ESF Minor Curriculum Change Proposal Form

Committee on Curriculum - ESF Faculty Governance
Office of Instruction & Graduate Studies

Date: **April 12, 2024**
Department: **Environmental Biology**
Curriculum Title: **Biotechnology MINOR**

For Minor Changes in existing curriculum (check all that apply):

- ☐ revised courses
- ☒ change in total cr. hrs.
- ☐ new course sequence
- ☐ new program objectives*
- ☐ new courses added
- ☐ new accreditation/assessment requirements

*See SUNY Guidelines

1. Rationale for Change

Please provide an explanatory narrative outlining the rationale for the change, and the impacts of this change on the learning outcomes of the curriculum:

A required course in the Biotechnology (BTC) minor, BTC401 Molecular Biology Techniques, changed from 4 to 3 credits in the 23-24 Academic year. As such, the number of credits in the core required classes for the minor also decrease (17 to 16). And therefore the overall required credits in the minor decrease (20 to 19).

We also took this opportunity to update the catalog description text for clarity, and updated the directed elective list to reflect the latest course offerings.

2. Institutional Impact:

Changes from existing condition:

Anticipated Enrollment or Enrollment Change: None

Faculty or Staffing Requirements: No changes

Technology, Computing Resources, and Classroom Resource Demands: No changes

Change in Accreditation Requirements: No changes

Changes to Assessment Plan: No changes

Library Resource Requirements: No changes

3. Catalog Narrative:

Please attach to this proposal form a copy of the current catalog description in MS Word format, with revisions shown in "track changes".

Biotechnology Minor
Coordinator: Dr. Christopher Whipps
The minor in biotechnology is for students who wish to add knowledge of biotechnology theories and methodologies to the experiences and qualifications gained from their undergraduate program. Required courses develop a basis for understanding biotechnology, both at the theoretical and practical levels. Directed electives allow students to focus on an area of interest in the field. The minor is available to all ESF undergraduate students except those in the biotechnology major. Admission is via petition and requires a minimum cumulative GPA of 2.7.

~~Twenty~~ Nineteen credit hours of coursework are required for completion of the minor. ~~Seventeen~~ Sixteen credits of specified courses include EFB 307 Principles of Genetics (3); EFB 308 Principles of Genetics Lab (1); BTC 401 Molecular Biology Techniques (4~~3~~); EFB 325 Cell Biology (3); FCH 430 Biochemistry I (3); and FCH 432 Biochemistry II (3). One directed elective course (for a minimum of three credits) must be selected from the following list. Other courses may be applicable with petition but cannot include BTC 420, 495, 498. A maximum of eight credits can count toward both major and minor requirements; overlap in excess of this number must be offset by taking additional courses from the directed elective list.

- BTC 425 Plant Biotechnology (3)
- BTC 426 Plant Tissue Culture Methods (3)
- ~~BTC 498 Research Problems in Biotechnology (3-6)~~
- ~~BTC 420 Internship in Biotechnology (3)~~
- EFB 303 Introductory Environmental Microbiology (4)
- FCH ~~45~~31 Biochemistry Lab (3)
- FCH 584 Spectro ID/Organic Compounds (3)
- MCR 484 Scanning Electron Microscopy (3)
- MCR 485 Transmission Electron Microscopy (3)
- BIO 440 (M001): Applied Genomics (3) (SU)
- BIO 446 Epigenetics of Human Health and Disease (3) (SU)
- BIO 447 Basic Immunology (3) (SU)
- BIO 448 Evolutionary Medicine (3) (SU)
- BIO 462: Molecular Genetics (3) (SU)
- BIO 464 Applied Biotechnology (4) (SU)
- BIO 468 Microbiomes Biotech & Medicine (3) (SU)
- BIO 473 Pharmaceuticals & Cells (3) (SU)
- MEDT 439 Applied Techniques in Medical Biotechnology (2) (SUNY Upstate)

4. Curriculum Transition Plan:

Please provide a narrative description of your plan for transitioning from your existing curriculum to the proposed new curriculum. Please provide specific dates for implementing curriculum changes, overlap periods where old and new curricula may exist simultaneously, and final phase out of old curricula. Please also include impacts and mitigating considerations for transfer students and students in mid-program during implementation, impacts of changes in semester delivery of existing courses, addition of new courses within a particular semester, etc.

This change would come into effect upon approval. Any student currently enrolled in the BTC minor would be moved to this updated version because it does not impact any coursework already taken. I.e., it simply matches BTC401 correctly to 3 credits.

5. Approval Signatures:

Signatures below, or attached letters, indicate that the affected departments, programs or units have been notified of this proposal and have had an opportunity to assess the impact of the proposal on their respective units. If departments did not respond to your notification, you may wish to document your effort to contact them.

Affected Academic Department(s) or Program(s):

Biotechnology major
Department/Program 1

Christopher Whipps, major coordinator
Name of Chair/Program Director

Chair Signature

April 16, 2024
Date

Or letter attached ☐

Environmental Biology Dept
Department/Program 2

Stephen Teale, Dept Chair
Name of Chair/Program Director

Chair Signature

April 16, 2024
Date

Or letter attached ☐

Department/Program 3

Name of Chair/Program Director

Chair Signature

Date

Or letter attached ☐

[if more/ess than three Departments/Programs, please add/delete lines as appropriate.

Other Units

Library Director

Date

Or letter attached ☐

Computing and Network Services

Date

Or letter attached ☐

_____ _____ Or letter attached ☐
Physical Plant Date

_____ _____ Or letter attached ☐
Forest Properties Date

_____ _____ Or letter attached ☐
Environmental Health and Safety Date

_____ _____ Or letter attached ☐
Admissions Date

_____ _____ Or letter attached ☐
Other_____ Date

_____ _____ Or letter attached ☐
Otjer_____ Date

Office of the Provost

Signature below, or attached letter, indicates that the Provost either a) agrees that that there is no need for additional resources from the College; or b) indicates willingness to provide the extra support to the department.

_____ _____ Or letter attached ☐
Provost Signature Date

6. Proposer Information and Department Chair Affirmation:

Contact Person:

Name:Christopher Whipps_____ Department: Environmental Biology_____

Email:cwhipps@esf.edu_____ Phone:x4762_____

This proposal has been reviewed and approved by the sponsoring Department. Affected departments have been notified and given the opportunity to provide feedback. Department resources are or will be made available to support this curriculum revision, or a plan is in place to meet the resource needs as identified in the Institutional Impacts section of this proposal (see Section 2, above) .

Name:Stephen Teale_____ Date:April 16, 2024__
Department Chair (or designated curriculum representative)

Signature:_____ Or letter attached ☐
Department Chair (or designated curriculum representative)

7. Final Approvals:

Curriculum Committee	**Date**
Faculty Governance	**Date**
Provost	**Date**