College of Education
Signature Page

LEVEL: Undergraduate  TYPE: Change Existing Program

❖ IF this submission is a program:
  o Is this an initial teacher certification program? YES
  o If no, is this program reviewed by NCATE? YES

❖ IF this submission is a course:
  o Is this course to be considered as part of the college approved core?
  o If yes, it will be used to fulfill the:

TITLE OF SUBMISSION: Reduction of program hours for Science Education-Biology

Faculty Sponsor: Dr. Dana Zeidler  Faculty Sponsor Phone: 813-974-3533

APPROVALS
List appropriate Department Chair, Committee Chair, Faculty Council Chair and Associate Dean Approving:

Dr. Stephen Thornton
Department Chair  SIGNATURE  2/11

Dr. Rick Austin - UPC
Committee Chair  SIGNATURE  

Dr. Bill Young or Dr. Nell Faucette
Faculty Council Chair  SIGNATURE  

Dr. Michael Stewart, Undergrad
Associate Dean  SIGNATURE  

CONSULTING DEPARTMENTS/UNITS
List other units and department of the University that have been consulted, comments and supporting remarks:

NAME OF UNIT: __________________________
CHECK: ☐ APPROVED  ☐ DISAPPROVED*  ☐ COMMENTS ATTACHED

(*MUST attach comments explaining rationale for disapproval)

Name/Title  Signature  Date

NAME OF UNIT: __________________________
CHECK: ☐ APPROVED  ☐ DISAPPROVED*  ☐ COMMENTS ATTACHED

(*MUST attach comments explaining rationale for disapproval)

Name/Title  Signature  Date

Rev. 11/2010
USF Minor, Certificate, Track or Concentration Form

No resource reallocation is required for the implementation of the minor; it is basically a designation of a set of courses offered by the department.

1. DEPARTMENT AND CONTACT INFORMATION

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>Secondary Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLLEGE</td>
<td>EDUCATION</td>
</tr>
<tr>
<td>BUDGET ACCOUNT NUMBER</td>
<td>172400 Secondary Education</td>
</tr>
<tr>
<td>FACULTY CONTACT PERSON</td>
<td>Dr. Dana Zeidler</td>
</tr>
<tr>
<td>FACULTY CONTACT PHONE</td>
<td>813-974-3533</td>
</tr>
<tr>
<td>FACULTY CONTACT E-MAIL</td>
<td><a href="mailto:zeidler@usf.edu">zeidler@usf.edu</a></td>
</tr>
</tbody>
</table>

2. MINOR/CERTIFICATE/TRACK/CONCENTRATION

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Change Existing Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL CREDIT HOURS</td>
<td>120</td>
</tr>
<tr>
<td>RECOMMENDED EFFECTIVE DATE</td>
<td>Fall 2011</td>
</tr>
<tr>
<td>TITLE</td>
<td>B.S. Science Ed</td>
</tr>
</tbody>
</table>

Reduction of program hours for Science Education- Biology to meet the state mandated 120 credit hour rule. Updating the current catalog to reflect the changes.
Overview of Program Change Request for the Science Education Program (Biology)

In order to comply fully with the State of Florida mandate that undergraduate programs not be allowed to exceed 120 credit hours, the science education program faculty are requesting an updated planned program of study in Science Education – Biology. Rather than continuing to require MCB 3020C General Microbiology (4 semester Hours), we recommend that students have four semester hours of electives. The four hours of electives would be designed to meet the student’s individual needs and areas of specific interest. Recommended prefixes would include but not limited to BSC, BOT, PCB, or SCE. If the elective is a 3 semester course then SCE 4940: Internship; Science Education would be 11 hours.

This change would not affect any of the accomplished practices for the science education (biology) program. Forms; A, B and D are attached and have been updated to reflect the current language of the undergraduate catalog for course descriptions and accurate course numbers.
• **SCIENCE EDUCATION**

Requirements for the B.S. Degree (BSB, BSC, BSY): In addition to the courses listed below, students must complete

"Preliminary Requirements for Students entering Teacher Education Programs."

**Prerequisites (State Mandated Common Prerequisites):** These prerequisites must be met by transfer students as well as

USF students. A grade of "C-" is the minimum acceptable grade.

• EDF X005 Introduction to Education (3)
• EDF X085/EDG X071* Teaching Diverse Populations (3)
• EME X040 Introduction to Educational Technology (3)
• Other state mandated program prerequisites:

  *For Biology Teacher Education** -
  Biology with Lab 8
  Chemistry with Lab or Physics with Lab 8
  Electives in Science 6

  *For Chemistry Teacher Education** -
  Chemistry with Lab 8
  Biology with Lab or Physics with Lab 8
  Electives in Science 6

  *For Physics Teacher Education** -
  Physics with Lab 8
  Biology with Lab or Chemistry with Lab 8
  Electives in Science 6

*In addition to EDF X085/EDG X071, a minimum of 6 semester hours with an international or diversity focus is required. Eligible courses will be determined by the community college or university where the student is currently earning the Associate in Arts or baccalaureate degree. Foreign language courses may be used to meet this requirement.

**Courses specified in this category may apply to general education coursework.

**Completion of General Education requirements:** General education courses will be determined by the community college or university where the student currently is earning the Associate in Arts or baccalaureate degree, and will be published in the institution's existing catalog or in the Community College Counseling Manual. For USF, see "Academic Policies and Procedures – General Education" section of the catalog.

**Professional Education Core for all Tracks (29 credit hours):**

The required courses in the professional education core are as follows:

EDF 3214 Human Development and Learning 3
EDF 3604 Social Foundations of Education (Exit) 3
EDF 4430 Measurement for Teachers 3
EEX 4070 Integrating Exceptional Students in the Regular Classroom 2
TSL 4324 ESOL Competencies and Strategies 3
SCE 4936 Senior Seminar in Science Education 2
SCE 4940 Internship: Science Education 10
ESE 4322 Classroom Management 3

**Biology Education**

**Prerequisites (16 credit hours):**

BSC 2010 Biology I* 3
BSC 2010L Biology I Lab* 1
BSC 2011 Biology II* 3
BSC 2011L Biology II Lab* 1
CHM 2045, 2045L General Chemistry I and Lab*

and

CHM 2046, 2046L General Chemistry II and Lab 8

or

PHY 2048, 2048L General Physics I and Lab (with Calculus)

**206 COLLEGE OF EDUCATION**

*UNIVERSITY OF SOUTH FLORIDA - 2009/2010 UNDERGRADUATE CATALOG*

and

PHY 2049, 2049L General Physics II and Lab* (with Calculus)

or

PHY 2053, 2053L General Physics and Lab*
and
PHY 2054, 2054L General Physics and Lab
*May be part of General Education Requirements
Specialization (40 credit hours):
Human Anatomy Physiology Course 3
PCB 3063 General Genetics 3
PCB 3023, 3023L Cell Biology and Lab 4
PCB 3043, 3043L Principles of Ecology and Lab 4
PCB 4674 Organic Evolution 3
MCB 3030C Introduction to Microbiology 4
BSC 4057 Environmental Issues (Exit) 3
SCE 4320 Teaching Methods in Middle Grades Science 3
SCE 4330 Teaching Methods in Secondary School Science 3
SCE 4305 Communication Skills in the Science Classroom 3
SCE 4236 Science, Technology, Society Interaction 3
Additional Requirements
MAC 2281 Engineering Calculus I 4
or
MAC 2311 Calculus I 4
# College of Education

**REVIEW FORM D**

**RECOMMENDED COURSE SEQUENCE FOR FULL TIME STUDENTS**

DEPARTMENT: *Secondary Education*  
PROGRAM TITLE: *Science Education-Biology*  
DEGREE LEVEL: *Bachelor's*

## FULL-TIME

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Term</th>
<th>Spring Term</th>
<th>Summer Term</th>
</tr>
</thead>
</table>
| I    | ENC 1101 English Composition I (3)  
Social Science (3)  
Quantitative Methods (3)  
Historical Perspectives (3)  
Fine Arts (3) | ENC1102 English Composition II (3)  
Social Science (3)  
MAC 2311 Calculus I (4)  
EME 2040 Introduction to Technology (3) | EDF 3604 Social Foundations of Education (3)  
EEX 4070 Integrating Exceptional Students into Reg. Classrooms (2) |
| II   | EDF 2005 Introduction to Education (3)  
BSC 2010 General Biology I w/lab (4)  
Historical Perspectives (3)  
ALAMEA (3) | EDG 2701 Diverse Populations (3)  
BSC 2011 General Biology II w/lab (4)  
CHM 2045 General Chemistry I w/lab (4)  
BSC 2093C Human Anatomy and Physiology (4) | |
| III  | PCB 3063 General Genetics (3)  
EDF 3214 Human Development and Learning (3)  
EDF 4430 Measurement for Teachers (3)  
SCE 4305 Communication Skills in the Science Classroom (3)  
Elective (recommend BOT, BSC, PCB, SCE) (3 or 4) | SCE 4330 Teaching Methods in the Secondary School Sciences (3)  
PCB 3043, 3043L Principles of Ecology w/lab (4)  
CHM 2046 General Chemistry II w/lab (4)  
TSL 4324 ESOL Comps and Strategies (3) | ESE 4322 Classroom Management (3) |
| IV   | SCE 4320 Teaching Methods in Middle Grade Science (3)  
BSC 4057 Environmental Issues (3)  
PCB 3023 Cell Biology w/lab (4)  
SCE 4863 Science, Technology, Society Interaction (4) | SCE 4936 Senior Seminar in SSE (2)  
SCE 4940 Student Teaching (10 or 11 depending on elective hours) | TOTAL 120 SH |