



IPBM

**INTERDEPARTMENTAL PLANT
BIOLOGY MAJOR**



**GRADUATE STUDENT
HANDBOOK**

**2008-2009
Iowa State University**

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<http://www.agron.iastate.edu/ptf/ipbm/home.asp>

ipbm@iastate.edu

Introduction

The Plant Biology Major

Iowa State University (ISU) is a land-grant institution of international stature. Its location in an important agricultural region has fostered the development of strength in the agricultural and life sciences. Graduate education has always been an important component of the University's overall mission. Basic plant biology (Botany, Biochemistry and Genetics) and applied plant science (Agronomy, Horticulture, Forestry and Plant Pathology) represent fully accredited, strong, traditional graduate program offerings in agriculture and the life sciences.

In accord with ISU's mission in graduate education, the Interdepartmental Plant Biology Major (IPBM), previously Interdepartmental Plant Physiology Major (IPPM), was established in 1987 to provide a broad-based graduate education in basic plant physiology and plant molecular biology. Prior to the initiation of IPPM, the only opportunity for a student to major in this discipline was as an area of specialization within the Botany Department, although faculty in several different departments conducted basic research appropriate for graduate research projects in plant physiology and molecular biology. Initially, there were 15 "charter" members of the IPPM faculty in seven departments from two colleges. The departments represented initially were Agronomy, Biochemistry & Biophysics, Botany, Forestry, Genetics, Horticulture, and Plant Pathology, but the Departments of Botany and Genetics have since been merged with the Zoology Department to form the Department of Genetics, Development and Cell Biology. The Department of Forestry has merged with the Department of Animal Ecology to form the Natural Resource Ecology and Management Department. Currently, 38 faculty members from the College of Agriculture, College of Engineering and the College of Liberal Arts and Sciences cooperate to provide graduate study in IPBM leading to the Master of Science and Doctor of Philosophy Degrees offered through seven participating departments: Agronomy, Biochemistry, Biophysics & Molecular Biology (BBMB), Chemical & Biological Engineering (CBE), Ecology, Evolution & Organismal Biology (EEOB), Genetics, Development and Cell Biology (GDCB), Horticulture, and Plant Pathology.

Research conducted by the faculty and students of the major represents basic plant biology including but not limiting to plant molecular biology, plant cell biology, plant biochemistry, plant physiology, and plant organismal biology. The experimental approaches represented in the major span the range of complexity from molecular studies, to cellular, organismal and the ecological level (crop monocultures and natural populations). Although IPBM graduate students are themselves involved in basic plant biology research, the research focus of the faculty in the major includes both basic and applied approaches. This mix of basic and practical research orientations helps foster a stimulating environment for graduate training.

In 2006 summer, IPPM faculty voted for a name change of the Major from "Plant Physiology" to "Plant Biology". The request was approved by the Board of Regents on June 12, 2008. Effective July 1, 2008, Interdepartmental Plant Physiology Major (IPPM) becomes Interdepartmental Plant Biology Major (IPBM). The new name of the major reflects the broad spectrum of plant science-related research programs ongoing among the faculty members affiliated with the major. In addition, the name change is intended to attract more graduate applicants to the program.

Administration

The IPBM Supervisory Committee and its Chair administer the Interdepartmental Plant Biology program. For the 2008-2009 academic year, the Chair and Supervisory Committee are:

Chair: Kan Wang, G405 Agronomy
515-294-4429, E-mail: kanwang@iastate.edu

Supervisory Committee: David Hannapel (interim associate chair), Hort
Madan Bhattacharyya, Agron
Martha James, BBMB
Steve Whitham, Plant Path
Robert Thornburg (*ex officio*), BBMB

Upon Arrival at ISU

When you first arrive, you may find yourself overwhelmed by the number of things you must do. Here is a list of some of the most important.

1. Visit the Interdepartmental Plant Biology Major Program Office in 207 Science I and introduce yourself to Mrs. Simi Venkatagiri, the Program Coordinator. Simi can help you find your way around the University administrative offices.
2. Visit G405 Agronomy Hall and introduce yourself to the Chair, Dr. Kan Wang. Dr. Wang will be able to answer any questions you have about the program and setting up your rotations.
3. **Read this HANDBOOK.** It is especially important to read the section on Administrative Matters during your first few days. This handbook is also available on-line at:
<http://www.agron.iastate.edu/ptf/ipbm/doc/IPBMHandbook2008-2009.pdf>
4. Register for e-mail at Durham Hall and plan to check it regularly (at least daily). E-mail is the most common means of communication at Iowa State University.
5. Obtain the following references and examine them carefully. These documents contain all the University regulations and requirements for graduation.

Graduate College Handbook

Graduate College Thesis Manual

They are available on the Web through the ISU Graduate College Homepage at:

<http://www.grad-college.iastate.edu/publications/gchandbook/homepage.html>

<http://www.grad-college.iastate.edu/thesis/>

Iowa State Graduate College forms are available on the Internet at:

<http://www.grad-college.iastate.edu/forms/forms.html>

6. Other references you may wish to obtain include:

General Catalog: ISU bookstore

or on the web: <http://www.iastate.edu/~catalog/>

Schedule of Classes: ISU bookstore

or on the web: <http://classes.iastate.edu/>

Iowa State University phone/e-mail directory (ISU bookstore)

Contains two-year calendar of academic dates and deadlines

Phone/e-mail directory on the web: <http://ph.iastate.edu/cgi-bin/phonebook>

Other References available on the web can be located through the Iowa State University Homepage: <http://www.iastate.edu>. Note the alphabet at the top of this page; you can click through to many subject headings.

Iowa State University forms are available on the Internet at:

<http://www.ats.iastate.edu/forms.html>

ISU University-wide POLICY LIBRARY:

<http://policy.iastate.edu/>

The First Year

Orientation and Advising

All prospective IPBM students are evaluated by the three-member Student Recruitment and Admission Committee. The criteria for evaluation of applicants include academic record, Graduate Record Exam scores (required for all applicants, except internal transfer), TOEFL scores (for international applicants), research experience, letter of reference, Statement of Interest from the applicants, and, where possible, personal interview. Students may either:

1. Enter the IPBM program directly, e.g. as a Biotechnology Fellow, PSI Fellow or an IPBM Graduate Assistant, and choose a mentor and a home department by the end of their first year, or
2. Enter one of the participating departments immediately, with departmental support or support from a mentor, with Plant Physiology as the declared major.

In either case, students must be accepted both by IPBM and by a department, and degrees are awarded by the department, with a major in Plant Biology.

Rotations

Students entering the IPBM program directly are asked to complete a series of research rotations with faculty members of their choice. It is suggested that students complete at least three rotations during the first two semesters. The rotations are usually approximately six to eight weeks in length. These rotations are designed to familiarize the student with the type of research done in the labs as well as to acquaint themselves with the professor and other members of the lab. The student is responsible for contacting professors for scheduling potential rotations. It is important to choose laboratories conducting research that interests you and that will be able to accept you in to the lab if you choose to stay.

There are 38 faculty members in IPBM representing seven departments (Agronomy, Biochemistry, Biophysics & Molecular Biology, Chemical & Biological Engineering, Development and Cell Biology, Horticulture, Ecology, Evolution and Organismal Biology, Genetics Development & Cell Biology and Plant Pathology). For detailed information about the faculty visit the IPBM web page (<http://www.agron.iastate.edu/ptf/ipbm/ippmfaculty.asp>).

2008-2009 rotation dates:

Rotation	Beginning date	End date	Total workdays
First	Sep 8, 2008	Oct 31, 2008	40 days
Second*	Nov 3, 2008	Jan 16, 2009	40 days
Third	Jan 19, 2009	Mar 13, 2009	40 days
Fourth**	Mar 23, 2009	May 15, 2009	40 days

* Second rotation includes three weeks break during the Thanksgiving and Christmas/New Year Holidays.

** Fourth rotation is optional.

Selecting a Major Professor

Following the completion of the research rotations, you should ask the faculty member with whom you would like to work whether he or she can accept you into his or her laboratory and arrange for your future financial support. Once an agreement is made, you must fill out the form **“Request to Establish a Home Department for Students Admitted to Interdepartmental Majors”**. This form can be found at <http://www.grad-college.iastate.edu/forms/files/EstablishDepartment.doc>. This arrangement must be made no later than the first week of May. In the case that no suitable match is attained after 3 rotations, you may conduct an optional 4th rotation. At the same time please contact your Temporary Faculty Mentor or IPBM Program Chair for advice.

Curriculum

Entering students are expected to have a strong academic background in the physical and life sciences (including: calculus, college physics, genetics, organic chemistry, plant anatomy, plant physiology), and significant laboratory research experience is desirable. Outstanding students with a deficiency in one academic area often are admitted with the understanding that the deficiency will be corrected promptly. Well-prepared students, especially those entering with a master's degree, usually have some of these courses waived because of previous equivalent course credit. The quantity and type of previous course work greatly affects the sequence in which these courses are taken, but, normally the general biochemistry and statistics courses are expected to be taken as early as possible and the advanced plant biology and molecular biology courses taken later.

In addition to the required core courses, a wide selection of courses is available to IPBM graduate students for focus in specific areas or broadening of their scientific education. Decisions about which courses are taken and when they are taken are made by the student, initially in consultation with his or her temporary advisor, and later in consultation with his or her Program of Study (POS) Committee, which also serves as the Thesis or Dissertation Committee. Any changes in the selection of required core courses must be recommended by the POS committee and approved by the Chair.

A. Course Requirements

Students can register for courses on-line using *AccessPlus*. If you are unable to register on-line please fill out an ISU Graduate College "Request for Schedule Change (Add or Drop)" form (yellow, half-sheet). The form is available in 207 Science I or from your home department graduate office. After the advisor and graduate student sign the form, it should be taken to Room 10 Alumni Hall.

Students should sign up for a total of 9 credits each fall and spring and 5 credits for summer session.

Curriculum for Plant Biology Ph.D. Students

All Ph.D. candidates take a core curriculum comprising courses recommended from the following four categories, attend research seminars, research credits (PLBIO 699), annual Loomis Lecture and mini-symposium and retreats. Students will take additional courses of interest as directed by their Program of Study (POS) Committee members.

A total of 72 credits including a minimum of 24 course credits are required for a Ph.D.

1. Complete the following core courses:

- Stat 401 (Statistical Methods for Research Workers), Cr. 4. F., S., SS.
- BBMB 404 (Biochemistry I), Cr. 3. F. or BBMB 501 (Comprehensive Biochemistry I), Cr. 4. F.
- GDCB 513 (Plant Metabolism), Cr. 2. F.

- Make four seminar presentations and enroll each term in the Interdepartmental Plant Biology seminar PHBIO 696P or its listed equivalent. The first seminar must be during the student's first year and is a 20 minutes seminar. The last presentation must be an exit seminar.
 - Agron/Gen/PLP 565 (Professional Practice in the Life Sciences) Cr. 0.5. S.
- 2. Take one course from the following courses:**
- BBMB 405 (Biochemistry II), Cr. 3. S.,
 - BBMB 502 (Comprehensive Biochemistry II), Cr. 4. S.
 - GDCB 511 (Molecular Genetics), Cr. 3. S.
 - GDCB 545 (Plant Molecular Biology), Cr. 3. Alt. F.
- 3. Take one course from the following courses:**
- GDCB 512 (Plant Growth and Development), Cr. 2. S.
 - GDCB 529 (Plant Cell Biology), Cr. 2. Alt F.
- 4. Take additional courses from the following list:**
- Agron 516 (Crop Physiology), Cr. 3. S.
 - Agron 527 (Plant Genetics), Cr. 3. S.
 - Agron/Hort/NREM 529 (Publishing in Biological Science Journals), Cr. 2. S.
 - Agron 616 (Advanced topics in Plant Physiology and Biochemistry), Cr. 4. Alt S., offered 2008
 - Agron 625 (Genetic Strategies in Plant Breeding), Cr. 3. Alt. S., offered 2009
 - BBMB 405 (Biochemistry II), Cr. 3. S.,
 - BBMB 451 (Physical Biochemistry), Cr. 2. F.
 - BBMB 502 (Comprehensive Biochemistry II), Cr. 4. S.
 - BBMB 607 (Plant Biochemistry), Cr. 2. Alt. F., offered 2008
 - BBMB 645 (Molecular Signaling), Cr. 2. Alt. S., offered 2008
 - BBMB 660 (Membrane Biochemistry), Cr. 2. Alt. F., offered 2008
 - BBMB 675 (Nucleic Acid Structure and Function), Cr. 2. Alt. F., offered 2007
 - BBMB 676 (Biochemistry of Transcription), Cr. 2. Alt. S., offered 2008
 - BCB 551 (Computational Techniques for Genomics Assembly and Analysis), Cr. 3. F.
 - BCB 596 (Genomic Data Processing), Cr. 3. F.
 - BIOL 454 (Plant Anatomy), Cr. 4. F.
 - BIOL 474 (Plant Ecology), Cr. 3. S.
 - EEOB 561 (Plant Diversity and Evolution), Cr. 4.
 - EEOB 563 (Molecular Phylogenetics), Cr. 3. F.
 - EEOB 566 (Molecular Evolution), Cr. 3. Alt F., offered 2008
 - EEOB 595 (Agrostology), Cr. 3. Alt. F., offered 2008
 - GDCB 510 (Transmission Genetics), Cr. 3. F.
 - GDCB 511 (Molecular Genetics), Cr. 3. S.
 - GDCB 512 (Plant Growth and Development), Cr. 2. S.
 - GDCB 528 (Cellular Growth and Regulation), Cr. 3. Alt. F., offered 2007

- GDCB 529 (Plant Cell Biology), Cr. 2. Alt F.
- GDCB 545 (Plant Molecular Biology), Cr. 3. F.
- GDCB 640 (Signal Transduction), Cr. 3. Alt. S., offered 2008
- GDCB 679 (Light microscopy), Cr. 5. Alt. F., offered 2008
- GDCB 680 (Scanning electron microscopy), Cr. 5. Alt. F., offered 2007
- GDCB 681 (Transmission electron microscopy), Cr. 5. Alt. S., offered 2009

In addition to the required core courses, a wide selection of courses is available to IPBM graduate students for broadening their scientific education. Decisions about which courses are taken and when they are taken are made by the student, initially in consultation with his or her temporary advisor, and then with his or her major advisor and eventually with POS Committee, which also serves as the Thesis or Dissertation Committee.

Curriculum for Plant Biology M.S. Students

All M.S. candidates take a core curriculum comprising courses recommended from the following four categories, attend research seminars, research credits (PLBIO 699), annual Loomis Lecture and mini-symposium and retreats. Students will take additional courses of interest as directed by their Program of Study (POS) Committee members.

A total of 36 credits including a minimum of 16 course credits are required for a M.S.

1. Complete the following core courses:

- Stat 401 (Statistical Methods for Research Workers), Cr. 4. F., S., SS.
- BBMB 404 (Biochemistry I), Cr. 3. F. or BBMB 501 (Comprehensive Biochemistry I), Cr. 4. F.
- GDCB 513 (Plant Metabolism), Cr. 2. F.
- Make two seminar presentations and enroll each term in the Interdepartmental Plant Physiology seminar PHBIO 696P or its listed equivalent. The first seminar must be during the student's first year and is a 20 minutes seminar. The last presentation must be an exit seminar.
- Agron/Gen/PLP 565 (Professional Practice in the Life Sciences) Cr. 0.5. S.

2. Take one course from the following courses:

- GDCB 512 (Plant Growth and Development), Cr. 2. S.
- GDCB 529 (Plant Cell Biology), Cr. 2. Alt F.

3. Take additional courses from the following list:

- Agron 516 (Crop Physiology), Cr. 3. S.
- Agron 527 (Plant Genetics), Cr. 3. S.
- Agron/Hort/NREM 529 (Publishing in Biological Science Journals), Cr. 2. S.
- Agron 616 (Advanced topics in Plant Physiology and Biochemistry), Cr. 4. Alt S., offered 2008
- Agron 625 (Genetic Strategies in Plant Breeding), Cr. 3. Alt. S., offered 2009
- BBMB 405 (Biochemistry II), Cr. 3. S.,

- BBMB 451 (Physical Biochemistry), Cr. 2. F.
- BBMB 502 (Comprehensive Biochemistry II), Cr. 4. S.
- BBMB 607 (Plant Biochemistry), Cr. 2. Alt. F., offered 2008
- BBMB 645 (Molecular Signaling), Cr. 2. Alt. S., offered 2008
- BBMB 660 (Membrane Biochemistry), Cr. 2. Alt. F., offered 2008
- BBMB 675 (Nucleic Acid Structure and Function), Cr. 2. Alt. F., offered 2007
- BBMB 676 (Biochemistry of Transcription), Cr. 2. Alt. S., offered 2008
- BCB 551 (Computational Techniques for Genomics Assembly and Analysis), Cr. 3. F.
- BCB 596 (Genomic Data Processing), Cr. 3. F.
- BIOL 454 (Plant Anatomy), Cr. 4. F.
- BIOL 474 (Plant Ecology), Cr. 3. S.
- EEOB 561 (Plant Diversity and Evolution), Cr. 4.
- EEOB 563 (Molecular Phylogenetics), Cr. 3. F.
- EEOB 566 (Molecular Evolution), Cr. 3. Alt F., offered 2008
- EEOB 595 (Agrostology), Cr. 3. Alt. F., offered 2008
- GDCB 510 (Transmission Genetics), Cr. 3. F.
- GDCB 511 (Molecular Genetics), Cr. 3. S.
- GDCB 512 (Plant Growth and Development), Cr. 2. S.
- GDCB 528 (Cellular Growth and Regulation), Cr. 3. Alt. F., offered 2007
- GDCB 529 (Plant Cell Biology), Cr. 2. Alt F.
- GDCB 545 (Plant Molecular Biology), Cr. 3. F.
- GDCB 640 (Signal Transduction), Cr. 3. Alt. S., offered 2008
- GDCB 679 (Light microscopy), Cr. 5. Alt. F., offered 2008
- GDCB 680 (Scanning electron microscopy), Cr. 5. Alt. F., offered 2007
- GDCB 681 (Transmission electron microscopy), Cr. 5. Alt. S., offered 2009

In addition to the required core courses, a wide selection of courses is available to IPBM graduate students for broadening their scientific education. Decisions about which courses are taken and when they are taken are made by the student, initially in consultation with his or her temporary advisor, and then with his or her major advisor and eventually with POS Committee, which also serves as the Thesis or Dissertation Committee.

Curriculum for Plant Biology Minor students

Ph.D. and M.S. candidates desiring a graduate minor in Plant Biology must take the below required courses and complete with a B or better. One member of the student's POS committee must have IPBM faculty membership.

1. Prerequisite Courses:

- Stat 401 (Statistical Methods for Research Workers), Cr. 4. F., S., SS.
- BBMB 404 (Biochemistry I), Cr. 3. F. or BBMB 501 (Comprehensive Biochemistry I), Cr. 4. F.

2. Take nine credits from the following list of courses:

- Agron 516 (Crop Physiology), Cr. 3. S.
- Agron 527 (Plant Genetics), Cr. 3. S.
- BBMB 607 (Plant Biochemistry), Cr. 2. Alt. F., offered 2008
- BIOL 454 (Plant Anatomy), Cr. 4. F.
- GDCB 512 (Plant Growth and Development), Cr. 2. S.
- GDCB 513 (Plant Metabolism), Cr. 2. F.
- GDCB 529 (Plant Cell Biology), Cr. 2. Alt F.
- GDCB 545 (Plant Molecular Biology), Cr. 3. F.

B. Seminar Requirements

The IPBM Seminar (PLBIO 696, one credit) is a student-run seminar designed to give students exposure to others' research and also to provide an opportunity for students to present their own research to others. Enrollment and attendance to this seminar series is required of all IPBM students. During the fall semester, workshops and lectures from people within the university community are given based on varying topics chosen by IPBM students. During the spring semester, students present their research in a seminar format. Students must present their research according to the following guidelines:

- **Ph. D.**

Make four seminar presentations and enroll each term in PLBIO 696. The first seminar must be during the student's first year and is a 20 minutes seminar. The last presentation must be an exit seminar.

- **Masters**

Make two seminar presentations and enroll each term in PLBIO 696. The first seminar must be during the student's first year and is a 20 minutes seminar. The last presentation must be an exit seminar.

C. Other Required Activities

In addition to coursework, there are a number of non-course activities that IPBM students are required to participate in. These activities are meant to expose students to research outside of their interests and provide an opportunity for interaction with other scientists.

- **Fall Retreat**

The Annual IPBM Fall Retreat is designed to provide for professional interaction among the faculty and graduate students of IPBM as well as to introduce new IPBM graduate students and expose them to the research opportunities available in the laboratories of IPBM faculty. The Retreat is a one-day event held in the early Fall devoted to short faculty presentations of their current research, introduction of new students, and informal discussion.

- **Loomis Lecture and Mini-symposium**

The annual Walter E. Loomis Lecture, funded by an endowment established by the Loomis family, has brought outstanding scientists to the campus since 1981. These lectures are

of interest to a broad range of plant biology students and faculty. A one-day mini-symposium, with the Loomis Lecture as its focus, has been implemented annually since 1995. Such symposia expose graduate students to outstanding scientists from other institutions in an interactive setting where emerging interdisciplinary approaches to basic plant biology are presented and discussed.

- **Graduate Organization of Plant Biology**

All IPBM graduate students and some non-IPBM graduate students are members of the Plant Biology Graduate Student Organization, which invites and hosts at least one prominent off-campus seminar speaker each year and acts to organize social events, as well as providing some cohesiveness to an otherwise rather diverse group of graduate students. Our student organization has strong leadership and has been very active in leading the fall seminar series and in participating in the spring symposium and the fall retreat.

D. Dismissal

Students in good standing will have a major professor (after the first year), maintain a grade point above 3.0, and be making satisfactory progress in their research and IPBM requirements. Students not in good standing will be notified by the Chair and counseled about program expectations. After the first year, students who have not been able to find a major professor as well as students who no longer have a major professor will be clearly informed that they cannot remain an IPBM student for more than one additional term. The program will assist such students to transfer to another major at ISU or to identify other opportunities.

Grievances will be handled according to standard University procedures.

Degree Requirements

A checklist of requirements for both Ph.D. and M.S. degrees can be found in this Handbook (page 17 and 18).

A. Committee Appointment and Program of Study

During the first or second year of the graduate program, you will, in consultation with your major professor, decide on a suitable program for completion of your graduate course work. It is then necessary to establish a Program Of Study (POS) Committee.

For the M.S. degree the POS Committee contains a minimum of three members, of whom two, including the major and co-major professor (if applicable), must be IPBM faculty members. For the Ph.D. degree the POS Committee contains a minimum of five members, of whom three, including the major and co-major professor (if applicable), must be IPBM faculty members.

The establishment of the POS Committee should be no later than the end of second academic year of the graduate study.

The POS Committee should include faculty whose research interests can aid and complement your research interests, as well as faculty whose expertise will ensure that you graduate with a breadth of knowledge. It is your responsibility to contact potential members of your POS committee and ask them if they are willing to participate. Once the required numbers of faculty have agreed to serve on your committee, you should complete the Graduate College form “**Committee Appointment**” and submit it to the IPBM program chair for approval. This form can be found on the Graduate College web site at <http://www.grad-college.iastate.edu/forms/files/CommitteeAppointment.doc>

Next, you should set up a time to meet with your committee, inform them of your research plans, and ask for their evaluation of your plans. This is also the time to complete the Graduate College form “**Program of Study**” (found at <http://www.grad-college.iastate.edu/forms/files/POS.doc>). This form is very important because it is essentially a contract between you and the graduate school indicating the minimum course work that must be taken to complete a Ph.D. or M.S. Following Graduate College approval, changes to the POS form can only be approved by unanimous support by the student, the POS committee, the IPBM chair, and the Graduate College.

B. Preliminary Examination (Ph.D. Students Only)

The comprehensive preliminary examination normally is taken upon completion of the second year of the graduate program. Most doctoral students are expected to finish their formal course work within their first two years, and to complete any preliminary exams by the end of their second year. A substantial part of their first year may be spent in research rotations, so there is considerable latitude given in these general guidelines.

The administration of proficiency, qualifying, comprehensive and/or other examination requirements for IPBM graduate students is at the discretion of the home department for each student. However, the preliminary exam contains both a written and an oral component. The written component may be in the form of either a series of questions or a research proposal. This

decision is left up to the POS committee but must meet the requirements of the home department (if any).

Before taking the preliminary examination you must fill out a "Request for Preliminary Examination" form. This form is available from Simi Venkatagiri (207 Science I) and at the Graduate College (1137 Pearson Hall) or from your Home department.

NOTE: You must have scheduled your preliminary exam with your committee and submit this form at least TWO WEEKS prior to the date of your preliminary exam.

After processing your request, the Graduate College will send you the Preliminary Examination form, and this form should be given to your major professor. The results of the Preliminary Examination will be recorded on this form, it will be signed by all committee members, and it must be returned to the Graduate College. All committee members must be present at this examination. This examination should be completed by the end of the first semester of the third year of graduate training.

C. Application for Graduation (Diploma Slip)

Once it has been determined that you are ready to complete your degree, an application for graduation should be made by the end of the first week of the semester (fall, spring or summer) in which the student expects to receive the degree, or by the last day of the spring semester when wishing to graduate during summer session. To apply for graduation, the student is required to submit to the Graduate College a signed "**Application for Graduation**" form, available in the program office or on the web at <http://www.grad-college.iastate.edu/forms/files/GraduationApplication.doc>. If it becomes apparent that you cannot graduate during the indicated term, you should call the Graduate College (515-294-4531) and cancel the "Application for Graduation" form. The student must then file a new form for the next planned term of graduation.

D. Writing Your Thesis

All ISU theses will be digital ("ETDs" converted to a single file in PDF format) and submitted on-line beginning in Fall 2006. The procedures and requirements for all theses have changed completely starting in Fall 2006, so you must review the new requirements and deadlines in the documents at <http://www.grad-college.iastate.edu/thesis/homepage.html>.

All graduate theses and dissertations submitted to Iowa State University must comply with the requirements established by the Graduate College, as stated in the current [Thesis Checklist](#). The Graduate College reviews the final thesis or dissertation and approves the final format before signing the final Approval Slip. Staff are available to advise students on formatting problems they may encounter. In addition, staff conduct several informational <http://www.grad-college.iastate.edu/thesis/seminars.html> early each semester.

E. Final Examination

The Final Examination for the Ph.D. and the M.S. degrees is an oral defense of the Ph.D. dissertation or M.S. thesis, respectively. All members of your POS committee must be present.

This examination will review the dissertation or thesis and the candidate's knowledge of relevant subjects.

After the dissertation or thesis has been completed and all other requirements have been met (including submitting an application for graduation form), you should request the schedule your Final Examination with your POS committee. Your dissertation or thesis has to be submitted to all the POS committee members **TWO WEEKS before your scheduled final examination date**. A "**Request for Final Oral Examination**" form needs to be filled out. This form can be obtained from Simi Venkatagiri (207 Science I) or from your home department.

NOTE: This form must be submitted to the Graduate College THREE WEEKS prior to the date of the Final Examination.

The results of the examination are reported on the "**Report of Final Examination**" form that will be sent by the Graduate College directly to your major professor after the Graduate College receives the "Request for Final Examination" form.

After the final oral examination, two unbound, signed copies of the thesis (or dissertation) must be submitted to the Graduate College no later than the Final Submission deadlines for the term of graduation.

F. Graduate Student Approval Slip for Graduation

After the "**Request for Final Oral Examination**" form is approved by the Graduate College, the student's major professor is sent a "**Graduate Student Approval Slip for Graduation**" form. The IPBM program chair, the Graduate College thesis specialist, and the Graduate College must sign this form. Final clearance of academic requirements will be made when current term grades have been submitted and evaluated by the Graduate College. Consult the Graduate College Handbook at <http://www.grad-college.iastate.edu/publications/gchandbook/homepage.html> for more details on requirements for this form.

All other requirements and information regarding graduation can be found in the Graduate College Handbook.

G. Name Change Transition

Any new students coming into the program for Fall 2008 and beyond will participate in the new major. The current students in the major have two choices for their degree. You can choose to 1) use the new name "Plant Biology" or 2) maintain "Plant Physiology" for the name of your degree. These changes will be effective in the Fall semester, 2008. If students make a change after Fall 2008, they will need to submit the "Retain a Previous Major" form on the Graduate College web site at <http://www.grad-college.iastate.edu/forms/files/retainmajor.doc> through the various approval processes.

Checklists

Procedures for Earning a Doctoral Degree (IPBM)

REQUIREMENT	DATE COMPLETED
Pass the Graduate English Examination (for non-English native)	
Perform Research Rotations (if necessary)	
Choose a Major Professor	
Complete “ Request to Establish a Home Department for Students Admitted to Interdepartmental Major ” form	
Complete “ Committee Appointment ” form, obtain all signatures, and submit to Graduate College for approval	
Complete “ Program of Study (POS) ” form, obtain all signatures, and submit to Graduate College for approval	
Meet all coursework and other requirements and establish date and time for Preliminary Examination	
Submit “ Request for Preliminary Oral Examination ” form to Graduate College at least 2 weeks prior to examination date	
Successfully pass Preliminary Examination and submit report form to Graduate College	
Complete research and write Dissertation	
File “ Application for Graduation ” (Diploma slip) with Graduate College for intended term of graduation	
Establish date and time for Final Oral Examination with POS committee	
Submit “ Request for Final Oral Examination ” form to Graduate College at least 3 weeks before examination date	
Take dissertation to Graduate College for preliminary format check (optional, but strongly encouraged)	
Give dissertation to POS committee at least 2 weeks before final examination date	
Successfully pass final oral examination and submit report form to Graduate College	
Receive Graduate Student Approval Slip for Graduation from major professor or program	
Submit final, signed copies of Dissertation to Thesis Office	
Take signed Graduate Student Approval Slip for Graduation to Graduate College for final signature(s)	
Attend commencement ceremonies	

Procedures for Earning a Master’s Degree (IPBM)

REQUIREMENT	DATE COMPLETED
Pass the Graduate English Examination (for non-English native)	_____
Perform Research Rotations (if necessary)	_____
Choose a Major Professor	_____
Complete “ Request to Establish a Home Department for Students Admitted to Interdepartmental Major ” form	_____
Complete “ Committee Appointment ” form, obtain all signatures, and submit to Graduate College for approval	_____
Complete “ Program of Study (POS) ” form, obtain all signatures, and submit to Graduate College for approval	_____
Meet all coursework and other requirements	_____
Complete research and write Thesis	_____
File “ Application for Graduation ” (Diploma slip) with Graduate College for intended term of graduation	_____
Establish date and time for Final Oral Examination with POS committee	_____
Submit “ Request for Final Oral Examination ” form to Graduate College at least 3 weeks before examination date	_____
Take thesis to Graduate College for preliminary format check (optional, but strongly encouraged)	_____
Give Thesis to POS committee at least 2 weeks before final examination date	_____
Successfully pass final oral examination and submit report form to Graduate College	_____
Receive Graduate Student Approval Slip for Graduation from major professor or program	_____
Submit final, signed copies of Thesis to Thesis Office	_____
Take signed Graduate Student Approval Slip for Graduation to Graduate College for final signature(s)	_____
Attend commencement ceremonies	_____

Financial Matters

Your Appointment

Most students in IPBM receive financial support in the form of a graduate student stipend. The source of the support and the responsibilities associated with it may vary. Students entering IPBM directly usually receive a research assistantship (RA) funded by IPBM from their arrival until the end of the first year. Stipends for students supported by departments are governed by departmental policies. The responsibilities associated with your stipends depend on whether you have an RA or a TA (teaching assistantship). Information about these forms of support is available in the Graduate College Handbook.

All graduate students on assistantships have signed a Graduate Assistantship Letter of Intent that lists the terms and conditions of their appointment. Generally, graduate assistantship appointments are on a "one-half time" basis. "Half-time" is the maximum time appointment for graduate students since the other half of your time is spent as a student in graduate studies and research. Appointments may be terminated by mutual consent or for cause as described in the Graduate College Handbook. If you have any questions regarding your appointment, see the IPBM Program Chair or Simi Venkatagiri (207 Science I or e-mail sgiri@iastate.edu).

Payday at the University is the last working day of each month. Your paycheck will be sent through campus mail to you by the ISU Treasurer to the university address you have given to the Human Resources Office (Room 3810, Beardshear), or you may authorize the Treasurer to deposit your check in a bank of your choice by completing an authorization form available at the Human Resources Office. It is strongly recommended that you have your check sent to a banking institution. If applicable, deductions are made for Federal and State income taxes.

Grants for Research

The Graduate Student Senate (GSS) provides funds to support graduate student research. GSS will provide up to a maximum of \$300 to each person submitting a research proposal. The projects for which you submit the proposals must be *unrelated* to your thesis or dissertation research. It is appropriate for you to apply for these funds during your first year while you are rotating through research labs. You can obtain the "Request for Professional Advancement Grant" form on the web at <http://www.grad-college.iastate.edu/gpss/PAG/PAGApplication.doc> and clicking on Professional Travel Grant (PAG).

Grants for Professional Travel

Attendance and presentation of research results at professional meetings is an essential part of your training. All students should, if possible, attend at least one national or international meeting during their degree program.

To assist you in doing this, support for travel to professional meetings and conferences is available from the Graduate College, the Graduate Student Senate, the IPBM Program and some departments. To request travel funds from the Graduate College and Graduate Student Senate, complete the "Request for Professional Advancement Grant" form (available at <http://www.grad-college.iastate.edu/gpss/PAG/PAGApplication.doc>). The form needs to be signed by your major professor and the IPBM Chair. You may receive one Professional Advancement Grant from the Graduate College and Graduate Student Senate for travel each fiscal year. Some funding agencies have a 90-day limit for turning in travel expense vouchers. If your trip is being

supported in part by funds from your major professor, be sure to turn in your travel expense voucher soon after you return to insure that you will be reimbursed.

Benefits

ISU Student Health Insurance Program

Group Hospital, Surgical, and Medical Insurance:

<http://www.hrs.iastate.edu/sship/homepage.html>

Single student coverage under the ISU Student and Scholar Health Insurance Program is provided *free of charge* to all graduate assistants at ISU. For new to ISU students, an ISU Insurance Program booklet should be mailed to you through campus mail as soon as you are entered on the payroll system. Students enroll for Health Insurance going on the line to AccessPlus <https://accessplus.iastate.edu/frontdoor/login.jsp>, clicking on the Student Tab and clicking through on Health Insurance and following the instructions provided for registration.

Newly employed personnel should not drop any other insurance they may have until they know the beginning date of the ISU insurance. The Student and Scholar Health Insurance Program is available for the spouse/domestic partner of students and the children of students. For details and enrollment cutoff dates on the ISU Student and Scholar Health Insurance Program, please contact the student insurance representative (515-294-2394).

All international students, whether on assistantship or not, are required to carry the ISU Student Health Insurance or to be covered by another health insurance policy. For more information, contact the International Education Services (IES) in 252 Memorial Union (294-1120).

Prescription Drug Benefit Program

Graduate students on assistantship receive single coverage free of charge in a prescription drug benefit program that reduces the cost of generic and prescription drugs available at the Student Health Center Pharmacy. Information on this benefit can be found at:

<http://www.hrs.iastate.edu/sship/docs/PharmacyGradAssistsPostDocs.pdf>

Health Service

As a student, you are eligible to use the ISU Student Health Service. Thielen Student Health Center is a complete outpatient medical clinic located west of Beyer Hall. The health fee covers consultations with medical staff and subsidizes charges for services, such as laboratory tests, immunizations, X-rays, and pharmaceuticals. A range of services is offered, including medical exams (physicals), women's health care, sports medicine, physical therapy, STD testing and treatment, travel immunizations, and a full-service pharmacy. Specialty services offered at a reduced rate include psychiatry, orthopedics, and ear, nose and throat. A mandatory Student Health fee (2008-09 school year) of \$95.00 and an \$8.00 Health Facility fee per semester is assessed to all students registered for five or more credits (\$47.50 and \$4.00 for summer session). This health fee pays for some services offered at the Student Health Center. The health facility fee goes towards the payment of the building of the new Student Health Center. For students enrolled for under five credits, the health fee is optional. The Thielen Student Health

Center is located at Sheldon and Union Drive on the northwest side of campus.
<http://www.health.iastate.edu>

Additional information on the student group plan medical insurance and the benefits of the mandatory health fee may be obtained at:

<http://www.grad-college.iastate.edu/finance/healthinsurance.html>

Dental Insurance is available for a fee:

<http://www.hrs.iastate.edu/sship/docs/DentalC&DBaseEnrollmentApp.pdf>

Vacations

Students on assistantships are paid employees of the University and as such are expected to conduct professional activities all days ISU is open, including days when classes are not in session. Most students also conduct research on at least part of most weekends. Many students find semester break a good time to make substantial research progress. Vacation should be discussed with your major professor.

Rotation students can take short vacations during their rotations, but keep in mind that you are paid employees of the University as well as students. Students who wish to do so must obtain permission from both the professor in whose lab they are rotating and the Chair of IPBM. Such permission should be obtained BEFORE reserving airline tickets or making other non-refundable travel arrangements. Students who take vacation without prior approval will not be paid for missed days and may suffer other administrative consequences at the discretion of the IPBM Chair. Students who opt to leave the country for vacations or holidays and whose return is delayed due to visa or other travel problems will likely have their payroll stopped beginning at the end of any approved vacation days until they return to work.

All students are welcome to take vacation during University holidays. During the typical graduate student rotation period, University holidays include Labor Day (September), 2 days at Thanksgiving (November), 3 days at Christmas-New Years (December and January) and Martin Luther King Day in January.

Injuries and Injury Reports

If you are injured while performing your duties as a Graduate Assistant, you must stop by the office of your home department or the IPBM Program Office and fill out an Employers First Report of Injury (<http://www.ats.iastate.edu/forms/uniform/stuacc.doc>) as soon as you are able to do so. As a rule, the University's Worker's Compensation insurance carrier will pay for your medical care.

Student Counseling

Student Counseling Service (SCS) provides a wide range of services to help students gain the most from their college experience. SCS offers career counseling, personal counseling, group counseling, and workshops. Most services provided by SCS are short-term in nature, and SCS can assist students needing long-term assistance with referrals to community services.
<http://www.public.iastate.edu/~stdtcouns/>

Some of the typical issues SCS assists students with include career decision-making, coping with relationship problems, low self esteem, stress, loneliness, depression, cultural differences, sexual assault recovery, trauma, childhood abuse, conflicts over sexuality, substance

abuse, eating disorders, academic motivation, and other concerns. Other services include the Substance Abuse Prevention Program, Career Resource Center, Learning Disabilities Screening, Placement Testing, and consultation and outreach services. SCS also provides consultation and training to faculty and staff to assist them in addressing the psychological needs of students.

Crisis Services through Student Counseling Services

If you have an urgent matter and feel it would be important to speak to a counselor as soon as possible, please call the SCS desk at 294-5056 and let the receptionist know that you are requesting a same-day crisis appointment or simply come to our office in the Student Services Building on the 3rd floor. SCS counselors save some appointments each day for such matters.

If this is after hours or on a weekend/holiday when SCS is not open, and you feel it is important to speak to someone, you may call the Richmond Center at 515-232-5811. **IF THIS IS A LIFE THREATENING SITUATION OR ONE THAT COULD RESULT IN HARM TO YOURSELF OR SOMEONE ELSE, CALL 911.**

Recreation Services Office: <http://www.recservices.iastate.edu>

Legal Assistance: <http://www.dso.iastate.edu/sls>

Student Organizations: <http://www.sodb.stuorg.iastate.edu>

Dean of Students Office (DSO) and Student Assistance Services (SAS)

Members of the Dean of Students Office (DSO) and Student Assistance Services (SAS) assist students as they manage issues surrounding academic concerns, personal matters/emergencies, and navigation of university policies and procedures. DSO/SAS staff members counsel students on effective ways of filing academic grievances, refer students to university & community resources, provide notification of faculty in emergency absence situations, intervene and follow up with students experiencing mental and physical crises, and provide assistance in understanding the University judicial system. In general, the DSO and SAS are places where students can find answers or start on the path to their own solutions.

These pages are designed to alleviate some frequent concerns, but it can be very helpful to talk one-on-one with a DSO staff member. Students, family members, and ISU faculty/staff seeking assistance can contact Nicci Port (nport@iastate.edu), Coordinator of Outreach Services; stop in to the [Dean of Students Office](#) (1010 Student Services Building); or call 515/294-1020 (TTY 515/294-6635) to schedule an appointment.

An Excellent Source of Information for all things graduate student—the Iowa State University Graduate Orientation Handbook: <http://www.grad-college.iastate.edu/gpss/>. Look at “Orientation Handbook” link on the left menu down towards the bottom.).

Administrative Matters

Administrative Assistance

There are a number of offices on campus to help with the administration of your graduate program. The main one for Plant Biology students is the Interdepartmental Plant Biology Office. Simi Venkatagiri is the IPBM Program Coordinator and can provide help with questions about all administrative procedures. Academic advice about courses and rotations will be provided by your Temporary Graduate Advisor, major professor or Dr. Wang (DOGE).

Simi Venkatagiri
Interdepartmental Plant Biology Major
207 Science I
☎ 515-294-9052
FAX 515-294-6019
E-mail: ipbm@iastate.edu

Office and Home Address

The Interdepartmental Plant Biology program needs to know your local address and telephone number and also needs to be informed of any changes in your address or phone number that may occur during your tenure in the program.

All first year IPBM RAs will have a mailbox in the IPBM Program Office. Your permanent office (desk) address will be determined once you have chosen a major professor. If you do laboratory rotations, you should be given a temporary desk in each laboratory as you proceed through your rotations. You may also be assigned temporary office space for your first academic year.

Communication

It is vital that you maintain good contact with IPBM personnel throughout your graduate program. This is most easily done using e-mail.

E-mail: E-mail should be checked at least daily as this is the *primary means* of keeping students and faculty informed about program activities. You may use the following e-mail addresses to reach all students and faculty in the program:

ipbms@iastate.edu (reaches all IPBM graduate students)
ipbmf@iastate.edu (reaches all IPBM faculty members)

Internet: Most of the information that pertains to the program in general can be found at the following web site:

<http://www.agron.iastate.edu/ptf/ipbm/home.asp>

Mail Service: You will normally pick up your mail in your home department. If you have not yet chosen a home department, a temporary mailbox will be assigned to you in 207 Science I.

You should check for mail on a regular basis (at least twice a week). If the office door is unlocked but closed, please feel free to come into the office to obtain your mail.

Telephone: Local calls (phone numbers in Ames) may be made on most campus phones. Long distance personal calls must not be made on University phones.

Transportation

Bicycles: You can park your bicycle at many locations on campus. Except for walks labeled as bike paths, bicycle riders must not use campus sidewalks. A bicycle used between sundown and sunrise must be equipped with a headlight, tail lights or an adequate reflector, and a warning device. Bicycles using only on campus can be registered free through the ISU Parking office. Bicycles used off campus must be registered by the city of Ames. The cost for bike registration for the city of Ames is \$5 for a two-year permit. The licenses may be obtained from various locations in Ames (Hy-Vee, Michael's Cyclery, all bike shops in Ames, Ames City Offices - Finance, the University Book Store, Cub Foods) or from the Parking Systems Office in the Armory on campus.

Buses: The city of Ames has an excellent bus system called CyRide. During the school year the buses leave from most locations every 20 minutes. If you show a current, paid University fee card, you can ride for free. <http://www.cyride.com/>

Cars and Parking: A copy of the ISU Traffic and Parking Regulations can be obtained from Public Safety, Parking Division, 27 Armory. Consult the section covering students. <http://www.dps.iastate.edu/parking/>

Summary of Administrative Forms

NOTE: For all forms:

The Director of Graduate Education (DOGE) is the IPBM Chair, Dr. Kan Wang (G405 Agronomy Hall, kanwang@iastate.edu, 294-4429)

The Department/Program is Interdepartmental Plant Biology Major.

Add/Drop Slips

Use to add/drop courses after the first week of classes. These yellow half-sheet forms are available at the Graduate College, in the IPBM Program office, and in departmental offices.

Request for Professional Advancement Grant (PAG)

You can request funds from the Graduate College and the Graduate and Professional Student Senate (GPSS) to attend and/or present at conferences and symposia.

<http://www.grad-college.iastate.edu/gpss/PAG/index.html>

Request to Establish a Home Department

Complete when you decide on your major professor and home department.

<http://www.grad-college.iastate.edu/forms/files/EstablishNewDept.doc>

Recommendation for Committee Appointment

Complete when you have formed a POS Committee

<http://www.grad-college.iastate.edu/forms/files/CommitteeAppointment.doc>

Request to Change Committee Appointment

Use to change POS Committee Appointments

<http://www.grad-college.iastate.edu/forms/files/CommitteeChange.doc>

POS (Program of Study)

Should be completed by the end of the first year in your permanent lab

<http://www.grad-college.iastate.edu/forms/files/POS.doc>

Ideally all of the IPBM core courses and seminars should be listed first so that they can be easily checked for number of times taken. Additional courses can then be listed at the bottom of the form.

POS (Program of Study) Supplement

Use if you need more room on the POS form to list your courses

<http://www.grad-college.iastate.edu/forms/files/POSSupplement.doc>

Modifications to the Program of Study

Use if you need to add or remove courses to your approved POS

<http://www.grad-college.iastate.edu/forms/files/POSModifications.doc>

Request for Preliminary Examination

Use this form to indicate your intent to take your preliminary examination. This form is not available on the web. It must be obtained in the IPBM Program Office or the Graduate College and must be turned into the Graduate College 2 weeks in advance of your preliminary examination. The **Preliminary Examination form** will be sent to the IPBM Program Coordinator who should then send it on to your major professor.

Graduation Deadlines

This site provides the date deadlines by semester and the steps/forms necessary to graduate:

Application for Graduation (Diploma Slip)

See above deadlines for due date

<http://www.grad-college.iastate.edu/forms/files/GraduationApplication.doc>

Thesis-Preliminary Format Check and Final Submission

Thesis—Information on Abstract, Preliminary Format Checklist, final Submission Checklist and Thesis sample pages can be found through this web site:

<http://www.grad-college.iastate.edu/thesis/homepage.html>

See above graduation deadlines for due date

A copy of your thesis must be provided to each of your committee members at least three weeks prior to final oral examination.

Request for Final Oral Examination

See above deadlines for due date. This form is not available on the web. *It must be obtained in the IPBM Program Office or the Graduate College and must be turned into the Graduate College 3 weeks in advance of your final examination.* The **Final Examination form** will be sent to the IPBM Program Coordinator who should then send it on to your major professor.

Approval Slip for Graduation

The Graduate College will send your department or major professor the Approval Slip with the "Report of Final Examination" form after your Request for Final Examination is received and approved.

Thesis Final Submission and Graduation Checklist includes information on deadlines

<http://www.grad-college.iastate.edu/thesis/deadlines.html>

Professional Ethics

IPBM subscribes to the precept that honest and ethical behavior is necessary for the conduct of good science. Membership in IPBM (both student and faculty) is contingent upon high individual ethical standards.

It is imperative that you understand the ethical standards of science and conduct your scholarly activities accordingly. Scientists who commit unethical acts, whether from carelessness, ignorance, or malice, quickly lose the respect of the scientific community and/or are prevented from practicing science. Scientific misconduct includes such activities as: falsification of data, fabrication, deceptively selective reporting, purposeful omission of conflicting data with the intent to falsify results, plagiarism, representation of another's work as one's own, misappropriation of the ideas of others, the unauthorized use of privileged information, misappropriation of funds or resources for personal gain, and falsification of one's credentials. At ISU, these acts are taken very seriously and constitute "academic misconduct" (see ISU Graduate College Handbook). Individuals found guilty of academic misconduct may suffer a variety of penalties, up to and including expulsion from the university.

Occasionally, you may be faced with situations in which you are tempted to act in a manner you think might be unethical. If this occurs, we recommend discussing the situation with your major professor, or another professor whom you trust, to determine whether the actions you are considering are unethical. He or she should be able to suggest alternative actions that will be free of ethical questions.

Unfortunately, not all people understand or care about ethical issues and, at sometime in your career, you may be witness to an act you believe to be unethical. When the individuals committing the presumed unethical acts are members of your own laboratory, or worse yet, individuals with power over you, such as your major professor, the situation can be very awkward and you must proceed cautiously. You will find yourself torn between a fear of retribution and a desire to stop the unethical behavior before it hurts you and other members of your laboratory.

If you believe that unethical behavior is going on in your laboratory, we recommend that you first attempt to discuss the situation informally with the person whom you think might be behaving unethically. Sometimes friendly questions will resolve the problem. If you feel uncomfortable in this approach, or if you have tried friendly approach and it didn't resolve the problem, we recommend that you discuss the situation informally with a professor whom you trust. You may also go directly to the Chair of Interdepartmental Plant Biology Major. All discussions with the Chair will be confidential. You may also go directly to Associate Vice-Provost for Research who is responsible for investigating charges of academic misconduct on campus. No matter what you chose to do, you should take great care to ensure the rights of the individual whose actions you are questioning. Frivolous accusations of misconduct and vicious spreading of rumors are just as unethical as fabrication of data or plagiarism.

Laboratory Safety Training

All new graduate students participate in OSHA Lab Standard Training. This Training can be conducted by the University Department of Environmental Health and Safety Office (EH&S) (Ruth Book, Training, 294-8338) or the student can complete this requirement on-line by following these instructions:

Go to: <http://www.ehs.iastate.edu/cms/default.asp>

Click on: Learning Center Login:

LOGIN: using your University ID card number and password

Click on: On-Line Courses:

Take the following:

Chemical Hygiene Plan and Personal Protective Equipment (new format-Audio)

Fire Safety and Extinguisher Training

ISU-EPA Hazardous Waste Generator Online Training

Take the following:

An Introduction to On-Line Courses (~2 minutes)

Chemical Hygiene Plan and Personal Protective Equipment (~25 minutes)

Fire Safety and Extinguisher Training (~16 minutes)

ISU-EPA Hazardous Waste Generator Online Training (~25 minutes)

New graduate students will be required to participate in other lab safety training as scheduling by EHSO allows. This can include: Personal Protective Equipment, Radiation Safety: What Non-Radiation Laboratory Employees Need to Know, Hazardous Waste in the Laboratory: Five Critical Factors, and Fire Extinguisher Training. To register for these courses go to: www.ehs.iastate.edu/.

Click on "On-Line Training Center"

Log-on

Click on "Register for Training/Training Calendar". Note the months listed and look through the listings by month for next available classes. Places, dates and times for training will be listed. You should register for training as required and then attend the course.

Nondiscrimination and Harassment Policies

Complete information can be found at: <http://policy.iastate.edu/policy/discrimination/>

Selections from Iowa State University Discrimination and Harassment Policy follow:

Respect is the foundation for interchange of ideas, for learning and for working toward common goals. Consequently, Iowa State University is committed to assuring that its programs are free from prohibited discrimination and harassment based upon race, ethnicity, sex, pregnancy, color, religion, national origin, physical or mental disability, age (40 and over), marital status, sexual orientation, gender identity, status as a U.S. veteran (disabled, Vietnam, or other), or any other status protected by university policy or local, state, or federal law. Discrimination and harassment impede the realization of the university's mission of distinction in education, scholarship, and service, and diminish the whole community.

Iowa State University reaffirms and emphasizes its commitment to provide a professional working and learning environment that is fair and responsible; that supports, nurtures, and rewards educational and employment growth on the basis of relevant factors such as ability and performance; and that is free of discriminatory, inappropriate, and disrespectful conduct or communication.

For these reasons, the university will not tolerate discrimination or harassment, as defined below, and is committed to preventing it or stopping it whenever it may occur at the university or in its programs. The policy presented here applies to employees, students, visitors, applicants, or program participants at Iowa State University.

Iowa State University prohibits discrimination, which can include disparate treatment directed toward an individual or group of individuals based on race, ethnicity, sex, pregnancy, color, religion, national origin, physical or mental disability, age (40 and over), marital status, sexual orientation (including gender identity), status as a U.S. Veteran (disabled, Vietnam, or other), or other protected class, that adversely affects their employment or education.

Iowa State University also prohibits harassment, which can be a form of discrimination if it is unwelcome and is sufficiently severe or pervasive so as to substantially interfere with a person's work or education. Harassment may include, but is not limited to, threats, physical contact or violence, pranks, jokes, epithets, derogatory comments, vandalism, or verbal, graphic, or written conduct directed at an individual or individuals because of their race, ethnicity, sex, pregnancy, color, religion, national origin, physical or mental disability, age, marital status, sexual orientation (including gender identity), or U.S. veteran status. Even if actions are not directed at specific persons, a hostile environment may be created when the conduct is sufficiently severe, pervasive or persistent so as to unreasonably interfere with or limit the ability of an individual to work, study, or otherwise to participate in activities of the University.

It is the University's goal to prevent the occurrence of discriminatory and harassing activity and to promptly stop such conduct. While grounded in state and federal non-discrimination laws, this policy may cover those activities which, although not severe, persistent, or pervasive enough to meet the legal definition of harassment, are inappropriate and unjustified in an educational or work environment. This policy will be interpreted so as to avoid infringement upon First Amendment rights of free speech. The University must be mindful of

the tradition of academic freedom that includes the free exchange of ideas inherent in an academic community. A determination as to whether discrimination or harassment has occurred will be based upon the context in which the alleged conduct occurs.

Complaint Resolution

In an effort to prevent or stop discriminatory or harassing behavior, the University has adopted specific avenues through which an individual can make his or her complaint known. With issues of discrimination and harassment, it is important to identify and remedy the situation as soon as possible. For this reason, the University has adopted two complaint resolution mechanisms for discrimination and harassment concerns - informal and formal resolution. Claims of discrimination and harassment must be brought either as an informal complaint or a formal complaint to ensure that appropriate action can be taken right away. An informal complaint may, but need not be made before filing a formal complaint; however, once a formal complaint has reached resolution, the same complaint cannot be brought as an informal complaint.

To best remedy a situation, complainants are urged to promptly share concerns or complaints rather than risking their well being or negatively affecting the University's ability to investigate their case due to the passage of time and potential departure of witnesses. If a formal complaint contains incomplete information, the Office of Equal Opportunity and Diversity will promptly seek to gather the needed information from the complainant. In the event that such information is not furnished to the Office of Equal Opportunity and Diversity within 30 days from the date of the request, the case may be closed. Consistent with federal regulations governing the filing of complaints, the Office of Equal Opportunity and Diversity may decline to investigate claims in which none of the alleged discrimination or harassing action occurred within the preceding 300 days.

Any employee, student, visitor, applicant, or program participant of Iowa State University may file a complaint alleging discrimination or harassment in violation of the University's policy prohibiting such conduct. In most cases, complaints against affiliates or contractors of Iowa State University must first proceed through the affiliate or contractor before Iowa State University may intervene. Information about the University's policy and resolution procedures may be found in several offices, including the Dean of Students Office, the Student Counseling Service, the Women's Center, the Employee Assistance Program, and the Office of Equal Opportunity and Diversity. As described at the above web site, the University has designated and trained certain individuals, called Sexual Harassment Assistors, to assist a potentially injured person in deciding if and how to proceed and in carrying out that decision.

Confidentiality

Persons seeking general information or guidance about harassment or discrimination may be concerned about whether the information they share with another person will be confidential. While the university is eager to create a safe environment in which individuals can be unafraid to discuss concerns and make complaints, legal obligations may require the university to take some action once it is informed that harassment or discrimination may be occurring. Because of their positions of authority, certain university personnel--i.e., central administrators, deans, directors, department chairs, supervisors, and managers--are particularly obligated to take action when they

receive a complaint of harassment or discrimination. Although the confidentiality of the information received and the privacy of the individuals involved cannot be guaranteed, they will be protected to as great an extent as is legally possible. The expressed wishes of the complainant regarding confidentiality will be considered in the context of the university's legal obligation to act upon the charge and the right of the charged party to be informed concerning the charge.

Diversity at Iowa State University

The Office of Equal Opportunity and Diversity (EOD) is located at 3210 Beardshear Hall, right off the elevator. <http://www.hrs.iastate.edu/diversity/>

ISU defines diversity as that quality of its physical, social, cultural and intellectual environment which embraces the rich differences within the multiplicity of human expression and characteristics including age, culture, ethnicity, gender identification and presentation, language and linguistic ability, physical ability and quality, race, religion, sexual orientation, and socioeconomic status. “In order for affirmative action or diversity to work, there has to be an environment that welcomes it, not just tolerates it”, Carla R. Espinoza, Associate Vice President, Human Resources Services, Director, Equal Opportunity & Diversity, January, 2006.

On-line training for courses such as Diversity, Harassment and Discrimination and Drug Free Workplace are now available through ACCESS PLUS.

“Iowa State University does not discriminate on the basis of race, color, age, religion, national origin, sexual orientation, gender identity, sex, marital status, disability, or status as a U.S. veteran. Inquiries can be directed to the Director of Equal Opportunity and Diversity, 3210 Beardshear Hall, (515) 294-7612.”

Fellowship Opportunities (that we know about)

Graduate Research Fellowship Program (GRFP):

Brief overview is below; please go to the website for complete details. <https://www.fastlane.nsf.gov/grfp/>

Synopsis of Program: The National Science Foundation aims to ensure the vitality of the human resource base of science, technology, engineering, and mathematics in the United States and to reinforce its diversity by offering approximately 1,000 graduate fellowships in this competition. The Graduate Research Fellowship provides three years of support for graduate study leading to research-based master’s or doctoral degrees and is intended for students who are at the early stages of their graduate study. The Graduate Research Fellowship Program (GRFP) invests in graduate education for a cadre of diverse individuals who demonstrate their potential to successfully complete graduate degree programs in disciplines relevant to the mission of the National Science Foundation.

The three eligibility requirements for the Graduate Research Fellowship Program -- citizenship, degree requirements, and field of study – are described. Applicants are advised to read the entire program solicitation carefully to be sure that the requirements are interpreted properly. Applicants must exercise judgment in assessing eligibility. Applicants must be United States citizens or nationals, or permanent resident aliens of the United States. Fellowships are intended for individuals in the early stages of their graduate study. Applicants must have completed no more than twelve months of full-time graduate study at the time of their application. Fellowships are awarded for graduate study leading to research-based Master’s or doctoral degrees in the fields of science, technology, engineering, and mathematics supported by

the National Science Foundation (See NSF-Supported Fields of Study). The NSF welcomes applications for interdisciplinary programs of study and research.

NIH Minority Fellowship:

<http://grants1.nih.gov/grants/guide/pa-files/PA-00-069.html>

The National Research Service Award Predoctoral Fellowship for Minority Students will provide up to five years of support for research training leading to the Ph.D. or equivalent research degree; the combined M.D./Ph.D. degree; or other combined professional degree and research doctoral degree in the biomedical, behavioral sciences, or health services research. These fellowships are designed to enhance the racial and ethnic diversity of the biomedical, behavioral, and health services research labor force in the United States. Accordingly, academic institutions are encouraged to identify and recruit students from underrepresented racial and ethnic groups who can apply for this fellowship. Support is NOT available for individuals enrolled in medical or other professional schools UNLESS they are also enrolled in a combined professional doctorate/Ph.D. degree program in biomedical, behavioral, or health services research.

Department of Homeland Security (DHS) Scholarship and Fellowship Program Graduate Fellowships:

<http://www.ora.gov/dhsed/>

US Citizens only. You must be pursuing a doctoral or master's degree with a thesis requirement in the physical sciences, mathematical sciences, computer and information sciences, life sciences, social sciences, psychology, selected humanities, or engineering. If you are enrolled in the first year of a PhD program as of the application deadline, and prior to fall 2008 you had completed no more than two graduate courses since completion of a bachelor's degree, you are eligible.

Graduate Fellowships for Minority Students (GEM):

<http://www.gemfellowship.org/>

The mission of The National GEM Consortium is to enhance the value of the nation's human capital by increasing the participation of underrepresented groups (African Americans, American Indians, and Hispanic Americans) at the master's and doctoral levels in engineering and science. We prepare technical leaders for advanced careers in industry, academia, and government agencies by identifying and selecting highly qualified GEM Fellows to complete a program of graduate study and internships. Through our [university](#) and [employer](#) members, and other [strategic partners](#), GEM develops funding to award fellowships and builds mentor networks to support Fellows in achieving academic and professional success.

On-Line availability of funding resources:

<http://www.vpresearch.iastate.edu>

The office of Sponsored Programs Administration (OSPA) located at 1138 Pearson Hall (294-5225) assists students seeking fellowships and research funding from sources outside the university (state, federal, and private agencies). OSPA maintains a library of directories and other materials on fellowships and grants and publishes listings of funding opportunities in each edition of the University Newsletter. Information on financing can be accessed via the Internet at <http://www.vpresearch.iastate.edu/osp/student.html>.