

Biological Sciences, BS

Z2. Program Modification Proposal 2018-2019 (modify, deactivate, or add a new concentration) v.3

General Catalog Information

INSTRUCTIONS for proposal originators

Select "Program" from the radio box below, then complete the information requested for level, curriculum approval committee, type of program, and applicable change requests.

Program Type (Select "Program")* Program
 Shared Core

Action* Modify (less than 50% change)
 Deactivate

Level** Undergraduate Graduate

Curriculum Approval Committee** Undergraduate Committee
 Graduate Committee A (COSM, CECS, CONH, BSOM)
 Graduate Committee B (RSCOB, CEHS, COLA, SOPP)

Approval Route

Choose one or more departments below.

For educator preparation programs include the Teacher Education department.

For interdisciplinary programs include all departments required for program approval.

For Honors, Air Force Studies, and Army Studies, please select "University Programs" from the list of departments and programs below.

Department or Program (for approval process)*

Biological Sciences

Type of Program** Graduate program in an existing degree
 Undergraduate major in an existing degree
 Undergraduate Minor
 Concentration (new or modified)
 Certificate
 Licensure Program or Endorsement

Select one or more of the following (determines) Request 50% or more of program be offered online
 Request 50% or more of program be offered off-campus
 Request to offer program at a different WSU campus

- approval routing):****
- Request a name change for an UG degree program, major, minor, concentration, or certificate
 - Request a name change for a GR degree program, major, minor, concentration, or certificate
 - Request a new concentration in an existing major/program
 - Request to deactivate any program (degree, major, minor, certificate, concentration, license, or endorsement)
 - Above options do not apply

Import the program data using the import button  above. Do not make any changes to imported information before launching.

Launch  the proposal, then make changes.

IMPORTANT: Be sure to LAUNCH the proposal using the arrow button  above BEFORE you make changes (modify an existing program). If you do not launch the program, your changes will NOT be tracked and a new proposal will be required.

Approve the proposal using the decision  button.

Submit program title changes as a modification and submit a separate deactivate request for the program title to be inactivated. **If the deactivate request is not submitted both programs (old title and new title) remain active and will appear in the catalog.** Program title changes should be approved **at least 60 days before** the requested effective date to allow ample time for approval by the Ohio Department of Higher Education.

TIPS FOR NEW USERS

Turn the help text on by clicking on the following icon .

All fields with an asterisk (*) are required fields.

Supporting documents and additional information may be attached using the

 button located at the top of this form but supporting documents do not replace the required fields in the proposal form.

Please complete a separate form for each request. Note that new degree programs or changes of 50% or more require approval by the Ohio Department of Higher Education (ODHE) and must use the New Program approval proposal form.

Concentrations are tied to a major. New concentrations can be proposed by using this Program Modification form to list the new concentration and requirements within a current major or graduate program.

Educator Preparation Programs (additional ODHE requirements will be identified by the College of Education and Human Services)

Title: Major/Program, Degree or Area of Study Credential

Examples: English, BA or Reading License

Title* Biological Sciences, BS

College*

Catalog Display

Select the primary College or Department. **Do not select a program.** This information will determine where a program displays in the catalog. A program may display in only one location, under either a College or Department.

College or Department (for catalog display)*

Biological Sciences

Requested Effective Term*

- Fall
- Spring
- Summer

Year* 2018

Note: If 50% or more of the program is offered off-campus, mostly on-line, or fully online, ODHE approval and HLC notification is required.

Where is the program offered? (check all that apply)*

- Dayton Campus
- Lake Campus
- Off-Campus in Ohio
- Off-Campus outside Ohio
- Off-Campus outside of the U.S.
- Fully online
- Mostly online (less than 50% offered face-to-face)

If 50% or more offered off-campus or online, describe all delivery and location options

If a change in location (adding or deleting locations), describe change(s) and if 50% or more of program is offered at each location.

Change in location

If program will be offered off-campus, how will services be available to students (advising, tutoring, counseling, financial aid, etc.)?

Program Description

The information entered will appear in the catalog as submitted.

Please include information using the following four headings (**Heading 2 format**, in the order provided below) for consistent presentation in the catalog.

Program Description

Admission Requirements

Program Learning Outcomes (see examples below)

For more information visit: (include the department website)

Program Learning Outcomes

Examples:

History graduates will be able to:

write proficiently,
understand the methodology that historians use, and
analyze primary sources and secondary works in order to arrive at a coherent and well-organized conclusion.

Program Description, Admission Requirements, Learning Outcomes and Program/Department Links*

Program Description:

The Department of Biological Sciences offers the following degree programs: Bachelor of Science and Bachelor of Arts in Biological Sciences, Bachelor of Science in Medical Laboratory Science, Bachelor of Science and Bachelor of Arts in Public Health, and minors in Biology and Public Health. Students can also focus their studies in health professions (e.g., medicine, dentistry, optometry). Students plan their individual programs of study with the help of departmental advisors.

The teaching and research programs of the department are conducted in modern, well-equipped classrooms and laboratories. Our curriculum fosters critical thinking and scientific reasoning, and many courses, including cell culture, biostatistics, cell and molecular laboratory, and others, build particular skills. A 200-acre biology preserve on campus, and nearby parks and preserves such as the Beaver Creek Wetlands, provide excellent opportunities for terrestrial and aquatic field studies, as do field-based courses like ornithology and Amazon ecology. Many undergraduate students include faculty-guided, independent research projects in their academic programs.

Biological Sciences

The Bachelor of Science curriculum offers a broad, integrated, and in-depth approach to the life sciences. Departmental requirements consist of a balanced core of courses selected from several subject areas, combined with elective courses from the Department of Biological Sciences and other life science departments such as Neuroscience, Cell Biology & Physiology, and Biochemistry & Molecular Biology.

Within this degree, several options are available to students. Programs of study can accommodate students with such differing interests and objectives as graduate work in molecular biology, laboratory work in microbiology, or field work in ecology. Programs also satisfy the curricular requirements for educational licensure and admission to professional schools in health sciences, including human and veterinary medicine, physical therapy, physician assistant, dentistry and others.

Biological Sciences Honors Program

An honors program allows qualified students to carry out sustained independent projects under the guidance of faculty sponsors. Students who have maintained a cumulative GPA of 3.4 during the preceding two semesters may apply to the Department of Biological Sciences to pursue an honors program. Application for admission to the program should be made during the student's junior year. Students interested in the honors program should contact the departmental office.

For additional information:

[Biological Sciences, BS](#)
[Department of Biological Sciences](#)
[College of Science and Mathematics](#)

Program Requirements:

Use the following template when creating program requirements. **The information will appear in the catalog as entered.**

Wright State Core Requirements (Undergraduate programs only)

Required courses

Elective courses

Other requirements (if applicable)

Total: # Hours (**REQUIRED**)

Undergraduate programs must be 120 credit hours. A minor is made up of at least 12 credit hours. Undergraduate certificates must be between 12 and 21 credit hours with at least 12 credit hours above the 2000-level. For additional information, please refer to the policies for Academic Standards and Curriculum at <http://policy.wright.edu>.

Masters programs must be a minimum of 30 of credit hours. Doctoral programs should be a minimum of 90 credit hours. Graduate certificate programs must be 9-20 credit hours. For additional information, please refer to the policies in the Graduate Council Manual <https://www.wright.edu/graduate-school/graduate-council-manual-graduate-curriculum-procedures>.

Program Requirements*

Program Requirements:

Note: For graduation credit, all CoSM courses require a grade of C or better.

I. Wright State Core: 43 Hours

Element 1: Communication: 6 Hours

Element 2: Mathematics: 4 Hours

Required

MTH 2240 Applied Calculus
or
MTH 2300 Calculus I

Element 3: Global Traditions: 6 Hours

Element 4: Arts and Humanities: 3 Hours

Element 5: Social Sciences: 6 Hours

Element 6: Natural Sciences: 8 Hours

Required

BIO 1120 Cells and Genes
BIO 1150 Organisms and Ecosystems

Additional Core Courses: 10 Hours

Required

CHM 1210 General Chemistry I
CHM 1210L General Chemistry Lab I
CHM 1220 General Chemistry II

II. Departmental Core Requirements: 18 Hours

BIO 2100 Orientation Seminar in Biological Sciences
BIO 2110 Principles of Molecular and Classical Genetics
BIO 2120 Cell Biology
BIO 2140 Introduction to Cell Biology Laboratory
BIO 2310 Evolution and Ecology
BIO 3140 Molecular Biology Laboratory

Senior Capstone Experience

Select one from:

BIO 4000 Senior Capstone
or
BIO 4020 Current Literature in Biology
or
BIO 4920 Senior Seminar
or
BIO 3920 Departmental Honors Seminar
(for Honors)

III. Departmental Requirements and Electives: 30 Hours

Select 30 credits from approved 3000- and 4000- level courses. Among those selected:

At least one course must include a lab component.

At least 20 credits must have a BIO or M&I prefix. (Up to 5 credit hours of Independent Study can be used.

Independent Study is to be arranged by the student and the professor and can include [BIO 4880](#) - Independent Reading, [BIO 4900](#) - Internship, [BIO 4990](#) - Research, [BIO 4950](#) - Honors Research. Up to 8 hours of Honors Research can be used. Up to 3 hours of [BIO 3990](#) - Undergrad Teaching Assistant can be used. 3.0 required for BIO 3990.)

At most 10 credits may have a prefix of ANT, BMB, EES, PHR, CHM, MTH, NCBP, STT, PHY, PSY.

IV. Related Course Requirements: 24 Hours

CHM 2110 Organic Chemistry I
CHM 2110L Organic Chemistry Laboratory I
CHM 2120 Organic Chemistry II
CHM 2120L Organic Chemistry II Laboratory
PHY 1110 Principles of Physics I
PHY 1110L Principles of Physics Lab I
PHY 1120 Principles of Physics II
PHY 1120L Principles of Physics Lab II
STT 1600 Statistical Concepts
or
STT 2640 Elementary Statistics

V. General Electives: 5 Hours

Total: 120 Hours

Graduation Planning Strategy

The Graduation Planning Strategy (GPS) has been created to illustrate one option to complete degree requirements within a particular time frame. Students are encouraged to meet with their academic advisor to adjust this plan based on credit already earned, individual needs or curricular changes that may not be reflected in this year's catalog.

[Biology, BS \(3_yr\) \(GPS\)](#)

[Biological Sciences, BS \(GPS\)](#)

If there is a program modification that impacts the Graduation Planning Strategy (GPS), indicate this below and complete a separate GPS proposal form so that both the program and GPS are updated in the catalog concurrently to ensure consistency between program requirements and the GPS.

Does this program modification require an update to the Graduation Planning Strategy (GPS)?*

Yes

No

Not applicable - not an undergraduate degree program

Department
Chair: Please

copy and paste
the url (web
link) from the
GPS modification
proposal form.

Additional
information, if
needed

Program Name Change

Complete this section if the proposal includes a change in the name/title of the degree, major, licensure, or endorsement.

A change in the name/title of the degree and the information below must be approved by the Provost and submitted to the Ohio Department of Education for approval.

Rationale for
name change:

Describe how the
name change will
affect students in
the current
program.

Are there any Yes
administrative,

curricular, faculty or support service changes occurring along with the name change? No

If "yes", please describe:

Have the appropriate program accreditation agencies been informed of the proposed change (if applicable)? Yes No Not applicable

Administrative Data

To be completed by Budget

CIP Code

CIP Code Name

To be completed by Registrar

Approved Effective Term Fall Spring Summer

Year

Banner Program Name

Banner Program Code

Banner Major Name

Banner Major Code

Concentration Name(s) and Code(s), if applicable:

Degree Type Bachelor of Science

Program Type

Bachelor

