



King Saud bin Abdulaziz University for Health Sciences  
College of Science and Health Professions  
Riyadh, Kingdom of Saudi Arabia

# COSHP

Course's Description

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
English Communication Skills	ENGL 101	3

### **Course Description**

This is an introductory level course which aims to build on students' previous knowledge to develop their academic reading and critical thinking skills appropriate to their level while giving practice in the academic writing process. Additionally, emphasis will be given to basic structure of logical division of ideas, cause/effect, and process paragraphs. This course consists of two interconnected components – an academic writing component and an oral component.

The oral component emphasizes the development of general listening and speaking skills essential for oral communication tasks both inside and outside of the classroom.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
English Grammar I	ENGL 102	3

### **Course Description**

This course is the first half of the Intermediate English Grammar I/II sequence. It provides students with an overview of the English tense system in the active voice, and introduces them to basic patterns of sentence structure. It begins with a review of the simple and progressive tenses (present and past) and future forms with will and be going to, and then introduces the present perfect, present perfect progressive and past perfect forms. Throughout the course, grammatical structures are presented through an active oral approach and reinforced through extensive drill practice, guided conversation exercises and daily written homework assignments.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
English Grammar II	ENGH 112	2

### **Course Description**

This course is the second half of the Intermediate English Grammar I/II sequence. It focuses on multi-clause sentence structures essential for academic writing. Students gain extensive practice in analyzing and constructing complex sentences containing adjective clauses. This course also introduces students to modal auxiliary verbs and passive constructions appropriate for academic and scientific writing. It also provides students with an introduction to complex sentence structures, and gerunds and infinitives. Throughout the course, grammatical structures are presented through an active oral approach and reinforced through extensive drill practice, guided conversation exercises and written homework assignments

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
English Reading & Vocabulary I	ENGL 103	2

### **Course Description**

This course is the first half of the Intermediate Academic Reading and Vocabulary sequence and the first of three Reading and Vocabulary Skills courses. It emphasizes the development of reading and critical thinking skills essential for academic studies at the university level. It also stresses basic vocabulary, paragraph organization, basic comprehension skills, word building, and reading strategies. Glossary lists are provided for the reading passages in the core textbooks. Students gain practice in inferring the meaning of unknown words from context and using an English-English dictionary. Reading skills are reinforced through regular in-class activities, homework assignments, and quizzes.

Course Name	Course Code	Credit hours
Arabic Language Skills I	ARBC 101	2

### الوصف العام للمقرر:

تعد المهارات اللغوية إحدى مواد الإعداد العام بالجامعة، وهي من متطلبات الفصل الأول من لسنتين التحضيريتين، حيث يتناول المنهج عناصر الاتصال اللغوي، كمهارة الاستماع والتخاطب، والتأثير والإقناع وتحليل الكلام والرسائل اللغوية، كما يدرس الطالب المهارات الأساسية في قواعد اللغة المعينة له في عملية التواصل اللغوي وإلقاء الكلمات والمحاضرات العلمية، كما يتعلم الطالب مهارة البحث في المعاجم التي تعينه على اختيار مفرداته بدقة وتنمي لديه الثروة اللغوية عند تحدّثه أو كتابته للرسائل العلمية والتقارير الطبية مستقبلاً. وكل ما سبق يتعلمه الطالب مدعوماً بالجانب التطبيقي.

Course Name	Course Code	Credit hours
Islamic Culture	ISLM 101	2

### الوصف العام للمقرر:

يعد مقرر 101 سلم/ معارف إسلامية معاصرة أحد مواد الإعداد العام المقررة على طلاب الجامعة، وهي تهدف إلى تزويد الممارس الصحي بقدر مناسب من المفاهيم الإسلامية التي تمكنه من فهم الإسلام والعمل به، كما أن لدراسة المعارف الإسلامية أهمية في حياة الممارس الصحي العلمية، خاصة في هذا الزمن الذي تجددت فيه القضايا، وتعددت فيه النوازل من فكرية وفقهية وغيرها، ولتدريس القضايا المعاصرة في ضوء الثقافة الإسلامية ثمرات إيجابية، من أبرزها: ربط الممارس الصحي في معرفة مفاهيم وأحكام هذه القضايا بثقافته الشرعية. ويتضمن المنهج عرضاً عاماً للمعارف الإسلامية، يشتمل على: أصول المعارف الإسلامية ومصادرها، وأثر الثقافة في تعزيز الانتماء إلى الوطن، والعمل التطوعي، ومنهج تلقي العقيدة الإسلامية والاستدلال عليها، وأركان الإيمان، والأخلاق في الإسلام، وحقوق الإنسان في الإسلام، والحوار بين الحضارات، والتعايش مع غير المسلمين في بلاد الإسلام، والوسطية وتطبيقاتها المعاصرة.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
English Academic Writing	ENGL 111	4

### **Course Description**

This course is the second half of the Intermediate English Reading and Vocabulary and the English Communication Skill of the writing component. It is designed to help students to improve their reading and critical thinking skills in preparation for academic studies at the university level. It stresses vocabulary enhancement, extracting implied meaning, analyzing author's purpose, and drawing conclusions. In addition, the course helps the students improve their reading fluency rate (speed and accuracy).

Moreover, the course provides students with a developmental, step-by-step approach to paragraph writing at a high intermediate level. The course also aims to develop students' abilities to paraphrase.



Course Name	Course Code	Credit hours
Arabic Language Skills II	ARBC 102	2

### الوصف العام للمقرر:

تعد مادة التحرير العربي إحدى مواد الإعداد العام، وهي تهدف إلى معرفة الكتابة العربية بأنواعها وأشكالها المختلفة، وإتقان هذه المهارة يفتح الباب لمعرفة هذا الأصل المهم في اللغة العربية. يتناول منهج التحرير العربي بناء الكتابة، بدءاً من الكلمة والجملة والفقرة والأسلوب وصفات الأسلوب الجيد، كما يتناول المنهج ضوابط الرسم الكتابي ليكون الكلام خالياً من الأخطاء كمعرفة كتابة الهزات في أول ووسط وآخر الكلمة، والألف اللينة والتاء المربوطة والمفتوحة، وعلامات الترقيم، كما يندرج في تدريس المادة معرفة بعض المهارات الوظيفية في الكتابة كمعرفة فن التلخيص والتقارير والرسالة الإدارية، والعمل على تطبيقها.

Course Name	Course Code	Credit hours
Chemistry for Health Sciences I	CHEM 111	2

### Course Description

This course will cover the general chemistry, which consists of theoretical and practical parts. The theoretical part of this course will provide the students with an in depth knowledge of the essential concepts such as atomic structures, electronic configuration, chemical bonding, molecular geometry and polarity. The students will be able to critically evaluate the chemical data by means of various chemical problems and questions related to chemical composition, Stoichiometry, Chemical equilibrium, pH,  $K_a$  and  $K_b$ , Buffer Solutions, acids and bases, oxidation numbers, states of matter, writing formula, balancing chemical equations etc. The practical part of this course will provide the students information about some concepts including the safety protocols, reactivity of metals, and acid –base reactions.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Chemistry for Health Sciences II	CHEM 112	2

### **Course Description**

This course covers the organic chemistry, which consists of theoretical and practical parts. In the theoretical part; the student will acquire a broad knowledge about the organic compounds including the recognition of functional groups for the families of organic molecules, types of formulas, classification, structures and molecules, geometry, and physical properties. The student will be able to apply the IUPAC rules for naming the compounds and the common names. He will also be able to name and identify the chemical reactions, predict the reactants, reagents or products for a defined set of organic reactions. Also, the students will acquire a brief knowledge about the aromatic compounds and their reactions as well as the stereoisomerism including the types of isomers and their properties. In the practical session; The student will learn the safety protocols and cover the basic techniques and illustrates principles presented in the classrooms.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Physics for Health Sciences I	PHYS 111	2
<b>Course Description</b>  A study of major concepts and laws of classical physics which will provide students with a foundation for understanding, at a conceptual level, the natural phenomena and technological applications encountered in medical fields and on everyday life.		

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Physics for Health Sciences II	PHYS 112	2
<b>Course Description</b>  A study of major concepts and laws of classical and modern physics which will provide students with a foundation for understanding, at a conceptual level, the natural phenomena and technological applications encountered in medical fields and on everyday life.		

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Biology for Health Sciences	BIOL 111	2

### **Course Description**

This is an introductory course aiming to introduce students to the basic principles and concepts of biology. The course will emphasize the cellular and molecular basis of life, biochemical processes, cellular structure and function, cell growth and division. It also covers an introduction to viruses and bacteria. Upon completion of this course students should be able to demonstrate understanding of life at the cellular and molecular level.

Course Name	Course Code	Credit hours
English Academic Writing for Health Sciences II	ENGH 113	4

### **Course Description:**

#### **Reading**

This is the advanced course in the Academic Reading and Vocabulary sequence. It helps students develop reading and inferential skills essential for academic studies at the university level. It also stresses vocabulary enrichment, chart analysis, extracting implied meaning from a text, analyzing an author's purpose, tone and style, drawing conclusions, advanced comprehension skills (including analysis and evaluation of a text), and providing responses to written material. Glossary lists are used to reinforce reading passages in the core textbooks. The general purpose of this course is to help students increase their level of reading fluency (in speed and accuracy) so that they can adequately comprehend written English at an advanced level.

#### **Writing**

This advanced level course also aims to continue the writing skills learned in ENGL 101 and 111, focusing on developing students' abilities to paraphrase, follow citation guidelines in order to incorporate academic sources into a multi-paragraph health science related essay, and identifying the structure of a scientific research article

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
English Grammar III	ENGH 114	2
<b>Course Description</b>  English Grammar III is an advanced course that focuses on multi-clause sentence structures essential for academic writing. Students gain extensive practice in analyzing and constructing complex sentences containing noun clauses a wide range of adverb clauses and conditional sentences.		



<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Medical Terminology	TERM 211	2

### **Course Description**

This is an introductory course in medical terminology studying the principles of medical word building in order to help students develop a foundation of working medical vocabulary on which they can build as they pursue their medical studies. The course ensures a thorough grounding in basic medical terms through the study of root words, prefixes and suffixes. Since medical terminology is closely related to the structure (anatomy) and systems (physiology) of the human body, this course also provides the students with an opportunity to explore some of the body systems and study terms used in anatomy, physiology, clinical procedures and pathology pertaining to these systems. Practical applications present terms as they appear in medical reports and records.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
English Academic Writing for Health Sciences III	ENGH 211	3

### **Course Description**

This course consists of an academic writing component conducted through a series of weekly workshops and lectures, emphasizing on all grammar portions covered so far. The writing workshops aim to develop students' writing skills so that they can effectively undertake the types of writing tasks encountered in undergraduate courses in the health sciences. The focus is primarily on summarizing, paraphrasing, editing, referencing, avoiding plagiarism, and writing a research literature review paper, including lessons on accuracy, vocabulary, and style

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Biostatistics	BIOS 211	2

### **Course Description**

This course provides an introduction to the basic conceptual and quantitative tools of commonly used descriptive and inferential statistical procedures, to enable students to understand and interpret basic statistical methods. The topics include:

1. Descriptive statistics and graphical displays of data
2. Basic concepts of probability and probability distributions
3. Continuous distributions including normal, Binomial,  $\chi^2$  and t-distribution
4. Confidence intervals and hypothesis testing
5. Power and sample size estimation
6. Descriptive and comparative bivariate data analysis.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Research Skills	RESC 211	1

### **Course Description**

The aim of this course is to conduct a research study\meta-analysis research, and present the findings in a format of a research paper and a poster at the end of the semester. The course will combine theory and practice throughout the trimester and students will be given an opportunity to conduct a small-scale research project and write it up.

The various stages of research will be introduced and discussed: Problem Statement, Research Questions/Hypotheses, Review of Literature, Data collection, Data Analysis, Findings and Discussion, Summary, Recommendations, Conclusions and References.

The students are not writing a paper that is longer than 4-5 pages. The students will be divided into groups, each group is going to select a scientific topic from the list which are related to instructor experience. The suitability of the research topic for him/her is coordinated between the student and prospective instructor. Instructors should always bear in mind that this is an introduction to research for undergraduate students.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Basic Biochemistry for Health Sciences	BCHM 211	3

### **Course Description**

This is a one trimester course designed to introduce concepts of biochemistry of macromolecules, including the structure and function of proteins, nucleic acids, sugars and lipids. The main concepts related to acid-base and buffers will be taught. The course also introduces the classification and the types of vitamins and coenzymes and their role in metabolism. The fundamentals of thermodynamics and the metabolic role of high energy molecules will be discussed. The fundamental concepts of how receptors regulate cell function through signal transduction networks will be discussed. The enzymology component of the course is meant to introduce the main concepts of enzymes' structure, functions, catalysis, different types of inhibitors and different modes of enzymes' regulation. Techniques to study biomolecules like proteins and their relevance to understanding biology will be illustrated. Six laboratory sessions will be conducted to illustrate aspects of the theoretical course, and to teach students essential practical skills.



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# COSHP

**COLLEGE OF SCIENCE AND HEALTH PROFESSIONS  
(COLLEGE OF MEDICINE)**

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Advanced Biochemistry for Medicine	BCHM 213	2

### **Course Description**

This is a one trimester course designed to introduce the main concepts of cellular metabolism that involves carbohydrate, lipids, amino acids and nucleic acids and the main functions of catabolic and anabolic pathways. The course discusses the substrates, reactions and the amount of energy consumed or produced by main metabolic pathways. The regulation of these metabolic pathways and the hormones that regulates cellular metabolism will be discussed. The course also includes a brief discussion of nutrients' digestion and how metabolites are transported between tissues with more emphasis about the role of lipoproteins.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Behavioral Sciences	BEHS 211	2

### **Course Description**

This course is designed to support health profession students in adopting an integrative approach to health that includes biology, psychology, sociology and spirituality. This will enable students to recognize the value of working within an interdisciplinary team and to develop the respect and ability to navigate the complexities within each patient. This will increase diagnosis accuracy, treatment adherence and both patient and providers satisfaction. Similarly, the course will examine the ways in which developmental stages can be used to understand where the patient is at developmentally and whether an intervention is age appropriate and required with a focus on cognitive and psychosocial theories of development. Students will also be introduced to simple yet necessary skills to effectively communicate and build professional relationships with medical providers, patients and families. In addition, students will be able to recognize symptoms of stress and grief and apply self care and coping skills that best supports their wellbeing.



Course Name	Course Code	Credit hours
Computer Science & Health Informatics	COMP 211	3

### Course Description

This course consists of two modules and a project. The two modules and the project are described in detail in the following subsections.

• **INTRODUCTION TO COMPUTER SCIENCE:**

This module is composed of six weeks of the term and is covered several fundamental Computer Science topics and emerging topics. In this module, students will be introduced to the main concepts of computer science such as Algorithms, Programming Languages, Computer Networks, the Internet and the Web, Data Representation and Databases, and emerging topics such as Internet of Things, Big Data, cybersecurity, and artificial intelligence & machine learning as illustrated in the block detailed learning objectives. Even though these topics are core topics in Computer Science, we are aware that our students are non-CS major. Therefore, there is no intention to go deep in these topics and students will be introduced only to the basics.

• **HEALTH INFORMATICS:** The second module is composed of 4 weeks of the term, and it will be devoted to Health Informatics topics. This module should be of high interest to students since the natures of topics are health related. The topics would shed a lot of light on the technologies used in Health Sector and how they can be acquired, implemented, and managed. Students also will be introduced to topics that will make them aware about health records, records management, Security Issues in Health Care Information Systems and much more.

• **Data Analytical PROJECT:**

Students will be given a project by the end of week 6 of the term and will be given two weeks to complete it. In the project, students will learn how to use the excel tools to analyze and visualize data. Students will first practice how to explore data, analyze it, and visualize it using excel functionality and capabilities. By the end of the project, students should develop analytical and visualization skills in excel. The project will be a medical oriented one and details will be agreed between course coordinators. Students will be evaluated based on meeting the requirements of the project that will be explained to the students before they begin. They include the following:

- Applying the correct concepts as discussed in lectures.
- Building-up the project in a form of small pieces and linking all of the pieces together.

- Ensuring the project delivers the required results.
- Submitting complete Project report.
- Teamwork.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Anatomy for Medicine	ANAT 211	3
<b>Course Description</b> <p>The course deals with the introductory exploration of the human body structure. It includes the study of the structure of different body systems, providing a basic understanding of the human body organization. Emphasis is on the normal structure of the human organism. Identifying of anatomical features of the body will facilitate students to pursue further courses in their specialized field.</p>		

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Physiology for Medicine	PHYG 211	2

### **Course Description**

The Physiology Block (PHYG 211, PHYG 212, PHYG 213, PHYG 214&PHYG 215) is designed to provide medicine, dentistry, pharmacy, applied medical Sciences, and public health and health informatics students with a foundation for the understanding of the human body encompassing physiology. The students will be explored to the systems of human body through lecture and laboratory experience. The focus of this Block is on the fundamental concepts of physiological mechanisms. The Block will provide a background for other professional Blocks that rely on physiology

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Microbiology & Immunology for Medicine	IMMC 211	2
<b>Course Description</b> <p>The microbiology and immunology is an introductory course to the basic processes concerned with disease causation, disease development and host defense. It covers the major categories of human diseases and consists of two integrated disciplines; immunology and microbiology</p>		

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Pathology and Molecular Genetics for Medicine	PAMG 211	3
<b>Course Description</b>  The Pathology and Molecular Genetics block is an introductory course to the basic processes concerned with disease causation, disease development and outcome.		

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Pharmacology for Medicine	PHRM 211	3

### **Course Description**

This course is designed to introduce Pre-Professional Medicine students with general principles of Pharmacology. During this course, selected topics in Pharmacology will be covered, including: General aspect of Pharmacology, Pharmacokinetic and Pharmacodynamics, drug acting on the Autonomic Nervous System, drugs used in Renal and Cardiovascular Systems, drugs used in inflammation and pain, drugs used to treat Asthma, drugs used to treat Peptic Ulcer, Antimicrobial Agents and Drugs used in treatment of diabetes. In addition, an introduction to Toxicology, Alternative Medicine, and Medication safety will also be part of the course.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Histology and Human Development	HIHD 211	2
<b>Course Description</b> <p>Lectures are conducted as scheduled in the Course Book with special consideration to the Credit Hours of the Course. After a basic introduction to Histology, emphasis is given to each tissue and systemic histology. Practical's are also added to elaborate and discuss details required for some topics. In the Human Development section of the course, General Embryology is discussed, emphasizing molecular regulations, birth defects, and stem cells.</p>		

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Ethics for Health Care Profession	ETHC 211	1

### **Course Description**

This course consists of an academic writing component conducted through a series of weekly workshops and lectures, emphasizing on all grammar portions covered so far. The writing workshops aim to develop students' writing skills so that they can effectively undertake the types of writing tasks encountered in undergraduate courses in the health sciences. The focus is primarily on summarizing, paraphrasing, editing, referencing, avoiding plagiarism, and writing a research literature review paper, including lessons on accuracy, vocabulary, and style



<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Anatomy & Physiology for Nervous System	APNS 211	2
<b>Course Description</b> <p>The course demonstrates an introductory exploration of the anatomy and physiology of the nervous system. This includes the basic organization of the main structures that forms the nervous system. A focus on the basic neuroanatomical and neurophysiological facts that are necessary for the practice of medicine, dentistry, and pharmacy, was considered for this course.</p>		



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# COSHP

**COLLEGE OF SCIENCE AND HEALTH PROFESSIONS  
(COLLEGE OF DENTISTRY)**

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Advanced Biochemistry for Dentistry	BCHM 214	2

### **Course Description**

This is a one trimester course designed to introduce the main concepts of cellular metabolism that involves carbohydrate, lipids, amino acids and nucleic acids and the main functions of catabolic and anabolic pathways. The course discusses the substrates, reactions and the amount of energy consumed or produced by main metabolic pathways. The regulation of these metabolic pathways and the hormones that regulates cellular metabolism will be discussed. The course also includes a brief discussion of nutrients' digestion and how metabolites are transported between tissues with more emphasis about the role of lipoproteins.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Anatomy for Dentistry	ANAT 212	3

### **Course Description**

The course deals with the introductory exploration of the human body structure. It includes the study of the structure of different body systems, providing a basic understanding of the human body organization. Emphasis is on the normal structure of the human organism. Identifying of anatomical features of the body will facilitate students to pursue further courses in their specialized field.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Physiology for Dentistry	PHYG 212	2

### **Course Description**

The Physiology Block (PHYG 211, PHYG 212, PHYG 213, PHYG 214&PHYG 215) is designed to provide medicine, dentistry, pharmacy, applied medical Sciences, and public health and health informatics students with a foundation for the understanding of the human body encompassing physiology. The students will be explored to the systems of human body through lecture and laboratory experience. The focus of this Block is on the fundamental concepts of physiological mechanisms. The Block will provide a background for other professional Blocks that rely on physiology

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Microbiology & Immunology for Dentistry	IMMC 212	2
<b>Course Description</b> <p>The microbiology and immunology is an introductory course to the basic processes concerned with disease causation, disease development and host defense. It covers the major categories of human diseases and consists of two integrated disciplines; immunology and microbiology</p>		

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Pathology and Molecular Genetics for Dentistry	PAMG 212	3
<b>Course Description</b>  The Pathology and Molecular Genetics block is an introductory course to the basic processes concerned with disease causation, disease development and outcome.		

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Pharmacology for Dentistry	PHRM 212	3

### **Course Description**

This course is designed to introduce Pre-Professional Dentistry students with general principles of Pharmacology. During this course, selected topics in Pharmacology will be covered, including: General aspect of Pharmacology, Pharmacokinetic and Pharmacodynamics, drug acting on the Autonomic Nervous System, drugs used in Renal and Cardiovascular Systems, drugs used in inflammation and pain, drugs used to treat Asthma, drugs used to treat Peptic Ulcer, Antimicrobial Agents and Drugs used in treatment of diabetes. In addition, an introduction to Toxicology, Alternative Medicine, and Medication safety will also be part of the course.





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**COLLEGE OF SCIENCE AND HEALTH PROFESSIONS  
(COLLEGE OF PHARMACY)**

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Advanced Biochemistry for Pharmacy	BCHM 215	2

### **Course Description**

This is a one trimester course designed to introduce the main concepts of cellular metabolism that involves carbohydrate, lipids, amino acids and nucleic acids and the main functions of catabolic and anabolic pathways. The course discusses the substrates, reactions and the amount of energy consumed or produced by main metabolic pathways. The regulation of these metabolic pathways and the hormones that regulates cellular metabolism will be discussed. The course also includes a brief discussion of nutrients' digestion and how metabolites are transported between tissues with more emphasis about the role of lipoproteins.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Anatomy for Pharmacy	ANAT 213	3

### **Course Description**

The course deals with the introductory exploration of the human body structure. It includes the study of the structure of different body systems, providing a basic understanding of the human body organization. Emphasis is on the normal structure of the human organism. Identifying of anatomical features of the body will facilitate students to pursue further courses in their specialized field.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Physiology for Pharmacy	PHYG 213	2

### **Course Description**

The Physiology Block (PHYG 211, PHYG 212, PHYG 213, PHYG 214&PHYG 215) is designed to provide medicine, dentistry, pharmacy, applied medical Sciences, and public health and health informatics students with a foundation for the understanding of the human body encompassing physiology. The students will be explored to the systems of human body through lecture and laboratory experience. The focus of this Block is on the fundamental concepts of physiological mechanisms. The Block will provide a background for other professional Blocks that rely on physiology

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Microbiology & Immunology for Pharmacy	IMMC 213	2
<b>Course Description</b> <p>The microbiology and immunology is an introductory course to the basic processes concerned with disease causation, disease development and host defense. It covers the major categories of human diseases and consists of two integrated disciplines; immunology and microbiology</p>		

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Pathology and Molecular Genetics for Pharmacy	PAMG 213	3
<b>Course Description</b>  The Pathology and Molecular Genetics block is an introductory course to the basic processes concerned with disease causation, disease development and outcome.		

Course Name	Course Code	Credit hours
Pharmacology for Pharmacy	PHRM 213	3

### **Course Description**

This course is designed to introduce Pre-Professional Pharmacy students with general principles of Pharmacology. During this course, selected topics in Pharmacology will be covered, including: General aspect of Pharmacology, Pharmacokinetic and Pharmacodynamics, drug acting on the Autonomic Nervous System, drugs used in Renal and Cardiovascular Systems, drugs used in inflammation and pain, drugs used to treat Asthma, drugs used to treat Peptic Ulcer, Antimicrobial Agents and Drugs used in treatment of diabetes. In addition, an introduction to Toxicology, Alternative Medicine, and Medication safety will also be part of the course.



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# COSHP

**COLLEGE OF SCIENCE AND HEALTH PROFESSIONS  
(COLLEGE OF APPLIED MEDICAL SCIENCES)**



<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Advanced Biochemistry for Applied Medical Sciences	BCHM 216	2

### **Course Description**

This is a one trimester course designed to introduce the main concepts of cellular metabolism that involves carbohydrate, lipids, amino acids and nucleic acids and the main functions of catabolic and anabolic pathways. The course discusses the substrates, reactions and the amount of energy consumed or produced by main metabolic pathways. The regulation of these metabolic pathways and the hormones that regulates cellular metabolism will be discussed. The course also includes a brief discussion of nutrients' digestion and how metabolites are transported between tissues with more emphasis about the role of lipoproteins.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Anatomy for Applied Medical Sciences	ANAT 214	3

### **Course Description**

Course Description The course deals with the introductory exploration of the human body structure. It includes the study of the structure of different body systems, providing a basic understanding of the human body organization. Emphasis is on the normal structure of the human organism. Identifying of anatomical features of the body will facilitate students to pursue further courses in their specialized field.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Physiology for Applied Medical Sciences	PHYG 214	2

### **Course Description**

The Physiology Block (PHYG 211, PHYG 212, PHYG 213, PHYG 214&PHYG 215) is designed to provide medicine, dentistry, pharmacy, applied medical Sciences, and public health and health informatics students with a foundation for the understanding of the human body encompassing physiology. The students will be explored to the systems of human body through lecture and laboratory experience. The focus of this Block is on the fundamental concepts of physiological mechanisms. The Block will provide a background for other professional Blocks that rely on physiology

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Microbiology & Immunology for Applied Medical Sciences	IMMC 214	2
<b>Course Description</b>  The microbiology and immunology is an introductory course to the basic processes concerned with disease causation, disease development and host defense. It covers the major categories of human diseases and consists of two integrated disciplines; immunology and microbiology		

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Pathology and Molecular Genetics for Applied Medical Sciences	PAMG 214	3
<b>Course Description</b>  The Pathology and Molecular Genetics block is an introductory course to the basic processes concerned with disease causation, disease development and outcome.		

Course Name	Course Code	Credit hours
Pharmacology for Applied Medical Sciences	PHRM 214	3

### Course Description

This course is designed to introduce Pre-Professional Applied Medical Sciences students with general principles of Pharmacology. During this course, selected topics in Pharmacology will be covered, including: General aspect of Pharmacology, Pharmacokinetic and Pharmacodynamics, drug acting on the Autonomic Nervous System, drugs used in Renal and Cardiovascular Systems, drugs used in inflammation and pain, drugs used to treat Asthma, drugs used to treat Peptic Ulcer, Antimicrobial Agents and Drugs used in treatment of diabetes. In addition, an introduction to Toxicology, Alternative Medicine, and Medication safety will also be part of the course.



King Saud bin Abdulaziz University for Health Sciences  
College of Science and Health Professions  
Riyadh, Kingdom of Saudi Arabia

# COSHP

**COLLEGE OF SCIENCE AND HEALTH PROFESSIONS**  
**(COLLEGE OF PUBLIC HEALTH & HEALTH INFORMATICS)**

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Advanced Biochemistry for Health Informatics	BCHM 217	2

### **Course Description**

This is a one trimester course designed to introduce the main concepts of cellular metabolism that involves carbohydrate, lipids, amino acids and nucleic acids and the main functions of catabolic and anabolic pathways. The course discusses the substrates, reactions and the amount of energy consumed or produced by main metabolic pathways. The regulation of these metabolic pathways and the hormones that regulates cellular metabolism will be discussed. The course also includes a brief discussion of nutrients' digestion and how metabolites are transported between tissues with more emphasis about the role of lipoproteins.



<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Anatomy for Health Informatics	ANAT 215	3

### **Course Description**

Course Description The course deals with the introductory exploration of the human body structure. It includes the study of the structure of different body systems, providing a basic understanding of the human body organization. Emphasis is on the normal structure of the human organism. Identifying of anatomical features of the body will facilitate students to pursue further courses in their specialized field.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Physiology for Health Informatics	PHYG 215	2

### **Course Description**

The Physiology Block (PHYG 211, PHYG 212, PHYG 213, PHYG 214&PHYG 215) is designed to provide medicine, dentistry, pharmacy, applied medical Sciences, and public health and health informatics students with a foundation for the understanding of the human body encompassing physiology. The students will be explored to the systems of human body through lecture and laboratory experience. The focus of this Block is on the fundamental concepts of physiological mechanisms. The Block will provide a background for other professional Blocks that rely on physiology

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Microbiology & Immunology for Health Informatics	IMMC 215	2

### **Course Description**

The microbiology and immunology is an introductory course to the basic processes concerned with disease causation, disease development and host defense. It covers the major categories of human diseases and consists of two integrated disciplines; immunology and microbiology

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Pathology and Molecular Genetics for Health Informatics	PAMG 215	3
<b>Course Description</b>  The Pathology and Molecular Genetics block is an introductory course to the basic processes concerned with disease causation, disease development and outcome.		

Course Name	Course Code	Credit hours
Pharmacology for Health Informatics	PHRM 215	3

### Course Description

This course is designed to introduce Pre-Professional Health Informatics students with general principles of Pharmacology. During this course, selected topics in Pharmacology will be covered, including: General aspect of Pharmacology, Pharmacokinetic and Pharmacodynamics, drug acting on the Autonomic Nervous System, drugs used in Renal and Cardiovascular Systems, drugs used in inflammation and pain, drugs used to treat Asthma, drugs used to treat Peptic Ulcer, Antimicrobial Agents and Drugs used in treatment of diabetes. In addition, an introduction to Toxicology, Alternative Medicine, and Medication safety will also be part of the course.



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# COSHP

**COLLEGE OF SCIENCE AND HEALTH PROFESSIONS  
(COLLEGE OF NURSING)**

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Basic Biochemistry for Nursing	BCHM 212	3

### **Course Description**

This is a one trimester course designed to introduce concepts of biochemistry of macromolecules, including the structure and function of proteins, nucleic acids, sugars and lipids. The main concepts related to acid-base and buffers will be taught. The course also introduces the classification and the types of vitamins and coenzymes and their role in metabolism. The fundamentals of thermodynamics and the metabolic role of high energy molecules will be discussed. The fundamental concepts of how receptors regulate cell function through signal transduction networks will be discussed. The enzymology component of the course is meant to introduce the main concepts of enzymes' structure, functions, catalysis, different types of inhibitors and different modes of enzymes' regulation. Techniques to study biomolecules like proteins and their relevance to understanding biology will be illustrated. Six laboratory sessions will be conducted to illustrate aspects of the theoretical course, and to teach students essential practical skills.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Advanced Biochemistry for Nursing	BCHM 218	2

### **Course Description**

This is a one trimester course designed to introduce the main concepts of cellular metabolism that involves carbohydrate, lipids, amino acids and nucleic acids and the main functions of catabolic and anabolic pathways. The course discusses the substrates, reactions and the amount of energy consumed or produced by main metabolic pathways. The regulation of these metabolic pathways and the hormones that regulates cellular metabolism will be discussed. The course also includes a brief discussion of nutrients' digestion and how metabolites are transported between tissues with more emphasis about the role of lipoproteins.



<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Anatomy & Physiology for Nursing I	PNUR 211	2

### **Course Description**

Anatomy and Physiology I (PNUR 211) is the first of two courses in sequence designed to provide a knowledge-base that is essential to Pre-Nursing students. Anatomy is the science of the structure of the human body. Physiology is the science of the functions of the different body systems. Nursing students should understand the basic anatomy and physiology of the human body and their clinical significance. This understanding is necessary for further study of pathophysiology and clinical sciences such as medical-surgical nursing

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Microbiology for Nursing	PNUR 214	3

### **Course Description**

This course enables the students to identify disease causing micro-organisms (bacteria, viruses, fungi, parasites) with emphasis on morphology, immunity, pathogenicity, mode of microbial infections, the diagnostic and control methods. Organisms to be studied include selected bacteria, fungi, viruses, and parasites of medical importance. The basic microbiological techniques, including sampling, importance of specimen transportation, staining, microscopy, and discussing methods of isolation, culture and identification of organisms will be carried in this course.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Pathophysiology for Nursing	PNUR 213	3

### **Course Description**

Pathophysiology is one of the most important bridging sciences between the basic medical sciences and clinical courses for students. This course introduces the concepts of basic mechanisms of disease process and the clinical correlation. It increases the integration of health promotion and disease prevention with updating risk factors.

<b>Course Name</b>	<b>Course Code</b>	<b>Credit hours</b>
Anatomy & Physiology for Nursing II	PNUR 212	3

### **Course Description**

Anatomy and Physiology II (PNUR 212) is the second of two courses in sequence designed to provide a knowledge-base that is essential to Pre-Nursing students. Anatomy is the science of the structure of the human body. Physiology is the science of the functions of the different body systems. Nursing students should understand the basic anatomy and physiology of the human body and their clinical significance. This understanding is necessary for further study of pathophysiology and clinical sciences such as medical-surgical nursing.