



# Level 1 First Term





Course	<b>Human Anatomy</b>
Code Number	Md101
Credit Hours	3
Prerequisite Course	-
Course status	Compulsory course

## 1) General instructional objectives (GIO)

Students should have acquired the

- 1- Appropriate background about and recognize the normal structure and function of the body and of each of its major systems
- 2- Appropriate background about and understand different stages of the life cycle and how these affect normal structure and function
- 3- Identification of the normal anatomy of the body and of each of its major organ systems.
- 4- Correlation anatomical facts with their clinical applications.

#### 2) Contents

An Introduction to Anatomy, the Skeletal System: osseous tissue and skeletal structure, the skeletal system: Axial Division, the skeletal system: appendicular division, the skeletal System: articulations, the muscular system: skeletal muscle tissue and muscle organization, the muscular system: axial musculature, muscular system: appendicular musculature, surface anatomy and cross-sectional anatomy, the nervous system, the cardiovascular system, the endocrine system, the respiratory system, the lymphoid system, the digestive system, the urinary system.

## 3) Teaching and learning methods

- 1. Lectures
- 2. Practical lessons
- 3. Self learning
- 4. Cooperative learning

# 4) – Student Assessment Methods

- 1. Written examination
- 2. Practical examination
- 3. Mid Term
- 4. Sheet examination
- 5. Oral examination

#### 5) References

1. Jacob, Sam. (2007). Human anatomy. Churchll livingstone.320 pages





Course	Biophysics
Code Number	Md102
Credit Hours	2
Prerequisite Course	-
Course status	Compulsory course

# 1) General instructional objectives (GIO)

Students should have acquired the

- 1- Knowledge of the structure of the cell membrane, its function and modes for transport through the cell membrane.
- 2- Knowledge of the membrane potential and molecular theory of muscle contraction and changes occurs during contraction.
- 3- Electrophysiology study and its applications.

#### 2) Scientific Contents

Body electricity and tissue organ electric conductivity, introduction to neurons and the brain, electrical properties of cells, the Hodgkin-Huxley model of action potentials, synapses, perceptrons.

# 3) Teaching and learning methods

- 1- Lectures
- 2- Practical lessons
- 3- Self learning
- 4- Cooperative learning

#### 4) – Student Assessment Methods

- 1- Written examination
- 2- Practical examination
- 3- Mid Term
- 4- Sheet examination
- 5- Oral examination

#### 5) References

Dillon, P.F. (2012). Biophysics "a physiological approach". Cambridge university press. 286 pages.





Course	Organic chemistry
Code Number	Chm101
Credit Hours	3
Prerequisite Course	-
Course status	Compulsory course

## 1) General instructional objectives (GIO)

Students should have acquired the

- 1- General purpose for the study of chemistry.
- 2- Using a scientific unit of measurement.
- 3- Basic principles of general chemistry, chemical calculations, atomic spectra and electronic configuration.
- 4- Using the periodic table to get important chemical information and trends.
- 5- Reorganization the chemistry of S-and P-block elements with special reference to their industrial applications and chemistry of environment.
- 6- Knowledge several types of chemical bonds and the molecular and geometrical shapes of the molecule.
- 7- Fundamentals of organic chemistry.
- 8- Explaining atomic structure, bonding in organic chemistry, nomenclature of simple organic compounds.
- 9- Studying of aliphatic hydrocarbons and their reactions. In addition to, some physical organic behavior of organic compounds

## 2) Scientific Contents

Introduction to organic molecules and functional groups, Hydrocarbons, Electrophilic aromatic substitution, Alkyl halides (nucleophilic substitution and elimination reactions), Alcohols, ethers and phenols, Oxidation and reduction reactions, Radical reactions, Aldehydes and ketones and nucleophilic addition, Carboxylic acids and their derivatives- nucleophilic acyl substitution, Substitution reactions of carbonyl compounds at the alpha carbon, Carbonyl condensation reactions, Amines, Stereochemistry

# 3) Teaching and learning methods

- 1- Lectures
- 2- Practical lessons
- 3- Self learning
- 4- Cooperative learning

#### 4) – Student Assessment Methods

- 1- Written examination
- 2- Practical examination
- 3- Mid Term
- 4- Sheet examination
- 5- Oral examination

#### 5) References

Bahi, A. and Bahl, B. S., (2005) organic chemistry. S chand. 1073 pagess.





Course	Analytical chemistry
Code Number	Chm102
Credit Hours	3
Prerequisite Course	-
Course status	Compulsory course

## 1) General instructional objectives (GIO)

Students should have acquired the

- 1- Basic principles of the quantitative chemical analysis including,
  - A- acid-base reactions
  - B- complexometric,
  - C- precipitimetric
  - D- ravimetric analysis
- 2- Knowledge of the theoretical bases for analytical methods discussed during the curse study and understand them.
- 3- Awareness of the sources of errors and have knowledge how to -avoid them.
- 4- Calculation of the amount of analyte in the specific application of each method
- 5- Knowledge how to obtain calibration curve and how to use it for an analytical purpose.

# 2) Scientific Contents

Qualitative analysis, quantitative analysis, Types of concentration, Acid-base reaction, Precipitation reaction, Redox reaction, pH and buffer solution, Separation and purification techniques, Electroanalytical techniques and Spectroanalytical techniques.

# 3) Teaching and learning methods

- 1- Lectures
- 2- Practical lessons
- 3- Self learning
- 4- Cooperative learning

# 4) - Student Assessment Methods

- 1- Written examination
- 2- Practical examination
- 3- Mid Term
- 4- Sheet examination
- 5- Oral examination

#### 5) References

1- Douglas A. Skoog, Donald M. West, F. James Holler, and Stanley R. Crouch(2013). Fundamentals of Analytical Chemistry. Brooks Cole; 9 edition. 1072 pages.





Course	Cell biology
Code Number	Md103
Credit Hours	3
Prerequisite Course	-
Course status	Compulsory course

# 1) General instructional objectives (GIO)

Students should have acquired the

- 1- Knowledge of basic concepts of cell biology and of those properties that are common to most eukaryotic cells.
- 2- Ability to analyze and interpret the behavior of cells in their microenvironment in multicellular organisms (i.e. a cell within its social context) with emphasis on cell-cell interactions, cell-extra cellular matrix interactions, and soluble signaling.
- 3- Capacity to solve problems and evaluate the relevance of experimental data
- 4- evidence-based critical thinking in cell biology
- 5- Appreciation of the depth and scope of the ever developing field of cell biology.

#### 2) Scientific Contents

Introduction to cells, Molecules: structures and dynamics, Macromolecular assembly, Membrane structure and function, membrane structure and dynamics, membrane pumps, membrane carriers, membrane channels, membrane physiology, chromatin, chromosomes and the cell nucleus, central dogma: from gene to protein.

#### 3) Teaching and learning methods

- 1- Lectures
- 2- Practical lessons
- 3- Self learning
- 4- Cooperative learning

## 4) – Student Assessment Methods

- 1- Written examination
- 2- Practical examination
- 3- Mid Term
- 4- Sheet examination
- 5- Oral examination

#### 5) References

Alberts,B., Bray,D. and Bray,D. (2009). Essential cell biology. Hardback. 860 pages.





Course	English (1)
Code Number	Unv101
Credit Hours	1
Prerequisite Course	-
Course status	Compulsory course

# 1) General instructional objectives (GIO)

Students should have acquired the

- 1- Knowledge about the grammar rules and syntax of the English language.
- 2- Knowledge about speaking and writing styles.
- 3- Knowledge about communication skills with English language fluently.
- 4- Communication effectively through oral presentations and written reports.
- 5- Analytical syntax and comprehension.

#### 2) Scientific Contents

Reading skills, reviewing, recognizing, perception, analysis, evaluation & comprehending. Writing skills, thinking& itemizing points, choosing effective phrases, planning, preparing good sentences.

#### 3) Teaching and learning methods

- 1- Lectures.
- 2- Self learning.
- 3- Cooperative learning.

#### 4) – Student Assessment Methods

- 1- Written examination.
- 2- Mid Term.
- 3- Sheet examination
- 4- Oral examination

#### 5) References

- 1- Alexander, L.G. (1999). Longman English grammar practice. Longman. 320 pages.
- 2- Umstatter, J. (2002) English brainstormers! . Jossey-Bass. 279 pages.





Course	Medical terminology
Code Number	Md104
Credit Hours	1
Prerequisite Course	-
Course status	Compulsory course

## 1) General instructional objectives (GIO)

Students should have acquired the

- 1- Understanding of the importance of the English in medical study
- 2- Knowledge of the common terms used in medical study and practice
- 3- Knowledge of uses of English language in the medical field
- 4- Facilitating the study of the academic and clinical subjects in English
- 5- Understanding the impact of medical terminology in his or her study

# 2) Scientific Contents

Organization of the body, suffixes, prefixes, medical specialists and case reports, body systems, diagnostic tests and procedures, abbreviations, acronyms, symbols and eponyms, allied health careers.

## 3) Teaching and learning methods

- 1- Lectures.
- 2- Self learning.
- 3- Cooperative learning.

## 4) – Student Assessment Methods

- 1- Written examination.
- 2- Mid Term.
- 3- Sheet examination
- 4- Oral examination

#### 5) References

1- Chabner, D.E. (2014). Medical Terminology: A short course. Saunders. 440 pages.





Course	Human rights
Code Number	Unv102
Credit Hours	2
Prerequisite Course	-
Course status	Compulsory course

# ١) أهداف المقرر:

# بعد انتهاء هذا المقرر من المتوقع أن يتمكن الطالب من:

- ١- معرفة القوانينة المختلفة المتعلقة بحقوق الإنسان.
- ٢- إدراك الاخلاقيات المهنية والمعايير الأخلاقية .
  - ٣- تفهم الأخلاقيات المتعلقة بعلوم الحياة.

# ٢) المحتوي العلمي للمقرر:

القوانين المختلفة المتعلقة بحقوق الإنسان، وعلاقتها بصحة وغذاء الإنسان، الأخلاقيات المهنية، المعايير الأخلاقية، الأخلاقية، الأخلاقية، المصلحة العامة، مصالح الجماعة، أخلاقيات التعامل مع الحيوان والنبات، أمثلة من المهنة.

# ٣) وسائل التقويم:

١- امتحان النظري النهائي.

# ٤) أساليب تدريس المقرر:

- ١- محاضرات
- ٢- تقسيم الطلاب لمجاميع نقاشية صغيرة.
- ٣- تقسيم الطلاب لمجاميع تدريبية صغيرة للأبداع الذهني.
  - ٤- التعلم الذاتي .

#### ٥) المراجع:

- 1- أحمد عبد الكريم سلامة وآخرين (٢٠٠٥). حقوق الإنسان وأخلاقيات المهنة، دراسة في القوانين المصرية والمواثيق الدولية، جهاز نشر وتوزيع الكتاب الجامعي، مطابع جامعة حلوان.
- ٢- فضل الله محمد إسماعيل (٢٠٠٦). حقوق الإنسان بين الفكر الغربي والفكر الإنساني، مكتبة بستان المعرفة.
  - ٣- أحمد الرشيدي (٢٠٠٥). حقوق الإنسان دراسة مقارنة في النظرية والتطبيق، مكتبة الشروق الدولية.