CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

NEW COURSE PROPOSAL

PROGRAM: MULTIPLE SUBJECT TEACHER CREDENTIAL PROGRAM

1. Catalog Description of the Course. [Include the course prefix, number, full title, and units. Provide a course narrative including prerequisites and corequisites. If any of the following apply, include in the description: Repeatability (May be repeated to a maximum of ___ units); time distribution (Lecture ___ hours, laboratory ___ hours); non-traditional grading system (Graded CR/NC, ABC/NC). Follow accepted catalog format.]

EDMS 529: SCIENCE, HEALTH AND PHYSICAL EDUCATION (4)
Four hours lecture/discussion per week
Prerequisite: Admission to the Multiple Subject Credential Program.
Study of the application of recommended methods for teaching physical, life and earth science, health and physical education to students (K-8) based on research and theory. Students reflect upon their personal development and abilities to integrate theory and practice in science, health and physical education with other subject areas. Needs of English Language Learners and exceptional children, technology for teaching and learning are integrated.

2. Mode of Instruction.

<table>
<thead>
<tr>
<th>Units</th>
<th>Hours per Unit</th>
<th>Benchmark Enrollment</th>
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</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>4</td>
<td>1</td>
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<tr>
<td>Seminar</td>
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<tr>
<td>Laboratory</td>
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<tr>
<td>Activity</td>
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3. Justification and Learning Objectives for the Course. (Indicate whether required or elective, and whether it meets University Writing, and/or Language requirements)

Required Course for the MULTIPLE SUBJECT TEACHER CREDENTIAL PROGRAM.
Course objectives:

1. The candidate will be able to write appropriate goals and measurable objectives for science, health and physical education lessons and units.
2. The candidate will be able to demonstrate various teaching strategies.
3. The candidate will be able to use improved questioning strategies in their science, health and physical education teachings.
4. The candidate will be able to use directed reading lessons in their science, health and physical education instruction.
5. The candidate will be able to create and use a variety of assessment strategies in their lessons.
6. The candidate will be able to create an authentic unit assessment.
7. The candidate will be able to discuss a variety of issues with respect to students’ previous and naïve knowledge and learning, assess the previous knowledge and naïve knowledge of students, and develop lessons that help students exchange naïve knowledge for more sophisticated knowledge of science, health and science education.
8. The candidate will be able to describe the influence of modern learning theories on science, health and physical education and utilize these theories in various aspects of the curriculum unit.
9. The candidate will be able to create concept maps for science, health and physical education content and concepts.
10. The candidate will be able to organize science content in a way to facilitate meaningful learning.
11. The candidate will be able to describe the instructional accommodations made for diverse learners (English Learners and special needs candidates included) in science, health and physical education.
12. The candidate will be able to infuse technology into their science, health and physical education teaching.
13. The candidate will be able to formulate and explain a personal definition of science describing the nature of science with respect to its products, processes, assumptions and values, and describe the implications

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of this definition within the context of the goals and objectives of American science education and
develop a personal philosophy of science education.
14. The candidate will be able to describe the nature of inquiry, discuss the relative merits of inquiry,
distinguish between inquiry and non-inquiry activities, evaluate inquiry materials and write inquiry labs.
15. The candidate will be able to explain how to teach children to promote lifelong health of themselves and
others.
16. The candidate will be able to describe how the growth and development of children affect their learning.
17. The candidate will be able to explain how to teach children to promote lifelong health of themselves and
others.
18. The candidate will be able to describe and utilize a variety of methods to develop motor skills and
abilities in children.
19. The candidate will be able to create lessons that develop candidate recognition of the importance of
lifelong health of themselves and others.
20. The candidate will be able to create and teach lessons that develop candidate knowledge and skills of
human movement.
21. The candidate will be able to create and teach lessons that develop candidate knowledge and skills of the
rules and strategies of games and sports.
22. The candidate will be able to incorporate activities into lessons that develop candidate self-worth and
confidence in relation to physical education and recreation.

4. **Is this a General Education Course**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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</thead>
<tbody>
<tr>
<td>A (English Language, Communication, Critical Thinking)</td>
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</tr>
<tr>
<td>B (Mathematics &amp; Sciences)</td>
<td></td>
</tr>
<tr>
<td>C (Fine Arts, Literature, Languages &amp; Cultures)</td>
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<tr>
<td>D (Social Perspectives)</td>
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<tr>
<td>E (Human Psychological and Physiological Perspectives)</td>
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5. **Course Content in Outline Form.** [Be as brief as possible, but use as much space as necessary]

   EDMS 529 covers the following topics:

   - Nature of science
   - Multicultural science education diversity (English Language Learner and Special Needs)
   - Content knowledge in science, health and physical education
   - Concept mapping & the California frameworks
   - Science education standards: Goals and objectives in teaching science and health
   - Process skills in science & health teaching
   - Inquiry and exploration in teaching science and health
   - The learning cycle
   - Learning theorists and previous knowledge
   - Motor skills and abilities
   - Human movement
   - Physical education games and sports
   - Physical education healthy lifestyles, confidence, self-esteem
   - Unit planning in science scope and sequence
   - Authenitic science assessment and student learning
   - Hypotheses generating and experiment design
   - Teaching for conceptual understanding
   - Technology in science teaching

6. **References.** [Provide 3 - 5 references on which this course is based and/or support it.]


7. **List Faculty Qualified to Teach This Course.**  
   Robert Bleicher, Jeanne Grier

8. **Frequency.**  
   a. Projected semesters to be offered: Fall __X__ Spring __X__ Summer __X__

9. **New Resources Required.**  
   None

10. **Consultation.**  
    Attach consultation sheet from all program areas, Library, and others (if necessary)

11. **If this new course will alter any degree, credential, certificate, or minor in your program, attach a program modification.**  
    N/A

Robert Bleicher & Jeanne Grier  
Proposers of Course  
Date 18 December, 2002