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 - Physics

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
DATE 2-1-11

Dr. Rick Austin - UPC
Committee Chair
SIGNATURE
DATE

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

Dr. Michael Stewart, Undergrad
Associate Dean
SIGNATURE
DATE

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

DEPARTMENT  Secondary Education

COLLEGE  EDUCATION

BUDGET ACCOUNT NUMBER  172400 Secondary Education

FACULTY CONTACT PERSON  Dr. Dana Zeidler

FACULTY CONTACT PHONE  813-974-3533

FACULTY CONTACT E-MAIL  zeidler@usf.edu

2. MINOR/CERTIFICATE/TRACK/CONCENTRATION

TYPE  Change Existing Program

TOTAL CREDIT HOURS  120

RECOMMENDED EFFECTIVE DATE  Fall 2011

TITLE

B.S. Physics Education

Reduction of program hours for Science Education- Physics 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 (Physics)

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 – Physics. Rather than continuing to require PHY 4031 Great Themes in Physics, PHZ 4151 C Computational Physics, and PHY 4324 Electricity and Magnetism II in the College of Arts and Sciences, we recommend that students instead have two hours added to their internship, SCE 4940, (variable 10-12 hours) or one hour added to SCE 4936 Senior Seminar (variable 1-3 hours) and one hour added to their internship, SCE 4940, (variable 10-12 hours).

This change would not affect any of the accomplished practices for the science education (chemistry) 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 ESL Competencies and Strategies 3
SCE 4836 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

Chemistry Education
Prerequisites (16 credit hours):
   CHM 2045 General Chemistry I* 3
   CHM 2045L General Chemistry Lab* 1
   CHM 2046 General Chemistry II* 3
   CHM 2046L General Chemistry II Lab* 1
   BSC 2010, 2010L Biology I and Lab*
   and
   BSC 2011, 2011L Biology II and Lab* 8
   or
   PHY 2048, 2048L Physics I and Lab* (with Calculus)
   and
   PHY 2049, 2049L Physics II and Lab* (with Calculus)
   or
   PHY 2053, 2053L Physics and Lab*
   and
   PHY 2054, 2054L Physics and Lab*
*May be part of General Education Requirements
Specialization (37 credit hours):
   CHM 2210, 2210L Organic Chemistry I and Lab 5
   CHM 3120C Elementary Analytical Chemistry 3
   CHM 3400 Elementary Physical Chemistry I 3
   CHM 3610, 3610L Intermediate Inorganic Chemistry and Lab 4
   CHM 4070 Historical Perspectives in Chemistry 3
   BCH 3023 Introductory Biochemistry 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
   MAC 2281 Engineering Calculus I 4
   or
   MAC 2311 Calculus I

COLLEGE OF EDUCATION 207
UNIVERSITY OF SOUTH FLORIDA - 2009/2010 UNDERGRADUATE CATALOG

Physics Education
Prerequisites (16 credit hours):
   BSC 2010, 2010L Biology I and Lab*
   and
   BSC 2011, 2011L Biology II and Lab* 8
   or
   CHM 2045, 2045L General Chemistry I and Lab*
   and
   CHM 2046, 2046L Chemistry II and Lab* 8
PHY 2048, 2048L General Physics I and Lab* (with Calculus) 
and
PHY 2049, 2049L General Physics II and Lab* (with Calculus)
or
PHY 2053, 2053L General Physics I and Lab*
and
PHY 2054, 2054L General Physics II and Lab*
Specialization (39 credit hours):
PHY 2020 Conceptual Physics 3
PHY 3101 Modern Physics 3
PHY 3221 Mechanics I 3
PHY 3323C Electricity and Magnetism 3
PHY-4031 Great Themes in Physics 3
Physics Electives (Select from PHY3 to PHY5, PHZ3 to PHZ5)
Computer Applications in Physics 3
SCE 4320 Teaching Methods in Middle Grade 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
MAC 2311 Calculus I 4
MAC 2312 Calculus II 4
MAC 2313 Calculus III 4
<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Term</th>
<th>Spring Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BSC 2010 General Biology I with CHM 2045</td>
<td>ENG 1101 Composition I (3)</td>
</tr>
<tr>
<td></td>
<td>The Arts (3)</td>
<td>English Composition (3)</td>
</tr>
<tr>
<td></td>
<td>General Chemistry I with Lab (4)</td>
<td>ENG 1102 Composition II (3)</td>
</tr>
<tr>
<td>2</td>
<td>EDF 3211 Calculus I (4)</td>
<td>SOC 2511 Social Science (3)</td>
</tr>
<tr>
<td></td>
<td>EDF 3010 Introduction to Education and Field</td>
<td>HIST 1110 History of Education (3)</td>
</tr>
<tr>
<td></td>
<td>EDF 3335 General Physics with Lab (4)</td>
<td>MAC 2112 Calculus II (4)</td>
</tr>
<tr>
<td></td>
<td>MAC 2110 Calculus I (4)</td>
<td>PHY 2025 General Physics I (4)</td>
</tr>
<tr>
<td>3</td>
<td>EDF 4400 Assessment for Teachers (3)</td>
<td>SED 4322 Classroom Management (3)</td>
</tr>
<tr>
<td></td>
<td>SED 4324 Special Education (3)</td>
<td>HIST 1110 History of Education (3)</td>
</tr>
<tr>
<td></td>
<td>SED 4330 Teaching Methods in Secondary</td>
<td>SCI 3430 Teaching Methods in the Secondary</td>
</tr>
<tr>
<td></td>
<td>PHY 3335 Electricity &amp; Magnetism I (4)</td>
<td>SCI 4380 Science, Technology, Society, &amp; Ethics (4)</td>
</tr>
<tr>
<td></td>
<td>PHY 3322 Mechanics I (4)</td>
<td>SCI 3490 Communication Skills in the Science</td>
</tr>
<tr>
<td></td>
<td>SCI 4320 Teaching Methods in Middle School</td>
<td>SCI 4360 Science, Technology, Society, &amp; Ethics (4)</td>
</tr>
<tr>
<td></td>
<td>SCF 4403 Science Education (3)</td>
<td>SCI 4360 Science, Technology, Society, &amp; Ethics (4)</td>
</tr>
</tbody>
</table>

TOTAL 120 SH