## NEW COURSE PROPOSAL FORM

**TO:** STUDENT ASSESSMENT COMMITTEE

**ACADEMIC AREA:** SCHOOL OF EDUCATION

**PROPOSEd by**: William Dwyer

**PRESENTER:** TYPE IN NAME OF WHO WILL PRESENT THIS PROPOSAL IF DIFFERENT FROM ABOVE

**DATE:** 11/2/2010

**COURSE PREFIX, NUMBER AND TITLE:**

### SCE 3362C – METHODS IN TEACHING HIGH SCHOOL SCIENCE WITH PRACTICUM – 4 CREDITS

### SECTION I

**COURSE INFORMATION: TYPE iN THE APPROPRIATE INFORMATION FOR EACH ITEM:**

**DEPARTMENT: School of Education**

**COURSE PREREQUISITE(S):** Admission into the Bachelor of Science in Education program or special permission from the Associate Dean of the School of Education.

EDG 4004 Special Topics in Education, EDG 3410 Classroom Management, EDM 3230 Middle Grades Curriculum and Instruction

**MINIMUM GRADE OF prereqUISITE(s):** 2.5

**COURSE COREQUISITE(S):** LIST ALL COREQUISITES IN SEQUENTIAL ORDER

**COURSE CREDITS OR CLOCK HOURS:** 4

**credit type: COLLEGE CREDIT (TRANSFERABLE)**

**CONTACT HOURS:** 3

**COURSE DESCRIPTION:**

This course is designed to: 1) enlarge and expand the instructional theories, ideas, and strategies for teaching secondary school sciences; and 2) help the student gain knowledge and skills necessary to become an effective teacher and leader in the area of secondary school biology and the other secondary school sciences. The activities in this course will: a) develop the theoretical basis for science instruction intended for secondary school students; b) illustrate and apply models for instruction in science courses involving laboratory and field activities and technology in the process of enhancing students’ understanding of science; and c) provide practical experience in planning, implementing, assessing and evaluating science instruction. This course addresses specific Next Generation Sunshine State Standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification.

**GENERAL TOPIC OUTLINE:**

* Major concepts as identified by the Grade 9-12 Next Generation Standards for Science that include the following bodies of knowledge:

|  |  |  |
| --- | --- | --- |
| The Nature of Science | * The Practice of Science
* The Characteristics of Scientific Knowledge
* The Role of Theories, Laws, Hypotheses, and Models
* Science and Society
 | * The Practice of Science
* The Characteristics of Scientific Knowledge
* The Role of Theories, Laws, Hypotheses, and Models
* Science and Society
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| Life Science | * Organization and Development of Living Organisms
* Diversity and Evolution of Living
* Heredity and Reproduction
* Interdependence
* Matter and Energy Transformations
 | * Earth in Space and Time
* Earth Structures
* Earth Systems and Patterns
* Properties of Matter
* Changes in Matter
* Forms of Energy
* Energy Transfer and Transformations
* Motion of Objects
* Forces and Changes in Motion
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* Current issues and trends in science education, including research that impacts the secondary school science curriculum (e.g. TIMSS report; NAEP results; Science FCAT; ethical science research; content area literacy, effective learning environments, technology and electronic resources, etc.)
* Effective research-based assessment procedures and their application in teaching secondary school science
* Problem-solving and critical thinking processes; communication and instructional strategies; technology concepts, and their application in the teaching of secondary school science

**LEARNING OUTCOMES:**

TYPE IN ALL OF THE LEARNING OUTCOMES, ASSESSMENTS AND GEN ED COMPETENCIES AS THEY SHOULD BE DISPLAYED IN THE SYLLABUS

|  |  |  |
| --- | --- | --- |
| LEARNING OUTCOMES | ASSESSMENTS | GENERAL EDUCATION COMPETENCIES |
| The teacher candidate will evaluate current issues and trends in science education, including research that impacts the secondary school science curriculum. | Science UnitReflective Journal | CT |
| Teacher candidates will create appropriate learning opportunities for students in a program of ongoing professional development. |  |  |
| The teacher candidate will construct a secondary school science curriculum that accommodates appropriate bodies of knowledge identified in the Grade 9-12 Next Generation Standards for Life Science, Physical Science, Earth & Space Science, and the Nature of Science. | Science UnitReflective Journal | CT |
| The teacher candidate will create and implement effective, research-based assessment procedures for teaching secondary school science. | Science UnitClassroom Teaching | COM |
| The teacher candidate will integrate the following learning opportunities in the secondary school science curriculum: problem-solving and critical thinking processes; communication and instructional strategies; and technology concepts and their application. | Science UnitReflective Journal | CT |
| The teacher candidate will analyze data from a variety of sources to determine the specific instructional needs of students, including cognitive, social, cultural, linguistic, emotional, developmental, and physical needs.  | Science UnitClassroom Teaching | CT |
| The teacher candidate will evaluate current issues and trends in science education, including research that impacts the secondary school science curriculum. | Science UnitReflective Journal | CT |

### SECTION II

**ICS CODE FOR THIS COURSE:** ADVANCED AND PROFESSIONAL - 1.14.08 - EDUCATION

**IF YOU INTEND TO RESTRICT STUDENT REGISTRATION BASED ON THE STUDENTS’ MAJOR(S), ENTER ALL APPLICABLE MAJOR RESTRICTION CODE(S):** SEDB

**GRADE MODE:** STANDARD GRADING

**IS THIS A GENERAL EDUCATION COURSE?** YES

**IS THIS A WRITING INTENSIVE COURSE?** NO

**iS THIS AN HONORS COURSE?** NO

**IS THIS A REPEATABLE COURSE?** NO

**IF SO, WHAT IS THE MAXIMUM NUMBER OF CREDITS A STUDENT CAN EARN FOR THIS COURSE?** ENTER NUMBER

**DO YOU EXPECT TO OFFER THIS COURSE THREE TIMES OR LESS?** NO

**WILL THIS NEW COURSE HAVE AN IMPACT ON OTHER COURSES, PROGRAMS OR DEPARTMENTS?** NO

**eXPLAIN:**

CLICK HERE TO ENTER TEXT.

**IF YES, HAVE YOU DISCUSSED THIS PROPOSAL WITH ANYONE (FROM OTHER DEPARTMENTS AND/OR PROGRAMS) REGARDING THE IMPACT? WERE ANY AGREEMENTS REACHED?**

CLICK HERE TO ENTER TEXT.

**DO YOU ANTICIPATE THAT STUDENTS WILL BE TAKING ANY OF THE PREREQUISITES LISTED FOR THIS COURSE IN DIFFERENT PARTS OF THE SAME TERM?** NO

**IS ANY COREQUISITE LISTED ON THIS COURSE ALSO LISTED AS A COREQUISITE ON ITS PAIRED COURSE?** SELECT ANSWER.

eXAMPLE: CHM 2032 IS A COREQUISITE FOR CHM 2032L AND CHM 2032L IS A COREQUISITE FOR CHM 2032.

### SECTION III

**PROVIDE JUSTIFICATION FOR CURRICULUM ACTION (OTHER EXPLANATORY INFORMATION):**

CLICK HERE TO ENTER TEXT.

**NOTE:**

CHANGES FOR THE UPCOMING FALL TERM MUST BE SUBMITTED AND APPROVED NO LATER THAN THE FEBRUARY CURRICULUM COMMITTEE MEETING PRIOR TO THE START OF THE NEXT ACADEMIC YEAR. CHANGES DURING MID-SCHOOL YEAR ARE NOT ALLOWED. EXTREME CIRCUMSTANCES WILL REQUIRE APPROVAL FROM THE VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS TO BEGIN IN THE SPRING TERM. THE PROPOSED CHANGES MUST BE PRESENTED AND APPROVED BY THE SEPTEMBER CURRICULUM COMMITTEE PRIOR TO THE SPRING SEMESTER.

**EXCEPTION:**
COURSES PUBLISHED IN THE 2010-2011 CATALOG THAT ARE PENDING CURRICULUM APPROVAL WILL BE EFFECTIVE SPRING 2011.

**TERM IN WHICH PROPOSED ACTION WILL TAKE PLACE:** SELECT EFFECTIVE TERM TYPE OTHER

 VPASA SIGNATURE (IF NECESSARY) TO APPROVE CURRICULUM ACTION MID-YEAR:

 APPROVED EFFECTIVE TERM

**FACULTY ENDORSEMENTS:**PLEASE SEPARATE FACULTY MEMBERS WITH A COMMA (,)



**DEPARTMENT CHAIR / PROGRAM COORDINATOR ENDORSEMENT:**

 PLEASE SELECT TODAY’S DATE.

**ASSOCIATE / ACADEMIC DEAN ENDORSEMENT:**

 PLEASE SELECT TODAY’S DATE.

**STUDENT ASSESSMENT COMMITTEE CHAIR ENDORSMENT:**

 PLEASE SELECT TODAY’S DATE.

**DISTRICT DEAN OF INSTRUCTION ENDORSEMENT:**

 PLEASE SELECT TODAY’S DATE.

AFTER REVIEWING AND SIGNING THIS PROPOSAL, THE DISTRICT DEAN WILL RETURN THE PROPOSAL TO THE DEPARTMENT CHAIR OR PROGRAM COORDINATOR WILL SUBMIT THE PROPOSAL TO THE VPASA OFFICE.

THE DEPARTMENT CHAIR/PROGRAM COORDINATOR WILL SEND THIS PROPOSAL ALONG WITH ANY OTHER PROPOSALS FROM HIS/HER DEPARTMENT BEING SUBMITTED FOR REVIEW BY THE CURRICULUM COMMITTEE TO THE STUDENT ASSESSMENT COMMITTEE FOR REVIEW. ONCE APPROVED BY THE STUDENT ASSESSMENT COMMITTEE, SUBMIT THE PROPOSAL(S) TO THE OFFICE OF THE VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS AT LEAST TWO FRIDAYS PRIOR TO THE NEXT SCHEDULED CURRICULUM COMMITTEE MEETING.

FOR MORE DETAILS, PLEASE REFER TO THE CURRICULUM COMMITTEE GUIDELINES, CURRICULUM PROCESS FLOW CHART AND THE CRITICAL DATES TABLE BY CLICKING CURRICULUM COMIITTEE ON THE FACULTY/STAFF LINK FROM THE EDISON HOMEPAGE (CLICK ON THE CURRICULUM PROCESS LINK).

REVISED: 8/25/10