1. **Degree/Major Title:**

   B.A. Biology

2. **Contact person:** Marilyn Cruz-Alvarez

   **College:** Arts and Sciences

   **Department/School:** Biological Sciences

   **Telephone:** 239-7237

3. **Briefly describe the proposed revision(s):**

   1. Addition of 2 new courses: PCB4115C Molecular Techniques in Behavioral Biology and MCB4223C Food Microbiology.

   2. Change the prerequisites for BOT4503C Plant Physiology, PCB3414C Behavioral Ecology, and BSC4910C Senior Project Research in Biology.

   3. Add the choice for students to take BSC 4910C Senior Project Research in Biology and BSC4911 Senior Project Presentation in Biology instead of BSC 4945C Integrated Research Experience.

   4. Change the designation of ISC312: Scientific Process to a C course.

   5. Remove and add electives.

4. **Effective date:** Fall 2014

   Changes are effective in the fall of the year. Exceptions are approved only in unusual circumstances with adequate justification.
5. Briefly explain the rationale for the proposed revision.
Link the proposed revision to assessment and institutional effectiveness activities (feedback from students, market demands, program evaluation, resource allocation, etc.).

1. New courses are added to satisfy demand and interest of students based on the expertise of faculty members.

2. The prerequisites for BOT4503C Plant Physiology and PCB3414C Behavioral Ecology have been changed to better reflect the need of students' background to be successful in these courses. Organic Chemistry II (CHM2211C) has been removed as a prerequisite for Plant Physiology. General Ecology (PCB3043C) has been added as a prerequisite for Behavioral Ecology. The prerequisite to BSC4910C Senior Project Research in Biology has been changed to allow students in the B.S. Biology accelerated program to take this course without taking PCB 3023C General Ecology or ZOO 3713C Vertebrate Form and Function, which are not required for this major.

3. Due to the larger number of students in the B.S. degree program relative to the B.A. program and the large student/faculty ratio, offering of the Integrated Research Experience course is limited at this time. This choice will facilitate the completion of requirements for students in the B.A. program.

4. The change is requested jointly with other Departments to better reflect the activities carried out in this course.

5. The number of upper division electives in Biology has increased based on the expertise of new faculty members. Upper division electives that do not have adequate prerequisites (PCB 3480C Ecosystem Monitoring and Research Methods, OCE 3008C Oceanography, OCB 4633C Marine Ecology, BSC 3403 Environmental Quantitative Techniques, and EVS 4814C Environmental Toxicology) have been removed. Electives that have not been taught recently (BSC 4912 Senior Seminar in Biology, HIS 3470 History of Science and Technology, ISC 4930 Current Topics in Interdisciplinary Natural Sciences, and MCB 4507 Virology, Mycology and Parasitology) have also been removed. At this time courses have not been terminated because they are in a different department or there is an expectation that as the increase in the number of students stabilizes and more faculty are hired, these courses will be taught again.

New courses (MCB 4223C Food Microbiology, and PCB 4115C Molecular Techniques in Behavioral Biology) or courses that were already electives for other programs in the Department (BSC 1930L Seminar in Medicine I and BSC 2930L Seminar in Medicine II) have been added to the list of electives.

6. Describe additional library resources needed to support this revision? Explain rationale for response, even if answer is None.
None. There are adequate library resources since there are no major changes to the program.

7. Describe additional faculty resources needed to support this revision? Explain rationale for response, even if answer is None.
None. New courses reflect areas of expertise of current faculty. The change of ISC 3120 Scientific Process to ISC3120C will require increase in contact hours. However, since faculty in 3 different departments (Biological Sciences, Marine and Ecological Sciences, and Chemistry and Physics) take turns teaching this course, the change will have a minimal impact on these departments.

8. Describe additional technology, facility, laboratory, or other resources needed to support this revision? Explain rationale for response, even if answer is None.
None. The new courses overlap current courses in terms of resources requirements.

9. What impact will the proposed revision have on other colleges, units, or programs?
None. The C designation for ISC3120 Scientific Process is requested jointly by the Departments requiring this course for their programs. The number of students taking the elective courses offered by Marine and Ecological Sciences department and that have been removed from the program is small and the impact will be minimal.

10. New courses:
☐ No new courses are required.
☒ New courses are needed. List prefix/number/title below. Complete a Course Add Form for each from the Curriculum Management System - https://midas.fgcu.edu/acadaff/scns/.

MCB4223C Food Microbiology

Degree/MajorRevision Proposal – Revised – 3-26-13
PCB4115C Molecular Techniques in Behavioral Biology

11. **Change to existing courses:**
   - No existing courses are being changed.
   - Existing courses are being changed. List prefix/number/title below. Complete a Course Change Form for each from the Curriculum Management System - https://midas.fgcu.edu/acadaff/scns/.
     
     BSC4910C Senior Project Research in Biology - change in prerequisites
     BOT4503C Plant Physiology - change in prerequisites
     ISC3120 Scientific Process - change in designation to ISC3120C
     PCB3414C Behavioral Ecology - change in prerequisites

12. **Termination of existing courses:**
   - No existing courses are being deleted from the FGCU course inventory.
   - Courses are being terminated. List prefix/number/title below. Complete a Course Terminate Form for each course from the Curriculum Management System - https://midas.fgcu.edu/acadaff/scns/.

13. **What impact will the proposed revision have on the progression or sequencing of courses in this degree program?**
    Please provide evidence in the form of a degree curriculum map, a listing of required and restricted elective courses in the major and their prerequisites or other form appropriate for your program (consult with College Curriculum Team Chair for additional information).

14. **Catalog copy:**
    See Instructions above.

15. **Additional remarks:**

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**APPROVALS (required prior to submission)**

Department/Program Chair/Director ______________________ Date 3/14/2013

College Curriculum Committee Chair ____________________ Date 11/11/13

College Dean ____________________ Date 11/14/13

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Does another department or unit provide related expertise or offer similar courses? □ No  □ Yes  (If yes: have the other department complete the following. Attach a separate sheet if needed.)

Department/Unit: ____________________

☑ Supports this proposal  □ Does not support this proposal  □ Defers Recommendation

Authorizing signature: ____________________ Date ____________________

Comments: ____________________