



SACRAMENTO
STATE

Course Change Proposal Form A



Academic Group (College): Natural Sciences and Mathematics	Academic Organization (Department): Physics and Astronomy	Date: Nov 03, 2008
Type of Course Proposal: New <input checked="" type="checkbox"/> Change <input type="checkbox"/> Deletion <input type="checkbox"/>	Department Chair: Gary H. Shoemaker	Submitted by: Vera Margoniner
Does this course fulfill a requirement for single-subject or multiple subject credential students? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	For Catalog Copy: Yes <input type="checkbox"/> No <input type="checkbox"/> CCE (Extension): Yes <input type="checkbox"/> No <input type="checkbox"/>	Semester Effective: Fall <input checked="" type="checkbox"/> Spring <input type="checkbox"/> , 2009_

This course replaces experimental course Subject Area (prefix) and Catalog Nbr (course number):	
If changing an existing course, should new version be considered a repeat of the original version? If so, the same Course ID will be maintained. If not, a new Course ID will be assigned. Note: In PeopleSoft terminology, the Course ID is the unique system identifier, not the Catalog Nbr.	Yes <input type="checkbox"/> No <input type="checkbox"/>

Change from:

Subject Area (prefix) & Catalog Nbr (course no.):	Title:	Units:

Change to:

Subject Area (prefix) & Catalog Nbr (course no.): PHYS 195	Title: Teaching Internship	Units: 1.0 – 2.0
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JUSTIFICATION:

This course is being developed as part of the new *Teacher Preparation Concentration* program, and will be part of six units of upper division electives required for this concentration.

An important challenge for students who want to become physics teachers is the process of certification, or credentialing by the State of California. The single subject credentialing in physics requires that candidates pass three subtests of the California Subject Examination for Teachers (CSET): two in general science and one in physics. Following this academic course work and exams, candidates must then complete a teacher education-credentialing program. The process can add up to one and a half years to the education of physics majors who wish to become teachers in California's schools.

Because of the time commitment required of students seeking a teaching credential, it is important for students to have the opportunity to gain professional experience early in their matriculation toward the BA degree to confirm the appropriateness of their career choice. In addition, professional experiences reinforce the knowledge that students acquire in university classrooms and help them integrate their knowledge in much the same way as in a "capstone" course. An important component of the *Teacher Preparation Concentration* program is therefore a set of teaching-related activities which, subject to the approval of the department, may be started as early as the third year of study and continued thereafter anytime during matriculation toward the degree.

The proposed course will give the student the opportunity, under close supervision of a faculty mentor, to tutor students in an assigned college lower-division course or in a high-school physics classroom. The student will gain experience in the duties and skills required for the effective teaching of physics, including class, homework and assessment preparation, grading and evaluation. The number of units assigned will depend upon the duties agreed upon by the student and mentor in accordance with the standards for equating unit credit with anticipated number of hours worked.

NEW COURSE DESCRIPTION: (Not to exceed 80 words, and language should conform to catalog copy. See <http://www.csus.edu/umaqual/acad.htm> - Guidelines for Catalog Course Description

PHYS 195. Teaching Internship. Supervised teaching internship for a high-school physics class, or for one of the following courses: PHYS002, 005A-B, 010, 011A-B-C, 107, or ASTR004. The student will meet weekly with the faculty teaching this class, and with their supervisor/mentor to help prepare and teach the class. **Prerequisites:** Completion of all math and physics lower division courses required for the B.A. in Physics. Approval from the *Teacher Preparation Concentration* Coordinator. **Graded:** Graded Student. **Units:** 1.0-2.0.

Note:

Prerequisite: Completion of all math and physics lower division course work required for the B.A. in Physics. Approval from the Concentration Program Coordinator.

Enforced at Registration: Yes ___ No

Corequisite:

Enforced at Registration: Yes ___ No

Graded: Letter Credit/No Credit ___ **Instructor Approval Required?** Yes No ___

Course Classification (e.g., lecture, lab, seminar, discussion): S2(S36)	Title for CMS (not more than 30 characters) Teaching Internship
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Cross Listed? Yes ___ No <input checked="" type="checkbox"/>	If yes, do they meet together and fulfill the same requirement, and what is the other course.
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How Many Times Can This Course be Taken for Credit? 2

Can the course be taken for Credit more than once during the same term? Yes ___ No

FOR NEW COURSE PROPOSALS OR SUBSTANTIVE CHANGES ONLY:

Description of the Expected Learning Outcomes: Describe outcomes using the following format: "Students will be able to: 1), 2), etc." See the example at <http://www.csus.edu/acaf/example.htm>

Students will be able to:

- 1) Prepare and present instruction and assignments of physics related subjects for small group instruction settings..
- 2) Evaluate instruction and assignments and judge them for content and accuracy.
- 3) Suggest improvements and discuss revisions of instruction and assignments with mentor.
- 4) Reflect on his/her effectiveness in engaging diverse learners and developing rapport with diverse students
- 5) Tutor students in a real-time classroom situation, and assist them with problem-solving strategies.
- 6) Develop a sense for the right amount of assistance to be given to students working in problems.
- 7) Help their lower division or high-school students work effectively in groups.
- 8) Integrate their previous knowledge of physics in a teaching context.
- 9) Use sound pedagogy and in the teaching of physics in the classroom and in all other instructional interactions with students. (Principles of pedagogy will be reviewed and discussed with the student by the mentor.)
- 10) Assess student learning, and measure teaching effectiveness.
- 11) Organize and manage classroom records and materials.

**Attach a list of the required/recommended course readings and activities [Note: it is understood that these are updated and modified as needed by the instructor(s).] This attachment should be forwarded only to your Dean's office, not Academic Affairs.

Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above:

The faculty teaching this class will meet with the student for:

- One to two hours per week to review the student's notebook (see below).
- One hour per week during instruction.

The mentor/supervisor will meet with the student for:

- One to two hours per week to discuss the upcoming week of instruction.
- Two to six hours per week during instruction.
- One hour at the end of the week to discuss: overall effectiveness of instruction; engagement of the students with any materials used in class (activity-sheets, hands-on activities, demonstrations); interaction among peers and between students and instructors; homework and other work submitted by students in the course. (The teaching assistant will generally be responsible for grading some fraction of student work subject to close review by the faculty mentor.)

The final letter grade will be based on two components. The first component of assessment will be a well-written notebook where the student will be required to: (1) keep a thorough description of each class; (2) keep record of his/her weekly discussions with mentor; and (3) write a critical review of each week of classes. The notebook will be reviewed on weekly meetings with the faculty teaching the course. The notebook grade will be 50% of the final grade.

The second component of assessment will account for the remaining 50% of the grade and will be based on observations of the student in class. Near the middle of the semester the faculty teaching this course and a second independent faculty member will observe the student helping their lower-division or high-school students. Each faculty member will independently evaluate the student's performance in class by answering to pre-established questions such as: *Does the student-teacher engage with the diverse population of students or just with a few? Does he/she move around in class? Does he/she promote interaction? Does he/she have the ability of sensing the right amount of help to give to students working on a problem? Can he/she come up with different ways of explaining a concept or providing assistance on a problem? Is he/she prepared and organized?*

The two faculty members will then meet with the student, review the evaluation and suggest areas for improvement. A written recommendation will be made to the student.

Near the end of the semester the same evaluation will be repeated. Both faculty members and the mentor will discuss the student's performance in class and assess the improvement from the first evaluation. The grade will be given by the faculty teaching the class and will be based only on this second teaching evaluation.

Grades will be assigned according to standard percentages (90-100%=A; 80-90%=B...). This course is not available for audit.

For whom is this course being developed?

Majors in the Dept Majors of other Depts ___ Minors in the Dept ___ General Education ___ Other ___

Is this course required in a degree program (major, minor, graduate degree, certificate)? Yes ___ No

If yes, identify program(s):

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer facilities, faculty, etc.)? Yes ___ No

If yes, attach a description of resources needed and verify that resources are available.


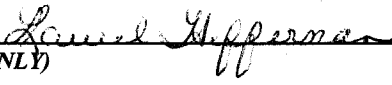
Indicate which department or programs will be affected by the proposed course (if any). _____ None _____

The Department Chair's signature below indicates that affected programs have been sent a copy of this proposal form.

Approvals: If proposed change, new course or deletion is approved, sign and date below. If not approved, forward without signing to the next reviewing authority, and attach an explanatory memorandum to the original copy.

Signatures:

Date

Signatures:	Date
Department Chair: 	11/3/08
College Dean or Associate Dean: 	12/9/08
CPSP (for school personnel courses ONLY)	
Associate Vice President and Dean for Academic Programs	

Distribution: Academic Affairs (original), Department Chair and College Dean. Dean's office to send original after approval to Academic Affairs, at mail zip 6016. An electronic copy must also be sent.

9/10/2008