Eastern Connecticut State University and Southern Connecticut State University Collaborative Agreement Accelerated Career Entry (ACE) Nursing Program January 7, 2019

Preamble

According to the Bureau of Labor Statistics, United States Department of Labor (2018), the projected job growth for professional Registered Nurses from 2016 to 2026 is 15%, which is much faster than average for all occupations. To meet the workforce needs in Connecticut, Eastern Connecticut State University (Eastern) and Southern Connecticut State University (Southern) have established an agreement for Eastern graduates to pursue nursing as a career. During undergraduate education at Eastern, students will be prepared to meet the application requirements for Southern's ACE Nursing program. Accepted students will then be able to graduate with a second baccalaureate degree in Nursing in 12 months, following graduation from Eastern.

Agreement

Eastern students will complete the courses required for admission to Southern's ACE Nursing program by either:

- 1. completing the Bachelor of Science in Health Sciences major with all required pre-requisite courses listed below for admission to the ACE Nursing Program at Southern; or
- 2. completing the course requirements for any academic major at Eastern, and complete as electives or as part of a major program all required pre-requisite courses listed below for admission to the ACE Nursing Program at Southern.

Southern Connecticut State University	Credits	Eastern Connecticut State University	Credits
BIO 200 Human Anatomy and Physiology I	4	HSC/HPE 318; or BIO 348	4
BIO 201 Human Anatomy and Physiology II	4	HSC/HPE 319; or BIO 202 and 203; or BIO 303; or BIO 350	4
BIO 120 Microbiology	4	HSC 425; or BIO 301 and 302; or BIO 334	4
One of the following: MAT 108 Mathematics for Natural Sciences, or MAT 120 College Algebra, or MAT 122 Precalculus, or MAT150 Calculus or CLEP MAT120 or MAT150	3	MAT 120; or MAT 130; or MAT 155; or MAT 155P; or MAT 243	3-5
MAT 107 Elementary Statistics	3	HSC 430; or BIO 378; or MAT 216; or PSY 227; or soc 351	3

Coursework for admission to the ACE Nursing Program at SCSU:

Southern Connecticut State University	Credits	Eastern Connecticut State University	Credits
CHE 120 General Chemistry I	4	CHE 210 and CHE 212; or CHE 211 and CHE 213.	4
PSY 100 General Psychology or CLEP PSY100	3	PSY 100	3
PSY 219 Lifespan Development or CLEP PSY219	3	PSY 212	3
PCH 200 Nutrition	3	HPE 209 Nutrition and Public Health	3

Admissions requirements for the ACE in Nursing Program at SCSU are:

- a) Submitted online application for Southern's ACE program made to Undergraduate Admissions by October 1st during the senior year; and
- b) required undergraduate courses listed above with grades of B or above by end of the fall semester of the senior year of study at Eastern*; and
- c) two (2) favorable letters of recommendations from recent employer(s) and/or faculty submitted prior to the Jan 1st deadline; and
- d) original transcript(s) from all postsecondary institution attended submitted prior to the Jan 1st deadline; and
- e) an interview may be required following the initial screening of applicants; and
- f) bachelor's degree completed with overall undergraduate grade point average of 3.00 or above (degree may be completed in December or May)

*Students are limited to two repeated prerequisite course attempts.

Eastern students meeting Southern's Accelerated Career Entry (ACE) Nursing Program admission requirements, or anticipating meeting those requirements by the end of the fall semester of the senior year at Eastern are able to apply for the ACE program. Applications are accepted until October 1 st and all requirements outlined as above must be met by the end of the fall semester (with the exception of the BA/BS degree which must be earned by May of the senior year of study at Eastern. A minimum of six (6) seats for Eastern students will be available annually. If less than six (6) students from Eastern are not accepted within the application cycle, the seats will be opened to other applicants.

This agreement supersedes the previous agreements, and may be revisited annually at the request of either party.

Reference:

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Registered Nurses, on the Internet at https://www.bls.gov/ooh/healthcare/registered-nurses.htm (visited January 7, 2019)

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Appendix

Course Descriptions

BIO 202 Human Biology Lecture (3 credits)

Prerequisite: None

An introduction to basic concepts related to the structure and function of molecules, cells, tissues, and organ-systems of the human body. The application of the scientific method to the study of human and animal models in health and disease will also be discussed. Three lecture hours per week.

BIO 203 - Human Biology Laboratory (1 credit)

Pre or Co-Requisite: BIO 202

Selected laboratory experiences to complement BIO 202. Course objectives are designed to: familiarize students with various experimental approaches to the study of cell and organ function, particularly as they relate to human biology; explore the application of the scientific method to experimental biology; and develop skills in the use of laboratory equipment and techniques. Two hours laboratory per week.

Three laboratory hours per week.

BIO 301 Microbes and Your Health (3 credits)

Prerequisite: None

This course provides general knowledge about the relationship between microbial organisms and the human host. The impact of the socio-economic and environmental health of society is also covered. The course deals with pathogenesis, infection, prevention, and treatment of selected diseases. Microbes include bacteria, viruses, fungi, and protozoans. Three lecture hours per week.

BIO 302 Microbes and Your Health Laboratory (I credit)

Pre or Co-Requisite: BIO 301 Microbes And Your Health Two lecture hours per week.

BIO 303 Applied Human Physiology (3 credits)

Prerequisite: BIO 120 or BIO 202 or equivalent or permission of instructor.

This course provides a practical study of how the human body functions. Biological mechanisms, which regulate and integrate activity of the major organ systems (such as neuromuscular, cardiovascular, excretory, endocrine, etc.) will be emphasized. Certain pathophysiological processes will be presented. This course does not fulfill the requirements for Eastern's Biology majors or minors. Three hour lecture per week. Three lecture hours.

BIO 334 General Microbiology with Laboratory (4 credits)

Prerequisites:

- BIO 120 Organismal Biology with Laboratory; and
- BIO 130 Ecology with Laboratory; and
- BIO 220 Cell Structure and Function with Laboratory, and
- BIO 230 Genetics with Laboratory.
- Each prerequisite course must have been completed with a final grade of C- or better.

Introduces the biochemical and physiological aspects of microbial agents including bacteria, fungi, protozoans, and viruses and how they interact with their environment. Emphasis is placed on: the difference between infection and disease, the importance and consequence of microbial interaction with the environment, the different kinds of microbial agents, host immunity to microbial agents, and mechanism of immunization and vaccination. Three lecture hours, and three laboratory hours per week.

BIO 348 Functional Human Anatomy with Laboratory (4 credits)

Prerequisites:

BIO 120 Organismal Biology with Laboratory; and

BIO 130 Ecology with Laboratory; and

BIO 220 Cell Structure and Function with Laboratory, and

BIO 230 Genetics with Laboratory.

Each prerequisite course must have been completed with a final grade of C- or better.

A study of the gross anatomy of the human body. The course provides a correlative review of the structure/function relationships of human body systems.

Three lecture hours, and three laboratory hours per week.

BIO 378 Biological Research and Data Analysis (3 credits)

Prerequisites: Sophomore Standing and Permission of Instructor

A hands-on data analysis course designed for students conducting independent research in biology. The course integrates descriptions of research projects by various biology faculty members with a survey of the statistical techniques typically utilized in biological research. Topics range from descriptive statistics to ANOVA and regression analysis. This course is required of all Biology Honors students and can be used in combination with MAT 243 to satisfy the math requirement for the Biology major. Three lecture hours per week.

BIO 350 Human Physiology with Laboratory (4 credits)

Prerequisites:

BIO 120 Organismal Biology with Laboratory; and

BIO 130 Ecology with Laboratory; and

BIO 220 Cell Structure and Function with Laboratory, and

BIO 230 Genetics with Laboratory.

Each prerequisite course must have been completed with a final grade of C- or better.

A systematic approach to the study of human physiology. Fundamental physiological mechanisms associated with homeostatic functions of major body systems will be discussed.

Consideration of some abnormal and pathologic states.

Three lecture hours, and three laboratory hours per week.

CHE 210 General Chemistry I Lecture (3 credits)

Prerequisite: High School Chemistry and placement in MAT 155 Precalculus Mathematics or MAT 243 Calculus I with Technology; or completion of a Tier I Mathematics requirement.

Pre or Co-Requisite: CHE 212 General Chemistry I Laboratory

Conceptual approach to modern chemistry. Topics include atomic theory, laws and theories concerning physical and chemical behavior. Emphasis given to structure of atoms and molecules and the nature of chemical bonding. Three lecture hours per week.

CHE 211 General Chemistry 11 Lecture (3 credits)

Prerequisite: CHE 210 General Chemistry I Lecture and CHE 212 General Chemistry I Laboratory; Pre or Co-requisite: CHE 213 General Chemistry II Laboratory,

Placement in MAT 155 Precalculus Mathematics, or MAT 155P Precalculus Mathematics Plus, or MAT 243 Calculus I with Technology; or concurrent registration in MAT 155 Precalculus Mathematics, or MAT 155P Precalculus Mathematics, or MAT 243 Calculus I with Technology, or completion of a

Liberal Arts Core Tier I Mathematics course.

This course is a continuation of CHE 210. Three lecture hours per week.

CHE 212 General Chemistry I Laboratory (1 credit)

Co-Requisite: CHE 210 General Chemistry I Lecture Laboratory offered simultaneously with CHE 210. Three laboratory hours per week.

CHE 213 General Chemistry Il Lab (1 credit)

Prerequisite: CHE 210 General Chemistry I Lecture and CHE 212 General Chemistry I Laboratory; Co-Requisite: CHE 211 General Chemistry II Lecture Laboratory offered simultaneously with CHE 211. Three laboratory hours per week.

HSC/HPE 318 Anatomy & Physiology I (4 credits)

Prerequisite: HSC/HPE 215 Biology for Health Sciences

A detailed study of the human organism according to levels of chemical and structural organization with special reference to cytology, histology, and organs of the integumentary, skeletal, muscular, nervous, sensory and endocrine systems. The laboratory exercises provide a foundation of experiences in these topics.

Three lecture hours, and three laboratory hours per week.

HSC/HPE 319 Anatomy & Physiology 11 (4 credits)

Prerequisite: HSC/HPE 318 Anatomy & Physiology I

A detailed study of the human organism according to levels of chemical and structural organization with special reference to cytology, histology, and organs of the cardiovascular, respiratory, urinary, digestive and reproductive systems, and genetics. The laboratory exercises provide a foundation of experiences in these topics. Three lecture hours, and three hours laboratory per week.

HSC 425 Microbiology for the Health Sciences (4 credits)

Prerequisite:

HSC 215 Biology for Health Sciences or

CHE 210 General Chemistry I Lecture and CHE 212 General Chemistry I Laboratory; or

BIO 220 Cell Structure and Function with Laboratory

This course provides students with specific knowledge of the interrelationships between microbial organisms and human health. It will provide students with basic information on microbial organisms and how they affect the human host and tools to appreciate the principles underlying the pathogenesis, maintenance & control of an infectious disease by microbes such as viruses, bacteria, fungus and protozoal infectious agents. The role of the host in the control of an infectious disease or an invading parasite and host immune response will be discussed. Knowledge gained from this course and associated laboratory component will help students appreciate microbial organisms and the importance of microbes in human society. Three lecture hours, and three laboratory hours per week.

HSC 430 Statistics in Health & Exercise Science (3 credits)

Prerequisite: HSC 215 or HPE 215

This course introduces the basic principles and techniques of statistical methods in health sciences, exercise science, and public health. SPSS software will be used. Three lecture hours per week.

MAT 120 Algebra Concepts in Context (3 credits)

Note: Open to Bachelor of General Studies students only.

This course will help prepare students both for the algebra they will meet in subsequent mathematics courses and for the mathematics they will use outside of academic contexts. The

Revised November 2022

concepts of algebra are presented in realistic contexts and explored through a number of representations, including verbal, symbolic, graphical, and tabular. The focus is on the concept of function, with a thorough study of both linear and exponential functions. Three lecture hours per week.

MAT 130 Precalculus Mathematics (4 credits)

Prerequisite: MAT 101 or Placement Or SAT 600+

A review of topics in algebra. An introduction to functions, inverse functions, exponential and logarithmic functions, trigonometry. The use and mastery of graphing technology is an essential aspect of the course.

Four lecture hours per week.

MAT 155 Precalculus Mathematics (4 credits)

Prerequisite: Placement at this level

Topics include the study of functions, domain and range, building new functions through algebraic operations, composition of functions, and inverse functions. The course will also include the study of families of functions such as polynomial, rational, radical, exponential, logarithmic, and trigonometric functions. Specifically, students are expected to gain an understanding of algebraic notation, expressions, equations, inequalities and their use in describing and interpreting relationships, functions and function notation, proportional and inversely proportional relationships, and applications of periodic phenomena and trigonometric identities. The use and mastery of graphing technology is an essential aspect of the course. The course is designed for students majoring in STEM disciplines. May also be useful to other quantitative disciplines. Four lecture hours per week.

MAT 155P Precalculus Mathematics Plus (5 credits)

Prerequisite: Placement at this level or completion of MAT 099

This course offers integrated just-in-time Intermediate through college algebra support. Topics include the study of functions, domain and range, building new functions through algebraic operations, composition of functions, and inverse functions. The course will also include the study of families of functions such as polynomial, rational, radical, exponential, logarithmic, and trigonometric functions. Specifically, students are expected to gain an understanding of algebraic notations, expressions, equations, inequalities and their use in describing and interpreting relationships, functions and function notation, proportional and inversely proportional relationships, and applications of periodic phenomena and trigonometric identities. The use and mastery of graphing technology is an essential aspect of the course. The course is designed for students majoring in STEM disciplines. May also be useful to other quantitative disciplines. Five lecture hours per week.

MAT 216 Statistical Data Analysis (3 credits)

Prerequisite: Liberal Alts Core Tier 1 Mathematics or General Education Requirement IllA or SAT 550+ Multidisciplinary, data-driven course in applied statistics. Topics selected from exploratory data analysis (tables, graphs, central tendency and variation), correlation and regression, probability and statistical inference (confidence intervals and hypothesis testing). Emphasis placed on interpretation and analysis of real-data sets. Use of statistical computing software is integral to the course. Three lecture hours per week.

MAT 243 - Calculus I with Technology (4 credits)

Prerequisite: MAT 155/155P or Placement at this level

A first course in calculus with a focus on differential calculus. Topics include the study of limits, continuity, rates of change, the definition of the derivative, indeterminate forms, and techniques of differentiation of linear, polynomial, exponential, logarithmic, rational, and trigonometric functions. The course will include applications of the derivative to solve applied problems. Characteristics of functions such as intervals of

Revised November 2022

increase or decrease, concavity, extrema, and end behavior will be studied as a means to describe, reason, interpret, and analyze relationships. The course concludes with an introduction of antiderivatives. Use of an approved graphing calculator is required throughout the course. Four lecture hours per week.

PSY 100 General Psychology (3 credits)

Prerequisite: None

Surveys the methods, findings, and theories of scientific psychology. Research methods, neuroscience, human development, learning, sensation and perception, cognition, motivation, personality, abnormal behavior, social behavior, and industrial/organizational psychology will be covered. Students are required to participate in psychological research or to complete an alternative writing assignment. Three lecture hours per week.

PSY 212 Life-Span Developmental Psychology (3 credits) Prerequisite: None

A comprehensive course covering physical, cognitive, and socio-emotional development from conception to death. Major developmental issues will be discussed along with life-span developmental theory and methodology. Three lecture hours per week.

PSY 227 Behavioral Science Statistics (4 credits)

Prerequisites: PSY 100; at least Sophomore Standing, Psychology Majors or Minors only (or by permission of instructor).

An introduction to the descriptive and inferential methods used to evaluate psychological research. Topics include measures of central tendency, sampling distributions, variability, probability, and hypothesis testing. Emphasis upon computation and psychological applications of correlational procedures, t-tests, ANOVA, and an introduction to non-parametric statistics and regression analysis. Statistical Package for the Social Sciences (SPSS) will be used. Completion of MAT 216 recommended. Four lecture hours.

SOC 351 Statistics For Social Research (4 credits)

Prerequisite:

SOC 100 Introduction to Sociology; and

MAT 130 Precalculus Mathematics, MAT 135 Math For Liberal Arts, MAT 139 Number Systems, or MAT 243 Calculus I with Technology, or consent of instructor. Focus on descriptive and inferential statistics used in sociology, social work, and anthropology. Sampling procedures are explored. Non-parametric statistics are considered. Students are introduced to the statistical package SPSS, Four hours of lecture per week.

HPE209 Nutrition and Public Health (3 credits)

An examination of current issues in the nutritional status of population and their impact on public health. Controversies in public health nutrition and the factors that influence stakeholders' positions. The focus will be on population-based nutrition as opposed to individual nutritional choices. Will examine how issues and trends in food production, food supply, and food safety affect public health.