Pre-Professional (Prerequisites) Course Descriptions

Course	Number	Description
General Chemistry	121	Introduction to the chemical and physical behavior of matter.
General Chemistry Lab	123L	Laboratory for Chem 121
General Chemistry	122	Continuation of 121.
General Chemistry Lab	124L	Continuation of 123L
Organic Chemistry	301	Chemistry of the compounds of carbon.
Organic Chemistry	302	Continuation of 301.
Organic Chemistry Lab	303L	To be taken concurrently with 301.
Organic Chemistry Lab	304L	To be taken concurrently with 302.
Introductory Biochemistry	423	Introductory course into metabolic reactions within the cell with emphasis on a chemical understanding of the way the cell integrates and controls intermediary metabolism; also included are quantitative problems in pH control, enzyme kinetics and energetics.
General Physics	151	Mechanics, sound, heat.
General Physics II	Phys 152	Electricity, magnetism, optics.
Biology	201L	The scientific method, the role of water in cell biology, carbon and molecular diversity, macromolecules, introduction to metabolism, tour of cell structures and functions, membrane structure and function, cellular respiration, photosynthesis, cell communication and the cell cycle.
Biology	202L	Mitosis, meiosis, Mendelian genetics, chromosomes and inheritance, molecular basis of inheritance, genes to proteins, genetic models (viruses and bacteria), eukaryotic genomes, genetic basis of development and overview of genomes.
Microbiology	239L	Introduction to microbiology with emphasis on principles of infection and immunity.
Human Anatomy and Physiology I	237	An integrated study of human structure and functions of the skeletal, muscular, nervous, and cardiovascular systems.
Human Anatomy and Physiology II	238	Continuation of 237.Cardiovascular, respiratory, digestive, excretory, reproductive, and endocrine systems.
Elements of Calculus I (Math)	180	Limits of functions and continuity, intuitive concepts and basic properties; derivative as rate of change, basic differentiation techniques; application of differential calculus to graphing and minima-maxima problems; exponential and logarithmic functions with applications.

Pre-Professional (Prerequisites) Course Descriptions

Course	Number	Description
Introduction To Statistics	145	Techniques for the visual presentation of numerical data, descriptive statistics, introduction to probability and basic probability models used in statistics, introduction to sampling and statistical inference, illustrated by examples from a variety of fields.
English	101	Composition I: Exposition: Expository writing and reading. Concentrates on organizing and supporting ideas in writing.
English	102	Composition II: Analysis and Argument: Practice writing analytic and argumentative essays based on expository and literary readings. Some Research.
Introductory Microeconomics	106	Exploration of individual consumer behavior, production decisions by the firm and supply and demand relationships in the marketplace. Examination of the international dimension of production and consumption choices.
Communication Selective	**Pick two of the following 5 courses**	
a. Public Speaking	C&J 130	A performance course that deals with the analysis, preparation and presentation of speeches.
b. Interpersonal communication	C&J 221	Analysis of a variety of interpersonal communication concepts, with special emphasis on the application of communication skills in different situations.
c. Small group communication	C&J 225	Basic characteristics and patterns of communication in small groups. Includes attention to role theory, conflict resolution and creative decision-making methods.
d. Business and professional speaking	C&J 332	Analysis, preparation and presentation of speeches common in business and professional settings.
e. Professional communication	C&J 333	Focuses on the written and presentation skills needed to succeed in a professional environment. Lessons emphasize writing reports and proposals, acquiring social information, social interaction skills, the influence of audience on message design and business etiquette.
f. Health communications	C&J 450	Concepts and strategies for preventive health communication in such contexts as provider-patient interaction, health campaigns, social marketing, health images in the mass media and communication in health care organizations.

Pre-Professional (Prerequisites) Course Descriptions

Course	Number	Description
Critical Thinking Selective Pick two of the following 11 courses		
a. Physical chemistry	Chem 311	The quantitative principles of chemistry, including gases, thermodynamics, equilibrium, quantum systems, spectroscopy and kinetics, developed by numerous problems.
b. Expository writing	Eng 220	An intermediate course with emphasis on rhetorical types, structure and style.
c. Survey of Mathematics	Math 129	An introduction to some of the great ideas of mathematics, including logic, systems of numbers, sequences and series, geometry and probability. Emphasizes general problem-solving skills.
d. Elements of Calculus II	Math 181	Includes definite integral, multivariate calculus, simple differential equations, basic review of trigonometry and its relation to calculus.
e. Trigonometry	Math 123	Definition of the trigonometric functions, radian and degree measure, graphs, basic trigonometric identities, inverse trigonometric functions, complex numbers, polar coordinates and graphs, vectors in 2 dimensions.
f. Introduction to philosophical problems	Phil 101	Philosophical issues and methodology illustrated through selected problems concerning values, knowledge, reality; and in social, political and religious philosophy.
g. Current moral problems	Phil 102	Ethical issues arising in contemporary society, e.g., sexual morality, preferential treatment, racism, punishment, war, world food distribution.
h. Reasoning and critical thinking	Phil 156	The purpose of this course is to help students learn how to analyze, critique and construct arguments in context, in other words, how to read and write argumentative essays.
i. Professional ethics	Phil 245	Examination of social and ethical problems associated with the business, engineering, medical and legal professions.
j. Symbolic logic	Phil 356	This is a first course in logical theory. Its primary goal is to study the notion of logical entailment and related concepts, such as consistency and contingency. Formal systems are developed to analyze these
k. Quantitative Analysis	Chem 253	Theory and techniques of chemical analysis

Non-Professional Electives

*Students are required to have completed 21 semester hours of non-professional electives during their prepharmacy coursework. ***(24 semester hours if student does not take Biochemistry)***

Communication: English writing, speech communications, linguistics or journalism. (English 100, 101 or 102 are not acceptable).

Humanities: Literature (including American English, Foreign and comparative literature) history, or region, Philosophy).

Social/Behavioral Sciences: Anthropology, psychology, economics, human geography, political science or sociology (the basic skills social science 100 course and economics 201 are not acceptable.

Foreign Languages

Fine Arts: Selected courses in the history appreciation and criticism of art, music, theatre and dance.

Health Promotion: First aid, nutrition, health and physical education (No Nonprofessional P.E. Courses)