Course Descriptions

BY 4132
Human Physiology
In this course the systems of the human body are examined at the cellular, tissue, and organ levels from a functional perspective. General physiological principles and relationships, rather than clinical aspects of physiology, are emphasized. With the exception of exercises on neurophysiology and muscle physiology, students serve as experimental subjects in the laboratory. Prerequisite: Biology II or Biological Science II and Comparative Anatomy. 3 hours Lecture and 3 hours Lab — 4 credits

BY 4152, 4253
Selected Topics I and II
Special projects are undertaken to meet individual needs of students in the biological field of major interest, as arranged with a member of the departmental faculty and with the approval of Chairperson of the Department. Electives for Biology juniors and seniors. 3 hours scientific effort and conference each — 1 credit

BY 4155
Molecular Biology
A review of macromolecular structure followed by detailed study of genetic control mechanisms and recent developments in recombinant DNA technology. The laboratory includes experience with bacterial and viral populations and molecular immunology as well as several exercises on the chemistry of DNA. Prerequisite: General Microbiology. 3 hours Lecture and 3 hours Laboratory — 4 credits

BY 4206
Determinative Microbiology
An advanced study of microorganisms, with emphasis on the characteristics of bacteria. The laboratory provides instruction in the techniques of microbial isolation, cultivation and identification. Prerequisite: General Microbiology. Offered in Spring Semester of even-numbered years. 3 hours Lecture and 3 hours Lab — 4 credits

BY 4218
Histology
This course emphasizes the study of the microanatomy of mammalian organ systems with particular attention to humans. The structure and function of cellular and tissue components is a primary focus, and their relationship to organ and system functions is explored. The laboratory section includes the examination of cell and tissue components, and students are exposed to current histological techniques. Prerequisites: Biology II or Biological Science II and Comparative Anatomy. 3 hours Lecture and 3 hours Laboratory — 4 credits

BY 4250
Virology
This course will introduce students to the field of virology. Upon completion of the course the student should have a basic understanding of the general structure and molecular biology of viruses, the classification of viruses, the interaction of viruses with their host cells and viral diseases. Prerequisites: Genetics and General Microbiology. Offered in the Spring Semester of odd-numbered years. 4 hours Lecture and 3 hours Laboratory — 4 credits

BY 4257
Comparative Physiology
This course features an examination of physiological and associated anatomical adaptations in selected invertebrates and vertebrates living in a variety of aquatic and terrestrial environments. Prerequisite: Biology II or Biological Science II. Offered in Spring Semester of odd-numbered years. 3 hours Lecture and 3 hours Laboratory — 4 credits

Specialized Methods and Techniques
Each major department offers a series of courses designed to acquaint the student with various applications of the professional specialty. In the Biology program this requirement is fulfilled by satisfactory completion of one of the following Biology electives: Botany, Comparative Anatomy, or Genetics Laboratory.

Biotechnology

BT 3000
Introduction to Biotechnology
An interdisciplinary course designed to provide increased familiarity with the concepts, objectives, techniques, ethical and regulatory considerations in the developing areas of biotechnology. Topics include molecular genetics, bacteria, viruses, and applications in biological, medical, food, plant and animal sciences. Prerequisites: Biology II, or Biological Science II, and Biochemistry. Meets the requirements for certification in Education, General Science and Biology minors. Does not substitute for Molecular Biology. Offered in Fall Semester. 3 hours Lecture and Discussion — 3 credits
**BT 3001**  
Introduction to Biotechnology Laboratory  
This is a one credit laboratory course offered in conjunction with BT 3000. Laboratory sessions provide students with hands-on experiences with commonly used methods and procedures in biotechnology. This experience is designed to improve employment opportunities for the students and to enhance their understanding of the lecture material. Prerequisites: BT 3000 Introduction to Biotechnology taken previously or concurrently. Spring semester. 3 hours Laboratory — 1 credit

**BUSINESS ADMINISTRATION**

**BA 1005**  
Introduction to Business  
This course is designed to give the student a basic overview of the organization and management of the enterprise. The course includes a study of the characteristics of economic systems; the nature and functions of management; and the basic organizational functions of finance, marketing, operations, and human resources. 3 hours Lecture and Discussion — 3 credits

**BA 1009**  
Management Concepts  
An introductory course in the study of business management and the various managerial skills necessary to make the decision-making process work. The course will focus on the different aspects of the business environment and concentration on the basic skills required of managers. 3 hours Lecture and Discussion — 3 credits

**BA 2008**  
Macroeconomics  
Course provides students with a background to understand the nature, forces, behaviors and institutions that comprise the US economic system. The student is introduced to economic thinking, concepts, principles, laws and models found in the field of macroeconomics. Students explore macroeconomics through topics and their related issues. Some topics studied are: economic systems, market system, demand and supply, functions of private and public sectors in the US economy, National Income Accounting, Business Cycle: unemployment, inflation, and growth, Employment Theory, Fiscal Policy, money and banking and monetarism. 3 hours Lecture and Discussion — 3 credits

**BA 2017**  
Principles of Marketing  
Management of the marketing functions, including marketing research, product planning, distribution channels, pricing, promotion, personal selling and advertising. New techniques and trends in marketing, as well as governmental rules and regulations will be examined. Emphasis is on consumer and industrial markets. Prerequisite: Junior Status. 3 hours Lecture and Discussion — 3 credits

**BA 2123, 2224**  
Principles of Accounting I and II  
These two courses in principles of accounting present accounting principles and practices at the basic level. Sole proprietorship, the accounting cycle, journals, internal control, receivables, inventories, vouchers, depreciation and financial statements are among the topics covered in the first part. To emphasis the role of accounting in decision making a practice set is included in Accounting I. For Accounting II, corporations, partnerships, cost accounting, budgeting, statement analysis, fund flow analysis, and taxes are among the topics covered. Students review business financial statements and analyze reports. Ethics — the professional standards of conduct are emphasized in both courses. The importance of proper ethical conduct by all businessmen and women, in particular accountants, makes the business system work. The introduction of International Accounting Standards is discussed. Prerequisite: Principles of Accounting I is a prerequisite for Principles of Accounting II. 3 hours Lecture and Discussion each — 3 credits each

**BA 2161, 2261**  
Business Law I and II  
The first course introduces the student to the legal and social environment of business, contracts, personal property and bailments, sales and personal property. The second course stresses commercial paper, debtor – creditor relations, risk management, agency and employment, legal forms of business organization, real property and estates. Prerequisite: Business Law I is a prerequisite for Business Law II, or permission of the instructor. 3 hours Lecture and Discussion each — 3 credits each

**BA 2210**  
Microeconomics  
The emphasis of this course is on understanding decisions that individuals and business’s make in the modern economy. An analysis of different market structures is explored using such tools as economic