

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.

	Units	Hours per Unit	Benchmark Enrollment
Lecture	4	1	20
Seminar			
Laboratory			
Activity			

- 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

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 **YES** **NO**

If Yes, indicate GE category:

A (English Language, Communication, Critical Thinking)	
B (Mathematics & Sciences)	
C (Fine Arts, Literature, Languages & Cultures)	
D (Social Perspectives)	
E (Human Psychological and Physiological Perspectives)	

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
 Authentic 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.]*

California Commission on Teacher Credentialing. (2001). *Standards of Quality and Effectiveness for Professional Teacher Preparation Programs*. California Commission on Teacher Credentialing.

National Research Council. (1996). *The National Science Education Standards*. Washington DC: National Academy Press.

National Research Council. (2000). *Inquiry and The National Science Education Standards*. Washington DC: National Academy Press.

7. List Faculty Qualified to Teach This Course.

Robert Bleicher, Jeanne Grier

8. Frequency.

a. Projected semesters to be offered: Fall ☒ Spring ☒ Summer ☒

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

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