ANTIMICROBIAL AGENTS AND IMMUNIZATION | BIOL243, PHAR342 |
| PHAR535 | Clinical Pharmacokinetics | PHAR434 |
| PHAR554 | Pharmacotherapy *2* | PHAR554 |
| PHAR555 | Pharmacotherapy *3* | PHAR555 |
| PHAR641 | CLINICAL CLERKSHIP 1 | Level 6 |
| PHAR642 | CLINICAL CLERKSHIP 2 | Level 6 |
| PHAR643 | CLINICAL CLERKSHIP 3 | Level 6 |
| PHAR644 | CLINICAL CLERKSHIP 4 | Level 6 |
| PHAR645 | CLINICAL CLERKSHIP 5 | Level 6 |
| PHAR646 | CLINICAL CLERKSHIP 6 | Level 6 |
| PHAR647 | CLINICAL CLERKSHIP 7 | Level 6 |
| PHAR648 | CLINICAL CLERKSHIP 8 | Level 6 |
| PHAR649 | CLINICAL CLERKSHIP 9 | Level 6 |

Professional elective (6 Credit Hours) from the following:

|  |  |
| --- | --- |
| Course | Course Name |
| PHAR 538 | Drug Discovery and Design |
| PHAR 538 | Pharmaceutical Biotechnology |
| PHAR 538 | Nutraceuticals |
| PHAR 538 | Research Methods in Pharmacoepidemiology |
| PHAR 538 | Parenteral Products |
| PHAR 538 | Radiopharmaceuticals |
| PHAR 538 | Drug Metabolism and Disposition |
| PHAR 538 | Selected Topics in Pharmaceutical Sciences |
| PHAR 538 | TOXICOLOGY |
| PHAR 538 | MEDICINAL CHEMISTRY 3 |
| PHAR 538 | IMMUNOPHARMACOLOGY |
| PHAR 538 | PHARMACEUTICAL TECHNOLOGY |

**Course Descriptions**

**Pharmaceutical Care Practice: PHAR 422**

Theory and practice of medication management and pharmaceutical care, including learning how to assess patients for drug therapy problems and coming up with a care plan to resolve those problems. (Prerequisite: PHAR231, PHAR342). ( 2 credit hours and 2 contact hours)

**Clinical Chemistry: PHAR 431**

Discussion of the clinical diagnostic tests, interpretation of their results and the effects of various factors including medications on the test values. Laboratory component dealing with procedures, principles of the tests, and use of some of the available kits. By relating tests and result case studies the student will learn principles of monitoring as a method of determining drug effectiveness. (Prerequisite: PHAR334). (3 credit hours and 3 contact hours)

**Medicinal Chemistry I ,II and III: PHAR 432,433 and 538**

A comprehensive study of the medicinal chemistry of drugs including their discovery, design, development and metabolism. A detailed coverage of the chemistry and biology of the various classes including autonomic, hematopietic, inflammatory, gastrointestinal , endocrine, central nervous systems and vitamins. (Prerequisite: Chem. 242, PHAR 342, 343, BIOC 332). (3 credit hours each, 3 contact hours each)

**Biopharmaceutics /Pharmacokinetics: PHAR 434**

The course provides a description of physicochemical and biopharmaceutical aspects involved in the design and formulation that affect drug performance and development of pharmaceutical dosage forms. In addition, this course covers the basic concepts and principles of pharmacokinetics and mathematical expressions that influence and characterize drug liberation, absorption, distribution, metabolism and elimination. Topics covered include an introduction to pharmacokinetic models, demonstration of the prediction of drug concentration after various modes of administration, discussion of the physicochemical and patient related factors affecting drug absorption, bioavailability and bioequivalence and drug distribution. (Prerequisite: PHAR 332). (3 credit hours, 3 contact hours)

**Over the Counter Medication/Supplies: PHAR 437**

Presentation and discussion of medications, remedies and devices which can be sold without prescription to be used for treatment of minor medical problems. Provides the students guidance on providing professional advice and service to the self treating public. (Prerequisite: PHAR 422, PHAR 301) (3 credit hours, 3 contact hours)

**Industrial Pharmacy: PHAR 441 (3+1)**

Discusses the processes of Pharmaceutical dosage forms preparation: Pharmaceutics ingredients, product formulation and good manufacturing practices. Powder technology, preformulation, sterilization principles and practical and aseptic techniques will be discussed. Practical application of some of these techniques in the laboratory. (Prerequisite: PHAR 332) (4 credit hours, 5 contact hours)

**Drug Information and Literature Evaluation: PHAR 421**

Evaluation techniques, statistical methods, application of research design to critically evaluate published literature, research reports and information about various classes of pharmaceuticals. Principles of answering clinical questions and evaluating biomedical literature. (Prerequisite: PHAR 221, 342) (2 credit hours, 2 contact hours)

**Pharmacotherapy I :PHAR 452**

This course teaches students how to apply the principles of treating various human diseases and conditions by utilizing their knowledge of pharmacology, pathophysiology, and pharmacokinetics. The course will utilize a patient-centered approach, where students are expected to understand human diseases and how to treat them using current treatment guidelines and practice, while monitoring for drug interactions, adverse effects, and therapeutic outcomes. This course will focus on cardiovascular, respiratory, and renal disorders. (Prerequisite: PHAR342, PHAR351, PHAR431, PHAR421). (5 credit hour each, 5 contact hours )

**Hospital Pharmacy Training: PHAR401**

Students spend 8 weeks in hospital pharmacies(inpatient, outpatient, chemotherapy,…etc). And they meet once weekly for a lecture to evaluate their work , and to discuss and cover all required material and assignments. Students become familiar with hospital pharmacy policies, widen their knowledge of parenteral and injectable drugs, ameliorate their communication skills with other health care professionals as well as patients. (Prerequisite: PHAR 301).

**Pharmacy Management: PHAR 522**

Management of professional situation and business related issues in institutional, community, and clinical pharmacy practice. (2 credit hours, 2 contact hours)

**Research Project in Pharmacy PHAR 523**

Senior Research project in pharmacy. ( Prerequisite: PHAR 452)

**Antimicrobial agents and Immunization: PHAR 532**

Comprehensive survey of anti-infective drugs, their chemistry, mechanism of action and use, discussion of immunization. ( Prerequisite: Biol 243, PHAR 342) (3 credit hours, 3 contact hours)

**Clinical Pharmacokinetics PHAR 535**

A clinically-oriented course that assists Pharm D students in applying pharmacokinetic principles in patient care situations. It focuses primarily on the pharmacokinetic aspects of optimization and individualization of drug dosage. This course will discuss principles of clinical pharmacokinetics and their application to the therapy of various states of disease. Changes in pharmacokinetic parameters due to diseases, therapeutic drug monitoring (TDM) and the methods used to individualize drug therapy will be emphasized. The essential concepts will be illustrated using lectures and case studies. (Prerequisite: PHAR 434). (3 credit hours, 3 contact hours )

**Pharmacotherapy II :PHAR 554**

This course teaches students how to apply the principles of treating various human diseases and conditions by utilizing their knowledge of pharmacology, pathophysiology, and pharmacokinetics. The course will utilize a patient-centered approach, where students are expected to understand human diseases and how to treat them using current treatment guidelines and practice, while monitoring for drug interactions, adverse effects, and therapeutic outcomes.

This course will focus on neurological, psychiatric, and endocrinologic disorders. (Prerequisite: PHAR452). (5 credit hour, 5 contact hours)

**Pharmacotherapy III :PHAR 555**

This course teaches students how to apply the principles of treating various human diseases and conditions by utilizing their knowledge of pharmacology, pathophysiology, and pharmacokinetics. The course will utilize a patient-centered approach, where students are expected to understand human diseases and how to treat them using current treatment guidelines and practice, while monitoring for drug interactions, adverse effects, and therapeutic outcomes. This course will focus on infectious diseases, geriatric disorders, immunologic, hematologic, and oncologic disorders. (Prerequisite: PHAR554). (5 credit hour, 5 contact hours)

**Clinical Clerkship I –IX : PHAR 641,642,643,644,645,646,647,648,649**

Supervised clinical rotations. Students gain clinical experience through patient rounds, monitoring, therapeutic consultation, in- service presentation and communication with other health care professionals. The various areas covered may include Internal medicine, Pediatrics, cardiovascular diseases, nephrology and other common conditions. (Prerequisite: Sixth year standing). (4 credit hours each, 8 contact hours each)

**Pharmaceutical Technology: PHAR 538**

A course dedicated to applying basic physical chemical property understanding to the development of drug delivery systems. (Prerequisite: PHAR 441) (3 credit hours, 3 contact hours)

**Selected Topics in Pharmaceutical Sciences:PHAR 538**

In depth examination of new and emerging topics in the area of pharmaceutical sciences related to drug discovery, development, dosage forms and related areas through lectures and readings based on the interest and availability of the instructor. (Prerequisite: PHAR332). (3 credit hours, 3 contact hours)

**Drug Discovery and Design: PHAR 538**

Principles of drug discovery, design, and development covering subjects such as molecular target identification, drug receptor interaction. DNA and proteins as molecular targets, other processes and tools such as computational chemistry and combinatorial chemistry. (Prerequisite: PHAR 433). (3 credit hours, 3 contact hours)

**Pharmaceutical Biotechnology: PHAR 538**

Biotechnology as it relates to basic/clinical pharmaceutical sciences. Emphasizes recombination DNA techniques and preparation/use of biotechnology-derived agents in diagnosing disease. (Prerequisite: Forth year standing). (3 credit hours, 3 contact hours)

**Nutraceuticals: PHAR 538**

Use of natural medicinal agents in pharmacy practice. Application of nutraceuticals in managing inflammatory disorders, gastrointestinal disorders and other disorders. Dosages, interaction and other effects of nutraceuticals and other natural medicines. (Prerequisite: PHAR 342, 322). (3 credit hours, 3 contact hours).

**Research Methods in Pharmacoepidemiology: PHAR 538**

This is a course that covers the principles and methods of epidemiology as applied to certain disease states. It assumes basic knowledge in pathphysiology and biostatistical methods. (Prerequisite: PHAR 452 ,PHAR 554)

**Parenteral Products: PHAR 538**

Discussion of the proper methods used in the preparation, handling , quality control, and dispensing of sterile dosage forms, including preparation of parenteral , nutrition products, chemotherapeutic agents, biological and specialty solutions. (Prerequisite: PHAR 332, Biol. 243). (3 credit hours, 3 contact hours)

**Radiopharmaceuticals: PHAR 538**

Discussion of the major radiopharmaceuticals used in diagnosis and treatment of disease states. Their toxicity, mechanism of action, dosage calculation, quality cost, methods of their preparation, and administration are covered. (Prerequisite: PHAR 332, 531). (3 credit hours, 3 contact hours)

**Drug Metabolism and Disposition: PHAR 538**

Chemical and enzymatic mechanisms of biotransformation/ bioactivition of drugs and other xenobiotics. Reactivity and fate of bioactivated metabolites. Various in vitro models used to evaluate drug metabolism or other chemicals. Factors involved in conducting in vivo studies. (Prerequisite: PHAR 342, 531). (3 credit hours, 3 contact hours)

**Immunopharmacology: PHAR 538**

Aspects of immune systems protection and destruction at the molecular, cellular level. New strategies for pharmacologic interventions and effects of current medical treatments. (Prerequisite: PHAR 342). (3 credit hours, 3 contact hours)

**Toxicology: PHAR 538**

A general course on the toxic effects of environmental agents and drugs. The role of absorption, distribution, metabolism and excretion of these agents in toxicity as well as some molecular and biochemical mechanisms by which cellular and organ toxicities occur. Agents with major hepatotoxicity, nephrotoxicity, pneumotoxicity, neurotoxicity, hematotoxicity, immunotoxicity, reproductive toxicity among others. The clinical presentation, pathophysiology, toxic levels of selected agents and their therapeutic interventions and antidotes. Prerequisite: PHAR 342, PHAR 432. (3 credit hours)

**PHAR 538 Advanced Pharmacology:**

An advanced class in pharmacology that presents selective topics in pharmacology including anticancer drugs, their mode of action, biochemical and physiological effects, uses, side effects, and most common interactions. In addition, the course presents novel pharmacological approaches, research methods in pharmacology and relevant assigned research articles. Prerequisite: PHAR 342. (3 credit hours).

## Department of Audiology and Speech Therapy

The students have to complete 129 credit hours distributed as the following general components:

|  |  |
| --- | --- |
| Component | Credit Hours |
| **University Requirements** | 21 |
| **Faculty Requirements** | 27 |
| **Program Requirements** | 75 |
| Professional elective | 6 |
| Total | 129 |

Faculty requirements for Audiology and Speech Therapy Program (27 credit hours)

|  |  |  |
| --- | --- | --- |
| Course Number | Course Name | Prerequisite |
| BIOL131 | GENERAL BIOLOGY |  |
| COMP132 | INTRODUCTION TO COMPUTER AND PROGRAMMING |  |
| PSYC236 | PSYCHOLOGY FOR HEALTH PROFESSIONS |  |
| NURS130 | HUMAN ANATOMY AND PHYSIOLOGY 1 | BIOL131 or concurrent |
| SPAU237 | [Fundamentals of linguistics](http://www.birzeit.edu/node/89064) | ENGC231 |
| NURS232 | [Nursing biostatistics and epidemiology](http://www.birzeit.edu/node/86625) |  |
| SPAU231 | INTRODUCTION TO SPECIAL EDUCATION - 1 |  |
| SPAU238 | FUNCTIONAL PHONETICS | SPAU237 |
| SPAU239 | PSYCHOLOGICAL COUNSELING | PSYC236 |

Audiology and Speech Therapy Program required courses (69 credit hours)

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| SPAU131 | INTRODUCTION TO SPEECH - LANGUAGE AND HEARING DISORDERS |  |
| SPAU132 | ANATOMY AND PHYSIOLOGY OF SPEECH AND HEARING | NURS 130 |
| SPAU232 | CHILD LANGUAGE DEVELOPMENT | SPAU 237, PSYC236 |
| SPAU233 | INTRODUCTION TO AUDIOLOGY | SPAU 131, SPAU 132 |
| SPAU234 | [Ethics and legal issues](http://www.birzeit.edu/node/89061) | SPAU 131 |
| SPAU235 | [Language disorders in children](http://www.birzeit.edu/node/86990) | SPAU 131, SPAU 232 |
| SPAU236 | [Fluency disorders](http://www.birzeit.edu/node/86991) | SPAU 131, SPAU 232, SPAU 239 |
| SPAU313 | CLINICAL OBSERVATION SPEECH - LANGUAGE AND HEARING DISORDERS | SPAU 233, SPAU 234, SPAU 235 |
| SPAU314 | [Clinical practicum speech - language disorders 1](http://www.birzeit.edu/node/89068) | SPAU 313, SPAU 236, SPAU 328 |
| SPAU315 | [Clinical practicum audiology 1](http://www.birzeit.edu/node/89069) | SPAU 313, SPAU 334, SPAU 328 |
| SPAU328 | PRINCIPLES OF EVALUATION, DIAGNOSIS, AND REPORT WRITING IN CD | SPAU232 , SPAU 233, SPAU 234 |
| SPAU332 | HEARING AIDS 1 | SPAU 233, SPAU 238 |
| SPAU334 | [Diagnostic audiology](http://www.birzeit.edu/node/89072) | SPAU 233 |
| SPAU335 | ARTICULATION DISORDERS | SPAU238, SPAU132, SPAU232 |
| SPAU336 | VOICE AND RESONANCE DISORDERS | SPAU131, SPAU132, SPAU238 |
| SPAU337 | [Medical aspects of hearing loss](http://www.birzeit.edu/node/87003) | SPAU334 |
| SPAU338 | [Hearing aids 2](http://www.birzeit.edu/node/87004) | SPAU334, SPAU332 |
| SPAU339 | [Speech and language rehabilitation for hearing impaired](http://www.birzeit.edu/node/87005) | SPAU235, SPAU332 |
| SPAU425 | [clinical practicum speech - language disorders 2](http://www.birzeit.edu/node/87006) | SPAU314, SPAU335 |
| SPAU426 | [Clinical practicum audiology 2](http://www.birzeit.edu/node/87007) | SPAU315, SPAU332, SPAU334 |
| SPAU430 | [Swallowing disorder](http://www.birzeit.edu/node/87008) | SPAU336 |
| SPAU433 | [Rehabilitation of clients with special needs](http://www.birzeit.edu/node/89083) | SPAU231, SPAU235, SPAU239 |
| SPAU434 | [Neuro speech and language disorders](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwjJ8NWGtKTLAhVMaRQKHTcmCnEQFggeMAA&url=http%3A%2F%2Fwww.birzeit.edu%2Fnode%2F87012&usg=AFQjCNFs_w5kNvtsy7zWBv7LrDFlaiuw3g) | SPAU237, SPAU132, SPAU232 |
| SPAU436 | [Clinical practicum speech - language disorders 3](http://www.birzeit.edu/node/87014) | SPAU425, SPAU433, SPAU434 |
| SPAU437 | [Clinical practicum audiology 3](http://www.birzeit.edu/node/87015) | SPAU337, SPAU338, SPAU426 |
| SPAU438 | [Research methods in communication disorders](http://www.birzeit.edu/node/89088) | NURS232, SPAU234, SPAU425, SPAU426 |

Audiology and Speech Therapy Program Elective Courses (6 credit hours)

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Prerequisite** |
| SPAU431 | [Principles of clinical management](http://www.birzeit.edu/node/87009) | SPAU234, SPAU314, SPAU315 |
| SPAU432 | [Alternative augmentative communication](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwi3xvq0tKTLAhXD6RQKHc08AkkQFggeMAA&url=http%3A%2F%2Fwww.birzeit.edu%2Fnode%2F89082&usg=AFQjCNFoOxTlGwUQeUNqftVIohJNVCuPdQ) | SPAU231, SPAU235, SPAU433 |
| SPAU435 | [Dyslexia](http://www.birzeit.edu/node/89085) | SPAU232, SPAU238 |
| SPAU439 | [Teaching methods for the hearing impaired](http://www.birzeit.edu/node/87017) | SPAU231, SPAU233, SPAU 38, SPAU339 |
| SPAU440 | [Special Topic](http://www.birzeit.edu/node/89090) | Level 4 and department approval |

**Course descriptions SPAU**

**SPAU 131 Introduction to Speech – Language and Hearing Disorders**

An overview of speech, language, and hearing disorders and the role of speech pathologists and audiologists in identification, prevention, and treatment of such disorders and the role of other professionals.

**SPAU 132 Anatomy and Physiology of Speech and Hearing**

Study of normal anatomy of speech and hearing mechanism including the musculature, nervous and breathing system that contribute to the function of speech, hearing, and balance. *Pre-requisites NURS 130*

**SPAU 231 Introduction to Special Education**

The course is an overview of the development of special education, its concepts and basic terms. In addition to the concept of special needs a review of the different categories of special needs, their characteristics, needs, and methods of support and service for positive accommodation in their every-day life and integration in their community.

**SPAU 232 Child Language development**

Language acquisition theories and stages of development of syntax, semantics, pragmatics and phonology in children. The effects of biological, social and environmental factors on the process of language acquisition. Collecting samples, analyzing and comparing to norms. *Pre-requisites SPAU237, PSYC 236*

**SPAU 233 Introduction to Audiology**

Introduction to the physics of sound, auditory system function, audiologic disorders, prevalence and effects, principles of audiologic testing in adults and children. *Pre-requisites SPAU 131, SPAU 132*

**SPAU 234 Ethics and legal issues**

Overview of the scope of practice in speech pathology and audiology, general professional issues, legal considerations, ethics and credentialing. *Pre-requisites SPAU 131*

**SPAU 235 Language Disorders in Children**

Overview of language disorders in children and language delay. Focus will be on different types of language disorders, methods and theories of assessment and treatment. *Pre-requisites SPAU 131, SPAU 232*

**SPAU 236 Fluency Disorders**

The study of normal and abnormal dysfluency of speech, etiology (developmental and environmental factors), evaluation and diagnosis procedures, and methods of intervention. *Pre-requisites SPAU 239, SPAU 131, SPAU 232*

**SPAU 237 Fundamentals of Linguistics**

A general introduction to the study of language, focusing on main linguistics issues in both Arabic and English taking into consideration the theoretical and practical aspects. The focus is on knowledge concerning the relationship between language and society, language and the brain, language and the dialects, knowledge of the principles of phonology, morphology, syntax and semantics, Language development and communication components and communication disorders. Prerequisite: ENGC231

**SPAU 238 Functional Phonetics**

A practical and analytical study of sounds and articulation points in both Arabic and English based on physiology and physics of sound, as well as the laboratory analysis of sounds. The course will cover the physiology of sounds in terms of airflow mechanisms and its effect on sound, the voice system, hearing system, sound categorization based on places and manners of articulation, the International Phonetic Alphabet (IPA) system of transcription, and introduction of syllables, melody and emphasis and its effect in speech.

and frequency, and the discrimination of sounds based on sound waves individual and complex. Finally, cover the methods and devices for sound analysis and recording. Prerequisite: SPAU 237

**SPAU 239 Psychological Counseling**

This course is an overview of psychological counseling, the counseling process, and the principles and ethics of counseling. The course will cover the main principles of psychological counseling and their use in counseling individuals with special needs to match the various needs. Prerequisite: PSYC236

**SPAU 313 Clinical Observation Speech – Language and Hearing disorders**

Supervised observation of diagnosis, treatment, and counseling of patients with speech, language and hearing disorders. Discussion of practical application techniques and rules and ethics of the clinical work. *Pre-requisites SPAU 233, SPAU 234, SPAU 235*

**SPAU 314 Clinical Practicum Speech – Language disorders 1**

Implementation of treatment sessions related to articulation and language disorders under direct supervision of speech language pathologist. Session management, treatment plan writing, recording of treatment outcomes and evaluation of progress, case discussions as well as report writing skills. *Pre-requisites SPAU 236, SPAU 328, SPAU 313*

**SPAU 315 Clinical Practicum Audiology 1**

Application of basic audiometric testing (pure tone, tympanometry, OAE) for adults and children. Screening of school and KG children. Writing up and interpreting results and case discussions. *Pre-requisite:, SPAU 313, SPAU 334,SPAU 328*

**SPAU 328 Principles of evaluation, diagnosis, and report writing in CD**

Methods of observing and recording behaviors for the purpose of assessment and planning intervention. Writing treatment plans, objectives and reports. The use of methods and materials in planning and assessing intervention. *Pre-requisites SPAU 233, SPAU 235, SPAU 236, SPAU 234*

**SPAU 332 Hearing Aids I**

Study of the hearing aid history, technology, acoustic and electronics characteristics of hearing aids. Evaluation, measurements and fitting methods of hearing aids for children and adults. *Pre-requisites SPAU 233*, SPAU 238

**SPAU 334 Diagnostic Audiology**

In depth study of audiological testing, pure tone, acoustic reflex, Tympanometry, play audiometry, VRA, masking, ABR, OAE, and differential diagnosis techniques. Case studies and result analysis of different tests. *Pre-requisites SPAU 233*

**SPAU 335 Articulation Disorders**

Study of the assessment and treatment of articulation disorders, a review of theories and procedures of articulation and phonological intervention. *Pre-requisites SPAU 238, SPAU 132, SPAU 232*

**SPAU 336 Voice and resonance disorders**

Principles and methods of assessment and intervention for vocal and resonance disorders in children and adults including the study of vocal physiology, dynamic characteristics, measurements of fundamental frequency and nasal emission, as well as using the different instruments. *Pre-requisites SPAU 131, SPAU 132, SPAU 238*

**SPAU 337 Medical aspects of hearing loss**

Medical aspects of hearing loss, diseases and medications related to hearing loss, tinnitus, and balance disorders. An overview of symptoms, diagnostic procedures, referral protocols and team work in a medical setting (including medical and pharmacological terminology). *Pre-requisites: SPAU 334*

**SPAU 338 Hearing Aids II**

Assistive technology including FM, Bone conduction hearing devices, cochlear implants and other assistive technology. The candidacy criteria, fitting and follow up protocols as well as troubleshooting. *Pre-requisites SPAU 332, SPAU 334*

**SPAU 339 Speech and Language Rehabilitation for Hearing Impaired**

The effect of hearing loss on speech and language development and acquisition. Assessment and treatment of speech and language disorder for children with hearing loss, different communication methods and educational needs. *Pre-requisites, SPAU 235, SPAU 332*

**SPAU 425 Clinical Practicum Speech – Language disorders 2**

Implementation of treatment sessions related to fluency, language disorders related to other disabilities e.g. hearing loss under direct supervision of speech language pathologist. Treatment plan writing and recording of treatment outcomes and evaluation of progress, case discussions as well as report writing skills. *Pre-requisites SPAU 314, SPAU 339*

**SPAU 426 Clinical Practicum Audiology 2**

Application of differential diagnostic audiometric testing (pure tone, tympanometry, OAE, acoustic reflexes) for adults and children. Special testing for pediatric population (VRA and play audiometry). *Pre-requisites SPAU 315, SPAU 337*

**SPAU 430 Dysphasia**

The anatomy, physiology, and neurology of normal swallowing, assessment and treatment of swallowing disorders. *Pre-requisites: SPAU 336*

**SPAU 431 Principles of clinical management**

Overview of the organization and management of Speech - Language and Hearing clinics in hospitals, rehabilitation centers and private practice facilities from a managerial and administrative point.  *Pre-requisites SPAU 234, SPAU 314, SPAU 315*

**SPAU 432 Alternative Augmentative Communication**

An overview of alternative augmentative communication methods and techniques for persons having severe communication disorders. Evaluation and design of alternative communication as well as the different technologies available. *Pre-requisites: SPAU 231, SPAU 235, SPAU 433,*

**SPAU 433 Rehabilitation of clients with special needs**

Survey of coexisting disorders and their effect on speech and language skills. The role of other rehabilitation and medical professionals in the treatment. Assessment and treatment methods in speech and language, rehabilitation teamwork, and special care in sessions. *Pre-requisites SPAU231, SPAU 235*, *SPAU 239*

**SPAU 434 Neuro speech and language disorders**

Study of neurological based speech language disorders e.g. dysarthria, apraxia, cerebral palsy, and brain injuries. Assessment and treatment of these disorders and collaboration with other health professions. *Pre-requisites SPAU 237, SPAU 132, SPAU 232*

**SPAU 435 Dyslexia**

Survey of reading and spelling problems; various theories on dyslexia and agraphia; causes, assessment and treatment. Their academic, social, and psychological impact on the patient. *Pre-requisites SPAU 232, SPAU 238*

**SPAU 436 Clinical Practicum Speech – Language disorders 3**

Screening of speech – language disorders in schools, preschools and special education centers. Apply treatment sessions and awareness raising campaigns at campus clinic and at selected rehabilitation centers. *Pre-requisites SPAU 425, SPAU 433, SPAU 434*

**SPAU 437 Clinical Practicum Audiology 3**

Diagnostic audiometric testing, hearing aid recommendation, fitting and verification. Cochlear implant candidacy testing, fitting and programming. Focus on awareness, prevention, and early identification. *Pre-requisites: SPAU 337, SPAU 338, SPAU 426*

**SPAU 438 Research methods in communication disorders**

Methods of research and applied science in the field of communication disorders. Data collection and analysis methods and interpretation into practical applications. Course will include and mini research paper (the use of references, data bases, and ethics of research writing). *Pre-requisites NURS 232, SPAU 234, SPAU425, SPAU426*

**SPAU 439 Teaching methods for the hearing impaired**

Survey of the educational needs of children with hearing loss, the different teaching methods and communication methods used in different rehabilitation settings including sign language and lip reading. *Pre-requisites SPAU231, SPAU 233, SPAU 339, SPAU 338*

**SPAU 440 Special Topics in Speech, Language, and Hearing Disorders**

Special studies in speech, language, and hearing disorders selected based on the needs of the students and interests of faculty. *Pre-requisites: fourth year level and department approval*

Faculty of Education

# Faculty of Education Study plans

Faculty of Education has been established since 2010, in order to provide the Palestinian society with its needs from highly-qualified teachers. As a result, this will be reflected on improving teaching quality in the Palestinian schools.

The faculty offers two academic programs; thebachelor degree for upperbasic/ elementary school (5-10) teacher in two areas: Teaching Social Studies, and Teaching Science.

Besides, the Faculty of Education offers Diploma Program of Education. This program targets all university students who are seeking to work in teaching. Additionally it attracts in-service teachers to increase their teaching capacities.

**The Faculty Requirements (17-18 credit hours), including the following courses (BA).**

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Courses** |
| CULS230 | Democracy, Human Rights, and International Humanitarian Law |  |
| EDUC231 | Introduction To Education |  |
| EDUC232 | Psychological Foundations of Education | EDUC231 |
| EDUC233 | Development During Childhood and Adolescence | EDUC232 |
| EDUC234 | Teaching and Learning in Heterogeneous Classes | EDUC233 |
| **For Upper Basic/ Elementary school teacher Program: Teaching Science, Teaching Mathematics, Teaching of Technology ( 3 Credit Hours)** | | |
| COMP132 | Introduction to Computer and Programming |  |
| **For Upper Basic/ Elementary School Teacher Program: Teaching Social Studies ( 2 Credit Hours)** | | |
| COMP121 | Introduction to Computer |  |

## Department of Curriculum and Instruction

The curriculum and Instruction Department offers two academic programs to award the bachelor degree forupper basic/ elementary school teacher (5-10): Teaching Social Studies, and Teaching Science. Additionally, the department offers a diploma program of education.

**First: Bachelor Program: Upper Elementary School Teacher Program: Teaching Social Studies.**

Students are enrolled directly in this program, based on their achievements and averages in high school certificate (Tawjihi). Students’ averages must meet the minimum average that is determined and declared by the faculty at that time.

**The Instructional Plan:**

The instructional plan consists of 132 credit hours as follows:

|  |  |
| --- | --- |
| **Requirement** | **Credit Hours** |
| University Requirements | 21 |
| Faculty Requirements | 17 |
| Major Requirements | 88 |
| Elective Courses | 6 |
| **Cumulative Credit Hours** | **132** |

**Major Requirements (88 Credit Hours)**

1. **Compulsory Courses ( 82 Credit Hours), including the following courses:**

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Courses** |
| EDUC3241 | Practicum: Teaching Social Sciences 1 | EDUC330, EDUC3341 |
| EDUC3242 | Practicum: Teaching Social Sciences 2 | EDUC3241, EDUC3342 |
| EDUC3243 | Practicum: Teaching Social Sciences 3 | EDUC3242, EDUC4341 |
| EDUC330 | General Methods of Teaching | EDUC232 |
| EDUC331 | Educational Technology and Teaching Recourses | EDUC231 |
| EDUC334 | Measurement and Evaluation | EDUC232 |
| EDUC3341 | Social Science Curriculum 1: Teaching History and Civic Education in the School Curriculum | EDUC232, EDUC 233 |
| EDUC3342 | Social Science Curriculum 2: Teaching Geography and National Education in the School Curriculum | EDUC3341 |
| EDUC4341 | Methods of Teaching Social Studies 1 | EDUC231, EDUC232 |
| EDUC 4342 | Methods of Teaching Social Studies 2 | EDUC4341 |
| EDUC437 | Educational Research Methodology | EDUC232, EDUC 334 |
| EDUC 438 | Seminar in Education | Fourth year level and/or Department approval |
| EDUC4404 | Practicum: Teaching Social Sciences 4 | EDUC3243, EDUC4342 ( or concurrent) |
| GEOG230 | Introduction To Human Geography |  |
| GEOG231 | Introduction To Physical Geography |  |
| GEOG232 | Principles of Cartographic |  |
| GEOG234 | Climatic Geography | GEOG231 |
| GEOG338 | Geography of Palestine |  |
| GEOG436 | Geographic Information System (GIS) | GEOG232 |
| HIST133 | Arab Islamic Civilization |  |
| HIST134 | History of Palestine Since 18th Century |  |
| HIST231 | Introduction to the Study of History |  |
| HIST238 | Early Islam and the Umayyad State | HSIT231 |
| HIST239 | Egypt and Syria From Fatimids Mamluks |  |
| HIST331 | History Of Abbasid and the Period of Petty States | HIST231 |
| HIST336 | History of Arab East in the 19thCentury |  |
| HIST337 | History of Arab East in the 20th Century |  |
| HIST430 | The History of Modern Europe (1789-1918) |  |

**B: Elective Courses: 6 credit hours from the following courses:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Credit Hours** | **Course No.** | **Course Title** | **Prerequisite Courses** |
| 3 credit hours from the following courses: | EDUCG235 | Regional Geography of the World | GEOG230 |
| GEOG333 | Geography of the Arab World |  |
| 3 credit hours from the following courses: | Geog233 | Economic Geography |  |
| GEOG331 | Geomorphology | GEOG231 |
| GEOG336 | Geography of the Environmental |  |

**Second: Bachelor Program: Upper Elementary School Teacher (5-10); Teaching Science**

Students are enrolled directly in this program, based on their achievements and averages in high school certificate (Tawjihi). Students’ averages must meet the minimum average that is determined and declared by the faculty at that time.

**The Instructional Plan:**

The instructional plan consists of 129 credit hours, divided as follows:

|  |  |
| --- | --- |
| **Requirement** | **Credit Hours** |
| University Requirements | 21 |
| Faculty Requirements | 18 |
| Major Requirements | 84 |
| Elective Courses | 6 |
| **Cumulative Credit Hours** | **129** |

**Major Requirements (84 credit Hours)**

1. **Compulsory Courses ( 84 Credit Hours) include the following courses:**

|  |  |  |
| --- | --- | --- |
| **Course No.** | **Course Title** | **Prerequisite Courses** |
| BIOL111 | General Biology Lab | BIOL131 ( Or concurrent) |
| BIOL131 | General Biology |  |
| BIOL240 | Zoology | BIOL111 |
| BIOL241 | Botany | BIOL111 |
| CHEM111 | General Chemistry Lab 1 | CHEM141 ( Or concurrent) |
| CHEM112 | General Chemistry Lab 2 | CHEM132, CHEM111  ( Or concurrent) |
| CHEM141 | General Chemistry 1 |  |
| CHEM132 | General Chemistry 2 | CHEM 141 |
| CHEM230 | Fundamentalsof Organic Chemistry | CHEM133 OR CHEM132 |
| CHEM234 | Analytical Chemistry 1 | CHEM112 OR CHEM132 |
| EDUC3221 | Practicum: Teaching Science 1 | EDUC330,EDUC3321 |
| EDUC3222 | Practicum: Teaching Science 2 | EDUC3221,EDUC3322 |
| EDUC3223 | Practicum: Teaching Science 3 | EDUC3222, EDUC4321 |
| EDUC330 | General Methods of Teaching | EDUC232 |
| EDUC331 | Educational Technology and Teaching Recourses | EDUC231 |
| EDUC3321 | Physics in the School Curriculum | EDUC232, EDUC233 |
| EDUC3322 | Biology in the School Curriculum | EDUC232, EDUC233 |
| EDUC3323 | Chemistry in the School Curriculum | EDUC232, EDUC233 |
| EDUC334 | Measurement and Evaluation | EDUC232 |
| EDUC4321 | Methods of Teaching Science 1 | EDUC330 |
| EDUC437 | Education Research Methodology | EDUC232, EDUC334 |
| EDUC438 | Seminar in Education | Fourth year level or/and department approval. |
| EDUC4402 | Practicum: Teaching Science 4 | EDUC4321, EDUC3223 ( or concurrent) |
| MATH1321 | Calculus and Analytical Geometry 2 | MATH1411 |
| MATH1411 | Calculus and Analytical Geometry 1 |  |
| PHYS11 | General Physic Lab 1 |  |
| PHYS112 | General Physic Lab 2 | PHYS111, PHYS132 (or concurrent) |
| PHYS132 | General Physics 2 | PHYS141, MATH1321 ( or concurrent) |
| PHYS141 | General Physics 1 | MTH1411 ( or concurrent ) |
| PHYS211 | General Physic Lab 3 | PHYS 111, PHYS231 (or concurrent) |
| PHYS231 | General Physics 3 | PHYS 141 |

**Third: Diploma Program in Education**

This program aims to prepare and qualify secondary teachers (Grades 11 -12), with facilitating the development of their professional development.

* Diploma in Educational Qualification program for secondary level aims to prepare school teachersto teach the following disciplines: Teaching Arabic Language, Teaching English Language, Teaching French, Teaching Mathematics, Teaching Information Technology, Teaching Physics, Teaching Chemistry, Teaching Biology, Teaching Geography, Teaching History, and Teaching Economics and Management.(The secondary level program graduates can also teachin the upper elementary/basiclevel)

**Enrollment Qualifications:**

* Students who are awarded bachelor degree from an accredited university,

In one of the specializations in teaching upper elementary or secondary levels (that mentioned above).

* Regular university students who are enrolled in any academic program, that awards a bachelor degree in any specialization in teaching upper elementary level or secondary level as major, provided that the bachelor degree and the diploma are from the same specialization.
* Getting grades not less than 70% in the following courses: EDUC231, EDUC2235.

1. **Core / Compulsory Courses:**

18 credit hours including the following courses

|  |  |  |
| --- | --- | --- |
| Course No. | Course Title | Prerequisite Courses |
| EDUC231 | Introduction to Education |  |
| EDUC235 | Educational Psychology |  |
| EDUC334 | Measurement and Evaluation | EDUC231 |
| EDUC430 | Practicum Teaching 1 | EDUC235, EDUC231 ,Concurrent with Methods of teaching Subject1 |
| EDUC431 | Curriculum and Teaching | EDUC235, EDUC231 |
| EDUC435 | Practicum Teaching 2 | EDUC430, Concurrent with Methods of teaching Subject 2 |

1. **Additional Compulsory Courses:**

6 credit hours from one of the following groups, based on the Discipline

|  |  |  |  |
| --- | --- | --- | --- |
| Credit Hours | Course No. | Course Title | Prerequisite Courses |
| Teaching Arabic Language | EDUC4311 | Methods of Teaching Arabic Language 1 | EDUC235 |
| EDUC4312 | Methods of Teaching Arabic Language 2 | EDUC4311 |
| Teaching English as a Foreign Language | EDUC4301 | Methods of Teaching English as a Foreign Language 1 | EDUC235 |
| EDUC4302 | Methods of Teaching English as a Foreign Language 2 | EDUC4301 |
| Teaching French Language | EDUC4361 | Methods of Teaching French Language 1 | EDUC235 |
| EDUC4362 | Methods of Teaching French Language 2 | EDUC4361 |
| Teaching Mathematics | EDUC4331 | Methods of Teaching Mathematics 1 | EDUC235 |
| EDUC4332 | Methods of Teaching Mathematics 2 | EDUC4331 |
| Teaching Information Technology | EDUC4353 | Methods of Teaching Information Technology1 | EDUC235 |
| EDUC4354 | Methods of Teaching Information Technology 2 | EDUC4353 |
| Teaching Physics | EDUC4323 | Methods of Teaching Physics1 | EDUC235 |
| EDUC4333 | Methods of Teaching Physics 2 | EDUC4323 |
| Teaching Chemistry | EDUC4325 | Methods of Teaching Chemistry1 | EDUC235 |
| EDUC4335 | Methods of Teaching Chemistry2 | EDUC4325 |
| Teaching Biology | EDUC4324 | Methods of Teaching Biology 1 | EDUC235 |
| EDUC4334 | Methods of Teaching Biology2 | EDUC4324 |
| Teaching Geography | EDUC4343 | Methods of Teaching Geography1 | EDUC235 |
| EDUC4345 | Methods of Teaching Geography 2 | EDUC4343 |
| Teaching History | EDUC4344 | Methods of Teaching History1 | EDUC235 |
| EDUC4346 | Teaching History 2 | EDUC4344 |
| Teaching Management and Economics | EDUC4326 | Methods of Teaching Management and Economics 1 | EDUC235 |
| EDUC4336 | Methods of Teaching Management and Economics 2 | EDUC4326 |

1. **Elective Courses**

6 credit hours (Students must take one course from the following two groups)

|  |  |  |  |
| --- | --- | --- | --- |
| Prerequisite Course | Course Title | Course No. | Course No. |
| EDUC231 EDUC235 | Teaching and Learning in Heterogeneous Classes | EDUC234 | Group 1 |
| The Department Approval | Learning Difficulties | EDUC433 |
| EDUC231 | Educational Technology and Teaching Recourses | EDUC331 | Group 2 |
| EDUC334 | Educational Research Methodology | EDUC437 |
| The Department Approval | Critical Readings in Education | EDUC432 |  |

**Courses Description:**

**EDUC231 Introduction to Education**

This course focuses on the definition, function and objectives of education in general. It explains the philosophy especially those philosophical views that left an influence on education. Further, it focuses on the personal development of educational experiences and attitudes as related to educational goals and methods. This course also addresses the relationship between education and culture, education and society, education and democracy. Additionally, it discusses the role of education in society development, the role of the teacher in the educational process and the teaching profession, the ethics of the teaching profession based on international standards, and the recent educational thoughts and philosophies. The history, reality and challenges of the Palestinian education system are also discussed in this course.

**EDUC232 Psychological Foundations of Education**

This course is considered an introduction to the psychology of learning. It focuses on the application of those psychological principles to planning for teaching and instruction particularly at the childhood and adolescence levels. It discusses the main learning theories and their applications in the learning and teaching process. These include: traditional and modern theories, behavioral and cognitive, social learning, structural, and the socio-structural. Higher-order thinking skills such as problem solving, cooperative learning, motivation, individual differences, intelligence and creativity are also discussed in this course. (Prerequisite: Educ231)

**EDUC233 the Development during Childhood and Adolescence**

This course provides students with an introduction to the evolution of psychology and its educational applications as far as teaching, planning for teaching and interacting with students at schools are concerned. It focuses on the definition of development and growth across different stages with a focus on childhood and adolescence. It also explains research methods in psychological development, the basic principles of evolution, the role of heredity and the environment in development, patterns and the diversity of evolution among students, the psychological, motor, mental, social, personal, ethical and linguistic development. The psychological and health problems of adolescence, how to face them, intelligence, and creativity in childhood and adolescence stages are other topics discussed in this course. (Prerequisite: EDUC232)

**EDUC234 Teaching and Learning in Heterogeneous classes**

This course discusses and explains the concept of heterogeneous classes, diversity in the classroom and effective approaches in managing and teaching such classes. Further, this course focuses on the individual differences among students pertaining to their abilities, motivation, interests, learning styles, personal experiences and social and cultural backgrounds. It also focuses on students with special educational needs, the integration policy, developing teachers’ skills that are required for identifying those needs. Methods of teaching and managing students with special needs in mainstream classes such as curriculum adaptation and creating supportive classroom environments are also discussed in this course. (Prerequisite: EDUC231).

**EDUC 235 Educational Psychology**

This course focuses on the psychological, mental, social, personal, ethical, and linguistic development of the learners particularly during childhood and adolescence stages. It also discusses the psychological and health problems facing learners during the adolescence stage. Further, it focuses on the definition of learning, its educational applications, modern and classic learning theories, higher-order thinking skills and individual differences such as intelligence, creativity and motivation.

**EDUC 3221-3251 Practicum1: Specialization (BSc)**

This course aims at assisting students to develop the ideological and educational framework for learning and teaching in classrooms. It also focuses on the definition of the practicum, its objectives and the analyses of its tasks. Further, it explains and discusses the teacher’s basic competences and performance skills. It focuses also on having and developing effective communication skills and teaching and learning ethics that serves as a resource that students could refer to during their teaching at schools. (1 Credit hour at the college and 28 observational hours in schools)

These courses are classified as the following:

|  |  |  |
| --- | --- | --- |
| Prerequisite Courses | Course Title | Course No. |
| EDUC330, EDUC3321 | Practicum: Teaching Science 1 | EDUC3221 |
| EDUC330, EDUC3331 | Practicum: Teaching Mathematics 1 | EDUC3231 |
| EDUC330, EDUC3341 | Practicum: Teaching Social Sciences1 | EDUC3241 |
| EDUC330, EDUC3351 | Practicum: Teaching Technology 1 | EDUC3251 |

**EDUC 3222-3252 Practicum 2: Specialization (BSc)**

This course is designed to equip students with the skills required to perform specific planning and teaching tasks in classrooms. This is achieved in cooperation between the hosting / mentor teacher and the academic advisor at the university. The emphasis in this course is on developing the teacher’s teaching, assessment and classroom management skills. (1 credit hour at the college, and 35 observational credit hours at schools)

These Courses are classified as the following:

|  |  |  |
| --- | --- | --- |
| Prerequisite Courses | Course Title | Course No. |
| EDUC3221, EDUC3322 | Practicum: Teaching Science 2 | EDUC3222 |
| EDUC3231, EDUC3332 | Practicum: Teaching Mathematics 2 | EDUC3232 |
| EDUC3241, EDUC3342 | Practicum: Teaching Social Sciences2 | EDUC3242 |
| EDUC3251, EDUC3352 | Practicum: Teaching Technology 2 | EDUC3252 |

**EDUC 3223-3253 Practicum 3: Specialization (BSc)**

This course aims at providing prospective teachers with the opportunity to practice performing teaching and learning activities in a school setting. It also focuses on the instructional and non-instructional roles and responsibilities of classroom teachers. (1 credit hour at the college, and 35 observational credit hours in schools)

These courses are classified as the following:

|  |  |  |
| --- | --- | --- |
| Prerequisite Courses | Course Title | Course No. |
| EDUC3222, EDUC4321 | Practicum: Teaching Science3 | EDUC3223 |
| EDUC3232, EDUC4331 | Practicum: Teaching Mathematics 3 | EDUC3233 |
| EDUC3242, EDUC4341 | Practicum: Teaching Social Studies3 | EDUC3243 |
| EDUC3252, EDUC4351 | Practicum: Teaching Technology 3 | EDUC3253 |

**EDUC4402-4405: Practicum 4: Specialization (BSc)**

The main aim of the course is to provide the opportunity to students to practice teaching and learning tasks in a holistic way, and to carry out the roles and responsibilities, and duties of the real school teacher.

(80 teaching contact hours in schools)

|  |  |  |
| --- | --- | --- |
| Prerequisite Courses | Course Title | Course No. |
| EDUC4321,EDUC3223 or concurrent | Practicum: Teaching Science4 | EDUC4402 |
| EDUC4332, EDUC3233or concurrent | Practicum: Teaching Mathematics 4 | EDUC4403 |
| EDUC4342, EDUC3243or concurrent | Practicum: Teaching Social Sciences 4 | EDUC4404 |
| EDUC4352, EDUC3253or concurrent | Practicum: Teaching Technology 4 | EDUC4405 |

**EDUC330: General Methods of Teaching**

Defining the concepts of the different teaching paradigms in the context of the general learning and teaching theories and methods. It provides training on planning for teaching, so as to enable students to manage the classrooms, and to create a suitable environment for learning, with practicing a micro-teaching of some lesson plans and assessing the teaching process and outcomes. The course also equips the students with certain individual differences teaching strategies. It provides the students work and plan for teaching in small groups, as well as analyzing and evaluating the classroom interaction and environment. (Pre-requisite: EDUC232)

**EDUC331: Educational Technology and Teaching Recourses**

The definition of the technology in education; the simple and modern. It also presents the models of electronic learning such as: multimedia, and the interactive activities with its different levels and with its implementation method. Additionally, this course addresses the designing of teaching aids from the local environment, the skills of using different software and the communicational and informational techniques in designing the integrated learning. (Pre-requisite: Educ 231)

**EDUC3321: Physics in the School Curriculum**

This course informs students with the concepts, the principles and the basic science processes in physics, at its classical level (the laws of motion and strength) and the electricity and the magnetism level. This course addresses the main goals of teaching physics, and the functional role of the physics laboratory in teaching the main physics concepts, with focusing on computerized virtual physics laboratory. It also aims to acknowledge students with the most recent teaching methods and strategies in teaching physics such as: the discovery and inquiry methods, problem solving, teaching for conceptual change, group work and individual learning, with special focus on giving a heavy concern to the role of the learner in the learning teaching process. (Pre-requisite: EDUC, 233, EDUC232)

**EDUC3322: Biology in the School Curriculum**

Informing students with the concepts, the principles, the laws and the science processes in Biology, such as, plant and animal cell, the human body and its organs, plants, living organisms and their categories, vertebrates and invertebrates, and genetics. It also equips students with the ability of using relevant teaching methods and strategies, which fit the teaching subjects and the characteristics of the students. It also provides relevant mechanisms and strategies to ease employing the acquired skills and knowledge and skills in daily life situations, either through supporting them in solving the problems that they may face, or by try to explain and understand some of the phenomena that are surrounding the students. It also provides students with practical skills to enable them conduct relevant experiments in laboratories other relevant practical activities.

(Prerequisite: EDUC233, EDUC232)

**EDUC3323: Chemistry in the School Curriculum**

This course aims to equip students with the concepts, principles and the basic science processes of inorganic and organic chemistry, in addition to the physical, analytical at the quantitative and qualitative levels. It also aims to equip students with special teaching methods that can be linked to their daily life experiences from one side, and with the higher-order thinking skills from another side. The course also aims to support students in conducting experiments in or out the classrooms, using the laboratory with taking into consideration the security and the safety procedures, which is considered as one of the main topics in this course. Additionally, it enables students in using some specialized software applications in chemistry, such as: three-dimensional multimedia, and molecules drawing software. (Pre-requisite: EDUC233, EDUC232)

**EDUC3331: Mathematics in the School Curriculum1**

This course addresses topics related to the mathematical content in the school curriculum, in order to be studied in depth, and to recognize the different multi-media representations of its concepts and its applications in life, including problemssolving relevant implications. The main topics of the course include: natural, integers, rational, real and complex numbers, the relation and the operations among these numbers, with their characteristics. It also includes Algebra, matrices, vectors, and the theory of numbers, representations of data, probability, statistics, associations and endings. The course focuses in addressing the topics at the different school teaching levels. (EDUC233, EDUC232)

**EDUC3332: Mathematics in the School Curriculum2**

This course addresses topics related to the mathematical concepts of the school curriculum, with special consideration to the multiple representations of its main concepts and applications in life, including problem solving implications, in order to be studied and analyzed indepth. The course main topics include the two and three dimensional geometrical shapes with their characteristics, and the relations among them, the geometrical transformations, some of Euclidean theories: the spatial and plane, and writing proofs with non-Euclidean assumptions system.The course focuses in addressing the topics at the different school teaching levels. (Prerequisite: EDUC 3331)

**EDUC334 Measurement and Evaluation**

An introduction to the foundations of the educational measurement and evaluation, its educational objectives, its fields and levels, its implementing in teaching and learning process, teaching assessment, developing suitable instruments for measuring students’ achievement, analyzing and evaluating the effectiveness of the tests, using the descriptive statistics tools, and the authentic assessment tools and it’s different methods. (Prerequisite: Educ231)

**EDUC3341**: **Social Science Curriculum1: Teaching History and Civic Education in the School Curriculum 1**

Some history topics that are related to some issues that Arab world’s faced such as ancient civilization, colonialization, and Europe history Europe in Renaissance and the Industrial Revolution, and the First and the Second World Wars. The civic education topics such as the child’s rights, the perseverance of the public interests, violence in schools, family and the reproduction health, the values of the civic society, human rights, and democracy and upbringing. Also, history and civic education teaching methods and strategies that are related to the above topics and grade (5-10) students. (Prerequisite: EDUC233, EDUC232)

**EDUC3342: Social Science Curriculum2: Teaching Geography and National Education in the School Curriculum 2**

Teaching methods and strategies of geography and national education subjects for grades (5-10), so as to be studied in depth, and to recognize the cosmic phenomena, the Earth, the World, the Arab World, Palestine, and differentglobal environments from geographical and cultural aspects. . (Prerequisite: EDUC3341)

**EDUC3351: Technology in the School Curriculum1**

This course is aiming at studying technology subjects in school curricula in depth and the most suitable teaching methods and strategy to teach these topics, concentrating on connecting theory into practice. Topics of this course are: Signals, Symbols, technical drawing and tools. As well as energy, electricity, and the material in life, and how these topics are taught in different school levels, with enriching the school curriculum with recent ideas that come in line with the modern technology

(Prerequisite: EDUC233, EDUC232)

**EDUC3352: Technology in the School Curriculum2**

This course is aiming at studying technology subjects in school curricula in depth and the most suitable teaching methods and strategy to teach these topics, concentrating on connecting theory into practice. Topics of this course are: The computer and its various applications, the characteristics and the use of some computer software, as well as algorithms and computer programming. It also concerns with teaching these topics for different school levels, with offering the chance for enriching the school curriculum with the recent ideas that come in line with the modern technology. (Prerequisite: EDUC233, EDUC232)

**EDUC432: Critical Readings in Education**

Different trends in education including presenting and discussing of the most recent readings related to specific topics that will be criticized , analysis of educational discourse in the Arab World and the global context, educational critical theory, ideological knowledge, and the centers of influence and power. (Prerequisite: The Curriculum and Instruction department’s approval)

**EDUC433: Learning Difficulties**

The concept of learning difficulties, types, causes, and the characteristics of students with learning difficulties. Methods of early diagnosis of Learning difficulties, strategies to deal with them, and proposing appropriate remedial programs. Teachers’ needed skills for managing the teaching process, and to integrate students with learning difficulties in the teaching process. Global trends of the integration of the students with learning difficulties. Designing an individual educational plan. (Prerequisite: The Curriculum and Instruction department‘s approval)

**EDUC430 Practicum Teaching 1**

Recent trends in the practicum, its procedures, with the tasks, the rights and the duties and roles of all stakeholders. It also presents the main concepts related to the teaching and learning process, the organized and purposeful observations of the school and the classroom environment, reflective writing, implementing specific practical teaching skills. (Prerequisite: EDUC231, EDUC235 or concurrent with teaching Subject 1)

**EDUC431: Curriculum and Instruction**

curriculum concept and its different types, the curriculum elements, foundations of developing curriculum and assessment, various trends in teaching and its association with the curriculum. The curriculum and, trends and the most effective teaching strategies and their relationship with the curriculum development and planning for teaching. (Prerequisite: EDUC231, EDUC235)

**EDUC435: Practicum Teaching 2**

Providing students with opportunities to practice teaching and apply the theoretical knowledge they have learnt (content and teaching methods) in real teaching situations, this includes planning, implementing, and reflecting. Doing action research to develop practices. Discussing students’ experiences in schools and in classrooms’ environment through classroom meetings. (Prerequisite: EDUC430, concurrent with Methods of Teaching subject 2(

**EDUC4301: Methods of Teaching English as a Foreign Language 1**

Various trends in teaching English as a second language (ESL), theories of learning English as a SL. Objectives and curriculum of teaching English language globally and locally, the content of the Palestinian curriculum. Various levels of planning for teaching English. (Prerequisite: EDUC235)

**EDUC4311: Methods of Teaching Arabic Language1**

Language as a humanitarian lingual social phenomenon, the history of Arabic language, Arabic language nature and its impact on teaching and learning. Objectives of teaching Arabic language, teaching and learning theories and their use in Teaching Arabic language. Arabic language teachers’ competences. Curriculum of Arabic language locally and in the Arab World, various levels of Planning for teaching Arabic. (Prerequisite: EDUC235)

**EDUC4321 Teaching Science 1 (5-10)**

The nature of science, the objectives of teaching science, learners' nature including learning theories, the alternative concepts, how to address such concepts and modify them. Global and local science curriculum. (Prerequisite: EDUC330 for BSc students, EDUC235 for Diploma students)

**EDUC4323: Methods of Teaching Physics 1**

Nature and the philosophy of science and physics. The objectives of teaching physics.Theories of teaching physics, the alternative concepts in physics, how to address such concepts and modify them. Global and local physics curriculum. Planning for teaching physics (Prerequisite: EDUC23).

**EDUC4324: Methods of Teaching Biology 1**

Nature and philosophy of science and biology, the historical developmental of biology, objectives of teaching biology, global and local curriculum of teaching biology, theories and models of teaching and learning biology. Planning for teaching biology.

(Prerequisite: Educ235)

**EDUC4325: Methods of Teaching Chemistry 1**

Nature and the philosophy of science and chemistry, its historical developments and objectives of teaching, theories and models of learning and teaching chemistry with focus on the alternative concepts and how to deal with them. Local and global chemistry curriculum. Using, developing, and managing the laboratory, taking into consideration the safety and the security procedures. Recent methods of teaching specific chemistry topics. (Prerequisite: EDUC235)

**EDUC4326 Methods of Teaching Management and Economics 1**

Nature of knowledge in management and economics sciences. Theoretical frameworks of management and economics. Directing and control. Organizational behaviors: leadership, communication, and motivating (directing). Investment projects and its legal entities, executive secretariat and administrative assistance. Supply and demand and impact of government intervention. Production and costing. Cost and benefit analysis, subsidization: concept and knowledge.

Pre requisite: EDUC235.

**EDUC4331 Methods of Teaching Mathematics 1**

Math school content and how to teach it through addressing the following topics: numbers, algebra, geometry, functions, probabilities, and statistics. National and International Mathematics Curricula. Mathematical process such as problem solving, deduction, associations and representations. Theories and trends of teaching and learning mathematics. Planning for teaching and supporting the practical knowledge through micro-teaching and use of technology. Cultural and social context for teaching and learning mathematics. Historical development of mathematics. (Prerequisite: EDUC235 for Diploma students or EDUC232, EDUC231 for BSc students)

**4332 Methods of Teaching Mathematics 2**

Focuses on the mathematical content, and how to teach it through the fields of the association, the transfers, the proofs, the space engineering, the probabilities and the calculus. It also focuses on enhancing the knowledge of the standards of the mathematical operations, with associating them with the topics of the mathematical content, parallel with mastering the practical and the field knowledge. In addition to the assessment of teaching mathematics, in–depth applications on planning and evaluation, as well as enhancing the knowledge of the social and cultural context for teaching mathematics. (Prerequisite: 4331)

**4341 Methods of Teaching Social Studies 1**

This course deals with the social studies in terms of its nature, definition, importance, and its relationship with other social sciences. It also provides an overview of the goals of the social studies, especially the behavioral ones. This course also addresses an in-depth study of the selected topics from the social studies material, and discusses the academic planning, its definition, importance, requirements, and the steps for preparing the lesson plans at all levels. Besides, this course provides a display of different teaching methods such as: the discussion, the lecture, drama, role- playing, problem solving and teaching through projects.

(EDUC235) or (EDUC232, EDUC231)

**4342 Methods of Teaching Social Studies 2**

Aims to improve the students’ knowledge, experiences and skills in teaching social studies, by raising the following topics: presenting and analyzing social studies textbooks for high schools, the teaching aids used in teaching social studies, the mechanism of the students’ evaluation, the lesson plans development related to teaching social studies, implementing teaching methods and styles, with forming professional attitudes of the teacher’s role in the learning and teaching processes, as well as drawing a personal philosophy towards learning. (Prerequisite: 4341)

**4343 Methods of Teaching Geography 1**

Nature of geography and basic geographical concepts. Objectives of teaching geography. Palestinian and international geography curriculum. Content of school curriculum. Theories and models of teaching and learning geography. Planning for teaching geography. (Prerequisite: 235)

**4344 Methods of Teaching History 1 (5-12)**

Nature of history and its foundation. Objectives of teaching History and research methods. (Prerequisite: 235)

**EDUC4353: Methods of Teaching Informational Technology 1**

Nature of informational and communicational technology and it’s leaning outcomes, related teaching and learning theories with concentration on new teacher s and their roles, students’ characteristics in digital learning environment, local and global IT education and its objectives, IT lab design and administration, safe and security in IT labs, IT research resources. (Prerequisite: EDUC235)

**EDUC 4361: Methods of Teaching French Language1**

The goals and the nature of teaching French as a second language (SL), the theories and the methods used in improving the four language skills, and the role of the teacher and the learner in these four skills, the mutual relation between the language and the culture in order to facilitate the linguistic communication process, addressing some misconceptions about teaching French, the curricula and the recent trends used in teaching French as a second language, (locally and globally). (Prerequisite: EDUC235)

**EDUC 437: Educational Research Methodology**

Various scientific research methodology, its procedures and instruments, developing the students’ different scientific research skills. Additionally, this course aims to put theories into practice through enabling students from choosing a research problem, and from developing valid and reliable research instruments. Literature review and accurate methods of citation (APA). Methods of sampling, data collection, formulating hypotheses, the research question, and the statistical analysis methods. (Prerequisite: EDUC334, EDUC232 (for BA students) or EDU 235 (for Diploma students))

**EDUC438: Seminar in Education**

Major concepts of scientific research, Skills of research writing, researching problems and fields of department and students interests,, writing a research project related to the seminar topic ( Department’s approval fourth- year level) .

**EDUC4302: Methods of Teaching English as a Foreign Language 2**

Strategies and methods of teaching English language, with focusing on teaching grammar, vocabulary, listening, speaking , pronunciation, reading and writing, assessment of the students’ learning.( EDUC4301)

**EDUC 4312: Methods of Teaching Arabic Language2**

Methods of teaching Arabic, including teaching reading, writing, conversation, literature creativities. The content of the Palestinian Arabic language curricula, methods of teaching, and the assessment of the students’ learning. (Prerequisite: EDUC4311).

**EDUC4333: Methods of Teaching Physics 2**

Models and strategies for teaching physics. Using laboratory, the physics content in the Palestinian curriculum for upper grades, methods for teaching it, besides presenting the physics teacher as a researcher, and using the learning resources. (Prerequisite: EDUC4323)

**EDUC4334: Methods of Teaching Biology 2**

Biology teaching methods, especially those that focus on developing higher-order thinking skills, organizing and managing the biology lab, using resourcesin teaching biology. The assessment in teaching biology. Biology content of the Palestinian curriculum and methods of teaching it. (Prerequisite: EDUC 4324)

**EDUC 4335: Methods of Teaching Chemistry 2**

Current trends in teaching chemistry and connecting specific topics in chemistry, in addition to presenting the recent trends in the assessment of learning chemistry and using laboratory. This course also discusses the organizing and the management of the chemistry laboratory. (Prerequisite: EDUC4325)

**EDUC4336: Methods of Teaching Management and Economics 2**

The economics and management in the Palestinian curriculum, the planning for teaching economics and management for secondary level, implementing methods and strategies related to teaching this subject. Measurement and evaluation methods, local and global models with associating them with the Palestinian context, developinglearners’ attitudes towards economics and the management. (EDUC4326)

**EDUC 4345: Methods of Teaching Geography2**

Models and methods for teaching geography, evaluating students’ learning in geography, and the content of the Palestinian curriculum and its teaching strategies. (Perquisite: 4343)

**EDUC4346: Methods of Teaching History 2**

History teaching methods such as: the lecture, the discussion, teaching concepts, problem solving strategy, teaching through projects and research, trips, microteaching teaching, using technology in teaching, assessment of teaching history, and the content of the Palestinian curriculum and its teaching strategies(Prerequisite: EDUC4344)

**EDUC4354: Methods of Teaching Informational Technology 2**

Planning for IT teaching , importance of using IT in problem solving, development of algorithm, design of flowchart and database implications, different teaching strategies, e-learning foundations and its importance for student learning and its recent trends, e-learning administration systems, evaluation of student learning.( (Prerequisite: 4353).

**EDUC 4362: Methods of Teaching French Language2**

Planning for teaching French at all levels, using different techniques that can assist learning the French language. Recent trends in teaching French as a second language, microteaching of selected teaching cases, adopting a personal philosophy towards teaching, reflecting on the teaching practices, and evaluating the classroom interaction as well as focusing on the basic skills and the assessment of the learning. (Prerequisite: 4361)

# Faculty Members for the Academic Year 2015/2016

1. Credit Hours: credit hours require a minimum of 15 academic sessions per semester, the duration of each session is 50 minutes for courses of theoretical nature and 150 minutes for courses of practical nature and labs, or their equivalent. [↑](#footnote-ref-1)
2. The credit hours related to the repeated course that a student has failed, after passing it the first time, will not be considered as part of the completed credit hours. The grade for the latest repetition is considered in the student’s average. [↑](#footnote-ref-2)
3. A student's cumulative average is calculated by dividing the total number of points (points are calculated by multiplying the grade by the number of credit hours for each course) earned by the total number of credit hours a student has registered to (whether passed or failed). Numbers are rounded to a single decimal place. In case of course repetition, the credit hours for the course are considered once only, and the mist recent grade is added to the above calculation. [↑](#footnote-ref-3)
4. A student is considered adjourned when he/she misses a number of sessions exceeding the maximum allowed number of absences without referring to the course instructor or justifying the absences, or officially withdrawing from the course through the Registration and Admission Department. [↑](#footnote-ref-4)
5. The grade for such courses are considered in the cumulative average as 50%. [↑](#footnote-ref-5)
6. This includes all the credit hours the student has registered to and did not withdraw from up to the end of the twelfth week of the semester, including any repeated courses. [↑](#footnote-ref-6)
7. A student's average in the semester is calculated by dividing the total number of points earned in the semester by the number of credit hours for that course. [↑](#footnote-ref-7)
8. A regular student is allowed to register for less than 6 credit hours only in the case where this is the only number of credit hours left for fulfilling the graduation requirements. The registration is completed based on the recommendation of the advisor and the approval of the Dean of the related Faculty. [↑](#footnote-ref-8)
9. The Readmission Committee is a sub-committee formed from the members of the Academic Council, headed by the Vice President for Academic Affairs and its members include the Deans of the Faculties, the Head of the Registration and Admission Department, and the Head of the Students’ Affair Department. [↑](#footnote-ref-9)
10. This introductory course should be taken by the students without previous German knowledge. It has to be taken in the same semester as GERM131. [↑](#footnote-ref-10)
11. 32 Credit hours for high school students (Tawjihi)/Art and Commercial streams

    29 credit hours for high school students (Tawjihi)/Scientific stream [↑](#footnote-ref-11)
12. 10 credit hours for high school students (Tawjihi)/Arts and Commercial streams

    13 credit hours for high school students (Tawjihi)/Scientific stream [↑](#footnote-ref-12)
13. For Humanities students, they are required to study MATH1351 course within free electives [↑](#footnote-ref-13)
14. For Humanities students, they are required to study MATH1351 course within free electives [↑](#footnote-ref-14)
15. For Humanities students, they are required to study MATH1351 course within free electives [↑](#footnote-ref-15)