## Biol 552: Professional Development for Biologists Instructor: Dr. Lee Fortunato (and assorted guests), Dept. of Biological Sciences

Course goals: The intent of this course is to provide graduate students with opportunities for professional development in a number of areas. There will be opportunities for students to participate in all aspects of the course. You will complete several projects as part of this course, and will need to start these well before the deadline. The intent is that you actually use these projects – consider submitting your grant proposal and giving your presentation at a scientific meeting.

Curriculum vitae. You will prepare your own CV.

Poster and oral presentation. You will prepare and present an oral presentation and a poster presentation on the same topic. If you are far enough into your program, you will present your own data. If you are just beginning your graduate program, you will present background information for the project you are considering or an overview of related work for your lab. You may not use a poster or oral presentation you have already given, but this is a good opportunity to prepare something you will present. We will print out your posters (I'm going to have the department pay for this.... \$\$ to be parceled soon!) and we'll have a little poster session of our own. You will briefly present your poster in maximum five-seven minutes. Oral presentations will be 12 minutes.

Grant proposal. You will prepare a grant proposal based on your proposed research (if you are early in your program) or on a potential postdoctoral project (if your research is well underway). Depending upon where your lab generally gets its funding, you will follow the You will follow the NSF graduate research fellowship program guidelines (or, for instance if your work involves environmental biology, you might tailor you application for the NSF Doctoral Dissertation Improvement Grant (DDIG) guidelines

(http://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=5234), or the NIH NRSA Individual Fellowship guidelines (http://grants.nih.gov/grants/guide/pa-files/PA-07-002.html), or the NSF or NIH postdoctoral fellowship guidelines if those might be more applicable. More details will be provided in class. First a brief one-page outline will be due, then a first proposal draft, a second draft for me to comment on, and a final proposal due at the end of the semester. During finals week we will review your proposals; you will be able to eavesdrop on the mock review panel to see how this aspect of the process works.

Let your inner artist shine!! This is MY individual contribution to this class. I want each of you to explore communicating your project in a way that might be completely foreign to you. My vision is the "dance your PhD" contest that is run by Science magazine each year. But there could be a lot of other avenues to explore..... for instance, Rapp your PhD, paint your PhD, write a poem...., etc etc. We'll explore this realm together and with the help of some of my "non scientist" friends!

*Grades:* Grades will be based on the following distribution of points.

Art and your project – dance your PhD!	15 %
Curriculum vitae	10 %
Poster presentation	15 %
Oral presentation	15 %
Grant proposal	30 %
Participation	15 %

<u>Book that might be helpful:</u> Friedland A.J. and C. L. Folt. 2009. Writing successful science proposals. 2nd edition. Yale University Press, New Haven & London. Dr. Top has used this in the past and found it very helpful. It is up to you whether you'd like to get one. I have one you can look at if you'd like!