

APPLICATION FOR NEW COURSE

1. Submitted by the
College of AGRICULTURE Date: 01/01/2010

Department/Division proposing
course: PLANT AND SOIL SCIENCES

2. Proposed designation and Bulletin description of this course:

Prefix and
a. Number IPS 610

b. Title* TRANS-DISCIPLINARY COMMUNICATION IN
INTEGRATED PLANT AND SOIL SCIENCES

*If title is longer than 24 characters, offer a sensible title of 24
characters or less: COMMUNICATION IN IPSS

c. Courses must be described by at least one of the categories below. Include number of actual contact hours per week.

() CLINICAL	() COLLOQUIUM	() DISCUSSION	() LABORATORY	() LECTURE
() INDEPEND. STUDY	() PRACTICUM	() RECITATION	() RESEARCH	() RESIDENCY
(<u>X</u>) SEMINAR	() STUDIO	() OTHER – Please explain:	_____	

d. Please choose a grading
system: Letter (A, B, C, etc.) Pass/Fail

e. Number of credit
hours: 1

f. Is this course
repeatable? YES NO If YES, maximum number of credit
hours: 2

g. Course description:

A one-credit companion course to IPS 625 specific for graduate students in the Integrated Plant and Soil Sciences program. This course exposes IPSS students to critical skills in publication, grantsmanship, and public presentation. It requires IPSS students to systematically evaluate research presentations from multiple disciplines, present a synthesis of the research topic addressed in IPSS 625, and interact with other members of the college and the university on topics related to plant and soil science issues. The course may be repeated twice.

h. Prerequisite(s), if any:

GRADUATE STUDENT STATUS

i. Will this course also be offered through Distance Learning? YES NO

If YES, please check one of the methods below that reflects how the majority of the course content will be delivered:

Internet/Web-based Interactive video Extended campus

3. Supplementary teaching component: N/A or Community-Based Experience Service Learning Both

4. To be cross-listed as: _____ / _____
Prefix and Number printed name Cross-listing Department Chair signature

5. Requested effective date (term/year): FALL / 2011

6. Course to be offered (please check all that apply): Fall Spring Summer

7. Will the course be offered every year? YES NO
If NO, please explain: _____

8. Why is this course needed?
Graduate students in plant and soil sciences must recognize the interdisciplinary nature of their fields and appreciate the value of effective presentation of research ideas from multiple perspectives. To best train our graduate students we expect them to develop skills in the areas of writing, grantsmanship, research presentation and assessment. To that end we have three objectives in offering this course: 1. Gain experience in writing for publication and extramural support; 2. Gain experience in preparing oral presentations of knowledge gained through scientific inquiry; 3. Increase knowledge and appreciation of the diversity of plant and soil science issues and modes of presenting scientific research; 4. Increase scientific interactions between students and faculty on topics related to plant and soil science issues.

9. a. By whom will the course be taught? Team Taught - Dr. Mark Coyne (Co-ordinator)

b. Are facilities for teaching the course now available? YES NO
If NO, what plans have been made for providing them?

10. What yearly enrollment may be reasonably anticipated?

7

11. a. Will this course serve students primarily within the department? Yes No
- b. Will it be of interest to a significant number of students outside the department? YES NO
If YES, please explain.

The skills gained in this course are applicable to the professional goals of any beginning graduate student.

12. Will the course serve as a University Studies Program course[†]? YES NO
If YES, under what Area? _____

[†]AS OF SPRING 2007, THERE IS A MORATORIUM ON APPROVAL OF NEW COURSES FOR USP.

13. Check the category most applicable to this course:

- traditional – offered in corresponding departments at universities elsewhere
- relatively new – now being widely established
- not yet to be found in many (or any) other universities

14. Is this course applicable to the requirements for at least one degree or certificate at UK? Yes No

15. Is this course part of a proposed new program? YES NO
If YES, please name: Graduate Program in Integrated Plant and Soil Sciences (IPSS)

16. Will adding this course change the degree requirements for ANY program on campus? YES NO
If YES[‡], list below the programs that will require this course:

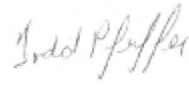
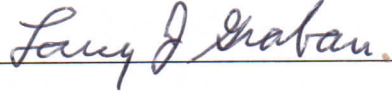
This course in conjunction with IPS 625 will serve as the core course requirements in the IPSS graduate program , which includes the existing MS program in Plant and Soil Sciences.

[‡]In order to change the program(s), a program change form(s) must also be submitted.

17. The major teaching objectives of the proposed course, syllabus and/or reference list to be used are attached.
18. Check box if course is 400G or 500. If the course is 400G- or 500-level, *you must include a syllabus showing differentiation for undergraduate and graduate students by (i) requiring additional assignments by the graduate students; and/or (ii) the establishment of different grading criteria in the course for graduate students. (See SR 3.1.4)*
19. Within the department, who should be contacted for further information about the proposed new course?

Name: Mark Coyne Phone: 257-4202 Email: mscopyn00@email.uky.edu

20. Signatures to report approvals:

01/22/10	Todd Pfeiffer	/ 
DATE of Approval by Department Faculty	printed name	Reported by Department Chair signature
03/05/10	Larry J. Grabau	/ 
DATE of Approval by College Faculty	printed name	Reported by College Dean signature
* DATE of Approval by Undergraduate Council	printed name	/ Reported by Undergraduate Council Chair signature
* DATE of Approval by Graduate Council	printed name	/ Reported by Graduate Council Chair signature
* DATE of Approval by Health Care Colleges Council (HCCC)	printed name	/ Reported by Health Care Colleges Council Chair signature
* DATE of Approval by Senate Council	Reported by Office of the Senate Council	
* DATE of Approval by University Senate	Reported by Office of the Senate Council	

*If applicable, as provided by the *University Senate Rules*. (<http://www.uky.edu/USC/New/RulesandRegulationsMain.htm>)

TRANS-DISCIPLINARY COMMUNICATION IN INTEGRATED PLANT AND SOIL
SCIENCES
(IPS 610)

FALL SEMESTER 2010 (Section 001)

Instructor(s): M.S. Coyne (257-4202; [mscoyn00@email.uky.edu](mailto:m scoyn00@email.uky.edu))
N-122 Ag Sci Building
R.L. Houtz (257-1982; rhoutz@uky.edu)
401-D Plant Science Building
D. Van Sanford (257-5020; dvs@email.uky.edu)
327 Plant Science Building

Classroom: TBA

Meeting Times: TBA

Office Hours: By appointment

PREREQUISITES

Graduate student status.

COURSE DESCRIPTION

A one-credit companion course to IPS 625 specific for graduate students in the Integrated Plant and Soil Sciences program. This course is an opportunity for IPSS students to practice important skills in manuscript preparation, grantsmanship, public presentation, and systematic evaluation of research presentations from multiple disciplines on topics related to plant and soil science issues. The course may be repeated once.

COURSE OBJECTIVES

1. Gain experience in preparing manuscripts for publication.
2. Gain experience in writing grants for extramural support.
3. Gain experience in preparing oral presentations of knowledge gained through scientific inquiry.
4. Increase knowledge and appreciation of the diversity of plant and soil science issues and modes of presenting scientific research.
5. Increase scientific interactions between students and faculty on topics related to plant and soil science issues.

METHODS TO MEET OBJECTIVES

1. Practice writing, evaluating, and editing the essential components of research publications.
2. Practice writing, evaluating, and editing the essential components of an extramural grant and participate in generating a group extramural grant.
3. Prepare presentations using computer software programs (e.g. PowerPoint) and/or overheads, and orally present to colleagues.
4. Increase knowledge in plant and soil science issues by attending and evaluating departmental seminars, and multiple other seminars related to plant and soil science.
5. Promote interaction by asking questions and participating in discussions at seminars.

REQUIREMENTS

1. Present a synthesis review of the IPS 625 topic for that semester.
2. Peer-review at least one research manuscript during the semester.
3. Participate in generating a group extramural grant for IPS 625 or submit an independent extramural grant.
4. Attend all departmental seminars during the semester and 8 or more other seminars outside the student's disciplinary area.
5. Evaluate the quality of speaker presentations during the semester.

EVALUATION CRITERIA

	<u>Points</u>
1. Summary Presentation	25
2. Peer-review of manuscript	25
3. Grant preparation	25
4. Seminar Attendance	5
5. Seminar Evaluation/critique	<u>20</u>
Total	100

There is no final exam for this course.

GRADING POLICY

90-100 %	A	Superior
80-89 %	B	Very Good
70-79 %	C	Average
< 70%	E	Fail

STUDENT RESPONSIBILITIES

Prepare a well-organized synthesis presentation. The total time allocated for each presentation will depend on the number of student participants each term, but should last a minimum of 10 minutes with two minutes allocated for questions. This is equivalent to about 10-15 slides. Major sections of the presentation and points that you will be graded on include: Abstract (5), Eye Contact with Audience (5), Voice Projection/Diction (5), Mannerisms/Appearance (5), Timing/Smoothness (5), Accuracy/Editing of Visual Aids (5), Clarity/Quality of Visual Aids (5), Well-explained/self-explanatory Visual Aids (5), Length of Presentation (5), Introduction (10), Body (15), Summary/Conclusions (10), Knowledge of Subject (10), Handling of Questions (10). It is suggested that you keep these criteria in mind while preparing your talk. Presentation quality will be evaluated based on the average score given by students enrolled in the course and faculty in the audience (50:50 ratio). The summary presentation accounts for 25% of the course grade. It is recommended that speakers set up their presentations on their own laptop computer and become familiar with the projection/microphone/laser pointer in PSB 101 sometime during the week of final presentations. Arrangements to reserve PSB 101 and practice your talk can be made by contacting office staff in PSB 105 at 257-5020 ext. 80709. On the day of the presentation, you should arrive early and quickly evaluate your presentation to make sure the system is working properly.

Peer Review of Manuscript. The student will obtain or be given a manuscript for peer review. The student will be expected to evaluate the manuscript from a technical and scientific perspective and write a summary review. The manuscript peer review accounts for 25% of the course grade.

Grant Preparation. During the term students enrolled in IPS 625 will prepare a cooperative grant as the major course requirement. The student will participate in the preparation of that grant (if concurrently enrolled in IPS 625) or has the option of preparing an independent grant. The grant preparation accounts for 25% of the course grade.

Attend all department seminars. Attendance will be monitored by collecting speaker evaluation forms prepared by students enrolled in the course. Each student should bring a pen/pencil and a copy of the evaluation form (one copy is included in the syllabus, make additional copies as needed to obtain credit for attending seminars). Departmental seminars in Plant and Soil Sciences will take place on Friday at either 2:00 or 3:15 pm; for various reasons a seminar might take place at a different time/place or be cancelled altogether. Seminars in other departments will be at variable times. Attendance at departmental seminars accounts for 5% of the course grade.

Formal written excuses, consistent with University regulations, will be required for each absence. University policies for excused absences are specified on the web page entitled Student Rights and Responsibilities <http://www.uky.edu/StudentAffairs/Code/part2.html>.

Evaluate presentation quality at external seminars. Students enrolled in IPS 610 are expected to evaluate the quality of presentations outside the department (a minimum of eight), with the idea that evaluators will gain better insight into what makes a good talk. Students should bring a copy of the speaker evaluation form to each seminar and turn in the completed form to the course instructor each week to obtain full credit for this part of the course. Evaluation criteria are as before.

**This syllabus is modeled after the syllabus for PLS 772 – Section 2 – Soil Science Seminar developed by Elisa D’Angelo (PhD) Department of Plant and Soil Sciences