

## WELCOME

Welcome to the Department of Natural Resources and Environmental Sciences. The department offers top notch faculty, nationally and internationally recognized as expert researchers in their respective fields. The University of Illinois offers abundant resources to support your research and academic pursuits, including computer, electron microscope, NMR, and radioisotope laboratories. It is notable that University faculty and their resources on the whole are open to communication and cooperative pursuits that transcend divisions of departments, colleges and units. We hope you will make use of these resources as you progress through your graduate training. The purpose of this handbook is to provide information concerning departmental policies in the planning and execution of graduate study programs. It also provides timelines and guidelines for the progression through your program of study. The handbook also designed to facilitate mutual understanding between students and faculty. This manual is intended as a supplement the following items:

- A Handbook for Graduate Students and Advisers (The Graduate College), [http://www.grad.uiuc.edu/grad\\_handbook/](http://www.grad.uiuc.edu/grad_handbook/)
- Academic Staff Handbook, <https://www.ahr.uiuc.edu/ahrhandbook/default.htm>
- University of Illinois Programs of Study, 2004  
<http://courses.uiuc.edu/cis/programs/urbana/index.html>
- University of Illinois Courses Catalog, <http://courses.uiuc.edu/cis/>
- Code of Policies and Regulations Applying to All Students, [http://www2.uiuc.edu/admin\\_manual/code/](http://www2.uiuc.edu/admin_manual/code/)

We hope your graduate experience is rewarding, and encourage you during and after your graduate program of study, to direct any questions to the NRES Student Services Center, N-509 Turner Hall, or to the Graduate College, 204 Coble Hall. Below are the key contacts for the NRES Graduate Program:

- Wesley M. Jarrell, NRES Department Head, (217) 333-2771, [wjarrell@uiuc.edu](mailto:wjarrell@uiuc.edu)
- Jack Juvik, NRES Graduate Coordinator, (217) 333-1966, [juvik@uiuc.edu](mailto:juvik@uiuc.edu)
- Mary Lowry or Karen Claus, NRES Student Services Center, 333-5824, [nres@uiuc.edu](mailto:nres@uiuc.edu)

\*\*Students first enrolled in summer 2004 or later will be held to the requirements of this handbook for graduation.



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## **THE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES**

The Department of Natural Resources and Environmental Sciences (NRES) is a broad and diverse department offering a wide range of options for graduate study, leading to both M.S. and Ph.D. degrees. The mission of the department is to establish and implement research and educational programs that enhance environmental stewardship in the management and use of natural, agricultural, and urban systems in a socially responsible manner. Composed of approximately 45 faculty, 80 adjunct professors and affiliates and 200 graduate students with a large supporting staff, the department includes the following specialization areas of research and teaching: Aquatic Ecology and Water Quality, Biogeochemistry and Transport, Fish and Wildlife Ecology, Food and Fiber Production, Forest Ecology and Management, Genetics and Plant Physiology, Green Industry, Human Dimensions of the Environment, Insect Ecology, Natural Plant Products, Quantitative Analysis, Soil Productivity and Management, and Sustainability.

Our affiliates are housed in the Illinois Natural History Survey, the Illinois State Geological Survey, the Morton Arboretum, and several other related agencies. Our affiliate faculty belong to a variety of academic departments and colleges on this and other University of Illinois campuses. This variety of disciplines provides a systems-level perspective that few departments can offer. Further illustrating the breadth of NRES, many areas of our research are interdisciplinary across departments or including one or more area of specialization. It is because of these interconnections and because of the applied nature of our work that our department includes so many scientists in so many fields. Graduate study in NRES involves developing an expertise through course work and research experience in one or more of these disciplines and using this knowledge to address and to solve problems.

Well-equipped laboratories, greenhouses, nearby experimental farms, and natural areas are available for each field of specialization within the department. The primary locations of NRES faculty are Turner Hall and the Plant Sciences Laboratory (dedicated April 1989). The Main Office, Department Head' Office, Business Office, Human Resources Office, and Student Services Center are all located in Turner Hall. Turner Hall is also the primary location for the soils faculty, turf faculty, and many of the natural resources faculty. The Plant Sciences Laboratory (PSL), is the primary location for the horticulture and human dimensions faculty. The Edward Robert Madigan Laboratory (opened spring, 1991) houses many of the plant physiology faculty from NRES and other departments and contains the latest biotechnology equipment, protocols, and expertise. In addition, the department has laboratories and offices in the Agricultural Engineering Science Building, the National Soybean Research Center and other buildings. In addition to facilities on the Urbana campus, the department has greenhouse and field research areas at the Dixon Springs Agricultural Research Center in southern Illinois, as well as at the St. Charles Horticulture Research Center in northern Illinois.

### **Departmental Organization**

The Department of Natural Resources and Environmental Sciences at the University of Illinois at Urbana-Champaign has a number of duties and responsibilities. There are three important components of the total program. **Teaching**, preparing undergraduate and graduate students through instruction to effectively assume leadership roles within the various aspects of NRES is a primary responsibility. The **research** programs of the department are primarily

designed to generate information needed by various state, national, and international organizations and companies to solve difficult environmental problems and to encourage students to reach their full potential. Many of these research efforts are of an applied type; others may be designed to discover more fundamental information needed to further advance applied technology. Within the department, there are strong **Extension** outreach programs to assist the people of Illinois in applying new technologies generated through research.

Each of the faculty of the department has responsibilities in resident instruction, research and/or Extension. (See Appendix B for a list of Graduate Faculty in NRES.) Additionally, most of the faculty, adjuncts and affiliates have responsibilities in more than one area. All faculty are available to assist and consult with students, serve on student guidance committees, direct thesis research, or serve on examination committees.

As graduate students, you are members of the Graduate College, and governed by their policies and procedures. All tenure track faculty and some adjunct researchers are members of the Graduate Faculty of the Graduate College. You, the department, its faculty and its undergraduate students are also members of the College of Agricultural, Consumer and Environmental Sciences (ACES). Undergraduate students are governed academic policies of the College of ACES. All Colleges, Schools and Units are under the directives put forth by the 'campus,' namely the Provost's Office, the Board of Trustees of the University of Illinois, and the Illinois Board of Higher Education.

Within the department various advisory committees and staff support the department head. The coordinators for teaching, research and outreach oversee these vital program areas and fill-in during the department head's absence. Each coordinator also leads other area specific faculty committees which meet regularly throughout the year to determine policies and guide future development relative to the department's mission.

## **JOINT/INTERDISCIPLINARY PROGRAMS**

The University of Illinois offers a joint degree program in law and natural resources and environmental sciences. Students must be accepted into each department separately during the same term, and will also complete the requirements of both programs at the same time. Graduates of the joint program will receive an M.S. in Natural Resources and Environmental Sciences and a Juris Doctor of Law degree from the College of Law. This program allows students to supplement a law program with training in a related scientific field. You may contact either Dr. Eric Freyfogle in the College of Law at 217/333-8713 or [erictf@uiuc.edu](mailto:erictf@uiuc.edu), or Dr. Jack Juvik in NRES at 217/333-1966 or [juvik@uiuc.edu](mailto:juvik@uiuc.edu), for more information.

A number of NRES faculty are also members of the Physiological & Molecular Plant Biology program. This program takes advantage of the breadth of knowledge and expertise in plant biology at UIUC. The program provides a flexible academic curriculum for students and draws participating faculty from a variety of academic units and programs. In this program students receive a M.S. in NRES, but with a specialization in plant development & molecular biology, plant biochemistry & biophysics, or organismal & community plant physiology. The program itself does not independently admit students or confer graduate degrees. Students must

be accepted to a specific departmental graduate program prior to admission to the program and must fulfill the requirements of the degree in NRES in addition to the program's requirements. A student participating in the program is a bona fide member of NRES, like any other NRES graduate student who is not participating in the Physiological & Molecular Plant Biology program. Please view the program's web page at <http://www.life.uiuc.edu/plantbio/pmpb> for more information.

Human Dimensions of Environmental Systems [HDES] is a rapidly expanding area of study. With increasing public concern about the environment there are great expansions of employment and research opportunities at a scale unmatched since the 1960's and 70's. The collective goal of this program at the University of Illinois at Urbana-Champaign is to enhance environmental decision-making through the application of social, psychological and cultural research to interactions between humans and natural systems. Through the scholarship and creative activity of the program faculty and graduate students, we strive to expand the body of knowledge of human-environment interactions and to disseminate research results for incorporation into environmental policy and management. The program comprises participating faculty from numerous disciplines and departments and HDES Scholars. The Scholars are graduate students selected through a competitive application process. The program itself does not independently admit students or confer graduate degrees. Students must be accepted to a specific departmental graduate program prior to admission to the program and must fulfill the requirements of the degree in NRES in addition to the program's requirements. These students are enrolled in participating units but undertake programs of study drawing on the resources of the Human Dimensions program, coursework, and faculty. The Human Dimensions of Environmental Systems program provides an interdisciplinary perspective on social, psychological, and cultural aspects of natural resources and environmental systems including: human impacts of environmental change, conservation behavior, hazard and risk assessment, environmental attitudes and beliefs, perceived environmental quality, environmental planning and assessment, and cultural aspects of environmental issues.

NRES is also one of the graduate departments participating in the Medical Scholars Program at the University of Illinois. The Medical Scholars Program at the University of Illinois at Urbana-Champaign is an MD/PhD program committed to preparing a diverse cadre of academic Physician-Scholars to confront the multi-dimensional problems and issues that face medicine. The MSP has over 160 MD/JD and MD/PhD students pursuing graduate study in over 35 academic disciplines, including the behavioral sciences, humanities, physical sciences, as well as the biomedical sciences. With such diverse student perspectives, the MSP provides a unique and electric environment for bright and creative scholars to pursue their passion for combining cutting edge research with individualized high quality clinical training. All of the graduate and medical training is done at the Urbana-Champaign campus. The Medical Scholars Program is jointly sponsored by the University of Illinois at Urbana-Champaign Graduate College and the University of Illinois at Chicago College of Medicine. Only US citizens and permanent residents are eligible for admission. Please contact them at 217-333-8146 for details.

The program in Environmental and Resource Economics (pERE) offers courses, seminars and an opportunity to conduct research under the guidance of some of the nation's leading scholars in environmental and resource economics. Its faculty serve on major government advisory bodies, editorial boards, and have been visiting scholars at universities around the globe. Their expertise ranges from environmental law and regulatory policy to advanced

methods for the analysis of ecological-economic problems. pERE is one of several environmental programs supported by the Environmental Council at the University of Illinois. The program itself does not independently admit students or confer graduate degrees. Students must be accepted to a specific departmental graduate program prior to admission to the program and must fulfill the requirements of the degree in NRES in addition to the program's requirements. Courses offered through the program in environmental and resource economics cover modern economic theory and its application to problems in environmental regulation, environmental quality, and natural resource management.

NRES also offers an extramural M.S. program in which working adults in the Chicago area can complete a non-thesis M.S. degree by taking extramural courses at off campus locations. These courses are offered by faculty and affiliates of NRES through cooperating collaborators, including the Morton Arboretum. Dr. Don Briskin is the contact for more information, and he can be reached at 217/244-1115.

Each graduate student will typically specialize in a single area of academic research, but most faculty members have discipline training and backgrounds that enable them to provide guidance in more than one specific area. Students are encouraged to get to know and seek technical help from as many of the faculty as possible, whatever their specific area of interest.

## **GRADUATE TRAINING - What Is It?**

Graduate training is that relatively short period of transition as a student becomes a teacher, researcher, extension specialist, consultant, or other related professional. The graduate student has opportunities for activities and experimentation that are unlikely to recur.

You alone can decide on the extent and quality of the educational and research experience gained from your graduate program. Your initiative, more than anything else, will dictate how much, how far, and in what direction this training will take you. Unlike undergraduate studies, the graduate program is not based entirely on the ability of the student to earn good grades in organized course work. Within your graduate program, you are expected to develop some appreciation for the broad field of NRES. This will not likely be accomplished through strictly formal studies, but will come from working closely with the staff of the department and other graduate students. You will find many exciting things going on within the department; keep your eyes open and become involved. What you get out of this experience in terms of preparation for a stimulating professional career will largely be determined by what you put into it. Always keep in mind that you can never really know what experiences will be valuable in the future. Consequently, the more complete and varied these experiences are, the better trained and qualified you will be.

The course work you will complete is not specifically prescribed, but rather is developed by you and your Guidance Committee to assist you in reaching your career goals. You will also be responsible for developing and conducting a research program. Bear in mind that as you proceed through your program of study and related activities, you are in fact writing your own recommendations. The strength of these recommendations will depend upon you.

## ADMISSIONS

The department receives more applications for admission than can be accepted. Funding for graduate student support is always limited and can be provided only to superior students.

### Admission Criteria

Applicants must have a grade average of 3.0 (4.0 = A) or better calculated on the last 60 semester hours of undergraduate course work. This includes the entire semester in which the 60th hour occurs. Applicants on a quarter system are evaluated on their last two years or 90 quarter hours. In addition, Ph.D. applicants must have earned a grade average of 3.5 (4.0 = A) or better for their M.S. degree work.

Applicants should have adequate preparation in the fundamental sciences and courses appropriate to the proposed field of study in natural resources and environmental sciences. Applicants without the necessary prerequisites may be accepted conditionally in a non-degree program. In these cases remedial undergraduate courses must be completed to establish a basic foundation before they will be accepted into the degree program. The Graduate Record Exam (GRE) is required of all students, except for students in the extramural M.S. program and students in the joint law program (who may substitute LSAT scores for GRE scores). We only require the quantitative, verbal, and analytical portions of the GRE exam, which each have a maximum score of 800, 800, and 800 or 6.0 (depending on the analytical version) respectively. Our recommended scores for these are a cumulative score of 1650, or 1100 and 4.5 for the analytical section; however, there is no minimum score for admission. If your score is lower than you feel you could have earned, you are encouraged to retake the exam to improve the total score. The GRE score must have been earned within five years of the anticipated date of admission to the department. The official GRE results will be mailed to the University of Illinois if you use the code 1836. The GRE results will be examined along with GPA, letters of recommendation, statement of purpose, and other information in the application package.

Students whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL). The Department of Natural Resources and Environmental Sciences recommends a minimum score of 600 on this test, or 250 on the computerized version. If the TOEFL score is above 607 (or 253 on the computerized version), no supplementary English courses will be required before graduation. The TOEFL score must have been earned within two years of the anticipated date of admission to the University. The University will not accept students who score below 550 on the TOEFL examination.

Prospective graduate students are urged to apply for admission to the degree program as early as possible, preferably six to ten months before the beginning of the semester in which they expect to enroll. For fall admission, a deadline of February 1 is used for review of students for financial assistance. Although applications can be submitted later, the opportunities for financial support may be reduced. Strong letters of reference, evident motivation to undertake graduate study, and good preparation in basic science courses enhance an applicant's credentials.

### **Admission Process**

When elements of an application file begin to be received at NRES, they are filed alphabetically by applicant's last name in an "incomplete" file. An applicant's file is considered complete when NRES has received an application with the fee paid, three letters of reference, an official GRE score report, all the applicant's transcripts, and if the applicant is international, an official TOEFL score report. The applicant will not be considered for admission until all these elements are present. When the file is complete, it then is sent to the NRES Graduate Education Committee. If the decision to circulate is positive, the file will be circulated to those faculty the applicant has listed an interest in working with, any faculty that have communicated an interest in that particular applicant, and any other faculty members having research interests in areas similar to the applicant as recommended by the Committee. This list of faculty is then included in the applicant's file. If the applicant is determined not to be qualified for our program, the applicant is sent a letter indicating that result.

For the qualified applicants, the next step is usually the longest in the process. The applicant's file is announced for review and made available to the faculty that were listed as potential advisors. In the file is a comment form to which any faculty on the circulation list may respond. The comment form indicates the level of interest of the faculty member in the applicant, by asking whether the applicant should be admitted, whether the professor would serve as the faculty advisor for the applicant, and whether or not funds would be committed to support the applicant's program of study. Once the file has been available for at least two weeks, the results are compiled. If no faculty are interested in serving as the advisor, the applicant is denied admission. If one or more faculty are willing to serve as the advisor, the applicant is sent a letter of acceptance to the program. The letter also includes any offers of assistantship that have been made by faculty. Usually, by this time however, faculty have contacted the applicant to discuss their research program and the applicant's interest in working with them. The acceptance letter also indicates a date by which the applicant needs to let NRES know of their decision. This decision should be sent to the Graduate Coordinator or the NRES Student Services Center. If the applicant declines, the file is closed. If the applicant accepts, the file is sent to the Office of Admissions and Records for verification. The department only recommends admission. Official acceptance into the program is communicated by the University's Office of Admissions and Records (OAR). OAR also determines qualifications of international applicants, verifies the availability of funding to support international students, and issues DS2019 or I-20 paperwork to international students.

### **Admission on Limited Status**

If you are admitted with an undergraduate GPA for the last 60 hours below 3.0, or if you scored below the University minimum on the TOEFL, you will be admitted on limited status. Once you have completed twelve hours of graded coursework or completed all the ESL courses required by the University, you will automatically be upgraded to full status by the Office of Admissions and Records. You must be upgraded to full status in order to graduate.

## **FINANCIAL SUPPORT**

### **Sources and Awarding of Financial Support**

Several sources of financial support are available within the department: research assistantships supported by federal and state and private grant funds made available to NRES faculty; competitive research assistantships supported by NRES; teaching assistantships; University Fellowships; the Jonathan Baldwin Turner Graduate Fellowship Program; the G. Victor Ball Horticultural Endowment, the C. A. and C. C. Rebeiz Endowment for Basic Research, the Odell Graduate Fellowship in Soil Science, the Eugene Borener Graduate Fellowship in Horticulture, the Spaeth & Boggess Graduate Fellowship in Forestry, the Carl Hoppman Graduate Fellowship in Turf Science, Federal Work Study programs, and waivers of tuition and fees. All of these are used to recruit high quality students to the department. All appointments greater than or equal to 25% and less than 67% as research or teaching assistants, as well as all fellowships, provide a stipend and waive tuition and the service fee. Several graduate scholarships are also annually awarded to continuing students in the department. (See the Appendix for a list of the NRES Graduate Scholarships.) The Graduate College Fellowship Office also administers competitive fellowships and grants to currently enrolled and prospective graduate students. Check the requirements for these awards at the Graduate College Fellowship Office web site, <http://www.grad.uiuc.edu/fellowship/fellowGC.html>.

Annually the department also awards \$1000 scholarships to continuing students. The call for applications goes out in the spring to continuing students. More information about each of the \$1000 graduate scholarships we award is available in appendix G.

Departmental financial support is granted on a competitive basis. Applicants are judged for academic potential based on past performance, experience, motivation, dedication to the designated area of interest, and where applicable, the potential to satisfy the objectives of a donor. Information about the current availability of financial aid can be obtained from the Graduate Coordinator or, in the case of research and teaching assistantships, directly from faculty members working in the area of interest.

In the awarding of financial support for graduate study, there are always many more applicants than support funds. Consequently, a careful evaluation of each applicant is made and offers are extended to those candidates who show the greatest potential for graduate study and for the use of the knowledge gained. The department does not assume the responsibility for supporting students that agree to enter the program at their own expense. Acceptance for graduate study in the department is not considered to be a commitment for present or for future financial support, unless specifically stated in the acceptance letter.

Students who qualify for federal work study must notify the NRES Student Services Center in order to take advantage of the program. In order to qualify, you must complete the FAFSA form in the winter, and be notified by the Office of Student Financial Aid that you qualify for this funding source.

**Expense and Benefit Table**

The following table represents some anticipated expenses of graduate study for the year 2004-2005 for a new, full time student studying for fall, spring, and summer. (All rates are variable and subject to change.)

**M.S.**

	IL Resident		Out of State*	
	Costs	Compensation	Costs	Compensation
Tuition & service fee	\$8,813		\$23,813	
Other fees	\$1,725		\$1,725	
Living expenses (approx.)	\$13,300		\$13,679	
Total cost*	\$23,838		\$39,710	
Annual stipend- 50% RA		\$15,026		\$15,026
Tuition & service fee waiver		\$8,813		\$24,306
Total award		\$23,839		\$39,332

**New Ph.D.**

	IL Resident		Out of State*	
	Costs	Compensation	Costs	Compensation
Tuition & service fee	\$8,813		\$23,813	
Other fees	\$1,725		\$1,725	
Living expenses (approx.)	\$13,300		\$13,679	
Total cost*	\$23,838		\$38,838	
Annual stipend- 50% RA		\$15,928		\$15,455
Tuition & service fee waiver		\$8,813		\$23,813
Total award		\$24,687		\$39,268

\* Applicants who are not U.S. citizens must submit evidence that they have sufficient financial resources to support their entire program of study before the University will accept them for admission. This includes costs of tuition, fees, living expenses for the student and all their dependents, etc. for all years necessary to complete the student's program of study.

Graduate student assistants with a 25 - 67% appointments receive a waiver of tuition and the service fee. The other fees that are not waived are the transportation fee, the general fee, the Krannert fee, the SEAL, SORF, SG fee and the health service fee. These fees are not waived and are assessed of all fully enrolled graduate students each semester you are enrolled. There is also a fee for health insurance. If you are covered by a personal policy, you will have to show proof of that policy to be refunded this fee. The health service fee refers to services obtained at the McKinley Health Center on campus. The health insurance fee covers services obtained at local doctors' offices, pharmacies and hospitals. For more information you can visit the Student Health Insurance Office, which is located on the fourth floor of the Illini Union Bookstore.

**Departmental Stipends**

The Department of NRES maintains minimum stipend rates for assistants. Teaching assistants and research assistants are paid at the same rates. An assistant may be appointed for 13%, 25%, 50%, 67%, or 100% time. However, 50% time appointments are considered standard. The monthly rate table for 2004-2005 NRES RA and TA stipends is shown below. These rates are subject to change annually as the University pay rates increase. Note that as PhD students pass their preliminary exam, their pay rate increases. The "level 2" rate will be applied the first August 16 after the student has passed the preliminary exam, as we cannot give students mid-year raises. Graduate assistants are normally appointed by the semester for a 9 or 11-month appointment. The monthly stipend rate below is then paid for each month in which the assistant is appointed. (For example, 11-month appointments do not get paid in August.)

**2004-2005, NRES RA and TA Stipends**

	<b>MS</b>	<b>PhD Level 1 (before the Prelim)</b>	<b>PhD Level 2 (after passing the Prelim)</b>
<b>%</b>	<b><u>Monthly</u></b>	<b><u>Monthly</u></b>	<b><u>Monthly</u></b>
100	\$2,732	\$2,896	\$3,092
67	\$1,830	\$1,941	\$2,072
50	\$1,366	\$1,448	\$1,546
25	\$ 683	\$ 724	\$ 773

**Work Required**

Research and teaching assistants are expected to work part-time for their assistantship. This service is exclusive of their thesis research. However, it is virtually impossible to determine absolutely the number of hours of work per week expected of most assistants. For instance, one cannot be specific about the time one devotes to a research assistantship that is tied to thesis research. The specific nature of this service is determined by the student's major advisor and approved by the Department Head. Support for students not fulfilling assumed responsibilities may be terminated.

A list of courses with teaching assistant positions regularly funded is available at the NRES Student Services Center. However, the faculty member teaching the course assigned an assistant will choose the teaching assistant. Inquiries about position availability should be made to them directly. An announcement is circulated when classes receiving TA support have been decided, and applications are taken. All teaching assistants in NRES are required to successfully complete the University's two-day All Campus TA Orientation as well as all four post-orientation follow-up sessions. In addition, international students are also required to attend the International TA Orientation and earn a score of 50 or better on the SPEAK test in advance of agreeing to TA. Students planning to assume a TA position should submit their name to the NRES Student Services Center at least two months prior to the start of the semester to ensure registration in the TA orientation course(s). The speak test is only offered in October and March, so international TAs must notify the office even further in advance.

**Appointment Processing**

Because the first day of the pay period is August 16, students should plan to begin working on that date. If that day is a weekend, students should discuss the actual start date with

their faculty advisor. Additionally, students may not work before their paperwork is completed. For these reasons, new students or students on new appointments who will be working as research or teaching assistants should report to the NRES Human Resources Manager as soon as they arrive on campus in order to fill out the necessary forms and to avoid a delay in receiving their first paycheck. Students who are advised by adjunct or affiliate faculty will need to see the Human Resources Manager in their respective department. Foreign students are required to have applied for a social security number before beginning employment. The Office of International Student Affairs (OISA) has streamlined this process so that it can be done on campus and usually within a week. Foreign students must make this a priority once they arrive on campus.

Continuing students should check with their advisor to verify that their appointment will be extended into the next semester, summer or the following academic year, depending on your circumstances. Advisors are required to submit paperwork every semester to continue graduate appointments, and you want to be sure that your advisor is doing this for you throughout your program of study. Summer percentages are not always the same, and some students work hourly during the summer, so your situation may vary. If you have questions about your appointment, see the NRES Human Resources Manager. Additionally, RA and TA funding is provided by your advisor, unless you have been awarded a fellowship or merit based assistantship. If you change advisors, your new advisor will become responsible for supporting your program of study.

Pay periods begin on August 16 for the fall term and on January 1 for the spring term. All assistants should be on campus and have their appointment processing done by these dates. Arriving late or not finishing processing by these dates will result in late paychecks and/or paychecks for less than a complete month for the first pay period. All graduate assistants are paid on the 16<sup>th</sup> day of each month. If the 16<sup>th</sup> falls on a weekend, paychecks will be available on the preceding Friday. Fall appointments are from 8/16 to 12/31. Spring appointments are from 1/1 to 5/15, and summer appointments are from 5/16 to 7/15. Once again, regular graduate assistants are 11-month appointments and are not paid in the month of August. As all assistants are paid by direct deposit, the only way to view your earnings statement is by using the NESSIE system.

### **Income Taxes**

After processing paperwork with the NRES Human Resources Manager, foreign students will have to report to B6 Coble Hall to fill out their W-4 forms for federal tax withholding. Income tax is withheld from the salary of all assistants, except from the earnings of graduate assistants on fellowships. However, this income is taxable, so it is your responsibility to arrange for taxes to be withheld or arrange to pay the tax later.

### **Sick Leave and Vacations**

Graduate assistants are eligible for 13 non-cumulative and non-compensable sick leave days per appointment year, but do not earn vacation time. Probably more than any other factor, success in science requires hard work and dedication. First rate scientists routinely work long hours, sometimes seven days a week. In contrast to class work, experiments are expected to continue on weekends and between semesters year round. In fact, the time between classes is

often the most productive time to do experiments. Before scheduling a vacation, you should approve the time off with your advisor.

## **ELEMENTS OF A GRADUATE PROGRAM**

Several specific elements comprise a graduate program of study. Within the Department of Natural Resources and Environmental Sciences the most important are: the major advisor, the Guidance Committee, the Plan of Study and the Research Proposal, the annual review process, seminar (NRES 500) and Graduate Student Orientation (NRES 594).

### **Major Advisor**

The key individual in the development of the graduate program is the major advisor or major professor. The major advisor is responsible for helping the student plan a program of study that will provide the opportunity to reach a prescribed level of excellence. It is important to recognize that the advisor is to advise and counsel and not to "carry" the student. It is the responsibility of the student to achieve the prescribed level of excellence with the advisor directing the way.

The selection of the major advisor is based on the interests and goals of the student, the source of funds if the student is provided financial assistance, the current workload and interests of the faculty of the department, and the availability of facilities. In the selection of a faculty advisor, every effort will be made to insure that the student has the best possible opportunity to achieve the graduate program goals, and that the professor chosen has expressed an interest in that specific student.

A student may change major advisors during their program of study only after a complete review of the situation by the Graduate Education Committee. To initiate the process, the student must fill out an NRES Request for Action form. The committee will make recommendations to the Graduate Coordinator who will consult with the Department Head in order to make a final decision. However, it is considered desirable for a change in advisors to occur between the M.S. and Ph.D. degrees if the student continues in NRES.

### **Guidance Committee**

During the first semester of the enrollment, a Guidance Committee will be selected. The composition of this committee will be determined by the major advisor in consultation with the student. The committee shall consist of at least 3 faculty members, one of which is the major advisor for a M.S. candidate. For Ph.D. candidates, this committee is composed of at least 4 members, including the major advisor. At least three of these must be members of the Graduate Faculty, and at least two must have tenure. Usually, the Guidance Committee also serves as the preliminary and final Examination Committees. (See the Ph.D. PROGRAM section Preliminary Examination for Examination Committee requirements.) At least one member of the Guidance Committee should be a faculty member from a department other than NRES. (See Appendix B for the list of 2003-2004 Graduate Faculty in NRES.)

It is the function of the Guidance Committee to assist the major advisor and the student in developing an appropriate course of study and to review the detailed Research Proposal, once the preliminary plan has been outlined by the major advisor and the student. The role of the committee members is to offer helpful suggestions toward the most effective execution of the research effort. The Guidance Committee is required to sign approval of both the Research Proposal and the Plan of Study.

### **NRES 594**

In the fall semester of their initial year, new graduate students are required to enroll in and satisfactorily complete NRES 594, Professional Orientation in NRES. As requirements for the course, the student will complete drafts of a Plan of Study and a Research Proposal. (See the following sections for more information about these elements.) Some time before the end of the following spring semester the student meets with the Guidance Committee, revises the documents according to the committee's recommendations, and obtains signatures of each committee member on each form (found in the appendix). The final approved versions of the Plan of Study and Research Proposal, signed off by the Guidance Committee are then submitted to the NRES Student Services Center for inclusion in the student file. Students who have completed a M.S. degree in NRES and continue on for a Ph.D. degree do not have to enroll in NRES 594 a second time. However, a new Plan of Study and Research Proposal for the Ph.D. program is required to be completed, signed by the committee members, and turned in to the NRES Student Services Center for approval by the Graduate Coordinator.

### **Plan of Study**

During the first semester of any graduate program, the student and the major advisor will prepare a complete Plan of Study. This plan will include a schedule of courses to be completed and a timetable of the proposed total program. Only courses at the 400 and 500-level, will apply toward completion of a graduate program. During the first or second semester, after the student meets with their Guidance Committee, changes in the plan and recommendations by the committee will be included in a revision. The revised plan should then be signed by the committee members and submitted to the NRES Student Services Center for inclusion in the student file. All members of the student's Guidance Committee should be provided a copy of the plan. If there is to be any deviation from the plan, modifications must be approved by the student's Guidance Committee. In order to complete the degree requirements in a timely manner, it is the responsibility of the student to take into consideration which semester(s) necessary courses will be available. Some courses are only offered in alternate years, or may be cancelled for other reasons, such as low enrollment or faculty sabbatical leaves. Schedules of when NRES courses are offered can be obtained from the NRES Student Services Center, in the appendix of this document, or from the NRES web page under graduate course offerings. The Plan of Study outline form can be found in the appendix of this document. The plan of study with the signatures of the Guidance Committee affixed is due to the Student Services Center by Reading Day of the spring semester following completion of NRES 594. If the plan is not received, students will be placed on departmental advising hold until the plan is received. Advising holds prohibit access to student registration.

## **Research Proposal**

Prior to the active initiation of research for either advanced degree, a specific proposal is to be developed by the student in consultation with the major advisor. This proposal is then presented by the student to the Guidance Committee at a meeting held for this purpose. After the meeting, committee recommendations and corrections are incorporated into the proposal, and committee signatures are obtained on the cover page (see appendix for the form). Before the end of the student's second semester, the final version of the Research Proposal is to be submitted to the NRES Student Service Center for approval and included in the student file. A research or special problem proposal is required of all M.S. and Ph.D. candidates. The research proposal with the signatures of the Guidance Committee affixed is due to the Student Services Center by Reading Day of the spring semester following completion of NRES 594. If the proposal is not received, students will be placed on departmental advising hold until the proposal is received. Advising holds prohibit access to student registration

The following guidelines provide an example of one format that can be used to prepare a research proposal. Since flexibility is needed between different programs, there are other formats the graduate students may wish to consider using. The Research Proposal should include the following:

### **Guidelines for Preparation of a Research Proposal**

Complete the cover sheet (see Appendix D).

**Title** - A clear, concise statement of the subject of the research. The title, used by itself, should give a good indication of what the project is about.

**Previous Work** - A brief review of the current state of knowledge on the problem, how it falls short of meeting current and future needs, and how the proposed work will extend present knowledge (literature citations should be listed at the end of the project outline). The conclusion of this section should lead the reader directly into the next two subsections of justification for further work and the statement of objectives for the proposed work.

**Justification** - A concise statement of the importance of the problem to the agriculture and rural life of the state, region, or nation, reasons for doing the work at this location at this particular time, and potential benefits to agriculture, the scientific community, and the public at large.

**Objectives** - A clear, complete, and logically arranged statement of the specific objectives of the project, each identified by number.

**Procedures** - A statement of the essential working plans and methods to be used in attaining each of the stated objectives. The procedures should correspond to the objectives and follow the same order. Phases of the work to be undertaken immediately and concurrently should be designated. The location of the work and the facilities and equipment available and needed should be indicated. The statement on procedure should indicate that the research has been carefully planned and provide for changes when they are necessary to improve the work.

Duration - An estimate of the time required to complete the research planned and publish the results. Whenever any material change in the objectives of a project is advisable, a new or revised project outline should be prepared. A major change in procedure may also necessitate a revision of a project outline. Projects normally run for one to three years, but a maximum of five years may be requested.

Personnel - A list of the leader or leaders and other technical workers assigned.

Financial Support - An estimate on a separate page of the annual allocations of funds to salaries, wages, equipment, supplies, travel, publication, and any other operating expenses.

Final copies of the Plan of Study and the Research Proposal, signed by the major advisor and the Guidance Committee members must be turned in to the NRES Student Services Center as a degree requirement for both M.S. and Ph.D. students.

### **Annual Graduate Student Review**

At the start of the fall semester of each academic year graduate students in NRES are required to complete an annual progress review. The annual review is designed to assist students in maintaining progress toward completing their degree requirements. This information will also be used to report on departmental activities and as a resource to identify students for scholarships, awards, and other recognitions. A key component of the review progress involves the communication between faculty advisors and their graduate students to address previous progress and future expectations in their graduate career.

The process is as follows: The NRES Student Services Center emails the annual review form to all graduate students at the beginning of the fall semester. Students complete the student section of the form and forward them by email to their academic advisor. Then the faculty advisors provide an evaluation of the student's progress using the last page of the form for each NRES grad student in their program. It is recommended that advisors review this document with their students before submitting them. Advisors then forward the complete review form back to the NRES Student Services Center. The Graduate Coordinator will then review these documents and return copies including the advisor's evaluation to each student. Copies of these forms will be included in each student's graduate file in the NRES Student Services Center. If students have any questions or concerns regarding the advisor's comments, they are encouraged to discuss these with their advisor.

### **Seminar**

All NRES graduate students are required to enroll in NRES 500 (seminar) for one semester during their graduate program. During this semester they are required to attend seminars and make a presentation covering their thesis research or special project. Both M.S. plan A and B, and Ph.D. students will enroll for seminar. Seminar will be held in fall and spring semesters.

Graduate students, who are at the stage of their program to present a seminar addressing the research findings produced by their graduate efforts, should enroll for 1 hour of credit for NRES 500. This requirement can not be fulfilled by any other alternative seminar series.

Students must enroll in NRES 500 for the semester in which they will present a seminar. Attendance is mandatory for all enrolled NRES graduate students. M.S. students should plan to present their seminar in their final semester of enrollment. Ph.D. students should enroll near the end of their second year in the program and present a seminar providing an overview of their proposed research topic.

All graduate students are encouraged to attend NRES 500 seminar presentations as well as other seminar series appropriate for their disciplinary interests. All faculty and graduate students are urged to place a high priority on attending seminars and actively participating, but seminar in NRES is a student course inasmuch as the majority of the presentations will be made by graduate students.

Final PhD seminars are arranged separately from the NRES 500. The final seminar and the final exam will be held on the same day. The seminar will be for 50 minutes, and open to the public. Afterward, the student and the committee will move to a nearby, smaller room for the examination portion of the final exam. The NRES Student Services Center will help with scheduling, reserving rooms, and advertising the seminar. The Final Seminar Check-List form is available at the NRES Student Services Center and can be obtained when you pick up your Final Exam committee sheet.

One of the principal features of seminar is to provide students an opportunity to refine communicative skills. The ability to communicate effectively with professional colleagues and lay people is extremely important in the development of any professional. Seminars provide a clearer picture of the total scope and breadth of departmental programs. They also present students with the opportunity to receive constructive suggestions concerning their research and presentation techniques. During interviews it is standard practice for the candidate to present a seminar on their thesis work to the interviewing organization. The quality of that seminar typically is very important to the success of the candidate.

## **GRADUATE COLLEGE INFORMATION**

### **Credit Loads**

The credit load information below is in effect beginning in the Fall 2004 semester. The new full-time credit loads are described below. Enrollment for less than full-time during any semester may decrease the fees assessed by the University, but also decreases the services available to you as a student (i.e. McKinley Health Center, IMPE, etc.), and in some cases may cause student loan deferments to be cancelled. Please also note that for purposes of loan deferral only, zero credit registration in GC 599 will count as full time registration. For more information about GC 599, please see the Graduate College web site. Graduate students not registered for at least a half-time load in a particular term will be subject to Social Security and Medicare deductions for that term.

Graduate students with 25%-67% assistantships, except Fellows (see below)

Fall and spring terms: 8 or more hours  
Summer 1 term: 3 or more hours  
Summer 2 term: 6 or more hours

Graduate students with fellowships (regardless of whether the student holds a concurrent assistantship) and graduate students with "stand-alone" tuition waivers

Fall and spring terms: 12 or more hours  
Summer 1 term: 3 or more hours  
Summer 2 term: 4 or more hours

**NOTE:** Fellows are required to maintain a full course load each term of registration unless a reduced course load has been approved by the Graduate College Fellowship Office. Fellows who are international students must also have a reduced course load approved by the Office of International Student Affairs.

Graduate students with 1%-24% assistantships and graduate students without assistantships

Fall and spring terms: 12 or more hours  
Summer 1 term: 3 or more hours  
Summer 2 term: 6 or more hours

NOTES for International Students:

For purposes of load, each required or recommended ESL course taken as a result of the English as a Second Language Placement Test (EPT) will count as the equivalent of 4 hours, even if the course credit is recorded as zero hours.

International students whose first term of study is Summer Term 1 or Summer Term 2 must carry a full course of study. In some cases, the U.S. Bureau of Immigration and Customs Enforcement considers a student to be full time at a reduced enrollment. International students should check with the Office of International Student Affairs for details. Continuing international students are not required by the campus to enroll for the summer terms. Those who do enroll are not required to carry a full course load.

International graduate students who have completed all credit requirements (course work and thesis research) for their degree programs may register for zero hours of 599 until completion of study. This registration will be considered full-time for purposes of SEVIS reporting. International students seeking any exception to the full-time credit requirements should contact the Office of International Student Affairs before registering for the reduced credit load.

Fellows and international students whose first semester is summer 1 or summer 2 must enroll for full-time during the summer session. In addition, students who hold an RA or TA for the summer term, but were not enrolled full-time for the previous spring or who will not be enrolled full-time for the following fall, must also register for the summer term. Registration for

all other students for the summer term is at the discretion of the research advisor. If a student will not be enrolling for summer, they may have their student health insurance coverage extended through the summer months by visiting the Student Insurance Office in Room 480 in the Illini Union Bookstore Building before the extension deadline in June.

### **Grading System**

The University of Illinois employs a 4.0 grading scale. Grades range from A+ to F, and each + and – level of each letter grade represents a different value that will be averaged to calculate a student’s GPA. The following symbols are also used.

- W - withdrawn from a course. No grade is assigned.
- EX - temporarily excused. An excused grade given in the spring or fall term must be replaced with a letter grade no later that reading day of the following semester. If the work is not completed, the grade is “F by rule” and is used in computing the student’s G.P.A.
- DF - temporarily deferred. Used in research courses that extend beyond one semester.
- AB - absent from the final exam without an acceptable excuse. Calculated as F in the GPA.
- S/U - used as a final grade in Thesis Research and is not included in the GPA computation.
- CR/NC- grade result of a course taken for credit/no credit. No letter grade is given.

The DF grade is only used for NRES 599, Thesis Research. All students will be given DF grades for every semester they are enrolled in NRES 599 except for the last semester. If the student had successfully defended the thesis or dissertation, the student should be awarded S for the final semester of NRES 599. Once the thesis has been deposited in the department, a grade change form will be sent to the major advisor which will change all the semesters of credit in Thesis Research from DF to S.

The EX grade can be given when a student has not fulfilled all the expectations of a graded course. If a student is assigned an EX grade, that grade can be changed by the professor upon completion of the work required. If no grade change is submitted by Reading Day of the semester following the assignment of the EX grade, the grade automatically changes to ‘F by rule’ and is calculated in the GPA as an F grade.

### **Credit/No Credit Option**

Graduate students must present letter grades for the minimum number of hours required for the degree being sought. Graduate students may, with the advisor's approval, take additional hours above the required minimum on a credit/no credit option. No credit is given for courses in which grades of D or F are received. Over the entire course of a degree program, a student must

earn at least 8 hours of graded (A-D) course work (excluding thesis and non-credit seminars) for each 4 hours of credit-no credit course work. In any one semester, a student may take no more than 4 hours on a credit-no credit basis. (Hours transferred from another university cannot be used as part of the "graded course work.") If a student is admitted on limited status, or if a student falls below a minimum GPA of 3.0 and is placed on limited status, they will not be allowed to register for credit-no credit course work until the GPA has been raised to the minimum and the limited status designation has been removed.

### **The Graduate Petition**

The graduate petition is used by graduate students to request any action from the Graduate College. These petitions are available from the NRES Student Services Center and online at the Graduate College web site. The student completes a request on the front of the form, and the advisor signs their approval on the reverse side. The form is then returned to the NRES Student Services Center where it will be submitted to the Department Head for approval. If approved at the department level, the petition will be forwarded to the Graduate College. The student will be notified of the Graduate College decision directly by email. Common examples of uses of the graduate petition are: acceptance of non-degree coursework towards a degree, extension of time to complete a degree, and transfer from the M.S. program to the Ph.D. program.

Decisions made at the departmental level require approval of the NRES Graduate Education Committee, and requests should be made in writing, using the NRES Request for Action form.

### **Graduate College Probation Policy**

Graduate students must make satisfactory progress in all aspects of their program in order to continue pursuing a graduate degree. Factors that a program may use to determine satisfactory academic progress include, but are not limited to, performance on qualifying, preliminary, and other examinations; performance in course work; satisfactory and timely completion of all milestones as determined by the program; satisfactory progress in research; and overall graduate and/or program grade-point average (GPA). Students enrolled in approved joint degree programs must meet the minimum GPA requirements of each degree program in order to maintain satisfactory academic progress and to graduate. All graduate students must meet the minimum degree GPA specified by the degree program in order to have the degree certified and to graduate. Most factors that determine satisfactory academic progress are monitored by the student's degree program, and failure to meet these requirements can result in the program recommending to the Graduate College that the student be placed on probation or dismissed from the Graduate College. While all factors to determine satisfactory academic progress are important, the Graduate College monitors only overall graduate grade-point average. The graduate degree programs monitor all other aspects of academic progress.

### ***GPA Requirements***

The Graduate College requires a minimum overall graduate GPA of at least 2.75 on a 4.0 scale; however, graduate degree programs can and often do set a higher minimum. If a minimum GPA higher than 2.75 on a 4.0 scale is approved by the Graduate College and published by the program, this higher minimum overall graduate GPA will be required by the Graduate College of

students in that program. (NRES has a minimum GPA of 3.0.) Students who have an overall graduate GPA below the degree program's minimum at the end of any semester of enrollment will be placed on probation. Once a student has been placed on probation, he or she will have one semester in which to raise his/ her overall graduate GPA to his/her program's minimum. Failure to do so will result in dismissal from the Graduate College.

#### *Limited Status Admission*

A student admitted to the Graduate College on limited status due to low undergraduate GPA must meet the degree program's minimum overall graduate GPA at the end of the first semester of registration, or be dismissed from the Graduate College.

#### *Appeal of Dismissal*

If a student is dismissed from the Graduate College because of a low overall graduate GPA, the graduate student petition process may be used to appeal this dismissal. The Graduate College will consider petitions containing strong program support and strong justification based on other factors pertinent to the program's determination of satisfactory academic progress.

## **M.S. PROGRAM**

Two options are open to the student wishing to pursue a Master of Science degree in the Department of Natural Resources and Environmental Sciences.

#### **Plan A- Thesis Option**

Plan A requires that the student satisfactorily complete a minimum of 32 semester hours of graduate course work, of which a minimum of 12 hours are 500-level numbered courses. This coursework shall include 1 to 12 hours of Thesis Research (599), which culminates in the completion and oral defense of a thesis.

- At least four hours of 500-level courses (lecture or lecture/discussion that is letter graded and includes exams and assignments) is required in addition to NRES 599.
- The student must also satisfactorily complete NRES 594 and seminar, NRES 500. (NRES 500 and NRES 594 cannot be counted toward the 500-level course requirement, as they are pass/fail courses, nor can any 500-level seminar, discussion, or special problems course satisfy this requirement.)
- Students in Plan A may not receive credit for more than 8 hours of NRES 501, Special Problems. The student must also satisfactorily defend the thesis at a final examination.

#### **Plan B- Non-thesis Option**

The Plan B option is preferred for extramural M.S. students, but only is allowed for on-campus M.S. students under certain conditions. Any request for this option is considered on its individual merit by the Graduate Education Committee, and must be submitted on an NRES Request for Action form with all the required attachments. This option is often a terminal degree program for those students who do not plan to pursue a career in research or for those who wish to change areas of specialization after the M.S. degree. The Plan B option may also be appropriate in special cases where a student executes a major special project which is equivalent

to a M.S. thesis, but which does not lend itself to the thesis format. A Plan B student must satisfactorily complete a minimum of 32 hours of graduate course work, of which a minimum of 12 hours are 500-level numbered courses.

- Plan B students may take up to 8 hours of NRES 501, Special Problems.
- At least four hours of 500-level courses (lecture or lecture/discussion that is letter graded and includes exams and assignments) is required in addition to NRES 501.
- The student must also satisfactorily complete NRES 594 and NRES 500. (NRES 500 and NRES 594 cannot be counted toward the 500-level course requirement, as they are pass/fail courses, nor can any 500-level seminar, discussion or special problems course satisfy this requirement.)
- The student must also prepare and submit a critical review of a special subject in the chosen area of interest and orally defend it. In addition, the student must perform satisfactorily on a comprehensive final examination.

### **Required Courses**

Coursework is tailored to meet the needs of the individual student and is determined in consultation with the student's advisor and Guidance Committee. In addition to meeting the other course requirements of Plan A or B, all students are required to enroll in NRES 594 (Orientation) during their first fall semester and seminar (NRES 500) during their final semester of enrollment, before completing the degree. Near the end of their program, M.S. students will present a half-hour seminar that covers the research they have carried out as part of their graduate program. See ELEMENTS OF A GRADUATE PROGRAM for more information on NRES 594 and 500.

The 32 hours of graduate courses required for the M.S. degree in NRES can be completed while enrolled in NRES or they can be transferred from another department or institution. Students wishing to transfer hours should consult the Graduate Coordinator or the NRES Student Services Coordinator for more details. Transfers are limited to 12 hours of graduate coursework. Transfers require petitioning the Graduate College. The expected time to completion for the M.S. degree is 2.5 calendar years.

### **Final Examination**

For the Plan A, M.S. degree, the student's final examination is held after the submission and approval of the thesis by the major advisor. For a Plan B program, the M.S. student in NRES is required to take a comprehensive final examination, which may be written, oral, or a combination of both, designed by the student's Examination Committee. The M.S. Examining Committee consists of the student's Guidance Committee with the major professor as chairperson. The scope and format of the final examination will be determined in advance by the Examination Committee. To clarify for the student the expectations of the committee members, the student is urged to visit with each committee member prior to the examination.

At the conclusion of the examination, the committee will complete the Report of the Masters Examining Committee form. This form reports the results of the examination and is available at the NRES Student Services Center. The form, signed by all the Examination Committee members, will then be submitted to the Student Services Center for inclusion in the student's file. The possible outcomes of the M.S. examination are pass, fail (and elimination

from the program), or incomplete. If the student receives an incomplete, the M.S. examination must be repeated within three months. The final examination shall be taken during the final semester the student is enrolled as an M.S. candidate.

### **Depositing the Thesis or Special Problem**

During the final semester, students are responsible for being sure that their names have been added to the degree list by using UI Integrate or the pink Application for Degree form, which is available at the NRES Student Services Center.

All of the following documents will be required when depositing a thesis and can be picked up at the NRES Student Services Center:

- Application for Degree
- NRES Graduate Student Exit Survey
- At least three Certificates of Committee Approval (online at the Graduate College)
- Departmental Format Approval form (online at the Graduate College)
- Report of the Masters Examining Committee
- An appointment for an exit interview with the department head
- You will also find it helpful to get a copy of the Graduate College document *Instructions for Preparation of Theses*, which can be obtained at the Graduate College office in Coble Hall.

All of the following documents will be required when depositing a special problem project and can be picked up at the NRES Student Services Center:

- Application for Degree
- NRES Graduate Student Exit Survey
- Departmental M.S. Project Approval form
- Report of the Masters Examining Committee form
- An appointment for an exit interview with the department head

When the Masters thesis/project is completed, the student will be required to write up the research in a format acceptable to the Graduate College. The Department of NRES has no additional format requirements. Well in advance of the final exam, a draft of the final paper is to be submitted to the student's advisor. This draft should be what the student and the advisor consider to be an acceptable presentation. The major advisor will then review the document and make appropriate suggestions. Copies of the revised draft are then provided to the members of the Examining Committee a minimum of two weeks in advance of the date of the exam. The student will then defend the research at the final examination. The Report of the Masters Examining Committee form must be completed and turned in to the Student Services Center immediately following the exam.

Suggestions or recommendations for change from the student's Examination Committee will then be incorporated into the document. Providing the student passes the examination and all thesis revisions are complete, the student should have the members of the Examining Committee affix their signatures on a minimum of three original Certificates of Committee Approval for thesis or two copies of the Departmental M.S. Project Approval form for non thesis projects. Once the committee's input has been incorporated, and they have signed off on the document, the following needs to be done. For Plan A students, one copy of the thesis, the

Departmental Format Approval form, and the Certificates of Committee Approval should be given to the Graduate Coordinator for departmental format approval, as required by the Graduate College. Those materials should then be submitted to the NRES Student Services Center. For Plan B students, one copy of the project and the Departmental M.S. Project Approval forms must be deposited at the Student Services Center. At this time, the student will also be required to schedule an exit interview with the department head and pick up a copy of the NRES Graduate Student Exit Survey, which will be turned in at the interview.

The form and documents will then be circulated to the Department Head, who is required to approve all theses and special problems. Please allow at least one week for the Graduate Coordinator and department head approvals. The student will be notified when the thesis has been approved and is ready to be picked up. One copy of the thesis must be left at the NRES Student Services Center for the department. The student may then carry the required two copies of the thesis to be deposited at the Graduate College. The Graduate College thesis checker is only in the office between 1 p.m. and 5 p.m. to check and accept theses. Plan B students do not deposit their projects at the Graduate College. Degrees will be officially conferred by the University after approval by the Board of Trustees of the University of Illinois. M.S. degrees are conferred in December, May, August, and October of each year. Diplomas will be mailed to graduates at the permanent address on record or the address provided by the student on the pink Application for Degree form, approximately one month later.

If you are leaving campus, and will not be in town during the deposit process, the best option is to sign up with the Thesis Office to deposit by mail. The Thesis Office is very cooperative and helpful when working with students remotely, but you do have to sign up in advance to do this. Additionally, the deposit by mail deadline is one week earlier than the regular deposit deadline.

M.S. students should also prepare one or more manuscripts, describing their research and results, for publication. The type of publication and the appropriate place for publication will be determined by the major advisor in counsel with the student. The student is expected to take the role of primary author for these publications.

### **Time Limit**

A candidate for the Master's degree must complete all requirements for the degree within five calendar years after the first registration in the Graduate College. However, the expected time to completion for the M.S. degree is 2.5 calendar years. When you enter the Graduate College, you are assigned an Expected Graduation Date (EGD). You will not be allowed to enroll after that term without petitioning for a time extension. However, M.S. students need not be enrolled the semester they take the final examination, deposit the thesis, or graduate.

### **M.S. Sequence of Program**

- Acceptance and selection of major advisor.
- Registration as a graduate student (including NRES 594).
- Guidance Committee selected during the first semester of study.
- Plan of Study and Research Proposal prepared and approved by Guidance Committee.

- Approved Plan of Study and Research Proposal submitted to Student Services Center by the end of the spring semester after completing NRES 594.
- Completion of program course requirements.
- Enrollment in NRES 500 and presentation of seminar.
- Add name to degree list.
- Preparation of thesis/project.
- Title page check at the thesis office.
- Final comprehensive exam and defense of thesis/project.
- Departmental format review.
- Submission of thesis/project to NRES Student Services Center.
- Submission of theses to the Graduate College.
- Exit Interview with the Department Head
- Return all office and lab keys to the area secretary.
- Graduation.

### **Graduation**

Graduation for M.S. students can be in May, August, October or December. Consult the Graduate College Calendar for dates and deadlines for the specific term during which you plan to graduate. The only graduation ceremony at the University of Illinois is held in May. If you plan to graduate in August, you can request at the Student Services Center to walk during the May ceremony before your deposit. Students graduating in October or December will be invited to participate in graduation the following May. In May, two ceremonies are held. The campus-wide ceremony is held at the Assembly Hall. The second ceremony you may participate in is held by the College of ACES, usually in the Smith Music Hall. Graduation tickets are distributed by the College of ACES Placement office. If you are on the graduation list, they will send the mailings to you directly.

### **Prospective Ph.D. Candidates**

Students nearing completion of an M.S. degree at the University of Illinois, who wish to continue for a Ph.D. in NRES at the University of Illinois, should make this request in writing to the Graduate Education Committee using an NRES Request for Action form. Both the current M.S. advisor, the prospective Ph.D. advisor, and one additional M.S. committee member should write letters of support to the Graduate Education Committee and should present evidence of the student's potential as a Ph.D. candidate. The Graduate Education Committee will make recommendations concerning admission of these students to Ph.D. candidacy after reviewing the student's progress as a M.S. candidate and the supporting letters. If accepted, the student will then complete a Graduate Petition to request the change of program, which requires the signature of the Department Head. The Graduate College must approve this petition before a student's status will be changed. After approval, the student must develop a new Plan of Study for the Ph.D. program and revise the Research Proposal in consultation with the Guidance Committee. These documents must then be signed by the Ph.D. committee and submitted to the Student Services Center by the end of the first year in the Ph.D. program.

It is preferred that students earn a M.S. degree before pursuing a Ph.D. degree. However, if an advisor desires the student to enter the Ph.D. program in NRES prior to obtaining the M.S.,

the student must petition the NRES Graduate Education Committee for the transfer. (See the section of this handbook entitled Direct B.S. to Ph.D. Degree Program.)

The advisor is responsible for notifying the Human Resources Manager of any change in graduate status before the stipend rate will be adjusted to the “Ph.D. Level 1” rate. Additionally, the student must fulfill the M.S. degree requirements before the new rate will become effective. International students continuing on in the Ph.D. program must notify the Office of International Student Affairs to update their visa and if necessary extend its expiration date.

## **Ph.D. PROGRAM**

### **Requirements**

For the Ph.D. program, a minimum of 32 hours of coursework and a minimum of 32 hours of thesis research beyond a M.S. degree are required. Included in the 32 hours of coursework must be the orientation course, NRES 594, which is taken during the first fall semester of the graduate program (if it was not taken during the M.S. program), and one semester of enrollment in NRES 500 (see ELEMENTS OF A GRADUATE PROGRAM under Required Courses for details). Students will present this seminar within the first two years of the program providing an overview of their research topic, during the term the student is enrolled in NRES 500. At the end of the graduate program, a defense seminar will be presented summarizing the results of the thesis research. This seminar will occur immediately before the final exam, will be advertised one week in advance, and will be open to the public. The expected time to completion for the Ph.D. degree after the M.S degree is 3.5 to 4 calendar years.

The 64 hours of graduate courses required for the Ph.D. degree in NRES can be completed while enrolled in NRES or they can be transferred from another department or institution. Students wishing to transfer hours should consult the Graduate Coordinator or the NRES Student Services Coordinator for more details. Transfers are limited to 12 hours of graduate coursework. Transfers require petitioning the Graduate College.

### **Plan of Study**

During the first semester, as a requirement of NRES 594, the student in consultation with the major advisor will prepare a Plan of Study. This plan will include a schedule of courses to be completed and will be based upon the recommendations of the student’s Guidance Committee. Only courses at the 400 and 500-level will apply toward completion of a graduate program. A timetable of the proposed total program will also be prepared at this time. The Plan of Study, including the timetable (use form provided in the appendix), must be approved and signed by all the members of the guidance committee, and turned in to the Student Services Center for inclusion in the student’s file. See Plan of Study section under both ELEMENTS OF A GRADUATE PROGRAM and M.S. PROGRAM for further details.

### **Research Proposal**

A rough draft of the Research Proposal will also be prepared as a requirement for satisfactory completion of NRES 594. A final Research Proposal will be due by the end of the second semester for Ph.D. candidates. The proposal and the form (provided in the appendix) with the signatures must be turned in to the Student Services Center. See Research Proposal under ELEMENTS OF A GRADUATE PROGRAM and M.S. PROGRAM for further details.

### **Preliminary Examination**

Those students working toward the Ph.D. degree are required to successfully complete a preliminary examination prior to admission to candidacy for the doctoral degree. The preliminary examination shall be taken following completion of the majority of the formal course work, and must be taken before the end of the 5<sup>th</sup> semester of study. This exam is a comprehensive test of the student's mastery of the subject matter, the ability to think and express oneself clearly and forcibly, and the capacity to pursue independent research. The examination normally has both an oral and a written component, developed and administered by the student's advisor and Examination Committee. The scope of the examination is not limited to courses taken.

At least three weeks prior to the preliminary exam, a green Request for Appointment of a Doctoral Examination Committee form must be submitted to the Graduate College. These forms are available at the NRES Student Services Center, and must be turned in to the SSC for Department Head approval before they will be forwarded to the Graduate College. The Examination Committee shall be composed of not fewer than 4 faculty, the majority of which are members of the Graduate Faculty (see Appendix B for a list or check online at the Graduate College, [http://www.grad.uiuc.edu/grad\\_faculty/index.html](http://www.grad.uiuc.edu/grad_faculty/index.html)), and two members of which are tenured. The student's major advisor should be a member of the Graduate Faculty, and should serve as Chairperson. Typically in the Department of Natural Resources and Environmental Sciences, the Examining Committee is composed of the same members as the student's Guidance Committee, which includes one or more faculty members from departments other than NRES. This policy applies to both preliminary and final examinations. Additionally, the candidate shall send a recent, complete copy of his/her transcript to the committee members before the exam.

The Ph.D. preliminary exam will likely be the most comprehensive testing of the student's knowledge and understanding that the student will ever undergo. Not only is it important that the student demonstrate a thorough mastery of the specific subject matter within the chosen discipline, but the student must demonstrate a clear comprehension as to how the individual specific items fit together and likewise be in a position to utilize knowledge in problem-solving situations. In addition, the committee will commonly request an update on the progress of the dissertation research project.

The purpose of this examination is to ensure that the student is competent in the chosen fields of specialization and can be expected to successfully conduct the research outlined in the dissertation Research Proposal. The outcome of the Ph.D. preliminary examination is pass, fail (and elimination from the program), or incomplete. If the student receives an incomplete, the student must pass a special examination over those areas of deficiency as agreed on by the

Examination Committee. This special examination must be completed within six months after the original preliminary examination.

### **Seminar**

All graduate students working toward a Ph.D. degree must satisfactorily complete one semester of NRES 500. Ph.D. graduate students should enroll for 1 hour of credit for NRES 500 after the third or fourth semester of their program. Students enrolled for NRES 500 will present a 30-minute seminar providing an overview of their research area and the proposed research. A second seminar is presented at the end of the student's program and reports the results of their dissertation research. This is a 50-minute seminar that is presented immediately prior to the thesis defense. All Ph.D. students are required to notify the NRES Student Services Center of their defense seminar date at least two weeks prior to this date, so that advertisements can be sent out, as this second seminar is open to the public. The SSC can also help to plan for the location, time, and date of the seminar. See ELEMENTS OF A GRADUATE PROGRAM under Seminar for more details.

### **Preparation of Dissertation**

All of the following documents will be required when depositing a dissertation and many can be obtained at the NRES Student Services Center:

- Application for Degree
- At least three Certificates of Committee Approval (online at the Graduate College)
- Departmental Format Approval form (online at the Graduate College)
- NRES Graduate Student Exit Survey
- An appointment for an exit interview with the department head
- Final Seminar Check-List form
- A completed Survey of Earned Doctorates
- A \$65 check payable to the University of Illinois for the ProQuest microfilm fee
- ProQuest Microfilm Agreement form, signed
- One abstract, formatted according to ProQuest guidelines
- You will also find it helpful to get a copy of the Graduate College document *Instructions for Preparation of Theses*, which can be obtained at the Graduate College office in Coble Hall.

During the last semester, students are responsible for being sure that their names have been added to the degree list by using UI Integrate or the pink Application for Degree form, which is available at the NRES Student Services Center.

Well in advance of the final oral exam, a draft of the dissertation is to be submitted to the student's advisor. This draft should comply with the format guidelines provided by the Graduate College, (see *Instructions for Preparation of Theses*). NRES format requirements are identical to the Graduate College requirements. The major advisor will then review the dissertation and make appropriate suggestions. Once these suggestions have been incorporated into the draft, it is to be circulated to the student's Examination Committee for review. All members of the final Examination Committee should receive the dissertation two weeks in advance of the date of the examination. The Examining Committee's recommendations for change will be presented to the student at the final exam.

### **Final Exam**

After the preliminary examination, and when the student's program is nearing completion, the student should submit a green Request for Appointment of a Doctoral Examination Committee form to the Graduate College to appoint the Final Examination Committee. Students should be sure to appoint one member of the committee as the contingent chair. Students will also fill out the Final Seminar Check-List form which will finalize the date and location of the final seminar and exam. These forms are available at the NRES Student Services Center.

Ph.D. students must be enrolled in NRES 599, Thesis Research, for the semester in which the final exam is taken, regardless of when the thesis will be deposited. Refer to the Graduate College academic calendar for details. Usually the final Examination Committee consists of the same members as the student's Guidance Committee. See the Preliminary Exam section for specifics related to the composition of Examination Committees. The final exam and exit seminar take place on the same day. The seminar is 50 minutes, open to the public and held at 9 a.m. or 1 p.m. After the seminar, the committee and student will move to a smaller room for the examination. The time and date of the final seminar and exam shall be communicated to the NRES Student Services Center in order to be announced to the faculty of the department, at least two weeks prior to the exam. Before the exam, a member of the committee must sign for and pick up the Certificate of Result from the NRES Student Services Center. For the Ph.D. degree, the final oral examination is an open exam and has the essential character of the preliminary examination, except for the level of performance expected of the student and the finality of its interpretation by the faculty. Traditionally, this examination is described as the "the defense of the dissertation," and generally the research on which the dissertation is based provides the starting point of questions posed. However, it will also challenge the student's general knowledge and ability to integrate their research into the wider framework of their discipline.

It is the general practice for questioning in the exam to pursue lines of thought and argument from data and concepts that have contributed to the research and to its critical evaluation by the student. This broadening of the base is acceptable for the purpose both of "defending the dissertation" and of determining the intellectual qualifications of the candidate for the degree. Inasmuch as the Ph.D. degree is conferred on the basis of originality, independence of thought, and capacity to synthesize and interpret, the oral examination generally deals more with principles and historic perspective than with factual data. The student is pursuing an academic degree of high order, and the final oral examination should be conducted on a corresponding plane of intellectual inquiry. The examination itself is not a routine exercise to be taken lightly by the student or the Examining Committee, but one on which depends the issue of qualification for a degree having the broad connotation of Doctor of Philosophy. In judging the qualification for a degree of this type, the quality of the research presented, as well as its defense and evidence of associated intellectual capacity, are taken seriously into account. The student is recommended to be prepared well in advance of the final examination. To clarify for the student the expectations of the committee members, the student is urged to visit with each committee member prior to the examination.

The outcome of this examination shall be pass, fail, or deferred. If the outcome is fail, the committee decides:

1. That the failure to pass should be recorded, but that the candidate should be given another opportunity after completing additional coursework or research. In this case, the certificate, noting failure, should be signed and returned with a brief note from the Chairperson indicating that the Committee believes the student should have a second examination.
2. That the failure is final. In this case, the certificate should be signed and returned.

Immediately after the exam is completed, the decision is marked on the Certificate of Result, which is then signed by all members of the Examination Committee and returned to the NRES Student Services Center. The Student Services Center will copy the certificate for the student's file and forward the original to the Graduate College.

### **Submission of Dissertation**

If the draft submitted to the Examining Committee is acceptable, they can sign the Certificate of Committee Approval forms at the final examination. If revisions are required, signatures can be collected at a later date after the examination. Once revisions are included, one copy of the dissertation, all of the Certificates of Committee Approval, and the Departmental Format Approval form, should be submitted to the Graduate Coordinator for format approval, as required by the Graduate College. Once the format is approved, the dissertation should then be submitted to the NRES Student Services Center with all the copies of the Certificates of Committee Approval and the Departmental Format Approval sheets. The dissertation will then be reviewed by the Department Head, for approval and signature. The student will be notified when the dissertation is ready to be picked up. Allow at least one week for the Graduate Coordinator and Department Head approvals. One copy of the dissertation must be left at the NRES Student Services Center for the department. At this time, the student will also be required to schedule and exit interview with the department head and pick up a copy of the NRES Graduate Student Exit Survey, which will be turned in at the interview.

The student may then deposit two copies of the dissertation with the Graduate College. The Graduate College thesis checker will only accept dissertations that are in the proper Graduate College format, and is only in the office between 1 p.m. and 5 p.m. to check and accept dissertations. The time when the dissertation is accepted by the Graduate College represents the official end of the graduate program, regardless of when the degree is conferred. The degree will be officially conferred by the University after approval by the Board of Trustees of the University of Illinois. Ph.D. degrees are conferred only in December, May, and October of each year. Diplomas will be mailed to graduates approximately one month later to the permanent address on record or the address provided by the student on the pink Application for Degree form.

### **Time Limit**

A candidate for the Ph.D. degree must complete all requirements for this degree within seven years after the first registration in the Graduate College, except as noted in the following paragraph.

A candidate for the doctorate who has received a Master's degree elsewhere, must complete all requirements for the degree within six years after this first registration in the Graduate College. A student whose program of study is significantly interrupted after he receives a Master's degree from the University of Illinois and who later returns to work for the Doctorate will have six years from the date of return to complete the degree requirements.

However, the expected time to completion for the Ph.D. degree in NRES is 3.5 to 4 calendar years. When you enter the Graduate College, you are assigned an Expected Graduation Date (EGD). You will not be allowed to enroll after that term without petitioning for a time extension. Students who exceed the time limits indicated above may petition for an extension, and reasonable extensions are granted by the Graduate College if recommended by the department. A candidate for the doctorate is required to take a second preliminary examination if more than five years elapse between the preliminary examination and the final examination. If coursework is beyond seven years old, the student must petition the Graduate College that it still be counted toward the degree. In this case, the student has to show proof that the material is still current and relevant.

### **Ph.D. Sequence of Program**

- Acceptance and selection of major advisor.
- Registration as a graduate student (including NRES 594).
- Guidance Committee selected during the first semester of study.
- Plan of Study and Research Proposal prepared and submitted to Guidance Committee for approval.
- Approved Plan of Study and Research Proposal submitted to the Student Services Center by the end of the spring semester following enrollment in NRES 594.
- Enrollment in NRES 500 and presentation of first seminar.
- Completion of coursework requirements.
- Submit Request for Appointment of a Doctoral Examination Committee form to the Graduate College to appoint the Preliminary Examination Committee.
- Preliminary Examination, within the first 5 semesters of the Ph.D. program.
- Completion of dissertation research.
- Preparation of dissertation.
- Enroll in NRES 599 for term during which the final exam will take place.
- Add name to the degree list.
- Submit Request for Appointment of a Doctoral Examination Committee form to the Graduate College to appoint the final Examination Committee.
- Turn in Final Seminar Check-List form to the Student Services Center.
- Final seminar and comprehensive exam/defense of dissertation.
- Preparation of research for publication.
- Submission of dissertation to NRES Student Services Center and Graduate College.
- Exit interview with department head.
- Return all office and lab keys to the area secretary.
- Graduation.

## **Graduation**

Graduation for Ph.D. students can be in May, October or December. Consult the Graduate College Calendar for dates and deadlines for the specific term during which you plan to graduate. The only graduation ceremony at the University of Illinois is held in May. Students graduating in October or December will be invited to participate in graduation the following May. Two ceremonies are held. The campus-wide ceremony is held at the Assembly Hall. The second ceremony you may participate in is held by the College of ACES, usually in the Smith Music Hall. Graduation tickets are distributed by the College of ACES Placement office. If you are on the graduation list, they will send the mailings to you directly.

## **DIRECT B.S. to Ph.D. DEGREE PROGRAM**

### **Entrance Requirements**

The student must have a minimum GPA of 3.5 in the last 60 semester hours (90 quarter hours) of undergraduate course work and in all work done in the M.S. program. Graduate Record Examination (GRE) scores are required. Students accepted into this track must be outstanding and have a singleness of purpose. Research experience as an undergraduate is desirable. This program is for exceptional students only, and acceptance into this program requires approval by the Graduate Education Committee and the Department Head at the time of application. Current M.S. students wishing to pursue this track must meet these same entrance requirements. In addition however, they must complete an NRES Request for Action, requesting that they be able to continue into the Ph.D. program without depositing the M.S. thesis. This document must be accompanied by supporting letters from the M.S. advisor, one M.S. committee member and if different, the potential Ph.D. advisor, and it must be turned in to the Student Services Center. The Graduate Policy Committee will consider the petition, and render a decision, potentially requiring a qualifying examination to ensure that the student has the competency and potential to obtain a Ph.D. degree.

### **Program Requirements**

Students in the direct B.S. to Ph.D. program must complete the requirements associated with both the individual M.S. (32 hours) and Ph.D. (62 hours) degree programs (see separate sections on requirements for these programs). Prior to the completion of the second year of the program or at the time of the request by a current M.S. student, the student will take an oral qualifying exam administered by the Guidance Committee. The program sequence hereafter is identical to the standard Ph.D. program.

### **The Qualifying Examination**

The qualifying examination is a rigorous exam designed to confirm the student's ability to begin a Ph.D. program. This examination is a test of the student's advanced level of knowledge of the proposed subject area. After the successful completion of this exam the student submits a Graduate College petition, along with the results of the Qualifying Exam on the departmental form, asking they be placed into the Ph.D. program in NRES. In the event of

failure the student may elect to continue as a M.S. degree candidate (either Plan A or Plan B) if recommended by the Guidance Committee.

### **B.S. to Ph.D. Sequence of Program**

- Acceptance and selection of major advisor.
- Registration as a graduate student (including NRES 594).
- Guidance Committee selected during the first semester of study.
- Plan of Study and Research Proposal prepared and submitted to Guidance Committee for approval.
- Approved and signed Plan of Study and Research Proposal submitted to the Student Services Center by the end of the following spring semester.
- Take oral qualifying exam before the end of the second year of the program.
- Enrollment in NRES 500 and presentation of first seminar.
- Completion of coursework requirements.
- Submit Request for Appointment of a Doctoral Examination Committee form to the Graduate College to appoint the preliminary Examination Committee.
- Preliminary Examination.
- Completion of dissertation research.
- Preparation of dissertation.
- Enroll in NRES 599 for term during which the final exam will take place.
- Add name to the degree list.
- Submit Request for Appointment of a Doctoral Examination Committee form to the Graduate College to appoint the final Examination Committee.
- Turn in Final Seminar Check-List form to the Student Services Center.
- Presentation of final seminar and then immediately the comprehensive exam/defense of dissertation.
- Preparation of research for publication.
- Submission of dissertation to NRES Student Services Center/Graduate College.
- Exit interview with department head.
- Return all office and lab keys to the area secretary.
- Graduation.

## **GENERAL DEPARTMENTAL INFORMATION**

Within the department certain guidelines and policies have been established to best serve the interests of both the students involved and those persons that are providing the resources needed to make graduate study programs possible. A Web Page Resources list is provided in the appendix of this document. Included are a variety of topics and sources of general information for students that are available on the web. The appendix also includes a NRES contact list, which contains the names and addresses of NRES faculty and staff and the areas of expertise they can offer.

**Email, Web Pages and the NRES Graduate Student List-serve**

All new students (even continuing students and current employees) are given a @uiuc.edu email account when they enter the Graduate College. The NRES Student Services Center will hold a packet for you containing your login and password. You should stop by soon after you arrive on campus to pick up this information. This account will be active every semester in which a student is enrolled and throughout the summer terms whether you are enrolled or not. The department will send important information and correspondence to this email account unless you request it be directed to another email address. University email mailboxes do have maximum size limits. It is your responsibility to be sure that you don't miss important information due to emails being returned because your mailbox is full. If you do not enroll for a fall or spring term, your email account will be closed in three months. Likewise if you pass your Expected Graduation Date (EGD), your email account will be closed. In either of these cases, it is your responsibility to let us know a new email address if you still want to get departmental information sent to you. You can request to have your University email account remain active and be able to access it using a dial up number during semesters of not being enrolled, by contacting CCSO (217-333-1637) and paying a fee.

All graduate students are able have a departmental web page that is linked to the departmental web site. These pages can be found on the web in the departmental directory in the Graduate section. The pages follow a standard format, but can include personal comments and photos. If you would like to activate your graduate student web page, please submit your information to the NRES Student Services Center or to nres@uiuc.edu. Computers for general use are available campus-wide to all students at all CCSO locations.

The department maintains a Graduate Student list-serve as the mechanism by which important emails are sent. Each graduate student in the department is automatically added to this list upon enrollment, and will remain on the list until graduation. If you do not want to be on this list, you will need to come to the NRES Student Services Center, and request in writing to be removed from the list-serve. This will be permanent unless you request, likewise in writing to the Student Services Center, to be put back on the list-serve.

The NRES list-serve is for official use only. Students may use the list-serve address to send official information only to other students. Abuse of the list-serve to send unofficial or offensive email to other students will result in removal from the list-serve and disciplinary action by the Department Head.

**Labs, Offices, Mailboxes, Telephones, and Keys**

Always leave the laboratories and other areas you use clean and orderly. Wash all glassware after using, and do whatever cleanup is necessary. University regulations state that we cannot keep food for human consumption in our refrigerators or freezers.

The department attempts to furnish desks, lamps, file cabinets, etc., when these are available. Faculty advisors are responsible for providing office and lab space for their graduate students. In addition, the department also has some limited graduate office space available. If you need a desk, please contact the Student Services Center. In the appropriate building near

your office space, you will be assigned a mailbox where you will receive all official mail. Please check your mailbox regularly.

You may have a telephone near your office. The number of that telephone is the one to list as your office telephone, and the one you will normally use. This telephone, like most of the staff telephones, is restricted to local calls only. Long-distance calls can only be made with the advisor's approval, using a telephone designated by the advisor.

Keys for laboratories and graduate offices are available only when requested by the major professor, approved by the Department Head, and handled through the area secretary responsible for your building. All keys must be accounted for by the secretary, which ensures an accurate inventory. Upon leaving NRES, return all keys to the secretary.

### **Security**

As a graduate student in the department you have rights and privileges, but you also have responsibilities. Each student should assume the responsibility for security of the building, labs, and other facilities. If the doors are to be locked, make certain they are locked. Be alert to strangers; we have had thefts in the past. This is your department; help preserve it.

### **Copiers and Supplies**

Departmental copiers can be used for research purposes if the material has been approved by the major professor. No class notes, thesis, or personal items can be copied, as there are other machines for this use.

All supplies (graph paper, pens, paper, record books, notebooks, and reprint request cards) can be obtained from the major professor only, unless other arrangements are made. This allows for an accurate record of expenses.

### **Field and Greenhouse Space**

Arrangements for field space are also made through the major professor, as are any arrangements to use departmental teaching, research, or demonstration areas located off campus. Requests for greenhouse space can be addressed to Ruth Green in the Plant Sciences Lab. Vegetable research locations can be obtained from Dr. John Masiunas. Space requests for pomology or fruit research should be addressed to Dr. Mosbah Kushad. Students researching in the ornamental horticulture or turf specializations should contact Dr. Dave Williams for research field space. Greenhouse space is normally assigned at the beginning of the fall term, and field space in the spring. Students are responsible for their field and greenhouse thesis research, and should do their own harvesting and collection of data. Problems with planting, spraying, and the like can be discussed with the major advisor.

### **Departmental Clubs and Organizations**

The department has several clubs and organizations that are very active and provide additional opportunities for experience and interactions for graduate students. Among these are the Illini Foresters, the Hands-on Herb Society, the Illini Orchid Club, the Turf Club, the

Horticulture Club, and student chapters of the Wildlife Society and the Soil and Water Conservation Society. Bulletin boards for club activities are located in the west hallway of the first floor of Turner Hall and the west hallway of the Plant Sciences Lab. Graduate students are also encouraged to participate in representing the department in activities and through the Graduate College as these opportunities become available.

### **Departmental Events**

The Department annually sponsors several events throughout the year. Faculty, students, staff, alumni, emeritus faculty and their families are invited to attend all departmental functions. First is the Fall Picnic, which is held soon after school begins in the fall semester. We have a holiday party, usually a potluck, in December. The Spring Picnic is held during the last week of school in the spring, normally on reading day. Watch for announcements about these events throughout the year. In addition, the departmental faculty seminar is held every Friday at noon during the fall and spring semesters, in one of the classrooms on the first floor of Turner Hall.

### **Professional Meetings**

The department encourages students to attend professional meetings in the area of their interest, but the department does not have a funding source available to offer funds for conference travel. Normally funding for conference travel is supported by the major advisor. The Graduate College Fellowship Office does offer competitive grants to reimburse up to \$300 of travel expenses that students may apply for, if the student has been accepted to present a paper at the meeting. The competition is held twice each year. See the Graduate College Fellowship Office web page for more information.

### **Job Placement**

Graduate students in NRES primarily gain employment after graduation through their major advisor or through networking with colleagues during their graduate program. However, the department also maintains a searchable job database online at [http://www.nres.uiuc.edu/careers/emp\\_db.html](http://www.nres.uiuc.edu/careers/emp_db.html). All job announcements that come to the department are posted here and on the bulletin board in the southwest hallway of the fifth floor of Turner Hall. Additionally, the Student Services Center has materials on resume, cover letter and CV writing, interviewing, job searching and other job searching skills. Other resources on campus include the UIUC Career Services Center, the Biotechnology Placement Center, and the ACES Student Development and Career Services Office. If you are looking for work on campus, the Student Office of Financial Aid and the Graduate Student Advisory Council post opportunities on their web pages. For more information on these and other job placement resources, see appendix E.

### **Problem Solving/Procedures for Grievances and Complaints**

Students and faculty in NRES are a diverse group whose personalities, experiences, activities, and personal goals vary widely. Most conflicts and problems that arise in this environment can be resolved without invoking formal grievance procedures; such informal resolution, where possible, is generally best for all concerned. At times, however, formal grievance procedures may be necessary. Prior to initiation of formal procedures, please contact

the Graduate Coordinator for consultation. All conversations will be held in the strictest confidence. More information about the departmental grievance policy and procedure are available in N-509 Turner Hall.

The Department of Natural Resources and Environmental Sciences follows all problem solving/grievance procedures established and approved by the Graduate College and University. Please see the following materials for specific information:

*A Handbook for Graduate Students and Advisers*, [http://www.grad.uiuc.edu/grad\\_handbook/](http://www.grad.uiuc.edu/grad_handbook/),

and

*Code on Campus Affairs and Handbook of Policies and Regulations Applying to All Students*, [http://www.uiuc.edu/admin\\_manual/code/code\\_contents.html](http://www.uiuc.edu/admin_manual/code/code_contents.html), **Rule 25**,

and

Policy and Procedures for Graduate Student Issues in the Department of Natural Resources and Environmental Sciences (**appendix H** of this handbook).

## HOUSING OPTIONS

Although most graduate students live in apartments or shared houses close to campus, there are several housing options available to graduate students at the U of I. There are four graduate student residence options on campus available through the Housing Division, Daniels Hall, Goodwin & Green Apartments, Orchard Downs Apartments, and Sherman Hall. Family housing is available to all graduate students at the Orchard Downs location. For information on these, see the campus Housing Division web site at <http://www.housing.uiuc.edu/>. Hundreds of privately owned houses and apartments are available to rent near campus. You should visit these before signing a lease. In general, the closer the building is to campus, the higher the rent. Distant housing can have more facilities or space, but then you will have to commute to campus. Parking is expensive, but the bus is free with your student ID. It might help to also talk with some of the other graduate students about what has worked or not worked for them. There is no roommate service on campus, so if you need to share rent, you will have to do that on your own. The University Tenant Union has some helpful information for finding housing in the community available at their website <http://www.tenantunion.uiuc.edu/>.

## SUGGESTIONS FOR GRADUATE STUDENTS

The graduate program of study is designed to provide the student the opportunity to achieve a high degree of competence in preparation for a professional career. Throughout the program the student is being evaluated, both formally and informally. Grades attained in formal courses are important but represent only a part of the total. Typically, the most in-depth evaluation of the overall professional competence of the student comes in relation to the

preliminary and final exams and the thesis presentation. Thus, it is very important that the student do as good a job as possible in demonstrating total competence. The following are but a few general suggestions that will, hopefully, prove useful.

### **Preparation for Oral Exams**

Well in advance of the examination, make plans to visit with each member of the examining group. Ask for suggestions as to what you should prepare for. You may not have had a course from this person, and you may be examined on something different than you might expect. Prior to the examination, it is also important that you discuss the procedure and guidelines thoroughly with your major advisor. It is certainly appropriate to ask specifically how the examination will be conducted. Typically, advisors have helpful suggestions.

Remember, there are several ways to respond to a question.

1. Give the correct answer.
2. Ask for clarification of the question. It may not have been worded so that you would give the best answer. Also, this will give you time to think.
3. "I don't know" is an acceptable answer. The examiner may not let an "I don't know" answer stand, but try to lead you to the answer with other questions.
4. The question may call for a speculative answer. If so, speculate. You may need more information before you answer; if so, ask for it.
5. **Remember, "The Committee wants to help you."** Committee members are expected to maintain professional attitudes and conduct the examination without personal bias.

Do whatever possible to reduce your nervousness. Being nervous will interfere with your conduct and responses to questions. If, during the examination, you need or want to do something to accomplish this, ask your major advisor if this is permissible.

For the final examination on the thesis or dissertation, you should be prepared to review:

1. Reasons for the study - scientific or practical implications.
2. Methods used for the important findings and their significance.
3. Unanswered problems suggested by your research or in other words, "What's next?"

### **Publication of Thesis and Dissertation Research**

Research is complete only after the results of that research have been published and transmitted to those that may have interest in, or use for, the results. All graduate students are expected to prepare one or more manuscripts suitable for appropriate publication. The type of publication and the appropriate place for publication will be determined by the major advisor in counsel with the student.

## APPENDICES

### A. Graduate Courses in NRES

The semester offered is subject to change. Odd and even refer to the year offered.

<b>Course Offerings</b>		
<b>Rubric &amp; Number</b>	<b>Title</b>	<b>Offered</b>
HORT 421	Horticultural Physiology	fall
HORT 422	Plant Physiology Laboratory	not taught
HORT 436	Perennial Grass Ecosystems	even spring
HORT 441	Floricultural Crops Production	spring
HORT 442	Plant Nutrition	odd spring
HORT 447	Horticultural Plant Breeding	even fall
HORT 450	Landscape Contracting	fall
HORT 453	Principles of Plant Breeding	spring
HORT 455	Residential Site Design I	fall
HORT 456	Residential Site Design II	spring
HORT 464	International Hort Products	odd fall
HORT 465	Ethics in Biotechnology	fall
HORT 466	Growth and Dev of Hort Crops	fall
HORT 467	Postharvest Phys of Hort Crops	odd fall
HORT 482	Plant Tissue Culture	spring
HORT 489	Controlling Turfgrass Pests	even fall
HORT 499	Experimental Graduate Courses	spring & fall & summer
HORT 505	Research Methods in Hort	even fall
HORT 566	Plant Gene Regulation	spring
HORT 568	Plant Pigments	even fall
HORT 588	Plant Biochemistry	odd fall
NRES 401	Watershed Hydrology	fall
NRES 403	Watersheds and Water Quality	spring
NRES 406	Fluvial Geomorphology	even fall
NRES 407	Wildlife Population Ecology	not offered
NRES 409	Fishery Ecol and Conservation	odd spring
NRES 410	Applied Natural Resources Econ	fall
NRES 416	Forest Biology and Protection	fall
NRES 419	Env and Plant Ecosystems	fall
NRES 420	Restoration Ecology	spring
NRES 421	Quantitative Methods in NRES	spring
NRES 422	Earth Systems Modeling	

<b>Course Offerings</b>		
<b>Rubric &amp; Number</b>	<b>Title</b>	<b>Offered</b>
NRES 425	Forest Resource Management	spring
NRES 426	Tree Physiology	odd spring
NRES 427	Modeling Natural Resources	spring
NRES 429	Aquatic Ecosystem Conservation	fall
NRES 430	Comm in Env Soc Movements	odd spring
NRES 431	Plants and Global Change	spring
NRES 432	Mechanics of Wood Materials	even fall
NRES 438	Soil Nutrient Cycling	odd spring
NRES 439	Env and Sustainable Dev	fall
NRES 440	Applied Statistical Methods I	spring & fall
NRES 442	Functional Ecology of Trees	
NRES 445	Statistical Methods	spring
NRES 446	Ecological Numeracy	spring
NRES 449	Science Technology and Policy	spring
NRES 451	Environmental Organic Chem	spring
NRES 452	Community Ecology	fall
NRES 454	GIS in Natural Resource Mgmt	spring
NRES 455	Adv GIS for Nat Res Planning	odd spring
NRES 456	Integrative Ecosystem Mgmt	spring
NRES 460	Anal & Interp Aerial Photo	spring
NRES 469	Spatial Ecosystem modeling	odd spring
NRES 471	Pedology	fall
NRES 472	Environmental Psychology	fall
NRES 473	Soil Testing Practicum	fall
NRES 474	Soil and Water Conservation	spring
NRES 475	Soil Microbiology	spring
NRES 477	Introduction to Remote Sensing	spring
NRES 480	Fiber and Textile Performance	odd fall
NRES 481	Environmental Research Methods	fall
NRES 483	Soil Mineralogy	spring
NRES 487	Soil Chemistry	spring
NRES 488	Soil Fertility and Fertilizers	fall
NRES 489	Physics of Plant Environments	fall
NRES 490	Surface Water System Chemistry	fall
NRES 493	Statistical Ecology	odd fall
NRES 499	Experimental Graduate Courses	spring & fall & summer
NRES 500	Graduate Seminar	spring & fall
NRES 501	Special Problems	spring & fall & summer

<b>Course Offerings</b>		
<b>Rubric &amp; Number</b>	<b>Title</b>	<b>Offered</b>
NRES 502	Research Methods in NRES	spring
NRES 510	Adv Natural Resource Economics	spring
NRES 512	Discussions in NRES	fall
NRES 515	Fundamentals of Geostatistics	fall
NRES 516	Ecosystem Biogeochemistry	spring
NRES 535	Advanced Forest Biometry	even fall
NRES 540	Public Involvement in Res Mgmt	even spring
NRES 572	Chemistry of Soil Fertility	even spring
NRES 573	Pedogenesis and Soil Taxonomy	even fall
NRES 579	Physics of Flow in Soils	even spring
NRES 580	Solute Transport in Soils	odd spring
NRES 582	Textile Finishing	as needed
NRES 585	High Performance Fibers	even fall
NRES 586	Soil Organic Matter	even fall
NRES 590	Professionalism and Ethics	fall
NRES 594	NRES Professional Orientation	fall
NRES 599	Thesis Research	spring & fall & summer

## B. List of Graduate Faculty

**Appleby, James E.**, Associate Professor  
Management and ecology of the insects and mites of forest and landscape trees, shrubs, and flowers  
Ph.D., The Ohio State University, 1964  
Email: jappleby@uiuc.edu

**Berenbaum, May**, Professor (Entomology)  
Insect ecology; chemical ecology  
Ph.D., Cornell University, 1980  
Email: maybe@uiuc.edu

**Branham, Bruce E.**, Associate Professor  
Turfgrass science; pesticide and nutrient fate; weed control in turf  
Ph.D., University of Illinois, 1983  
Email: bbranham@uiuc.edu

**Brawn, Jeffrey D.**, Visiting Associate Professor  
Conservation biology; avian ecology; tropical ecology; statistical ecology  
Ph.D., Northern Arizona University, 1985  
Email: jbrawn@uiuc.edu

**Brazee, Richard J.**, Associate Professor  
Forest resource economics, development of behavioral models that describe forestry and natural resource policies and markets  
Ph.D., University of Michigan, 1987  
Email: brazee@uiuc.edu

**Briskin, Donald P.**, Professor  
Medicinal plants, natural products metabolism, plant biochemistry  
Ph.D., University of California, Riverside, 1981  
Email: dbriskin@uiuc.edu

**Cheeseman, John M.**, Professor (Plant Biology)  
Physiology; photosynthesis; integration of activities in plants  
Ph.D., Duke University, 1975  
Email: j-cheese@life.uiuc.edu

**Chow, Poo**, Professor  
Wood science; forest products; plant fiber utilization  
Ph.D., Michigan State University, 1969  
Email: pchow2@uiuc.edu

**Cloyd, Raymond A.**, Assistant Professor  
Integrated pest management; ornamental entomology  
Ph.D., Purdue University, 1999  
Email: rcloyd@uiuc.edu

**Darmody, Robert G.**, Associate Professor  
Environmental impacts of coal mining; soil genesis, classification, mapping; soil-landscape relationships; paleosols; soil interpretations  
Ph.D., University of Maryland, 1980  
Email: rdarmody@uiuc.edu

**David, Mark B.**, Professor  
Biogeochemistry of forest, aquatic, and agricultural ecosystems; forest soils, nutrient cycling; wetlands; nitrogen cycling; water quality; environmental quality  
Ph.D., State University of New York, College of Environmental Science and Forestry, 1983  
Email: mbdavid@uiuc.edu

**Dawson, Jeffrey O.**, Professor  
Tree physiology; symbiotic nitrogen fixation; nitrogen metabolism of woody plants; plant-microbe interactions; forest ecology; silviculture  
Ph.D., Iowa State University, 1978  
Email: jdawson2@uiuc.edu

**DeLucia, Evan H.**, Professor and Head (Plant Biology)  
Physiological ecology of trees; climate change; photosynthesis  
Ph.D., Duke University, 1986  
Email: delucia@uiuc.edu

**DeWalt, R. Edward**, Associate Research Scientist (Illinois Natural History Survey) Systematics and ecology of freshwater aquatic insects; stream quality; biodiversity informatics

Ph.D., University of North Texas, 1992

Email: edewalt@inhs.uiuc.edu

**Eastman, Catherine E.**, Associate Professional Scientist (Illinois Natural History Survey)

Insect pest management in vegetable cropping systems; interactions of insects, weeds, and plant pathogens in cropping systems; insects as vectors of plant pathogens

Ph.D., Louisiana State University, 1976

Email: ceastman@uiuc.edu

**Ellsworth, Timothy R.**, Associate Professor Modeling and experiments of chemical fate and transport in soil; spatial variability; geostatistics

Ph.D., University of California, Riverside, 1989

Email: ellswort@uiuc.edu

**Endress, Anton G.**, Professor Restoration ecology; biodiversity and germplasm conservation; agribusiness; plant growth and development; physiology of plants in adverse environments; air pollution

Ph.D., University of Iowa, 1974

Email: aendress@uiuc.edu

**Fermanian, Thomas W.**, Associate Professor

Management and decision aid models; turfgrass and weed management systems

Ph.D., Oklahoma State University, 1980

Email: fermo@uiuc.edu

**Gertner, George Z.**, Professor Biometrics research on statistical methods and artificial intelligence techniques applied to natural resource monitoring and simulation systems; statistical based quality assessment of simulation systems, error analysis, error budgets, non-linear models; Bayesian methods, artificial neural networks; supercomputer modeling applications

Ph.D., University of Washington, 1980

Email: gertner@uiuc.edu

**Hamblin, Andrew M.**, Assistant Professor Turf and forage grass breeding and genetics; conventional breeding and molecular mapping of disease resistance; genetic diversity of grasses

Ph.D., University of Illinois, 1997

Email: hamblin@uiuc.edu

**Hanks, Lawrence M.**, Assistant Professor (Entomology), Assistant Professional Scientist (Illinois Natural History Survey) Ecology and behavior of phytophagous insects; plant-insect interactions; woody ornamentals; biological control; integrated pest management

Ph.D., University of Maryland, 1991

Email: hanks@life.uiuc.edu

**Hannon, Bruce**, Professor (Geography) Biological, ecological and economic modeling

Ph.D., University of Illinois, 1970

Email: bhannon@uiuc.edu

**Herendeen, Robert A.**, Associate Professor (Animal Biology)

Ecological modeling; efficiency of resource use; environmental quality; ecological economics

Ph.D., Cornell University, 1970

Email: herendee@uiuc.edu

**Herricks, Edwin E.**, Professor (Civil Engineering)  
Effects of contaminants on communities and ecosystems; improvement of engineering design and environmental decision making; biological monitoring procedures for environmental decision-making  
Ph.D., Virginia Polytechnic Institute and State University, 1974  
Email: herricks@uiuc.edu

**Heske, Edward J.**, Assistant Professor (Animal Biology)  
Ecology and conservation of terrestrial mammals; population and community ecology; conservation biology  
Ph.D., University of California, Berkeley, 1985  
Email: e-heske@uiuc.edu

**Hill, Steven R.**, Assistant Research Scientist Botany  
Ph.D., Texas A&M University, 1979  
Email: srhill@denr1.igis.uiuc.edu

**Hollinger, Steven E.**, Assistant Professor (Illinois State Water Survey)  
Agricultural meteorology and climatology with emphasis on the effects of weather on crops and natural ecosystems  
Ph.D., Purdue University, 1981  
Email: hollinger@uiuc.edu

**Huck, Morris G.**, Associate Professor  
Physical and chemical processes at the root/soil interface; integrating root function with whole-plant processes; numerical simulation of organism-level system interactions  
Ph.D., Michigan State University, 1967  
Email: mghuck@uiuc.edu

**Hudson, Robert J.M.**, Associate Professor  
Aquatic chemistry; modeling of biogeochemical processes in aquatic and terrestrial systems; trace metal-biota interactions

Ph.D., Massachusetts Institute of Technology, 1989  
Email: rjHUDSON@uiuc.edu

**Irwin, Michael E.**, Professor  
Plant virus epidemiology; aphid migration and movement; interchange of biota between managed and wild systems; international crop protection and soybean pest management; biosystematics of Therevidae and phylogeny of the Asiloidea  
Ph.D., University of California, Riverside, 1971  
Email: meirwin@uiuc.edu

**Isard, Scott**, Associate Professor (Geography)  
Physical climatology; hydroclimatology; agricultural biometeorology; aerobiology  
Ph.D. 1984, Indiana University  
Email: isard@uiuc.edu

**Jarrell, Wesley M.**, Professor and Head  
Sustainable production and management of food and ornamental plants, and the health of rural and urban landscapes, especially soil and water  
Ph.D. 1977, Oregon State University  
Email: wjarrell@uiuc.edu

**Jeffords, Michael R.**, Associate Professor  
Biological control of forest insects  
Ph.D., University of Illinois, 1978  
Email: jeffords@uiuc.edu

**Jones, Robert L.**, Professor  
Soil mineralogy and biogeochemistry  
Ph.D., University of Illinois, 1962  
Email: rljones1@uiuc.edu

**Juvik, John A.**, Professor  
Classical and molecular genetic methodologies to identify & isolate genes in vegetable crops in conjunction with evaluations of utility in field agroecosystems; genetics and molecular biology; plant breeding; biochemistry; food science and nutrition; post-harvest physiology; pharmacology and toxicology of foods; entomology; plant pathology; statistics; DNA marker technology  
Ph.D., University of California, Davis, 1980  
Email: juvik@uiuc.edu

**Kling, Gary J.**, Associate Professor  
Woody plant production and physiology; growth regulators  
Ph.D., University of Illinois, 1981  
Email: gkling@uiuc.edu

**Korban, Schuyler S.**, Professor  
Plant molecular genetics and biotechnology; mapping and map-based cloning; plant-based edible vaccines; gene transfer systems; regulation of gene expression; disease and plant defense genes; antigenic protein genes; fatty acid synthesis genes  
Ph.D., University of Nebraska, 1980  
Email: korban@uiuc.edu

**Kovacic, David A.**, Associate Professor  
(Landscape Architecture)  
Ecosystem ecology; wetland ecology; biogeochemistry of managed and unmanaged ecosystems  
Ph.D., Colorado State University, 1983  
Email: dkovacic@uiuc.edu

**Kuo, Frances E.**, Assistant Professor  
Effects of the urban forest on human functioning and behavior; environmental psychology; techniques for involving the public in natural resource/environmental decisions  
Ph.D., University of Michigan, 1995  
Email: f-kuo@uiuc.edu

**Kushad, Mosbah M.**, Associate Professor  
Influence of cultural and environmental factors on the nutritional and health promoting properties of fruits and vegetables; specific research relates to the regulation of glucosinolates, antioxidants, vitamins, and ethylene biosynthesis and breakdown  
Ph.D., Oregon State University, 1984  
Email: kushad@uiuc.edu

**Lila, Mary Ann**, Professor  
Plant physiology; image analysis; biotechnology; bioreactor based production of chemoprotective plant metabolites  
Ph.D., University of Wisconsin, 1984  
Email: imagemal@uiuc.edu

**Mankin, Phil**, Research Coordinator  
(Illinois-Indiana Sea Grant College Program)  
Wildlife ecology and behavior; spatial analysis of wildlife ecosystems; wildlife applications of aerial radiotracking and land use photography; modeling and applications for wildlife, regional land use, and aviation  
Ph.D., University of Illinois, 1993  
Email: pmankin@staff.uiuc.edu

**Masiunas, John B.**, Associate Professor  
Impact of vegetable cropping systems on weed populations; weed biology and ecology; sustainable and organic cropping systems  
Ph.D., Purdue University, 1986  
Email: masiunas@uiuc.edu

**McIsaac, Greg**, Associate Professor  
Watershed hydrology; water quality; soil erosion; ecosystem-based management  
Ph.D., University of Illinois, 1994  
Email: gmcisaac@uiuc.edu

**Mendoza, Guillermo (Gil)**, Associate Professor  
Optimization techniques; systems analysis; forest and ecosystem management; Geographic Information Systems

Ph.D., University of Washington, 1980  
Email: gamendoz@uiuc.edu

**Molano-Flores, Brenda**, Adjunct Professor,  
Assistant Research Scientist (Illinois Natural  
History Survey)  
Prairie restoration and conservation;  
reproductive biology of plants  
Ph.D., University of Iowa, 1997  
Email: molano@inhs.uiuc.edu

**Mulvaney, Richard L.**, Professor  
Soil and fertilizer nitrogen transformations;  
nitrogen and nitrogen-15 methodology  
Ph.D., University of Illinois, 1983  
Email: mulvaney@uiuc.edu

**Olson, Kenneth R.**, Professor  
Soil survey; soil conservation and  
management; soil productivity; soil erosion  
Ph.D., Cornell University, 1983  
Email: krolson@uiuc.edu

**Onstad, David W.**, Associate Professor  
Insect and pathogen ecology; modeling;  
population ecology; systems analysis  
Ph.D., Cornell University, 1985  
Email: onstad@uiuc.edu

**Paige, Ken N.**, Professor and Head (Animal  
Biology)  
Plant-animal interactions; molecular  
genetics; conservation biology; mammalian  
ecology  
Ph.D., Northern Arizona University, 1986  
Email: k-paige@uiuc.edu

**Pegg, Mark A.**, Assistant Professional  
Scientist (Illinois Natural History Survey),  
Adjunct Professor  
Applied fisheries ecology, river ecology and  
restoration  
Ph.D., Iowa State University, 2000  
Email: markpegg@uiuc.edu

**Philipp, David P.**, Professor and Director  
(Center for Aquatic Ecology, Illinois  
Natural History Survey)

Conservation genetics  
Ph.D., University of Massachusetts, 1976  
Email: philipp@uiuc.edu

**Phillips, Christopher A.**, Adjunct Assistant  
Professor (Illinois Natural History Survey)  
Population biology; conservation genetics  
Ph.D., Washington University, 1989  
Email: caphilli@uiuc.edu

**Raheel, Mastura**, Professor  
Textile physics: structure-property  
relationships in fibrous systems; textile  
chemistry: fiber chemistry, chemical  
modification of fibers/textiles to enhance  
performance, dyeing and finishing  
Ph.D., University of Minnesota, 1971  
Email: raheel@uiuc.edu

**Rebeiz, Constantin A.**, Professor  
Chemistry and biochemistry of the greening  
process; pesticides; cancericides; plant yield  
Ph.D., University of California, Davis, 1965  
Email: crebeiz@uiuc.edu

**Reisner, Ann**, Associate Professor (Human  
and Community Development)  
Environmental communications;  
environmental social movements and social  
movement organizations; sociology of the  
mass media (press); strategic  
communications; how can we all learn to  
work together in a fragmented world  
Ph.D. 1987 University of Wisconsin at  
Madison  
Email: reisnera@uiuc.edu

**Retzer, Michael E.**, Associate Tech.  
Scientist (Illinois Natural History Survey)  
Evolution and ecology of fishes;  
conservation of fishes and aquatic  
environments  
Ph.D., University of Illinois, 1994  
Email: mretzer@mail.inhs.uiuc.edu

**Robertson, Kenneth R.**, Plant Systematist  
(Illinois Natural History Survey) and  
Adjunct Professor (Plant Biology)

Plant systematics; natural area ecology and preservation; biodiversity; tallgrass prairie ecosystems

Ph.D., Washington University and Missouri Botanical Garden, 1971

Email: krrobert@uiuc.edu

**Robinson, Gene**, Professor (Entomology)

Use of the honey bee, *Apis mellifera*, to understand the mechanisms governing social behavior, aspect of colony organization, the division of labor among workers, and the process of worker behavioral development that underlies it.

PhD, 1986, Cornell University

Email: generobi@life.uiuc.edu

**Roy, William R.**, Associate Professor

(Illinois State Geological Survey)

Environmental soil and water chemistry; adsorption-desorption of soil contaminants; chemical fate and transport of contaminants in soil and groundwater; geochemical modeling; solid and hazardous wastes, soil and water contamination

Ph.D., University of Illinois, 1985

Email: roy@isgs.uiuc.edu

**Salo, Ken E.**, Assistant Professor

Ethnography of transnational environmental law and policy conflicts in the global South  
BS LLM, University of Cape Town, South Africa, 2001

Email: kensalo@uiuc.edu

**Seigler, David S.**, Professor (Plant Biology)

Secondary metabolism; the interactions in which secondary metabolites serve as mediators or messages; the evolutionary relationships of organisms in which these interactions occur

PhD, 1967, University of Oklahoma

Email: daveseig@uiuc.edu

**Simmons, F. William**, Associate Professor  
Environmental soil science; soil-herbicide interactions; herbicide fate and persistence; nitrogen fate in irrigated crops

Ph.D., North Carolina State University, 1987

Email: fsimmons@uiuc.edu

**Sims, Gerald K.**, Microbiologist (USDA Agricultural Research Service)

Environmental microbiology; fate of xenobiotics; microbial ecology

Ph.D., Purdue University, 1985

Email: gksims@uiuc.edu

**Skirvin, Robert M.**, Professor

Use of non-sexual methods, including biotechnology, to improve asexually propagated crops; specializing in grapes, blackberries, blueberries, and raspberries, but also working with vegetables and ornamental species; working with the grape industry to establish an Illinois grape and wine industry

Ph.D., Purdue University, 1975

Email: skirvin@uiuc.edu

**Solter, Leellen F.**, Assistant Professor  
(Illinois Natural History Survey)

General insect pathology; biology of entomopathogens; host-parasite-pathogen relationships; developmental cycles and host specificity of entomopathogenic microsporidia; epizootiology of insect diseases; microbial control

Ph.D., University of Illinois, 1996

Email: lsolter@uiuc.edu

**Spomer, L. Arthur**, Professor

Plant physiology; environmental control of plant growth and plant water requirement; plant soil water relations; soil mix physical properties; environmental measurement; video image analysis

Ph.D., Cornell University, 1969

Email: spomer@uiuc.edu

**Stucki, Joseph W.,** Professor

Physical chemistry of clays and soils with emphasis upon the effects of variable oxidation states of iron in clay minerals on their physical and chemical properties

Ph.D., Purdue University, 1975

Email: jstucki@uiuc.edu

**Sullivan, William C.,** Associate Professor

How having everyday contact with nature influences human functioning; examining the effect of contact with nature on aggressive and violent behavior, crimes and other anti-social behaviors, and on the strength of social ties among neighbors in inner-city neighborhoods

Ph.D., University of Michigan, 1991

Email: wcsulliv@uiuc.edu

**Swiader, John M.,** Associate Professor

Plant nutrition of horticultural crops; nutrient use efficiency and consumer crop quality; physiological mechanisms responsible for genotypic differences in nitrate accumulation in vegetables

Ph.D., Virginia Polytechnic Institute and State University, 1980

Email: jswiader@uiuc.edu

**Taft, John B.,** Research Scientist (Illinois Natural History Survey)

Vegetation ecology; structure, composition, and diversity patterns in plant communities; restoration ecology; fire effects on plant communities; floristic surveys; natural area identification; methods for assessing ecological integrity of plant communities

Ph.D., University of Illinois, 1999

Email: taft@mail.inhs.uiuc.edu

**Vining, Joanne,** Associate Professor

Environmental psychology; public involvement in natural resource management; emotion and decision making; conservation behavior; human-animal interactions

Ph.D., University of Arizona, 1983

Email: jvining@uiuc.edu

**Voegtlin, David,** Assistant Professor

(Illinois Natural History Survey)

Aphid biology and systematics; aphid movement; overwintering strategies; pest aphid complexes; aphids as virus vectors; biological control

Ph.D., University of California, Berkeley, 1976

Email: dvoegtli@uiuc.edu

**Voigt, Thomas,** Assistant Professor and Extension Turfgrass Specialist

Turfgrass species and cultivar evaluation and management; landscape uses for native and exotic ornamental grasses and forbs

Ph.D., University of Illinois, 1995

Email: tvoigt@uiuc.edu

**Wahl, David H.,** Professor (Illinois Natural History Survey)

Fish ecology, behavior and management; trophic ecology; predator-prey interactions; bioenergetics

Ph.D., The Ohio State University, 1988

Email: d-wahl@uiuc.edu

**Wander, Michelle,** Associate Professor

Relationship between management practices, soil characteristics, and specific aspects of sustainability; soil organic matter; tillage, fertilization and crop rotation impacts on soil quality, soil productivity, and microbial and organic matter dynamics

Ph.D., The Ohio State University, 1992

Email: mwander@uiuc.edu

**Warner, Richard E.,** Professor and

Director (Illinois-Indiana Sea Grant College Program)

Population ecology and management of wild vertebrates; interactions of wild vertebrates with humans and domestic animals; human dimensions of ecosystem management; systems approaches to sustainable agricultural ecosystems

Ph.D., University of Illinois, 1981

Email: dickw@uiuc.edu

**Warnock, Daniel F.**, Assistant Professor  
Insect pest management in the production of  
floriculture crops; genetics and chemistry of  
crop insect resistance and biological control  
Ph.D., University of Minnesota, 1998  
Email: [dwarnock@uiuc.edu](mailto:dwarnock@uiuc.edu)

**Weatherhead, Patrick J.**, Professor and  
Senior Professional Scientist (Illinois  
Natural History Survey)  
Behavior, ecology and conservation of birds  
and snakes  
Ph.D., Queen's University, 1978  
Email: [pweather@uiuc.edu](mailto:pweather@uiuc.edu)

**Weinzierl, Richard A.**, Associate Professor  
(Crop Sciences)  
Insect pest management in the production of  
fruits, vegetables, and livestock animals;  
focus includes biological control, the use of  
semiochemicals, and insecticide resistance  
Ph.D., Oregon State University, 1984  
Email: [weinzier@uiuc.edu](mailto:weinzier@uiuc.edu)

**Wiedenmann, Robert N.**, Associate  
Professional Scientist (Illinois Natural  
History Survey)  
Biological control of insects and weeds  
Ph.D., Purdue University, 1990  
Email: [rwieden@mail.inhs.uiuc.edu](mailto:rwieden@mail.inhs.uiuc.edu)

**Wilkinson, Henry T.**, Professor  
Turfgrass science; plant pathology; soil-  
borne plant pathogens  
Ph.D., Cornell University, 1980  
Email: [hwilkins@uiuc.edu](mailto:hwilkins@uiuc.edu)

**Williams, David J.**, Professor  
Nursery crop production and marketing;  
weed control in landscape plants; landscape  
plant evaluation; growth regulators  
Ph.D., Rutgers University, 1974  
Email: [william3@uiuc.edu](mailto:william3@uiuc.edu)

**DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES**

**GRADUATE RESEARCH PROPOSAL**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

(See ELEMENTS OF A GRADUATE PROGRAM for instructions on formatting the proposal.)  
Attached is the M.S. \_\_\_/Ph.D.\_\_\_ research or special project proposal entitled:

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This proposal has been reviewed by the Guidance Committee of the student, and will serve to guide the research program of the student.

**Approved by:**

\_\_\_\_\_  
Advisor Student

\_\_\_\_\_  
Committee Member Committee Member

\_\_\_\_\_  
Committee Member Committee Member

Received by \_\_\_\_\_ on: \_\_\_\_\_  
Graduate Coordinator date



**DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES**

**GRADUATE PLAN OF STUDY**

Name: \_\_\_\_\_ Degree: M.S. Plan A\_\_\_ B\_\_\_ Ph.D.\_\_\_\_

Date First Enrolled: \_\_\_\_\_ Expected Date of Graduation: \_\_\_\_\_

Institution of B.S. (and M.S.): \_\_\_\_\_  
\_\_\_\_\_

Date Plan of Study Completed: \_\_\_\_\_ Undergraduate Major: \_\_\_\_\_

Area of Interest: \_\_\_\_\_

Guidance Committee Members:

Signature of Approval

(Student) \_\_\_\_\_

\_\_\_\_\_

(Advisor) \_\_\_\_\_

\_\_\_\_\_

(Member) \_\_\_\_\_

\_\_\_\_\_

(Member) \_\_\_\_\_

\_\_\_\_\_

(Member) \_\_\_\_\_

\_\_\_\_\_

(Member) \_\_\_\_\_

\_\_\_\_\_

Courses Considered Essential:

<u>Course No.</u>	<u>Course Title</u>	<u>Hours</u>
NRES 594	Professional Orientation in NRES	1
NRES 500	Seminar	1

Recommended Courses:

Course No.	Course Title	Hours
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Essential Courses:	_____	Hours
Thesis (599):	_____	Hours
Recommended Courses:	_____	Hours
Total:	_____	Hours

Course Planning:

(Please remember that some courses are only taught in fall or spring, and others are taught only every other year. Also, classes may be cancelled because of low enrollment, sabbatical leave, etc.)

1 <sup>st</sup> Sem.	Fall/Spring/Summer	2 <sup>nd</sup> Sem.	Fall/Spring/Summer	3 <sup>rd</sup> Semester	Fall/Spring/Summer

4 <sup>th</sup> Sem.	Fall/Spring/Summer	5 <sup>th</sup> Sem.	Fall/Spring/Summer	6 <sup>th</sup> Semester	Fall/Spring/Summer

7 <sup>th</sup> Sem.	Fall/Spring/Summer	8 <sup>th</sup> Sem.	Fall/Spring/Summer	9 <sup>th</sup> Semester	Fall/Spring/Summer

Approved by: Graduate Coordinator \_\_\_\_\_ on \_\_\_\_\_  
 (Attach additional sheets if necessary)

## E. Web Resources

### General

U of I <http://www.uiuc.edu/>  
NRES <http://www.nres.uiuc.edu>  
UIUC Student Resources [www.uiuc.edu/usergroups/students.html](http://www.uiuc.edu/usergroups/students.html)

### University Policy

Code of Policies and Regulations Applying to All Students  
[http://www2.uiuc.edu/admin\\_manual/code/](http://www2.uiuc.edu/admin_manual/code/)  
UI Academic Calendar <http://www2.uiuc.edu/unit/senate/calendar.html>  
Tuition and fees <http://www.oar.uiuc.edu/current/tuit.html>

**The following web sites contain a great deal of information for University of Illinois students related to these topics.**

### Admissions and Records

Office of Admissions and Records <http://www.oar.uiuc.edu/>  
Order a transcript <http://www.oar.uiuc.edu/current/trans.html>

### Apartments

Tenant Union <http://www.tenantunion.uiuc.edu/>

### Campus Safety

Division of Public Safety <http://www.dps.uiuc.edu/>

### Computer Services

Campus computer labs, e-mail, passwords <http://www.cites.uiuc.edu/>

### Counseling Services

Counseling Center at the University of Illinois <http://www.couns.uiuc.edu/>

### Courses

Schedule, Course Catalog, Registration, Programs of Study  
<http://www.courses.uiuc.edu>  
Transferable courses <http://www.oar.uiuc.edu/prospective/transfer/which.html>

### Disabled Student Resources

Division of Rehabilitation-Education Services <http://www.rehab.uiuc.edu/>

### Employment

Biotechnology Placement Office <http://www.biotech.uiuc.edu/placement.htm>  
Searchable database of NRES employment opportunities:  
[http://www.nres.uiuc.edu/about/employment/emp\\_db.html](http://www.nres.uiuc.edu/about/employment/emp_db.html)  
UIUC Career Center <http://www.careercenter.uiuc.edu/>  
On-Campus job placement [http://www.osfa.uiuc.edu/employ/virtualjob\\_brd.htm](http://www.osfa.uiuc.edu/employ/virtualjob_brd.htm)

GSAC Assistantship Clearinghouse: <http://www.grad.uiuc.edu/GSAC/clearinghouse/index.html>

ACES Student Development and Career Services <http://www.aces.uiuc.edu/Students/SDCS/>  
Graduate College Career Services Office  
<http://www.grad.uiuc.edu/CareerServices/index.html>

### **Financial Aid**

Office of Student Financial Aid <http://www.osfa.uiuc.edu/>

### **Graduate College**

Graduate College <http://www.grad.uiuc.edu/>  
Graduate fellowships and financial aid <http://www.grad.uiuc.edu/fellowship/>  
UI Graduate Student Handbook [http://www.grad.uiuc.edu/grad\\_handbook/](http://www.grad.uiuc.edu/grad_handbook/)  
Grad Times Newsletter <http://www.grad.uiuc.edu/Pubs/newsletter/index.html>  
Graduate Student Advisory Council <http://www.grad.uiuc.edu/GSAC/index.html>

### **Health**

Student Insurance <http://www.si.uiuc.edu/>  
McKinley Health Center <http://www.mckinley.uiuc.edu/>

### **Housing on Campus**

Family and Graduate Housing Division <http://www.housing.uiuc.edu>

### **International Student Resources**

Office of International Student Affairs <http://www2.uiuc.edu/unit/oisa/>  
Division of English as a Second Language/ESL <http://www.deil.uiuc.edu/>

### **Parking**

Division of Public Safety <http://www.dps.uiuc.edu/>

### **Research/Thesis Resources**

Illinois Researcher Information Service <http://www.library.uiuc.edu/iris/>  
Office of Technology Management (intellectual property) <http://www.otm.uiuc.edu/>  
Writer's Workshop <http://www.english.uiuc.edu/cws/wworkshop/>  
Statistical Consulting <http://www.stat.uiuc.edu/iso//>

### **Transportation**

C-U Mass Transit District (bus service) <http://www.cumtd.com/index.html>

## F. NRES Departmental Contacts

### NRES Main Office

Joyce Henderson - Receptionist  
W-503 Turner Hall  
333-2771

### Plant Science Laboratory Main Office

Linda Harvey - Secretary  
1007 PSL  
244-1693

### E.R. Madigan Laboratory Main Office

Secretary  
240 ERML  
333-1965

### NRES Teaching Coordinator

Bill Simmons  
W-503 Turner Hall  
333-2771

### Graduate Coordinator

Jack Juvik  
307 ERML  
333-1966  
[juvik@uiuc.edu](mailto:juvik@uiuc.edu)

### Appointments and Payroll

Linda Kemplin – Human Resources Manager  
W-511 Turner Hall  
244-1484  
[kemplin@uiuc.edu](mailto:kemplin@uiuc.edu)

### Travel, Supplies and Reimbursements

NRES Business Office  
N-519 Turner Hall  
244-9430

### General Problem Solving

NRES Student Services Center 8-5 M-F  
N-509 Turner Hall 333-5824  
Mary Lowry, Coordinator [lowry@uiuc.edu](mailto:lowry@uiuc.edu)  
Karen Claus, Secretary [klaus@iuc.edu](mailto:klaus@iuc.edu)

The Student Services Center was created in order to improve our response to student concerns and be a place for students to find answers to their questions. The Center also supports

the academic programs responsibilities for the department, including class scheduling, graduate student admissions, and student record-keeping for both graduate and undergraduate students. Additionally, the Center offers job placement assistance, keeps alumni records for the department, and administers departmental scholarships and fellowships.

## **Internships**

Karyn McDermaid  
S-510 Turner Hall  
244-3896  
[karynk@uiuc.edu](mailto:karynk@uiuc.edu)

## **Employment**

NRES Student Services Center  
Mary Lowry  
N-509 Turner Hall  
333-5824  
[lowry@uiuc.edu](mailto:lowry@uiuc.edu)

Searchable database of NRES employment opportunities:  
[http://www.nres.uiuc.edu/about/employment/emp\\_db.html](http://www.nres.uiuc.edu/about/employment/emp_db.html)

## **G. NRES Graduate Scholarships**

The Department of Natural Resources and Environmental Sciences has five different Graduate Scholarships available: 1) Eugene S. Boerner Scholarship in Floriculture, 2) Odell Graduate Scholarship in Soil Science, 3) J. Nelson Spaeth and William R. Boggess Graduate Scholarship in Forestry, 4) Downers Grove Garden Club Graduate Scholarship, and 5) Illinois Federation of Outdoor Resources Scholarship. Each scholarship is in addition to any other scholarships, research assistantships and teaching assistantships.

The Graduate Policy Committee is seeking applications for these scholarships. To apply, a student should furnish the following documentation:

- A cover letter including the name of the scholarship to which you are applying, a discussion of your financial need, and a statement of your professional career objectives,
- A letter of support from your major advisor, and
- A CV indicating publications or presentations, extracurricular activities, community service and work related experiences.
- The Student Services Center will attach a copy of your unofficial transcript to your application before submission to the committee.

You must be a continuing student during the 2005-06 academic year to qualify. Application packets must reach the NRES Student Services Center in N-509 Turner Hall by 5:00 p.m., Monday, April 19th. Late arriving or incomplete application packages will not be considered.

For the Downers Grove Garden Club Graduate Scholarships, the Garden Club itself will choose the winners over the summer and winners will be awarded in the fall. For the other scholarships, the Graduate Policy Committee will evaluate applications based on scholarship guidelines and superior academic achievement. Winners will be notified in May.

Descriptions of the scholarships follow.

### **EUGENE S. BOERNER SCHOLARSHIP IN FLORICULTURE**

In honor of Eugene S. Boerner (B.S. '17), a rose breeder, this scholarship is awarded to NRES graduate students majoring in floriculture and doing research in floriculture. Eugene Boerner was a past President of Jackson and Perkins, the world's foremost producer and marketer of roses, where he started as a hybridizer. His most notable contribution was the Floribunda class of roses. The scholarship recognizes scholastic excellence in graduate studies. In accordance with Eugene S. Boerner's wishes, preference is given to students doing major work in the development, culture and pathology of roses, however this is not a requirement. One \$1000 award is available.

### **ODELL GRADUATE SCHOLARSHIP IN SOIL SCIENCE**

The Odell Scholarship is awarded on an annual basis to an outstanding graduate student in soil science, with preference being given to students in Pedology, among students of similar ability. Recipients of the Odell Graduate Scholarship in Soil Science must have successfully

completed at least one and preferably more semesters of graduate work at the University of Illinois. They must also have demonstrated superior academic ability and the potential for productive research in soil science. The same student may receive the Odell Scholarship for more than one year. One \$1000 award is available.

#### J. NELSON SPAETH AND WILLIAM R. BOGGESS GRADUATE SCHOLARSHIP IN FORESTRY

This scholarship is in honor of two distinguished former heads of the Department of Forestry, J. Nelson Spaeth and William R. Boggess. This Scholarship recognizes scholarly excellence and research potential in graduate students specializing in any area of forestry. The scholarship is awarded annually on a competitive basis. Applicants must have completed an undergraduate degree in forestry or related discipline. One \$1000 award is available.

#### DOWNERS GROVE GARDEN CLUB SCHOLARSHIP

This scholarship is sponsored by the Downers Grove Illinois Garden Club and recognizes scholarly excellence and research potential of a graduate students in the Department of Natural Resources and Environmental Sciences. The scholarship is awarded annually to M.S. or Ph.D. students in NRES working in the following fields: Conservation, Landscape Architecture/Design, Natural Resources or Horticulture. Winners will also be required to provide a letter of acceptance and a photo. Two \$1000 awards will be available.

#### ILLINOIS FEDERATION OF OUTDOOR RESOURCES SCHOLARSHIP

The Illinois Federation of Outdoor Resources proudly sponsors this award for NRES graduate students focusing their studies on conservation, wildlife management, ecology, or conservation law enforcement. Applicants must be a resident of the state of Illinois and maintain a 3.0/4 GPA to qualify for and hold the scholarship. It is expected that the recipient attend the IFOR annual banquet, usually held in Alton, IL and provide a photo for their newsletter. One \$1000 award is available.

In addition, the turfgrass faculty administer the M.C. Shurtleff Graduate Student Scholarship in turfgrass pathology. See Hank Wilkinson, 333-8707 or hwilkins@uiuc.edu for more information about how to apply. One \$1250 award.

## **H. Policy and Procedures for Graduate Student Issues in the Department of Natural Resources and Environmental Sciences**

Prepared May 30, 2000

### **I. INTRODUCTION**

The goal of the Department of Natural Resources and Environmental Sciences policy and procedures is to rapidly and successfully resolve differences between advisors/mentors and graduate students before they become detrimental to either the student's or mentor's programs. If successful, this process will benefit both students and mentors and alleviate the need for intervention by the Graduate College. In order to avoid potential problems, the department insists that graduate students and advisors communicate their expectations clearly at the start of a graduate program, so that both parties are aware of the requirements of the working arrangement. We promise to facilitate preventative policies and procedures where most grievances can be handled without invoking formal processes. One of the preventative measures includes the development of an anonymous consultation web site, to which students may direct possible conflicts before they become problems. The graduate coordinator will address the questions and advise the students as to possible solutions.

All members of the University community are expected to observe high standards of professional conduct and ethical behavior in graduate education and in the supervision of graduate research and teaching, (*Guiding Standards for Faculty Supervision of Graduate Students*, March 31, 1997). In a large and heterogeneous scholarly community however, problems may arise. Thus the University articulates its policies and provides effective informal and formal procedures for resolving these problems involving graduate students.<sup>1</sup>

The purpose of this policy is to protect the interests of graduate students in the Department of Natural Resources and Environmental Sciences by providing informal and formal means of seeking resolution in case of an inappropriate action of a member of the faculty or administrative staff or an inappropriate application of a department policy. Any graduate student in the Department of Natural Resources and Environmental Sciences may informally pursue or formally file a grievance when s/he believes that a decision or behavior adversely affects his/her status as a graduate student.

This *Policy and Procedures on Grievances by Graduate Students in the Department of Natural Resources and Environmental Sciences* specifies the policy and describes the procedures to be employed to resolve grievances by graduate students in this department. It was approved by the Graduate College on August 14, 2000. This policy does not apply in cases of academic misconduct. Breaches of academic integrity in research and publication are handled under the campus's *Policy and Procedures on Academic Integrity in Research and Publication*. Similarly, this policy does not apply to cases that arise under the *Code of Policies and Regulations Applying to All Students* ("Code"), such as capricious grading in a course (Section 26) or academic integrity (Section 33).

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<sup>1</sup> The policies and procedures described in this document do not override or supersede any other policies as established in the University statutes and campus policies. For more information, see the Department of Natural Resources and Environmental Sciences graduate handbook and the *Handbook for Graduate Students and Advisers*.

## II. SCOPE AND COVERAGE

### A. Definition of a Grievance

A grievance may arise when a graduate student believes that his/her status as a graduate student, or University appointment based on student status, has been adversely affected by an incorrect or inappropriate decision or behavior. Examples include, but are not limited to the following:

- 1) inappropriate application of a department or University policy;
- 2) being unfairly assessed on a preliminary examination;
- 3) being required to engage in excessive effort on assistantships;
- 4) being improperly terminated from student-based University appointment (teaching or research assistantships, etc.);
- 5) being improperly terminated from a program;
- 6) being required to perform personal services unrelated to academic or assistantship duties;
- 7) being required to meet unreasonable requirements for a graduate degree that extend the normal requirements established by the campus or by the department and are inconsistent with the scholarly standards in the discipline;
- 8) being the subject of retaliation for exercising his/her rights under this policy; or
- 9) being the subject of professional misconduct by a student's graduate supervisor or other faculty or staff member.

### B. Use of the Grievance Policy

The University supports a variety of policies, which apply to many different situations. Questions about whether this grievance policy or another policy is the appropriate one to address a particular problem, may be directed to the department head, associate head, graduate coordinator, Graduate College or other appropriate office.

Practices or actions by a student's supervisor, other faculty member, or other member of the University community that seriously deviate from ethical or responsible professional standards in the supervision of graduate student work may constitute professional misconduct in violation of University policy.

## III. INFORMAL PROCEDURES

University policy strongly encourages all students who believe they have a grievance to use all appropriate avenues for informal resolution before initiating a formal grievance. Students in Natural Resources and Environmental Sciences are encouraged to discuss the issue with the faculty or staff member with whom the problem has arisen. If a satisfactory solution is not forthcoming, the student should discuss the issue with his or her adviser, the director of graduate studies, or the head of the department, who shall attempt to find a resolution acceptable to both parties. The student may also consult with the Graduate College, the Office of the Dean of Students, the Ombuds Office, the Office of International Student Affairs, or other sources.

## IV. FORMAL PROCEDURES

### A. Identification of the Grievance Committee

- 1) If the department head or associate department head determines the need for a committee to begin a formal grievance process, the department head will appoint a committee composed of three faculty members and two graduate students, none of whom may have any conflict of interest or involvement with the grievance. At least one of the faculty will be a current member of the

Graduate Policy Committee. The following process will identify the graduate student members.

- 2) An annual request for interested participants will be communicated to all the department's graduate students. For each formal grievance, the graduate coordinator will select from the pool the appropriate students to serve on the committee for that grievance procedure. However, the graduate student grievant may request that there be no graduate students on their grievance committee.
- 3) The department head shall appoint one of the faculty members to serve as chair of the committee. The chair is responsible for assuring that a record of the committee's investigations, deliberations, and recommendations is forwarded to the department head.

B. Procedures

- 1) A student in the Department of Natural Resources and Environmental Sciences may file a formal grievance with either the graduate coordinator, department head or directly with the Graduate College, as the student elects. A formal grievance should be filed promptly and must be filed in writing within 180 calendar days of the decision or behavior resulting in the grievance, regardless of whether the department procedure or Graduate College procedure is used. The written grievance should indicate the parties involved, the action or decision being contested, any applicable university, campus or unit policy, an explanation of why the action or decision is inappropriate, and the remedy sought.
- 2) The department head shall define the subject matter and scope of the issues related to the grievance in a written charge to the grievance committee. The primary involved parties shall receive a copy of the charge.
- 3) Any participant to the grievance may challenge any member of the grievance committee if there is a perceived conflict of interest. The challenge should be made in writing to the department head. If the objection is prompt and reasonable, the head shall replace the person with one who meets the stated criteria. The decision of the head as to whether the challenge is prompt and reasonable as to the acceptability of the replacement selected may be a basis for appeal of the grievance committee's recommendation.
- 4) The grievance committee's investigation shall include a review of written materials presented and seeking information from the primary parties in writing or in person. During a hearing, each of the primary involved parties may make a brief opening statement, and then respond to questions from the committee. The primary involved parties may not question each other directly, but may pose questions through the committee chair. At the end of the hearing, each primary involved party may make a closing statement.
- 5) Within 30 calendar days of the filing of the grievance, the chair of the grievance committee shall report its recommendations in writing to the department head. The department head may grant an extension of the time limit for good cause. The grievance committee's report shall contain:
  - a. a summary of the grievant's contentions and relief sought
  - b. the response of the individual or department against whom/which the grievance was filed
  - c. a general description of the investigative process

- d. a citation of relevant policies
  - e. an explicit finding of fact based on the preponderance of the evidence with respect to each grievance included in the grievance committee 's charge
  - f. a listing of the evidence relevant to each finding
  - g. an indication of whether there was a reasonable basis in fact and honest belief for the allegations in the investigated grievance
  - h. a recommendation of appropriate redress for the grievant(s) and
  - i. any recommended changes in policies and procedures to minimize the probability of recurrence.
- 6) Within 7 calendar days of receipt of the committee's report, the head in consultation with the graduate coordinator, shall determine the disposition of the case and communicate the decision to the primary involved individuals and the grievance committee.
  - 7) If the head in consultation with the graduate coordinator determines that the grievance has not been proved or has no merit, the department head will notify all involved parties and all persons who have been interviewed or otherwise informed that grievance has been dismissed.
  - 8) If the head in consultation with the graduate coordinator concurs with the committee's conclusion that the grievance has been sustained and has merit, the department head will proceed in accordance with the University statutes and relevant University rules and regulations. The department head may, after consultation with appropriate campus officers, prescribe redress for the grievant. In addition, the department head may initiate modifications of department policies or procedures. The department head shall notify the relevant primary involved individuals (grievant, respondent, grievance committee members) of actions taken.
  - 9) Within 10 calendar days of receipt of written notification of the department head's determination, appeals may be made to the Graduate College as specified in the Graduate College grievance policy. This appeal can be based only upon demonstrated specific deficiencies in the application of this department grievance procedure to the student's grievance.
  - 10) The grievance committee will appoint one member to conduct a follow-up review of the situation. Within 30 calendar days of the disposition of the case, the appointed committee member will meet with the involved parties individually to assess whether or not the recommendations were carried out and the grievance resolved. S/He will then report back to the committee on the progress of the matter. The committee, in consultation with the graduate coordinator, will discuss the handling of the matter, the solution and the conclusion to make further recommendations about avoiding the problem in the future and to evaluate the grievance policy process.
  - 11) After completion of a grievance review and all ensuing related actions, the department head shall return all original documents and materials to the persons who furnished them, if they are requested. The department shall destroy the grievance file on a date 5 years beyond the grievant's time limit for completion of the degree. A report of the nature of the grievance and the primary involved parties shall be forwarded to the Graduate College.

## V. GENERAL PROVISIONS

### A. Coverage

This policy and these procedures apply to all graduate students and members of the academic and administrative staffs in the Department of Natural Resources and Environmental Sciences. This policy also applies to former graduate students, provided they meet the timeliness requirements specified in the procedures above.

### B. Oversight Authority and Responsibility

- 1.) The department head has responsibility, under the policies and procedures of the Graduate College, for the management of Department of Natural Resources and Environmental Sciences graduate programs and related policies and procedures.
- 2.) The department head shall have the primary responsibility for administering campus procedures detailed herein. All information and items furnished will be made available to the grievance committee. During the course of an investigation, the department head will provide information about the status of the proceedings to the primary involved individuals. Subsequent to the grievance committee's reporting, the department head will maintain a file of all documents and evidence, and is responsible for the confidentiality and the security of the file. The department head shall make the complete file available to the associate dean of the Graduate College on the appeal of a grievance outcome to the Graduate College.

### C. Confidentiality

All persons involved in administering these procedures will make diligent efforts to protect the reputations, privacy, and positions of all involved persons. These persons include those who file grievances, persons who are alleged in a grievance to have taken inappropriate actions or activities, and department administrators. All of the procedures and the identity of those involved should be kept confidential to the extent permitted by law. However, confidentiality regarding information other than the identity of the grievant need not be maintained if the grievance is found to be false and in particular if dissemination is necessary to protect the reputation of individuals or units falsely accused. Making public the fact that a grievance has been deemed false or unproved is not considered retaliation against the grievant. Protection of confidentiality does not preclude disclosures necessary to redress actions leading to a grievance.

### D. Standards of Evidence

The grievance committee's decision shall be made on the "preponderance of evidence" standard. Any finding against an individual or department on the subject of the grievance must be supported by a preponderance of the evidence.

### E. Academic Freedoms and Rights of the Parties

- 1) It shall be a prime concern of all persons who implement this policy and these procedures to protect the academic freedoms fundamental to the academic enterprise. Among other things, this includes the professional judgments of student performance that are an essential part of the graduate education process. Academic freedom, however, affords no license for the mistreatment of graduate students.
- 2) The rights of the primary involved individuals shall be specified in the form of a written notice or letter from the department head. The primary involved individuals have the following rights:

- a. To receive notice of the identity of the members of the grievance committee.
  - b. To receive a written statement of the charge including the subject matter being considered by the grievance committee. If additional information emerges during the committee's evaluation that substantially changes the subject matter, the parties shall be informed promptly in writing.
  - c. To submit statements in writing and to meet with the committee to present information.
  - d. To consult private legal counsel, or another person who may provide providing advice at the meeting with the committee. Prior notice of the presence of an advisor must be given and any other primary involved party may request a delay of up to 5 calendar days to arrange for the presence of an advisor.
  - e. To review and respond to the grievance committee's final report.
- 3) Any of the parties responsible for the implementation of this policy may consult University Legal Counsel at any time during the informal or formal processing of a grievance.

F. Conflict of Interest

A conflict of interest is a significant professional or personal involvement with the facts or the parties to a dispute. Any participant who has a conflict of interest in a dispute under this procedure, or a concern about a conflict on the part of another, shall report it to the department head who shall take appropriate action. If the department head has such a conflict, one of the associate department heads, in consultation with the Dean of ACES or a Dean or Associate Dean of the Graduate College, will replace the department head and carry out the duties of the department head for that grievance process.

G. Timeliness and Procedural Changes

All procedures prescribed in this document should be conducted expeditiously. The department head for good cause may extend any of the time periods and may make other reasonable alterations of these procedures, provided that the alteration does not impair the ability of a grievant to pursue a grievance or the respondent(s) named in the grievance to defend him/herself. Any alterations of these procedures must be communicated to all pertinent parties.

H. Withdrawal of a Grievance

The grievant may submit a written request to withdraw the grievance at any time. The department head shall decide whether to approve the request. A request to withdraw shall be approved only if both parties to the action agree to terminate the proceedings. If the withdrawal request is approved, the department head shall notify the primary involved parties and the files shall be destroyed. If the withdrawal request is denied, the grievance shall continue to be processed to a conclusion according to the above procedures.

I. Termination of University Employment

The termination of University employment of any of the primary involved individuals in a grievance, by resignation or otherwise, after initiation of procedures under this policy shall not necessarily terminate these proceedings.

J. Malicious Charges

Bringing unfounded charges in bad faith is a violation of this and the Graduate College grievance policy. If the grievance committee determines that the allegation(s) in the grievance or the testimony of any person was unfounded and motivated by bad faith, that finding shall be communicated by the department head to the Dean of the Graduate College and the dean of the

academic college. After consultation with the Provost, the deans may inform the department head of such a finding. Such finding may be the basis for disciplinary action or other personnel decision in accordance with University rules and regulations.



NRES Student Services Center  
Department of Natural Resources and Environmental Sciences  
N-509 Turner Hall  
1102 South Goodwin Avenue  
Urbana, IL 61801

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Fax: 217.244.3219  
E-mail: [nres@uiuc.edu](mailto:nres@uiuc.edu)



College of Agricultural, Consumer and Environmental Sciences

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UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN