Note: The material in this PDP is entirely fictional. It is just used to illustrate what kinds of information might be included in the PDP.

Professional Development Plan 2007-2009
for
Dr. John Smith, Department of Biological Science

Introduction:

As an integrative biologist, I have been hired to develop, implement and assess the new inquiry-based core curriculum at SJSU. I will pursue new directions in curricular development and establish a collaborative research group of undergraduate students, graduate students, and faculty, investigating teaching pedagogy and student learning. I will collaborate with other faculty in these efforts; I expect to work closely with my counterpart in ecology, Dr. Jones. I will be flexible in responding to the changing needs of curriculum development and assessment. I recognize that the integrative nature of this position leads to a blurring of lines among the teaching, scholarship, and service areas of evaluation for retention promotion and tenure. Ideally, every activity I pursue will contribute to teaching, scholarship, and service, and I will strive to highlight the integrative nature of this position as I proceed through my probationary years at SJSU.

Teaching:

I am a broadly trained organismal biologist with expertise in GIS database development and my teaching responsibilities will include a combination of major core, major elective, non-major, and graduate courses as needed by the Department of Biological Science. I currently serve on two teaching collaborative committees that are developing the Evolution and Biodiversity core course and Physiological Ecology core course. I expect that I will teach each of these core courses as they are implemented. I may also teach upper division majors elective courses in physiology and behavior, as needed by the Department of Biological Science; such courses may include animal behavior, functional morphology, or biomechanics. I also currently serve on five committees that are devoted to curriculum design, assessment, and faculty development.

Spring 2007

- Non-majors course, BIO 092, and a graduate course in teaching effectiveness, BIO 500

Fall 2007/Spring 2008

- Non-majors course, BIO 091 and a beginning Biology course for majors, BIO 101A. I will also be responsible for 3 lab sections of the majors course.
- I will teach the non-majors course, BIO 092 and I will teach a new course in Physiological Ecology (BIO 191).

Fall 2008/Spring 2009

- Non-majors course, BIO 091 and a beginning Biology course for majors, BIO 101A. If my grant application for WWNFF is denied I will also be responsible for 3 lab sections of the majors course.
- I will teach the non-majors course, BIO 092 and I will continue to teach a new course in Physiological Ecology (BIO 191).

I will develop methods to assess how I have met goals of student learning in my courses. I will share assessment methods I identify or develop with the other members of the Departmental Assessment Committee and the Department of Biological Science at large.

I will evaluate any supporting materials I develop through student questionnaires focusing on specific activities and exercises.

Service:
I will strive to identify new, cutting-edge, teaching and mentoring opportunities in Biological Science at SJSU. I will engage students in research projects of both their own and my design. I find that nothing focuses a problem like being confronted with finding ways to address it. Research problems stimulate creativity, cause frustration, and promote learning. My part in mentoring students will be to help students experience the excitement of discovery through original research.

Spring 2007

- I will serve as co-director of the NSF Undergraduate Mentoring in Environmental Biology (UMEB) program, which aims to enhance recruitment, retention, and success of undergraduates in environmental biology. As part of this program I will coordinate and teach a summer field course for UMEB students

Fall 2007/Spring 2008

- I will serve as co-director of the NSF Undergraduate Mentoring in Environmental Biology (UMEB) program, which aims to enhance recruitment, retention, and success of undergraduates in environmental biology. As part of this program I will coordinate and teach a summer field course for UMEB students.
- I plan to mentor 1-2 undergraduate students as research assistants in my laboratory
- I will take over the role of advising undergraduate students in Environmental Biology for the department.
- I will serve as co-director of the NSF Undergraduate Mentoring in Environmental Biology (UMEB) program, which aims to enhance recruitment, retention, and success of undergraduates in environmental biology. As part of this program I will coordinate and teach a summer field course for UMEB students.
- I plan to mentor 2-4 undergraduate students as research assistants in my laboratory
- I plan to advise 3 graduate students seeking an MS in Environmental Biology and become a committee member for no more than 3 graduate students seeking MS or MA degrees.
- I will continue advising undergraduate students in Environmental Biology for the department.

Fall 2008/Spring 2009

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- I will continue advising undergraduate students in Environmental Biology for the department.

Scholarly, Artistic or Professional Achievements:

Spring 2007

- I will pursue professional development in teaching by attending and presenting at professional meetings such as Sigma Xi and the education sessions of the Society for Integrative and Comparative Biology.
- I will continue to analyze data I started before arriving at SJSU. My prior research in teaching and learning has focused on curriculum design, teaching skills training, and student engagement in learning. I plan to develop further these research areas and will pursue a research program focused on two main areas of teaching and learning.
- I will start the process of writing a grant application for funding research in teaching offered through WWNFF. My proposed research on student learning will include, but is not limited to, assessment of content knowledge, critical thinking and problem solving skills, conceptual understanding, analysis of technical skills learned, retention of content knowledge, attitudes toward science, and evaluation of the understanding of the role of science in society. I will measure student learning by developing new and adapting current assessment tools. Assessment tools are likely to include (1) pre and post-tests of content knowledge, (2) tests designed to measure analytical skills, (3) and attitude surveys. I plan to follow a sub-group of students throughout their undergraduate career and after they graduate to measure long-term changes in knowledge retention and attitudes.
- I will get my research lab in a functional state so that I can start my research with GIS database development for identifying potential habitat for endangered species.

Fall 2007/ Spring 2008

- I plan to complete two manuscripts from work I started before arriving at SJSU.
- I plan to submit the grant application for WWNFF.
- I plan to continue to work with my students on GIS database development.
- I will try to identify a source of funding to purchase new computer equipment and software for my lab.
- I plan to attend education sessions of the Society for Integrative and Comparative Biology.

Fall 2008/ Spring 2009

- If my WWNFF grant is funded, I will be developing two new courses.
- I will try to develop at least 1 manuscript based on the research my student's and I have completed in relation to the GIS database project.
- I plan to submit a grant proposal for obtaining computer equipment and software for my lab.
- I plan to attend an international conference on GIS database development which will be held in Stockholm, Sweden.
- I will try to submit at least 1 manuscript based on the research from my laboratory.

Professional, University, and Community Service:

I will serve as an active member of the Society for Integrative and Comparative Biology, Sigma Xi, and the National Science Teachers Association. In addition, I will review manuscripts as requested by editors.