

BACCALAUREATE COUNCIL  
Sixth Meeting/2018-19 Academic Year  
March 21, 2019  
Held Electronically

**SECTION A – Recorded for inclusion in the 2020-19 Undergraduate Catalog**

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**COLLEGE OF EDUCATION**

**Department of Curriculum and Instruction (LTIC, LTLA, LTRE, TLCI, TLEE)**

Other Catalog Change

Page 124-125, 2018-19 Undergraduate Catalog

**Major in Middle Level Teaching and Learning (B.S.Ed.)**

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**Professional Education Requirements (49)**

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One of the following in the major content area (3)

GEOL 483/BIOS 402X/CHEM 493X/ENVS 483X/PHYS 493X - Interdisciplinary Teaching of Science in Secondary **and Middle Level** Education (3)

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**Minor Content Area Option: Science (24)**

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BIOS 402X/CHEM 493X/ENVS 483X/GEOL 483/PHYS 493X - Interdisciplinary Teaching of Science in Secondary **and Middle Level** Education (3)

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**COLLEGE OF HEALTH AND HUMAN SCIENCES**

**School of Family and Consumer Sciences**

Course Revision

Page 204, 2018-19 Undergraduate Catalog

HDFS 491. INTERNSHIP IN FAMILY SOCIAL SERVICES (7-12). Supervised participation in professional settings. Students will be assigned to experiences appropriate to their professional interest in family social services. ~~May be repeated to a maximum of 12 semester hours.~~ When taken in conjunction with HDFS 394, Cooperative Education II for Family Social Services, total enrolled credit hours in both courses may not exceed 12 hours. S/U grading may be used. See special requirements as may apply to internships according to major. PRQ: Consent of school.

**School of Health Studies**

Course Revision

Page 204, 2018-19 Undergraduate Catalog

NUTR 309. SCIENCE OF NUTRITION (3). ... .. PRQ: BIOS 103 and BIOS 105, CHEM 230 **310** or CHEM 330. CRQ: BIOS 357.

Other Catalog Change

Page 199-201, 2018-19 Undergraduate Catalog

**Major in Medical Laboratory Sciences (B.S.)**

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**Requirements outside School (37-38)**

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AND \*CHEM 213 - General Chemistry Laboratory II (1)  
~~CHEM 230 - Introductory Organic Chemistry (3)~~  
~~CHEM 231 - Introductory Organic Chemistry Laboratory (1)~~  
CHEM 310 - Introductory Organic and Biological Chemistry (3)  
CHEM 311 - Introductory Organic and Biological Chemistry Laboratory (1)  
HSCI 318 - Medical Terminology (3)

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**Major in Nutrition, Dietetics, and Wellness (B.S.)**

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**Requirements outside School (47-49)**

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OR \*CHEM 212 - General Chemistry Laboratory I (1)  
~~CHEM 230 - Introductory Organic Chemistry (3),~~  
CHEM 310 - Introductory Organic and Biological Chemistry (3),  
OR CHEM 330 - General Organic Chemistry I (3)

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**Major in Public Health (B.S.)**

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**Emphasis 3. Environment and Health**

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**Requirements outside School (28-31)**

~~CHEM 230 - Introductory Organic Chemistry (3)~~  
AND ~~CHEM 231 - Introductory Organic Chemistry Laboratory (1)~~  
CHEM 310 - Introductory Organic and Biological Chemistry (3)  
AND CHEM 311 - Introductory Organic and Biological Chemistry Laboratory (1)  
GEOG 253 - Environment and Society (3)

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**School of Interdisciplinary Health Professions**

Other Catalog Change

Page 208, 2018-19 Undergraduate Catalog

**Major in Health Sciences (B.S.)**

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**Emphasis 2: General (31-41)**

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**Requirements outside School (29-41)**

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Select five of the following (13-16):

AHLS 211 - Introduction to the Medical Laboratory Sciences (3)<sup>2</sup>

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~~CHEM 230 – Introductory Organic Chemistry (3)<sup>2</sup>~~  
~~AND CHEM 231 – Introductory Chemistry Laboratory (1)<sup>2</sup>~~  
**CHEM 310<sup>2</sup> - Introductory Organic and Biological Chemistry (3)**  
**AND CHEM 311<sup>2</sup> - Introductory Organic and Biological Chemistry Laboratory (1)**  
\*COMD 220 - Introduction to Communicative Disorders (3)

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**COLLEGE OF LIBERAL ARTS AND SCIENCES**

**Department of Biological Sciences**

**College Section**

Other Catalog Change Page 222, 2018-19 Undergraduate Catalog

**Minor in Cognitive Studies**

**Requirements (18-19)**

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BIOS ~~359~~ **459** - Human Neurobiology (4)

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**Department Section**

Course Revisions Page 246, 2018-19 Undergraduate Catalog

~~359~~ **459**. HUMAN NEUROBIOLOGY (4). ~~Biology of~~ **Basic organization of the human central nervous system, with emphasis on the anatomy and physiology of neural systems in the brain and spinal cord that mediate sensation, motivate bodily action, and integrate sensorimotor signals with memory as well as pathways and diseases affecting the central nervous system. In the laboratory, students will have the opportunity to dissect a human brain.** PRQ: BIOS 355 or BIOS 357.

370. DIRECTED RESEARCH IN BIOLOGY (1-3). ... .. May be repeated to a maximum of ~~6~~ **9** semester hours. PRQ: At least a B average ... department. Collectively, a maximum of ~~6~~ **9** semester hours of credit (~~9 in the case of students admitted to the department honors program~~) in BIOS 370, BIOS 490, BIOS 495H and BIOS 499H, **including no more than 3 semester hours from BIOS 490,** may be applied to the major.

402X. INTERDISCIPLINARY TEACHING OF SCIENCE IN SECONDARY **AND MIDDLE LEVEL** EDUCATION (3). ....

433. BEHAVIORAL ECOLOGY (3). Examples and theories of how behaviors **influences survival and**

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reproduction in different environments evolve. Practice in critical analysis, decision-making, and reasoning skills, such as weighing costs, benefits, and tradeoffs. Many key ideas apply not only to biology, but also to anthropology, economics, and psychology. PRQ: ~~BIOS 208, BIOS 210, BIOS 209, and BIOS 211~~ or consent of department.

BIOS 454. DEVELOPMENTAL BIOLOGY (4). ~~Mechanisms of eukaryotic~~ Examines the developmental process that guide the transition of a fertilized embryo to an adult animal. Core topics include the basic patterns of embryonic development, establishment of the three germ layers, organogenesis, morphogenesis, tissue regeneration and mechanisms that control these processes at the cellular and molecular levels. Human developmental disorders will also be discussed in the context of these principles. ~~Emphasis on model animal systems. Two hours of lecture and four hours of laboratory per week.~~ PRQ: BIOS 302 and BIOS 303, ~~and CHEM 330 or CHEM 336.~~

461. ENDOCRINOLOGY (3). ~~Classic mammalian~~ Investigation of endocrine systems examined with emphasis on cellular and molecular mechanisms of action through a comparative systems approach. Topics ~~Concepts~~ include endocrine cell signaling coordination of physiological processes, cellular and molecular mechanisms of hormone action, and some discussion of endocrine pathology evolution of hormonal regulation. ~~Lecture material and readings from the current professional literature.~~ Competencies include creative problem solving, modeling and simulating systems, interdisciplinary communication, experimental design and critique, and teamwork. PRQ: BIOS 355; or BIOS 302 and BIOS 303.

463. PHARMACOLOGY AND TOXICOLOGY (3). ... .. PRQ: BIOS 303 ~~and BIOS 355.~~

490. COOPERATIVE EDUCATION/INTERNSHIP (3). ... .. Collectively, a maximum of 6 semester hours of credit (9 in the case of students admitted to the department honors program) in BIOS 370, BIOS 490, BIOS 495H, and BIOS 499H may be applied to the major.

Other Catalog Change

Page 243, 2018-19 Undergraduate Catalog

**Major in Biological Sciences (B.S.)**

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**Requirements outside Department (33)**

\*CHEM 210 - General Chemistry I (3), ~~and~~

~~AND~~ \*CHEM 212 - General Chemistry Laboratories I (1)

\*CHEM 211 - General Chemistry II (3), ~~and~~

~~AND~~ \*CHEM 213 - General Chemistry Laboratory II (1)

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\*MATH 229 - Calculus I (4),

AND MATH 230 - Calculus II (4),

OR \*MATH 211 - Calculus for Business and Social Science (4),

AND STAT ~~301~~ 200 - Elementary Statistics (4)

~~OR~~ \*MATH 229 - Calculus I (4) AND STAT 200 - Elementary Statistics (4)

\*PHYS 210 and \*PHYS 211 - General Physics I and II (8),

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OR \*PHYS 253 - Fundamentals of Physics I: Mechanics (4) ~~and~~  
**AND** \*PHYS 273 - Fundamentals of Physics II: Electromagnetism (4)

**Total Hours for a Major in Biological Sciences: 79**

Other Catalog Change Page 244, 2018-19 Undergraduate Catalog

**Educator Licensure**

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**Professional Development Phase and Student Teaching**

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Students must satisfactorily complete a series of discipline-based pedagogy course work.

**BIOS 402X - Interdisciplinary Teaching of Science in Secondary and Middle Level Education (3)**

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Other Catalog Change Page 244, 2018-19 Undergraduate Catalog

**Degree with Biology Honors**

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3) Complete BIOS 370, Directed Research in Biology and 6 semester hours of BIOS 495, Directed Research Biology Honors, or BIOS 499, Directed Research University Honors under a faculty member's supervision;

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**Note:** Collectively, a maximum of 6 semester hours of credit (9 in the case of students admitted to the department honors program) in BIOS 370, BIOS 399~~H~~, BIOS 490, BIOS 495~~H~~, and BIOS 499~~H~~ may be applied to the major.

**Department of Chemistry and Biochemistry**

**All University Section**

**Limited Admissions and Limited Retention Requirements**

Other Catalog Change Page 26, 2018-19 Undergraduate Catalog

**Medical Laboratory Sciences Major  
(School of Health Sciences)**

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\*CHEM 211, General Chemistry II (3),

AND \*CHEM 213, General Chemistry Laboratory II (1)

~~CHEM 230, Introductory Organic Chemistry (3)~~

~~CHEM 231, Introductory Organic Chemistry Laboratory (1)~~

**CHEM 310, Introductory Organic and Biological Chemistry (3)**

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**CHEM 311, Introductory Organic and Biological Chemistry (1)**

\*STAT 208, Basic Statistics (3)

**Department Section**

Course Deletions Page 252-253, 2018-19 Undergraduate Catalog

230. INTRODUCTORY ORGANIC CHEMISTRY (3).

231. INTRODUCTORY ORGANIC CHEMISTRY LABORATORY (1).

New Courses Page 253, 2018-19 Undergraduate Catalog

CIP: 40.0599

310. INTRODUCTORY ORGANIC AND BIOLOGICAL CHEMISTRY (3). Beginning organic and biological chemistry for non-chemistry majors designed to follow CHEM 110 to provide a one-year sequence in general, organic, and biological chemistry. PRQ: CHEM 110 or CHEM 210.

311. INTRODUCTORY ORGANIC AND BIOLOGICAL CHEMISTRY LABORATORY (1). Designed to accompany CHEM 310. One 3-hour period a week. PRQ: CHEM 110 and CHEM 111, or CHEM 210 and CHEM 212. CRQ: CHEM 310.

Course Revisions Page 253, 2018-19 Undergraduate Catalog

370. INTRODUCTORY BIOCHEMISTRY (3). ... .. PRQ: CHEM 230 or CHEM 330.

493X. INTERDISCIPLINARY TEACHING OF SCIENCE IN SECONDARY AND MIDDLE LEVEL EDUCATION (3). ... ..

Other Catalog Change Page 251, 2018-19 Undergraduate Catalog

**Major in Chemistry (B.S.)**

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**Emphasis 3. Secondary Teaching**

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**Requirements in Department (52-58)**

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CHEM 493X - Interdisciplinary Teaching of Science in Secondary and Middle School Education (3)

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**Environmental Studies**

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483X. INTERDISCIPLINARY TEACHING OF SCIENCE IN SECONDARY AND MIDDLE LEVEL EDUCATION (3). . . . .

Other Catalog Change Page 286, 2018-19 Undergraduate Catalog

**Major in Environmental Studies (B.A. or B.S.)**

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**Emphasis 6. Educator Licensure - Environmental Science (96)**

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**Professional education courses, including (37):**

BIOS 402X/CHEM 493X/ENVS 483X/GEOL 483/PHYS 493X - Interdisciplinary Teaching of Science in Secondary and Middle Level Education (3)

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Other Catalog Change Page 286, 2018-19 Undergraduate Catalog

**Minor in Environmental Studies (21-22)**

The environmental studies minor is an interdisciplinary and multidisciplinary program that allows undergraduates in any degree program to study environmental concepts, issues, and problems from the viewpoints and with the approaches of the natural and social sciences. Credit hours applied to a major may not be applied to this minor.

**\*The above needs to be added to the PDF catalog.**

**Requirements (21-22)**

Students must select at least seven (7) of the following courses. At least three (3) courses must be selected from the environmental studies courses, and at least one (1) course must be selected in each of the following: natural sciences, engineering, and technology courses and humanities and social sciences courses. The remaining two (2) courses must be selected from the courses listed below, if not previously used to fulfill the requirements for those categories.

**Select three of the following environmental studies courses (9)**

ENVS 301 - Environmental Science I: Physical Systems (3)

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Select from one of the following natural science, engineering, and technology courses (3-4)

BIOS 406 - Conservation Biology (4)

~~CHEM 427 - Environmental Chemistry (3)~~

~~ENVS 315 - Geography of Energy (3)~~

~~OR GEOG 315X - Geography of Energy (3)~~

ENVS 301 - Environmental Science I: Physical Systems (3)

ENVS 302 - Environmental Science II: Biological Systems (3)

GEOG 303 - Water Resources and the Environment (3)

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TECH 245 - Pollution Prevention and Sustainable Production (3)  
TECH 305 - Green Technologies (3)  
OR ENVS 305X - Green Technologies (3)

Select one of the following humanities and social sciences courses (3)

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ECON 386 - Environmental Economics (3)  
ENVS 210 - Introduction to Sustainable Food Systems (3)  
ENVS 303 - Environment in the Social Sciences and Humanities (3)  
ENVS 304 - Environmental Law, Policy, and Economics (3)  
#HIST 377 - American Environmental History (3)  
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^POLS 324 - Politics or Environmental Health and Safety Regulation (3)  
~~SOCL 364 - Environmental Sociology (3)~~

**Department of Geographic and Atmospheric Sciences**

New Course Page 293, 2018-19 Undergraduate Catalog

CIP: 40.0401

GEOG 382. GEOGRAPHY OF DISEASE AND HEALTH (3). Geographic dimensions of health in local and regional populations across the globe with a regional foci on Southeast Asia, Africa, and the Americas. Topics include disease ecology, infectious and chronic diseases, geographic mobility, biometeorology, nutrition, development and health, geographic disparities in health, healthcare resources and access, medical systems and ethnomedicine, concepts of health and place, and therapeutic spaces.

**Department of Geology and Environmental Geosciences**

Course Revision Page 301, 2018-19 Undergraduate Catalog

483. INTERDISCIPLINARY TEACHING OF SCIENCE IN SECONDARY AND MIDDLE LEVEL EDUCATION (3). ... ..

**Department of Physics**

Course Revision Page 330, 2018-19 Undergraduate Catalog

493X. INTERDISCIPLINARY TEACHING OF SCIENCE IN SECONDARY AND MIDDLE LEVEL EDUCATION (3). *Crosslisted as BIOS 402X, CHEM 493X, ENVS 483X, and GEOL 483.* Methods and theory for the teaching of interdisciplinary science in grades 6-12. Exploration of the nature and purpose of science and its underlying assumptions, the social and cultural challenges in science teaching, and the potential solutions to these challenges are explored through research, discussion, and reflection.



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~~Requirements include using~~ **Use of** state and national science standards to develop student learning objectives and to design inquiry-based lesson plans, micro-teaching, construction and use of assessment rubrics, and ongoing development of a professional portfolio.

Other Catalog Change Page 327, 2018-19 Undergraduate Catalog

**Major in Physics (B.S.)**

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**Emphasis 2. Secondary School Teaching**

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**Requirements in Department (37)**

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PHYS 493X - Interdisciplinary Teaching of Science in Secondary **and Middle Level** Education (3)

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Other Catalog Change Page 328, 2018-19 Undergraduate Catalog

**Educator Licensure Program**

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**Requirements**

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PHYS 493X - Interdisciplinary Teaching of Science in Secondary **and Middle Level** Education (3)

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