Accelerated Nursing Program Prerequisite Guide Office of Undergraduate Admissions

Prerequisites Courses

The following prerequisite courses must be completed by the application deadline.

Deadlines:

- Fall Semester May 1st
- Spring Semester September 1st
- Summer Semester February 1st

Required:

- Introductory Psychology or Introductory Sociology 3 credits (C or higher)
- Statistics 3 credits (C or higher)
- Human Growth and Development 3 credits (C+ or higher)
- Nutrition 3 credits (C+ or higher)
- Anatomy & Physiology I 4 credits (C+ or higher, lab included, completed in last 10 years)
- Anatomy & Physiology II 4 credits (C+ or higher, lab included, completed in last 10 years)
- Microbiology 4 credits (C+ or higher, lab included, completed in last 10 years)

Prerequisites

These accelerated prerequisite descriptions have been added for your convenience. Please refer to them to determine if the prerequisite courses you have taken or plan to take will fulfill the prerequisite requirements for the accelerated nursing program.

If you are unsure if your courses will satisfy the prerequisite requirements contact the Office of Undergraduate Admissions to schedule an <u>unofficial transfer credit evaluation</u>. We also recommend <u>Transferology</u> to determine if a prerequisite course will fulfill a requirement.

Courses Required Prior to Application to the Accelerated Nursing Program Option

- **Completion of all prerequisite courses is required before the application deadline. **
- ** To be eligible for the program, a prerequisite GPA of 3.3 or above is required. **
- >> The 7 required prerequisite courses are listed below:

Anatomy and Physiology I	4 credits
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Anatomy and Physiology II	4 credits
Microbiology	4 credits
Lifespan Growth and Development	3 credits
Nutrition	3 credits
Social Behavioral Science Elective	3 credits
Statistics	3 credits

>> The prerequisite courses do not need to be completed at UMass Boston.

>>You may take the prerequisite courses at a regionally accredited community college or university. We accept online programs like Portage online as well.

>> Please use a GPA calculator to calculate your prerequisite GPA to see if it meets the prerequisite GPA of 3.3.

Prerequisite Table

UMB Course	Credits	UMB Course Title
PSYCH 100	3	Introductory Psychology
SOCIOL 101	3	Introduction to Sociology
MATH 125	3	Introductory Statistics
ECON 205	3	Statistical Methods
PSYCH 370	3	<u>Statistics</u>
IT/MSIS 111L	3	Managerial Statistics
EHS 280	3	Statistics for Health Professionals
HLTH 230	3	Lifespan Growth and Development
BIOL 108	3	Intro to Nutrition
EHS 150	3	Introduction to Nutrition
BIOL 207	4	Anatomy and Physiology I with Lab
BIOL 208	4	Anatomy and Physiology II with Lab
BIOL 209	4	Medical Microbiology with Lab
BIOL 334	4	Microbiology with Lab

>> Please click the Course Title above and compare the UMass Boston course description to the course description of the course you plan to take to confirm the same topics are covered. Please visit the UMB course catalog for the latest course descriptions and upcoming offerings.

Anatomy and Physiology I and II, and Microbiology

Please note: Anatomy and Physiology I, Anatomy and Physiology II, and Microbiology must be taken within 10 years and require a grade of C+ or higher for acceptance. They cannot be taken on a pass/fail basis. Only one of each course is required.

BIOL 207: Anatomy & Physiology I with Lab (4 credits) Lecture & Laboratory / Graded / Prerequisite BIOL 111

A study of the human organism, correlating structure, and physiological mechanisms. Emphasis on skin, the special senses, and the skeletal, articular, muscular, nervous, and endocrine systems. Required of nursing and human performance and fitness majors.

BIOL 208: Anatomy & Physiology II with Lab (4 credits) Lecture & Laboratory / Graded / Prerequisite BIOL 207

Continuation of BIOL 207. Emphasis on the digestive, circulatory, respiratory, excretory, and reproductive systems.

BIOL 209: Medical Microbiology (4 credits) *Lecture & Laboratory / Graded / Prerequisites BIOL* 111 and CHEM 115 & CHEM 117, or CHEM 903A, or CHEM 130

This course examines bacteria, fungi, protozoa, viruses, viroids, and prions, focusing on those that are pathogenic to humans. The course also provides an introduction to immunology, epidemiology, and clinical microbiology. The laboratory introduces students to sterile techniques in microbiology emphasizing isolating and maintaining pure

cultures, as well as microbe identification and biochemical testing.

BIOL 334: Microbiology (4 credits) *Lecture & Laboratory / Graded / Prerequisites BIOL 210 or BIOL 212 and BIOL 252 or BIOL 254 and CHEM 104 or CHEM 116 and CHEM 118*

The study of viruses, bacteria, algae, fungi, and protozoa, to include their characterization, classification, and relationship to humans and the environment. Lecture topics include microbial biochemistry, cell biology, genetics, taxonomy, pathogenic bacteriology, food and industrial microbiology, and ecology, the laboratory emphasizes aseptic techniques to isolate, culture, observe, and identify bacteria.

Lifespan Growth and Development

Please note: Lifespan Growth and Development course(s) does not expire and requires a grade of C+ or higher for acceptance. It cannot be taken on a pass/fail basis. Only one of each course is required.

HLTH 230: Life Span Growth and Development (3 credits) *Lecture | Graded | Prerequisites* BIOL 207 and BIOL 208 and BIOL 209 and CHEM 130 or CHEM 115 & 117, or CHEM 116 & 118, or CHEM 251 & 255, or CHEM 252 & 256

This course is designed to examine theories and concepts of normal growth and development. Ranges in human growth, development, and behavior in each stage throughout the life cycle, birth through death, are emphasized. The course explores the influence of family, society, and culture on health maintenance behaviors and perceived health needs for each developmental stage.

>>**Examples** of other Lifespan Growth and Development courses available from institutions aside from UMass Boston that meet our prerequisite requirement:

Portage Learning Online: PSYC140 Developmental (Lifespan) Psychology (3 credits)

This course studies human growth and development across the lifespan. From conception to death, physical, cognitive, and socioeconomical development is examined.

Bunker Hill Community College: PSY-213: Human Growth and Development (3 credits)

This course examines the theories of the biological, social, and psychological development of human beings throughout the life span.

Middlesex Community College: PSY 124: Human Growth and Lifespan Development (3 credits)

This course examines human development across the lifespan from conception to death. This course will explore human growth with emphasis on continuity and change and the interaction of biological, psychological, social, and cultural aspects of human development. Students will have the opportunity to engage in major developmental theories as they critically analyze, evaluate, and consider the impact of biopsychosocial factors on one's own growth and development.

Nutrition

Please note: A Nutrition course does not expire and requires a grade of C+ or higher for acceptance. It cannot be taken on a pass/fail basis. Only one of each course is required.

BIOL 108: Introduction to Nutrition (3 credits) Lecture / Graded

Introduction to the elements of nutrition with emphasis on nutrition for humans; examination of food stuffs and nutritional quality, physiology of food utilization, food quality regulations, and the global ecology of food production.

EHS 150: Introduction to Nutrition (3 credits) Lecture / Graded (EHS and Nursing students only)

This course examines ways in which nutrition promotes health, influences disease, and affects exercise and sports performance. A major goal is to have students better understand the role nutrition plays in their own health. Participants evaluate popular diets and dietary supplements, examine current nutrition recommendations, and acquire confidence in making sensible nutrition recommendations.

Please note: The Social Behavioral Science Elective course does not expire and requires a grade of C or higher for acceptance. It cannot be taken on a pass/fail basis. The Social Behavioral Science Elective *must* be either Intro to Psych or Intro to Soc. They are the only courses accepted for this prerequisite. CLEP credit accepted if minimum score of 50 is met for Psychology or Sociology Exam, with official documentation. AP Psychology of 4 or higher will be accepted to meet the requirement. Only one of each course is required.

PSYCH 100: Introductory Psychology (3 credits) Lecture / Graded

A general survey of selected content areas in psychology, including personality and human development, physiological psychology, learning, intelligence, heredity and environment, and motivation and emotion.

SOCIOL 101: Introduction to Sociology (3 credits) Lecture / Graded

This course provides a broad overview of sociology and how it applies to everyday life. Major theoretical perspectives and concepts are presented under the following broad sections: sociological imagination, social inequality, and social institutions. Applying C. Wright Mills's notion of the "sociological imagination," this course will seek to find ways to connect an understanding of ourselves with broad dynamics of national and global social structures and forces of social change.

Statistics

Please note: Statistics does not expire and requires a grade of C or higher for acceptance. It cannot be taken on a pass/fail basis. AP Statistics of 4 or higher will be accepted to meet the requirement. Only one of each course is required.

ECON 205: Statistical Methods (3 credits) Lecture / Graded

A non-calculus introduction to statistical inference aimed at familiarizing students with common statistical concepts so they will be able to make intelligent evaluations of technical reports. Topics include descriptive statistics; probability, including the normal distribution; hypothesis testing, including t-tests; analysis of variance; regression and correlation.

PSYCH 370: Statistics (3 credits) Lecture / Graded

The applied science of the scientific method in the behavioral sciences. Fundamental statistical concepts and techniques are surveyed and used, with primary emphasis on the logic underlying the use of descriptive inferential tools in scientific inquiry. Topics include parametric and non-parametric statistics, e.g., correlation and analysis of variance.

MATH 125: Introductory Statistics (3 credits) Lecture / Graded

This course is a concept-driven introduction to statistics and statistical reasoning. It covers descriptive statistics, including histograms, the normal curve, and linear correlation and regression; probability sufficient to enable development of inferential statistics; and topics in statistical inference. The latter will include sampling theory, confidence intervals and their interpretation, tests of hypotheses, and chi-square tests.

IT/MSIS 111L: Managerial Statistics (3 credits) Lecture / Graded

Provides the student with the basic statistical techniques needed for business decision making in areas such as operations management, quality improvement, marketing research, finance, and general management. The course examines collection and presentation of data, frequency distributions, basic probability, statistical inference, and regression. Students use statistical software for data presentation and analysis.

EHS 280: Statistics for Health Professionals (3 credits) Lecture / Graded

This course focuses on basic concepts of statistics such as measures of central tendency and variability; concepts of test validity, reliability, and objectivity; and on basic techniques used in inferential statistics such as correlation, regression, t-tests, and analysis of variance. Advantages and limitation of statistical tests will be presented. Emphasis will be placed on interpreting the statistics presented in scientific peer-reviewed research in the field of exercise and health sciences.

Confirming Prerequisites

Visit UMass Boston's Transfer Credit Database, <u>Transferology</u>. Enter your completed courses, confirm they meet the requirements (credit, grade, time limit), and verify the results match the course codes listed above. If your course does not show up in Transferology, you may contact the Office of Undergraduate Admissions to confirm your course will fulfill the prerequisite requirement – undergrad.admissions@umb.edu.