



SACRAMENTO
STATE

Course Change Proposal Form A



Academic Group (College): NSM	Academic Organization (Department): Biological Sciences	Date: November 27, 2006
Type of Course Proposal: New ___ Change <u>X</u> Deletion ___	Department Chair: Nicholas Ewing	Submitted by: Dept Bio Sci
Does this course fulfill a requirement for single-subject or multiple subject credential students? Yes ___ No <u>X</u>	For Catalog Copy: Yes <u>X</u> No ___ CCE: Yes ___ No <u>X</u>	Semester Effective: Fall ___ Spring <u>X</u> , 20 <u>08</u>

This course replaces experimental course Subject Area (prefix) and Catalog Number (course number):	
This Catalog Number (course number) is being replaced:	

Change from:

Subject Area (prefix) & Catalog No. (course no.): BIO 220	Title: Research Methods in Biological Sciences	Units: 3
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Change to:

Subject Area (prefix) & Catalog No. (course no.): BIO 220	Title: Introduction to Scientific Inquiry	Units: 2
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JUSTIFICATION:

The graduate methods course (BIO 220) currently addresses two major skill sets 1) oral and written scientific presentation skills focused primarily on the advancement to candidacy and 2) hands-on scientific methodology. In the past, this class has been used mainly for students preparing to deliver their advancement seminar and written proposal. After assessing our programmatic needs, the department envisions the current course being split up into two courses. The first course is to remain as BIO 220, and will be the inaugural course for incoming graduate students. BIO 220 will focus on the development of analytical and scientific presentation skills essential for the success of graduate students in the biological sciences. The second course in the series has been separately proposed as BIO 221 A/B which will be devoted to methods and techniques.

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

Graduate level introduction to scientific inquiry in the biological sciences. Students learn to apply the scientific method, critically evaluate the scientific literature, initiate their graduate project, and develop written and oral scientific presentation skills. Lecture two hours; 2 units.

Note:	
Prerequisite: none	
Corequisite: none	
CAN (California Articulation Number):	
Graded: Letter <u>X</u> Credit/No Credit ___	Instructor Approval Required? Yes ___ No <u>X</u>
Course Classification (e.g., lecture, lab, seminar, discussion): Lecture-C2	Title for SIS+/CMS (not more than 30 characters) Intro to Scientific Inquiry
Cross Listed? Yes ___ No <u>X</u>	If yes, do they meet together and fulfill the same requirement, and what is the other course.
How Many Times Can This Course be Taken for Credit? <u>Once</u>	
Can the course be taken for Credit more than once during the same term? Yes ___ No <u>X</u>	

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 develop a well-designed biological investigation.
 Students will understand and be able to articulate the various skills and attributes that are necessary to be a successful biologist.
 Students will be able to effectively search and evaluate the biology literature.
 Students will demonstrate the ability to deliver an effective scientific presentation in both oral and written forms.

**** 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:

Assignments (library searches, annotated bibliography), two oral presentations, and written project proposal

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): Master of Science

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

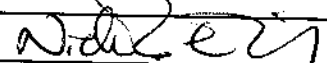
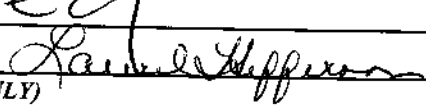
If yes, attach a description of resources needed and verify that resources are available.

Indicate which department or programs will be affected by the proposed course (if any). _____

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
Department Chair: 	3/26/07
College Dean or Associate Dean: 	4/17/07
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.