



الجامعة الملكية العلمية والتقنية

الكلية الصيدلانية



بكالوريوس العلوم في الكيمياء الحيوية
البرنامج



الجامعة الملكية للعلوم والتكنولوجيا

FACULTY OF PHARMACY



BACHELOR OF SCIENCE IN BIOCHEMISTRY
COURSE PROGRAM S



ST. ANTHONY OF PADUA UNIVERSITY

FACULTY OF PHARMACY



BACHELOR OF SCIENCE IN BIOCHEMISTRY
COURSE

This course investigates human reason through the academic discipline of logic. It deals with the fundamental logical concepts and principles in simple apprehension, judgment and reasoning; and examines truth-validity and logical fallacies using traditional (Aristotelian) and modern (Symbolic) logic. This course aims to give students a fundamental training in analytical reasoning using the rules of correct inferential thinking.

This course presents the continuing saga of a people in living the mission of Jesus. It introduces the students to a better understanding and deeper appreciation of their mission as members of the Church; and, to an active participation in celebrating the Presence of Jesus in the sacraments.

The first part of the course deals with the nature, origin, characteristics, goals, and mission of the Church today. This is followed by a presentation of the Seven (7) Sacraments of the Church giving emphasis to their rootedness in the Word of God, their faithfulne



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FACULTY OF PHARMACY



BACHELOR OF SCIENCE IN BIOCHEMISTRY
COURSE

CHEM 200	Organic Chemistry	3	2	
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ISLAMIC UNIVERSITY OF MEDICAL SCIENCES

FACULTY OF PHARMACY



BACHELOR OF SCIENCE IN BIOCHEMISTRY
COURSE

The course deals with the study of man as a moral being called by God to respond in freedom and responsibility to attain the fullness of life in Christ. It seeks to familiarize the students with the foundations of morality that would equip them with principles and guidelines to confront contemporary moral situations. This also deals with the challenges of Christian discipleship and the Christian invitation to moral growth through the study of grace, sin, conversion and virtues.

The course deals with the study of the parts and functions of the major organs and organ systems of the human body. It introduces students to the language of anatomy, as well as, the fundamental concepts of cellular structures and functions, integration, organization, and control of all body systems. The students will engage in the analysis and application of these concepts in various real-life settings, as they acquire a basic understanding of physiological adaptations to special conditions.



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UNIVERSITY OF SARAJEVO

FACULTY OF PHARMACY



BACHELOR OF SCIENCE IN BIOCHEMISTRY
COURSE

This course deals with a review of differentiation, integration and selected topics in differential equation. Topics included are differentiation and integration of trigonometric, inverse trigonometric, logarithmic and exponential functions; techniques of integration by integration by parts, algebraic substitution, trigonometric substitution and partial fraction; topics included in differential equation are partial differentiation, exact differential equation, linear equations of the first order and equations reducible to linear equations.

It is a study of forces, motion, friction, work, power, energy, heat, light, electricity and magnetism.

The course deals with an in-depth study of the response of the Catholic Church to the socio-political, ecological, cultural, and spiritual concerns of the times. Among the issues it tackles are human promotion and human rights, justice and peace, labor, ideologies, Church and State Relations, media education and ecology, and the Church's Preferential Option for the Poor.



الجامعة السعودية

فakulty of Pharmacy



BACHELOR OF SCIENCE IN BIOCHEMISTRY
COURSE

CHEM 401	Physical Chemistry I	3	2	MATH 101, MATH 102, MATH 108, MATH 109, CHEM 111, PHYS 201
BIOCHEM 2	Proteins, Carbohydrates and Lipids	3	2	CHEM 111, CHEM 112, CHEM 200, BIOCHEM 1
BIOCHEM 3	Nucleic Acids and Molecular Biology	3	0	CHEM 111, CHEM 112, CHEM 200, BIOCHEM 1



الجامعة العلمية الملكية

FACULTY OF PHARMACY



BACHELOR OF SCIENCE IN BIOCHEMISTRY
COURSE

CHEM 402	Physical Chemistry 2	3	1	MATH 101, MATH 102, MATH 108, MATH 109,
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SAUDI ARABIAN UNIVERSITY OF MEDICINE

FACULTY OF PHARMACY



BACHELOR OF SCIENCE IN BIOCHEMISTRY
COURSE

regulate and inhibit enzyme activity; evaluate enzymes according to type of inhibition and regulation; elucidate the different mechanisms by which the cofactors contribute to enzyme catalysis; distinguish common methods used in enzyme isolation, characterization and purification and associate the application of enzymes in medicine, industry and research; and describe non-protein catalysts, ribozymes and abzymes based on catalytic mechanisms and their applications



AL-SAN'DI QADIMAH UNIVERSITY

FACULTY OF PHARMACY



BACHELOR OF SCIENCE IN BIOCHEMISTRY
COURSE

The course aims to develop the students' proficiency in writing and research skills in academic discourse. The focus is on descriptive, expository, and argumentative texts, library research paper and critiques. Collaborative and workshop activities between teacher and students have been designed to foster expressive, creative and critical academic writing skills among students.

This course is a multidisciplinary approach to marriage but emphasis is given to the theological and



ROYAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF PHARMACY



BACHELOR OF SCIENCE IN BIOCHEMISTRY
COURSE

APEPRACT	Advanced Practice Experience/ Practicum	0	2	BOT 102, CHEM 111, CHEM 112, CHEM 200, CHEM 203, CHEM 301, CHEM 302, BIOCHEM 1, BIOCHEM 2, BIOCHEM 3, BIOCHEM 4, BIOCHEM 5, BIOINFO, GIM



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FACULTY OF PHARMACY



BACHELOR OF SCIENCE IN BIOCHEMISTRY
COURSE

BIOCHEM 6	Intermediary Metabolism	3	2	CHEM 111, CHEM 112, CHEM 200, BIOCHEM 1, BIOCHEM 2, BIOCHEM 3, BIOCHEM 4, BIOCHEM 12
BIOCHEM 7	Physical Biochemistry	2	2	MATH 101, MATH 102, MATH 108, MATH 109, CHEM 111, CHEM 112, CHEM 200, CHEM 203, CHEM 401, CHEM 402, PHYS 201, BIOCHEM 1
BIOCHEM 8	Nutritional Biochemistry	3	0	CHEM 111, CHEM 112, CHEM 200, BIOCHEM 1, BIOCHEM 2, BIOCHEM 3, BIOCHEM 4, BIOCHEM 5
BIOCHEM 9	Phytochemistry	3	0	



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COURSE PROGRAM S



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FACULTY OF PHARMACY



BACHELOR OF SCIENCE IN BIOCHEMISTRY
COURSE PROGRAMS

BUSAN DOGUSU MASLAKI UNIVERSITESI

FACULTY OF PHARMACY





الجامعة العلمية والتقنية

فakولفة اللفارماف



**BACHELOR OF SCIENCE IN BIOCHEMISTRY
COURSE**

The course deals with the application of essential biochemical principles in understanding the mechanisms of the immune response in health and disease states including the molecular aspects of the detection and study of viral genes and expressed proteins in HIV/AIDS as well as the genetic basis of cancer. This will provide the students with the basis for associating these mechanisms with strategies for diagnostics and therapeutics including related biotechnological advances in the treatment of diseases. Major topics include cellular and molecular immunology, mechanisms of the immune response, nature of viruses and their replication, immunological response to viral infection and the molecular genetics of cancer. At the end of this course, the students are expected to make use of the principles of biochemistry in explaining the cellular and molecular mechanisms involved in the development of the immune response in various disease states; in HIV infection and AIDS and in carcinogenesis; discuss recent advances and emerging themes in the diagnosis and treatment of these diseases.

The course is designed to offer an opportunity for students to present current topics in biochemistry of their interest through journal critique using power point technical oral presentation while engaging oneself in critical discussion with the facilitator. It enriches and equip students with the fundamentals of biochemistry research, bioethics, intellectual property rights (IPR), manuscript writing and publishing, and sourcing research grant. It also provides a venue for mock presentation of students' thesis followed by thesis defense in front of a panel of evaluators. The course includes journal critique of two (2) recent journal publications combined into one (1) 20-min technical oral presentation, brief discussion on research ethics, IPR, mock and thesis defense. At the end of the course, the students can broaden their knowledge in various areas of current researches and applications of biochemistry research; perform journal critiquing through synthesis of concepts derived from evaluating and summarizing selected articles under review; make an effective technical oral presentation in class or defend thesis in the presence of a panel of evaluators.

