

Fundamentals of Bioagricultural Sciences and Pest Management

BSPM 500: Fall 2017 Course syllabus
Monday/Wednesday 11-11:50 in E005 Plant Sciences

Course Instructors:

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General Course Objectives

This course is designed to (a) help students get off to a great start in graduate school by understanding how the process works, setting goals, and getting started writing a research proposal, (b) introduce incoming students to BSPM faculty and their diverse research areas and expertise, (c) introduce new students to each other, and (d) create a common language among students to facilitate dialog among different research areas.

Specific course objectives include:

1. Assist you in developing specific short and long-term career goals.
2. Introduce you to the major research, teaching and outreach areas encompassed by BSPM and the key tools we use to advance our science and our impact on society at large.
3. Strengthen your critical thinking skills involving the collection, analysis, interpretation and communication of data.
4. Develop written and oral communication skills that are essential for all career trajectories.
5. Help you to connect with your graduate student peers, our department's faculty and empower you to fully engage the resources available to you at CSU.

Course Structure

After several weeks of introduction to graduate school, the course is structured with one lecture (Monday) and one discussion session (Wednesday) per week. During the Monday lecture, a topic will be presented from a BSPM faculty member, either on their own work or key work from their field. At the end of this lecture period 1-2 papers will be assigned for the Wednesday discussion. To help develop communication skills, discussion sections will be student led and weekly leaders will be selected by the roll of dice.

Evaluation

The class will be evaluated on a 100-point scale. Details of assignments to follow.

- Participation in weekly discussions (40 points)
- Career trajectories, examples of appropriate CVs or resumes; Discussion and brief list of your goals (10 points; 11 - September, in class)
- 3-5 minute presentation on your background and research interests (10 points)
- A research proposal or fellowship application (20 points):
First draft (5 points)
Final draft (15 points)
- Peer Review of 3 fellow students' research proposals (5 points each, total of 15 points).
- Participation in Panel Review (5 points)

Week	Schedule	Speakers and discussions	Notes
1	21-Aug	Solar Eclipse	Be careful of your eyes!! Don't look for too long even with eclipse glasses.
	23-Aug	Introductions, syllabus, course expectations, your expectations	Readings: read through the syllabus and assignments
2	28-Aug	Success in grad school: Short presentation (Ruth) and discussion	Reading: Thompson 2005 "On being a successful graduate student in the sciences" and Schultz "Criteria for being a successful grad student (and becoming employed afterward)"
	30-Aug	Writing a strong proposal - Ruth	Readings:Ladd, 2015 "Advice to Applicants of the NSF's Graduate Research Fellowship Program (GRFP)" Bourne PE, Chalupa LM (2006) Ten Simple Rules for Getting Grants
3	4-Sep	Labor day - no class	
	6-Sep	TILT Teacher training resources	Please read through the CSU teaching certificate website before class
4	11-Sep	Career Goals - discussion	Come with CVs of people who have jobs you are interested in one day having
	13-Sep	Effective writing habits, quantitative skills - Ruth	Reading TBA (Chapter from Heard's book)
5	18-Sep	Inclusion in Higher Ed- Andrew	Assignment: Go to https://implicit.harvard.edu/implicit/takeatest.html and take one or more tests of implicit bias. Reading: Miyake et al. 2010, Moss-Racusin et al. 2012
	20-Sep	Inclusion in Higher Ed continued	Research proposal or fellowship application due for peer review
6	25-Sep	Panel review – in class	Written peer reviews due
	27-Sep	Panel review – in class	
7	2-Oct	Scott Nissen	
	4-Oct	discussion	W4185 - Ruth out, Andrew out
8	9-Oct	John McKay	
	11-Oct	discussion	Research proposal/fellowship application due
9	16-Oct	Research ethics - Ruth	
	18-Oct	Reference libraries, good lab notebooks, data management - Andrew	Reading: Gotelli and Ellison 2004
10	23-Oct	Pankaj Trivedi	
	25-Oct	discussion	
11	30-Oct	Jane Stewart	Ruth out (PD meeting and NSF panel in DC)
	1-Nov	discussion	Ruth out (PD meeting and NSF panel in DC)
12	6-Nov	Cris Argueso	Entomology meeting in Denver, Ruth out, Andrew out
	8-Nov	discussion	Entomology meeting in Denver, Ruth out, Andrew out
13	13-Nov	3-minute student presentations	
	15-Nov	3-minute student presentations	
14	20-Nov	<i>Thanksgiving week</i>	
	22-Nov	<i>Thanksgiving week</i>	
15	27-Nov	Lou Bjostad	
	29-Nov	discussion	
16	4-Dec	Franck Dayan	
	6-Dec	discussion	Ruth out