MSU DENVER COLLEGE OF HEALTH AND HUMAN SCIENCES

Traditional Nursing Option

Prerequisite Courses - *To enhance student success in the program, we recommend all prerequisite courses have been completed within 5-7 years.*

- **BIO 2310: Anatomy and Physiology I with lab (4 credits) -** This is the first of two courses addressing the structure and function of the human body. Topics include tissues, anatomy, the musculoskeletal system, and neurophysiology. (pre-req: BIO 1080/1090)
- **BIO 2320: Anatomy and Physiology II with lab (4 credits)** - This is the second of two courses addressing the structure and function of the human body. Topics include endocrinology; circulation; and the respiratory, digestive, urinary, and reproductive systems. (pre-req: BIO 2310)
- **ITP 4600: Clinical Pathophysiology (4 credits) -** This course is designed to familiarize the student with the nature of human pathophysiology using major conceptual areas. Pertinent biochemical and metabolic derangements are correlated with the cellular structure by applying systems theory. The course focuses on the effects of the disease process on all the major bodily systems, pathogenesis, and related clinical manifestations. (pre-req: BIO 2320)
- **PSY 2210: Psychology of Human Development (3 credits) -** This course presents the development of behavior from conception through maturity and death and is intended to help the student understand the developmental characteristics of different age groups and the determinants of their individual and collective behaviors. (pre-req: PSY 1001) Often referred to as Psychology over the Lifespan.
- **NUT 2040: Introduction to Nutrition (3 credits) -** This course is designed to provide the student with an understanding of the fundamental concepts of human nutrition, including digestion, absorption, metabolism, and function of nutrients as they relate to human health and disease.
- **CHE 1100/1150: Principles of Chemistry (5 credits) -** This course is a study of the fundamentals of chemistry. A survey of atomic structure, periodicity, bonding, nomenclature, stoichiometry, gas laws, and solution chemistry is provided for those students with no background in these areas. Plus lab (pre or co-req: college algebra course *or* appropriate math testing score)
  or CHE 1800/1801: General Chemistry I (5 credits) - A comprehensive study of the facts, concepts, and laws of chemistry. This course meets the requirements of students majoring in chemistry, medicine, medical technology, biology, physics, and other fields requiring a strong background in chemistry. Students enrolling in this course should have successfully completed high school chemistry or equivalent coursework. Plus lab (pre-req: college algebra course or appropriate math test score)
- **MTH 1210: Introduction to Statistics (4 credits)** - This course is an introduction to the principles and techniques of descriptive statistics, probability, regression analysis, and statistical inference (estimation and tests of hypotheses). Students will work with data on problems related to their own interest or field of study. (pre-req: appropriate math course or test score)
  or PSY 2310: Introduction to Statistics for Social and Behavioral Sciences (3 credits) - This course applies basic statistics to measurement, analysis, and interpretation in psychology as well as other social and behavioral sciences covering distributions, probability, central tendency, variability, sampling distributions, and hypothesis testing.
- **BIO 2000: Intro to Microbiology for Nursing (4 credits)** - This course is a non-majors introductory microbiology course specifically for pre-nursing. It will not count toward a biology major or minor. This course emphasizes the interplay between microorganisms and humans including infectious diseases and the immune system and has an emphasis on the control of microbial growth, spread of microorganisms, and their ability to cause disease and circumvent the immune system and antimicrobials. (pre-req BIO 1080/1090, CHE 1100/1150)
  or BIO 2400: General Microbiology with lab (5 credits) - This is a one-semester introduction to the microbial world, including discussions of bacteria, Cyanobacteria, fungi, protozoans, and viruses. (pre-req BIO 1080/1090, BIO 1081/1091, CHE 1100/1150)

Pre-Nursing (UNN) Sample Curriculum Plan

	1st Semester	Credits
	ENG 1010 - Composing Arguments (Written Comm. req.)	3
	*Optional: ENG 1001 – Writing Studio A	1
	College Algebra** (MTH 1109, 1110, 1112, 1115) or MTH 1210 - Intro to Statistics (Quant. Lit. req.)	4
	PSY 1001 - Introductory Psychology (Social & Behavioral Sciences req.)	3
	Oral Communication (req.) - See General Studies list*	3
	Total	**13/14**
	2nd Semester	
	BIO 1080 - General Biology I (Natural & Physical Sciences req.)	3
	BIO 1090 - General Biology Lab I (Natural & Physical Sciences req.)	1
	ENG 1020 – Research and Argument Writing (Written Comm. Req.)	3
	College Algebra** (MTH 1109, 1110, 1112, 1115) or MTH 1210 - Intro to Statistics (Quant. Lit. req.)	4
	Social & Behavioral Sciences (req.) - See General Studies list*	3
	Total	**14**
	3rd Semester	
	BIO 2310 - Human Anatomy and Physiology I	4
	** CHE 1100 - Principles of Chemistry (Natural & Physical Sciences req.)	4
	CHE 1150 - Principles of Chemistry Lab (Natural & Physical Sciences req.)	1
	Arts and Humanities (req.) - See General Studies list*	3
	Total	**12**
	4th Semester	
	PSY 2210 - Psychology of Human Development	3
	BIO 2320 - Human Anatomy & Physiology II	4
	BIO 2000 - Introductory Microbiology for Nursing	4
	*** CPD course of your choice (suggestions: CPD 1300 Stu Success, CPD 2300 Time Mgmt, CPD 2310 Stress Mgmt)	1
	Total	**12**
	5th Semester	
	ITP 4600 - Clinical Pathophysiology	4
	NUT 2040 - Introduction to Nutrition	3
	Historical (req.) - See General Studies list*	3
	Arts & Humanities (req.) - See General Studies list*	3
	Total	**13**

English and math placement determined by scores/high school grades.

** Students can qualify for **CHE 1100** by testing in (280 AAF) or by completing an Algebra course (MTH 1109, 1110, 1112, or 1115). Students could choose one of those Algebra classes based on their AAF score if they did not make 280:
210 or higher = MTH 1108 followed by MTH 1109 in a second semester
220 or higher = MTH 1115, along with MTH 1116 (lab) concurrently
230 or higher = MTH 1111, along with MTH 1101 (lab) concurrently
235 or higher = MTH 1112
245 or higher = MTH 1110

*** CPD = Career and Personal Development - search for course descriptions in Academic Catalog.

University requirements: One General Studies course must also meet Global Diversity and one must meet Ethic Studies and Social Justice.