

2005-2006 Student Handbook of The Graduate Program in Animal Sciences

TABLE OF CONTENTS

Program Overview	1
Contact People	2
Important Graduate School Webpages	3
Degree Requirements	4
Timeline for Ph.D. Students	7
Timeline for M.S. Students	8
General Information	11
Animals in Instruction and Research	14
Appendix	
Article VI of Graduate Program By-Laws: Academic Warning, Probation, Suspension or Dismissal	15
Courses	18
Academic Calendar for Fall 2005	20
2005-2006 Tuition & Fees	23
2005-2006 Checklist for Ph.D. Degree	24
2005-2006 Checklist for Master's Degree with Thesis	25

Acknowledgments: We thank Marsha Morin of the Graduate Program in Ecology & Evolution for providing their handbook as a template for ours, and we thank all Animal Sciences students and faculty who contributed to this effort.

Disclaimer: If anything important is missing here, you may still be responsible! Be sure to review our program by-laws and the documents found on the Graduate School–New Brunswick website (<http://gsnb.rutgers.edu>), especially the graduate catalog and other documents on the “Current Students” link.

PROGRAM OVERVIEW

The Graduate Program in Animal Sciences
Cook College
Rutgers, The State University of New Jersey
84 Lipman Drive
New Brunswick, NJ USA 08901-8525
Fax: (732) 932-6996
<http://www.anisci.rutgers.edu/graduate/grad-about.shtml>

Mission

- To provide research-oriented training leading to advanced degrees (Ph.D. and M.S.) in basic and applied animal sciences

Major Areas of Research

<http://www.anisci.rutgers.edu/graduate/grad-research.shtml>

- Endocrinology
- Equine Sciences
- Animal Health and the Environment

Graduate Faculty

<http://www.anisci.rutgers.edu/graduate/grad-gradfac.shtml>

- **Full and Associate Members:** Biological scientists at Rutgers and University of Medicine and Dentistry of New Jersey, which share the New Brunswick/Piscataway campus
- **Adjunct Members:** Faculty at other universities and scientists from pharmaceutical and agricultural corporations

Research Funding

- National Institutes of Health
- National Science Foundation
- U.S. Department of Agriculture
- New Jersey Department of Environmental Protection
- Smaller Foundations and Private Institutions

Animal Research Models

- Horses, dairy cattle, goats, pigs, sheep, rats, mice, poultry, lizards

Research Facilities

<http://www.anisci.rutgers.edu/graduate/grad-labs.shtml>

- AAALAC-accredited laboratory animal facility
- Fully equipped equine exercise research barn
- New heifer research facility
- Bartlett Hall laboratories and several Foran Hall laboratories

Graduate Curriculum

<http://www.anisci.rutgers.edu/graduate/grad-courses.shtml>

- Full and comprehensive, drawn in part from the diverse course lists of the many other biological programs

CONTACT PEOPLE

and their relationship to you as students

Henry John-Alder, Graduate Program Director and Professor
henry@aesop.rutgers.edu; Bartlett 213C; 732-932-3229 (Lab BT 303, 2-3762)

- Representative of Animal Sciences students and faculty to the Graduate School–New Brunswick and Cook College
- Sets policy for the program in consultation with faculty
- Signs many necessary forms such as Ph.D. and M.S. candidacy forms and Change of Status forms
- Door is “always open” for graduate students with any concerns.

Kathy Manger, Graduate Program Assistant
manger@aesop.rutgers.edu; Bartlett 105; 732-932-3879*

- Contact person for Animal Sciences graduate students and faculty
- Liaison with the Graduate School for students’ questions
- Keeps graduate student files up-to-date (Ask her for necessary forms)
- Designs/coordinates workshops, publications, and website

Larry Katz, Department Chair
katz@aesop.rutgers.edu; Bartlett 106; 732-932-7426*

- Any issues related to the department or Bartlett Hall
- Door is “always open” for graduate students with any concerns.

George Eager, Department Administrative Assistant
eager@aesop.rutgers.edu; Bartlett 103; 732-932-9793*

- All payroll questions, appointments and tuition remission (Cook TAs and GAs), travel reimbursements, purchase orders

Department Secretary (*Position vacant as of 8/30/05*)
Bartlett 105; 732-932-9100*

- Keys, mail, Xerox and fax machines, supply closet

Aaron DeLaRosa, Coordinator of Multimedia Services
delarosa@aesop.rutgers.edu; Bartlett 121; 732-932-2966*

- Email and server accounts; poster printing; webpages

Emily Lamprecht and Andrea Sweeney Haulenbeek,
2005-2006 Animal Sciences Graduate Student Representatives
lamprecht@aesop.rutgers.edu; andrea@aesop.rutgers.edu

- Selected by graduate students for one-year term
- Present graduate student report (including any concerns) at graduate faculty meetings; voice but no vote

**While Bartlett Hall is being renovated (Summer-October 2005), the department chair and administrative staff have temporarily relocated to Bartlett 302, the “Graduate Students’ Office” (732-932-9770). Many Bartlett faculty and research staff are also displaced. Contact missing folks via email. Faculty email addresses are listed at <http://www.anisci.rutgers.edu/graduate/grad-gradfac.shtml> and students’ at <http://www.anisci.rutgers.edu/graduate/grad-students.shtml>.*

CONTACT PEOPLE *(continued)*

Barbara Sena—Life Sciences TA Contact

Nelson Bio Labs A108, Busch Campus; sena@biology.rutgers.edu; 732-445-5536

- Any and all questions relating to your Life Sciences TAs (if you have one)

Barbara Sirman—Graduate School-New Brunswick, Dean's Office, 25 Bishop Place, College Ave. Campus; sirman@rci.rutgers.edu; 732-932-8122

- Any questions relating to your thesis format or degree certification

Alex Bachmann—Graduate School-New Brunswick, Dean's Office, 25 Bishop Place, College Ave. Campus; abachman@rci.rutgers.edu; 732-932-7449

- Registration questions; drop/adds
- Monitors ESL

Dot Amorosi—Graduate School-New Brunswick, Dean's Office, 25 Bishop Place, College Ave. Campus; amorosi@rci.rutgers.edu; 732-932-7034

- Candidacy forms, general information

IMPORTANT GRADUATE SCHOOL WEBPAGES

Graduate School—New Brunswick (GS-NB) Homepage

(<http://gsnb.rutgers.edu>): This website provides numerous resources, including up-to-date announcements for current students. Be sure to check out all of the documents and other resources found via the "Current Students" link:

- **General Information** – Keeps you informed of deadlines, degree requirements, and policies/procedures (includes academic calendar, events, catalog, policies and procedures, and *the Dissertation and Thesis Style Guide*). Read the beginning chapters of the catalog, especially "Academic Policies and Procedures" and "Degree Requirements."
- **Publications** – Consider the statement on academic integrity/issues for graduate students required reading:
<http://gsnb.rutgers.edu/publications.php3?name=integrity#student>
- **Research and Funding Information** – Use the links found in this section to identify internal and external funding resources: Conference Travel Awards (*remember the March 1, July 1, and November 1 deadlines*), International Travel Registration and Resources, University and Bevier Fellowships, GSNB Awards, CHaSeR, and ORSP. Contact info for the latter two offices is reprinted below:
- **Teaching** – If you are a TA and/or aspire to an academic teaching career, follow the links to the Teaching Assistant Project and its wonderful *Teaching Assistant Handbook*, the Center for Advancement of Teaching, and *Introduction to College Teaching*, a course offered in the spring semester.

DEGREE REQUIREMENTS

<http://www.anisci.rutgers.edu/graduate/grad-req.shtml>

<http://www.rutgers.edu/catalogs/nb-grad.html> (see especially the Academic Policies & Procedures section and Degree Requirements section)

Proficiency Requirements (Ph.D. and M.S.)

Each student must demonstrate proficiency in four core areas:

- Animal Sciences and Biotechnology
- Physiology
- Molecular Biology and Biochemistry
- Statistics and Experimental Design

To establish proficiency in each area, students will select courses in consultation with their advisor. Note that Systems Physiology (01:146:356, 3 cr) or equivalent is required of all students. Satisfactory attainment of proficiency in each of these areas will ultimately be determined by your committee (e.g., at the M.S. thesis defense committee meeting or in the written and oral qualifying examinations Ph.D. students must take).

Number of Credits

- **Ph.D. degree:** At least 72 credits of graduate work, including at least 24 credits of graduate coursework (and the remainder in graduate research: Research in Animal Sciences 16:067:701,702)
- **M.S. degree:** At least 30 credits of graduate work, including at least 6 credits of graduate research: Research in Animal Sciences 16:067:701,702

“Full-time” status is considered as few as 9 credits and as many as 16 credits. It is usually best to take a full load of 16 credits while on an assistantship or fellowship: In addition to the TA/GA (6 cr with “E” prefix) or Fellowship (0 cr) and courses, register for research credits with your advisor up to the 16-credit maximum. However, in certain circumstances Ph.D. candidates need only register for one research credit to be considered full-time. Continuous registration is required of all.

Courses You May Take

See the Appendix for more information. See also the University Schedule of Classes at http://clue.rutgers.edu:8880/sc_pn/plsql/sc_display.main and the Staggered Class Schedule, designed to provide more time for intercampus travel, at <http://scheduling.rutgers.edu/Fall05scheduleinfo.html>]

- Courses offered by this graduate program
- Courses offered by other graduate programs at Rutgers or UMDNJ in consultation with your advisor and committee
- Up to 12 undergraduate credits at the 300 and 400 levels, of which only 6 credits may be at the 300 level – Use “G” prefix when registering

If you receive financial assistance in the form of a TA, RA, or fellowship, you must register for the appropriate course during each semester you’re funded:

- **Teaching Assistantship** (16:067:877, 6 cr with an “E” prefix, meaning excluded from credit)
- **Research Assistantship** (16:067:866, 6 cr with an “E” prefix)
- **Graduate Fellowship** (16:067:811, 0 cr)

DEGREE REQUIREMENTS *(continued)*

Grades

- You must maintain a grade point average of 3.0 or better
- A maximum of 2 courses with grades of C or C⁺ will be counted toward the degree.
- All research credits must have a grade of "S".
- **Teaching Assistantship** and **Graduate Assistantship** should receive an "E" (excluded from credit) on your transcript, not an "S" or other grade.

Transfer of Credits

- A maximum of 24 credits (for a Ph.D. student) or 12 credits (for a M.S. student) may be transferred from another institution or from nonmatriculated coursework at Rutgers with program approval.
- Credits can be transferred only after 12 matriculated credits have been completed successfully at Rutgers.
- Only courses with a grade of "B" or better will be considered.
- Obtain the form from the Program Assistant. Approval must be obtained from the Graduate Program Director and the Dean of the Graduate School.
- Approval will be granted only for those courses pertinent to your field.

Dissertation/Thesis

- Ph.D. students: A dissertation is required.
- M.S. students: A thesis is required.

Make sure you obtain a copy of the GS-NB *Thesis and Dissertation Style Guide* from the Program Assistant or the GS-NB website, <http://www.nbcs.rutgers.edu/thesis/guide.html>

Your Dissertation/Thesis Committee Composition

After your committee is established (see appropriate "Timeline" section later in this document), complete the committee composition form (available from the Program Assistant) and obtain the graduate director's signature.

Committee members may be changed with the approval of your chair and the Graduate Program Director.

- **Ph.D. Dissertation Committee**
 - Minimum of 4 members
 - Chair of committee is your advisor.
 - At least two other members of the Animal Sciences graduate faculty
 - One committee member, chosen in consultation with your advisor and with approval of the Graduate Program Director, from outside the program (Be sure to give the outside member's address and CV to Program Assistant.)
- **M.S. Thesis Committee**
 - Minimum of 3 members of the Animal Sciences Graduate Faculty
 - One non-program member is permitted with the approval of the Graduate Program Director.

DEGREE REQUIREMENTS *(continued)*

Qualifying Examination (Ph.D. students only)

- To test the basic knowledge of Animal Sciences and Biotechnology, Physiology, Molecular Biology and Biochemistry, Statistics & Experimental Design, and other fields pertinent to your anticipated area of specialization
- Your Qualifying Exam Committee consists of your chair and three other members of the Animal Sciences graduate faculty.
- Areas to be covered should be discussed with your committee well in advance of your exam (e.g., 3-6 months before the exam).
- Four questions for the written part of the qualifying exam are submitted by the student's committee to the Academic Standards Committee, which then reviews and modifies the questions as necessary and administers the exam. The oral part of the qualifying exam is developed and administered by the student's committee.
- A failed Qualifying Exam may be retaken once within 6 months of the first exam. A second failure will terminate your candidacy for your Ph.D.
- Students should obtain committee members' signatures on the Application for Admission to Candidacy form (available from the Program Assistant).

Proposal Defense (Ph.D. and M.S.)

- To present a detailed written research proposal of your Ph.D. or M.S. research for approval by your dissertation/thesis committee. This proposal should be presented to your committee **at least three weeks prior** to your proposal seminar and committee defense.

Dissertation/Thesis Defense (Ph.D. and M.S.)

- **The actual PhD dissertation or MS thesis must be in accordance with the Graduate School-NB regulations.** Before drafting the document, get a copy of GS-NB's *Thesis and Dissertation Style Guide* from the Program Assistant or the website <http://www.nbcs.rutgers.edu/thesis/guide.html>
- A final draft should be presented to your committee **at least three weeks prior** to your defense.
- Pick up your candidacy forms from the Graduate School prior to your defense. They will be the same form that you used for your Qualifying Exam (Ph.D. students) or that you submitted listing your completed coursework and research credits (M.S. students). Obtain your committee members' signatures in the appropriate section.
- After the defense, the Graduate School-NB must verify the format of the thesis, and any necessary changes must then be made.
- Read the current GS-NB Checklist for your degree (available from the Program Assistant) to determine the deadlines (typically October 1, January 2, and May 1) and the number of copies required. For example:
 - **2005-2006 Ph.D. Checklist:** Submit one unbound copy of the dissertation on 100% rag/cotton paper, signed candidacy form (**black ink required**), and four additional signed title pages and abstracts. Copies are NOT required on rag paper.
 - **2005-2006 M.S. Checklist:** Only three additional copies of the signed title pages (**black ink required**) and abstract are required.

Timeline for Ph.D. Students

First Year

You should try to complete your course credit requirements during your first two years so that you can concentrate on research in later years. If you are a TA or GA, plan to take two courses per semester. Your most productive research time will be during the summer months.

- Meet with your advisor to select courses and to plan your initial research activity.
- Determine who your dissertation advisor will be, and finalize the designation of this faculty member as your graduate advisor and dissertation committee chair.
- Create your individual webpage to be posted on the graduate program's website under "Current Students." (Ask the Program Assistant or Coordinator of Multimedia Services for the electronic form to use.)
- Explore possibilities for external funding and fellowships.
- In the spring semester (and all subsequent spring semesters), meet with the Graduate Program Director, Chair of the Academic Standards Committee, and your advisor to review progress and outline plans for the coming year.

Second Year

By the end of the second year, you should have completed 24 course credits (or nearly 24) and you should have a clear idea of your dissertation research topic. You should begin to make good progress in your research.

- **First semester:** Start to focus on your dissertation research topic; designate your dissertation committee in consultation with your advisor. Meet with your dissertation committee to discuss research plans.
 - After your committee is established, complete the committee composition form (available from the Program Assistant) and obtain the graduate director's signature.
 - When the outside member of your committee has been decided upon, his or her name and professional address and affiliation must be submitted to the Graduate Program Director and the Graduate School for approval along with a copy of his or her CV. (Obtain form from the Program Assistant.)
- **Second semester:** Depending on how focused your research has become and how quickly you are progressing, you may schedule your dissertation proposal seminar and defense and your qualifying examination for advancement to candidacy for the Ph.D.
 - Talk with the faculty coordinator of the Seminar in Animal Sciences series prior to the semester you anticipate presenting your proposal seminar so that it can be included on the schedule. If your proposal seminar cannot be part of the regular Friday Seminar series, ask the Program Assistant's help in scheduling a room for your proposal seminar and a room for your proposal defense with your committee.
 - Prior to your qualifying exam, get an "Application for Admission to Candidacy for the Degree of Doctor of Philosophy" form from the Program Assistant. Remember to obtain your committee members' signatures in the appropriate section while all are assembled.

Third Year

By the beginning of your third year, you should have completed or very nearly completed your required course work, and you should be making good progress in a well-established research program. You should be in continual consultation with your dissertation advisor, and you should meet freely with other members of your dissertation committee as needed. You should present your dissertation proposal seminar and complete your qualifying exam by the end of the first semester, third year.

Fourth and Subsequent Years

At this point, you will be concentrating your efforts on your dissertation research, in close consultation with your advisor and, as needed, other members of your committee. Obtain a copy of the current GS-NB "Checklist for Ph.D. Degree." (The 2005-2006 Checklist is included in the Appendix.)

- Complete your research, write your dissertation (according to GS-NB style guidelines), present a dissertation seminar, defend your dissertation to your Committee, and submit your dissertation with any required revisions to the GS-NB.
 - Talk with the faculty coordinator of the Seminar in Animal Sciences series prior to the semester you anticipate presenting your defense seminar so that it can be included on the schedule. If your defense seminar cannot be part of the regular Friday Seminar series, ask the Program Assistant's help in scheduling a room for your defense seminar and a room for your actual committee defense.
 - Obtain signatures on your "Application for Admission to Candidacy for the Degree of Doctor of Philosophy" form, list all coursework and research credits on the back page, give the Program Assistant a copy for your graduate file, and submit this form to the Graduate School–New Brunswick.
 - Make all required revisions to your dissertation, and ask Barbara Sirman at the GS-NB to review it for compliance with style guidelines. As per the Ph.D. checklist, submit corrected dissertation (unbound) along with your signed candidacy form to the GS-NB on or before the May, October, or January completion date. Remember that the title page must be signed in **black ink**.
- Submit required "Graduate Diploma Application" to the Graduate Registrar.
 - Obtain form from the Program Assistant and submit it by the deadline (October 1 for October dated diploma, January 4 for January, March 15 for May).

In most cases, students admitted with a B.A. or B.S. will complete their Ph.D. within 6 academic years. Students admitted with a graduate degree may finish in a shorter period. The Graduate School-NB will allow 7 years after initial registration before they question your progress.

Timeline for M.S. Students

First Year

- Determine your advisor (committee chair) and lab you intend to work in.
- Meet with your advisor, Graduate Program Director, and Academic Standards Committee Chair to plan course of action.
- Determine courses needed. Take careful note of times/semesters the courses are offered and plan accordingly.
- Create an individual webpage to be posted on the graduate program's website under "Current Students." (Ask the Program Assistant or Coordinator of Multimedia Services for the electronic form you'll need to complete.)
- Choose a thesis topic and do preliminary research.
- Choose your Committee in the fall semester and begin holding Committee meetings in your first semester.
- Present proposal seminar (Spring semester of first year or Fall semester of second year) and defend proposal with your committee.
 - Talk with the faculty coordinator of the Seminar in Animal Sciences series prior to the semester you anticipate presenting your proposal seminar so that it can be included on the schedule. If your proposal seminar cannot be part of the regular Friday Seminar series, ask the Program Assistant's help in scheduling a room for your proposal seminar and a room for your actual proposal defense with your committee.

Second/Third Years

- Meet with your advisor, Graduate Program Director, and Academic Standards Committee Chair to update progress.
- Complete required coursework and research credits. (Obtain an "Application for Admission to Candidacy for the Degree of Master of Science" form from the Program Assistant, list your completed coursework and research credits, obtain the Graduate Program Director's signature, give the Program Assistant a copy for your graduate file, and hand-deliver the original to the GS-NB along with a copy of your transcript – at least two months before your proposal defense.) Obtain a copy of the current GS-NB "Checklist for Master's Degree with Thesis." (The 2005-2006 Checklist is included in the Appendix.)
- Have a Committee meeting each semester. (If there is an outside member who is not a member of the GS-NB/FAS faculty, his or her name and professional address and affiliation must be submitted to the Graduate Program Director and the Graduate School. Obtain form from Program Assistant.)
- Complete your research, write your thesis (according to GS-NB style guidelines), present a thesis seminar, defend your thesis to your Committee, make any required revisions, and submit it to the GS-NB as per checklist.
 - Talk with the faculty coordinator of the Seminar in Animal Sciences series prior to the semester you anticipate presenting your defense seminar so that it can be included on the schedule. If your defense seminar cannot be part of the regular Friday Seminar series, ask the Program Assistant's help in scheduling a room for your defense seminar and a room for your committee defense.

- Obtain your “Application for Admission to Candidacy for the Degree of Master of Science” form from the GS-NB (after the list of courses and research credits has been approved), obtain your committee’s signatures at your thesis defense, and resubmit this form to the GS-NB.
- Make all required revisions to your thesis, and ask Barbara Sirman at the GS-NB to review it for compliance with style guidelines. As per the M.S. checklist, submit corrected thesis (unbound) along with your signed candidacy form to the GS-NB on or before the May, October, or January completion date. Remember that the title page must be signed in **black ink**.
- Submit required “Graduate Diploma Application” to the Graduate Registrar.
 - Obtain form from the Program Assistant and submit it by the deadline.

In most cases, students admitted with a B.A. or B.S. will complete their M.S. within 2 academic years. The Graduate School-NB will allow 3 years after initial registration before they question your progress.

General Information

that applies to all students regardless of degree sought

Seminar in Animal Sciences

- All members of the graduate program – including faculty, graduate students, postdocs, and research staff – attend and participate in weekly research seminars sponsored by the graduate program (Fall'05: Friday Pd4 in BT 123).

Mandatory Training Seminars (Contact our departmental Safety Officer, Susan Becker, with any questions: becker@aesop.rutgers.edu; 732-932-3759)

- **Laboratory Safety Training** – All students who work in labs/environments where chemicals are used. Go to Rutgers Environmental Health and Safety homepage <http://rehs.rutgers.edu> and click on the “Training” link to identify dates of upcoming seminars (registration not required)
- **Animal Use in Research – Regulations and Protocols** – For all animal users. Go to the Laboratory Animal Services Home Cage <http://las.rutgers.edu/> and click on the link “Training for research staff and students” to register for upcoming training seminars.
- **Radiation Safety** – Required if handling radioactive materials. Go to Rutgers Environmental Health and Safety homepage <http://rehs.rutgers.edu> and click on the “Training” link to identify dates of upcoming seminars (registration not required)

Continuous Registration

- You must remain registered every semester, either with course and research credits or as “Matriculation Continued” if the situation warrants.
- If you are an M.S. student or a post-qualifying-exam Ph.D. student who is not actively working on your research, you must sign up for 1 credit of Research in Animal Sciences 16:067:701/702 (not Matriculation Continued 16:067:800) for any full semester before you graduate. Contact Alex Bachmann (abachman@rci.rutgers.edu; 732-932-7449) at the Graduate School if you have any questions.
- International students must have completed all course work and research credits before registering for 1 research credit.
- “Matriculation Continued” is to be used only if you are on leave from your studies and are a pre-qualified Ph.D. student.
- Any lapse will require an Application for Readmission form and approval of the Graduate Program Director and the Dean of the Graduate School-NB.

Change of Status

- If you decide to change your degree status in any way, i.e., Masters student to Ph.D. student or vice versa, a Change of Status form (available from the Program Assistant) must be sent to the Graduate School-NB.

Incomplete Grades

- Incomplete grades must be made up within one year (i.e., an incomplete in the fall semester must be completed by the end of the next fall semester). Any extension of that time requires an Extension of Time for Incomplete Grade form (available from the Program Assistant). This form must be approved by the Graduate Program Director and the Graduate School-NB Dean.

Academic Review

- An annual review of each student's progress is completed by the Academic Standards Committee.
- Appropriate recommendations are made if requirements are not being met, e.g., your GPA falls below 3.0. or other problems arise.
- Students should become thoroughly familiar with the GS-NB policy on Academic Integrity and the program's policy as stated in the by-laws.

Committee members

- After your committee has been decided upon, the names of the members should be listed on a form obtained from the Program Assistant. Once this form is signed by the graduate program director, it will be kept in your file. Addresses of outside members must be submitted along with their CVs.

Conference Travel Awards

- The Graduate School–New Brunswick awards money for travel to conferences, on a competitive basis, if students are presenting either talks or posters. You may apply before your conference with estimated costs. Access the application online via a link from the GS-NB "Current Students" webpage. Deadlines are March 1, July 1, and November 1.

CHaSeR Office

- Sponsored by the Graduate School–New Brunswick, this office assists students in acquiring outside funding. Contact Teresa Delcorso, delcorso@rci.rutgers.edu, 732-932-2705, or visit the ChaSeR website, <http://chaser.rutgers.edu> (accessible via a link from the GS-NB "Current Students" webpage).

Change in address, phone, or email

- The Program Assistant and Department Secretary should have your most current contact information at all times.

Reserving the Library and Seminar Room

- If the Enos Perry Library (Bartlett Hall, 2nd floor) is needed for qualifying exams or other committee meetings, the student must reserve the library by indicating the time slot needed on the library calendar in BT 105.
- For thesis/dissertation proposal seminars or defense seminars scheduled for times other than Fridays at Seminar time during the academic year, ask the Program Assistant to reserve BT 123 with the Scheduling Office.

“Search Rutgers” and Rutgers Online Directory

Websites, events, buildings, and departments may be located online via the “Search Rutgers” webpage, <http://search.rutgers.edu/>. You may search for an individual’s contact information in the Rutgers Online Directory by selecting “People” on the “Search Rutgers” webpage.

Posting Large Files (Instead of Emailing Them)

PostIt.rutgers.edu is available as an alternative to sending large files (or unsafe attachments such as ZIP files) via email. Using this site, you can upload a file to our server and send a link to that file via email. This can come in handy when trying to:

- Send a file to a user with attachment size limits, such as yahoo, hotmail, or AOL users.
- Send a very large file to individuals or lists inside or outside of the university
- Send legitimate attachments, such as a ZIP or Access database (MDB) files that are routinely blocked by mailservers and mail clients.

You must have a valid AESOP account or NetID to use this service to upload attachments, but the recipients can be anywhere in the world, including individuals or lists inside and outside the University. You can upload up to 3 files at once, and any files uploaded will stay online for 1 month, giving recipients ample time to retrieve these attachments. If you have any questions, contact Karl Lindauer, Cook/NJAES Information Technology Services (klindauer@cook.rutgers.edu).

ANIMALS IN INSTRUCTION AND RESEARCH

by Larry S. Katz, Ph.D., Animal Sciences Department Chair

Research in contemporary animal sciences is in many cases critically dependent on the use of animals. The use of animals at Rutgers is governed by University policy, which states that such use will be in accordance with the Public Health Service Policy on Humane Care and Use of Laboratory Animals, the NIH Guide for the Care and Use of Laboratory Animals, the Animal Welfare Act, and other applicable laws, regulations, and guidelines. The University policy applies these regulations to all vertebrate animals, regardless of species or source of funding. Rutgers has an approved animal Welfare Assurance on file with NIH.

In accordance with University policy, no project using animals may be initiated without prior review and approval by the Animal Care and Facilities Committee. To oversee its animal care and use programs, the University has established the Animal Care and Facilities Committee, which has the responsibility to formulate policies and procedures governing the management and husbandry of laboratory animals maintained at the University for both research and instruction programs.

The Rutgers University "Animal Welfare Policy Governing the Use of Animals in Research, Instruction, and Demonstration" is posted on the following Office of Research and Sponsored Programs (ORSP) webpage:

<http://orsp.rutgers.edu/animals/awp.asp>

APPENDIX

Article VI of Graduate Program By-Laws: Academic Warning, Probation, Suspension or Dismissal

All students admitted to the Graduate Program in Animal Sciences are expected to maintain the highest levels of academic achievement. Those students who fail to maintain the minimum academic standards described by Graduate School Bulletin and the Program by-laws, may be subject to academic warning, probation, suspension, or dismissal according to the procedures described herein. Each student in the Program shall receive at admittance a copy of, and is responsible for being familiar with these procedures as well as with all Graduate School and Program policies and procedures governing degree requirements.

PROCEDURES

I. Academic Difficulty

I-1. The academic record of all students in the Graduate Program in Animal Sciences shall be thoroughly reviewed biannually by the Academic Standards Committee. In cases of unusual academic difficulty, the Graduate Student Committee may be convened to review the case at the request of the Program Director, the student's major advisor, or by the student.

I-2. The academic record shall consist of earned course grades, performance records on the Admission to Candidacy Examination, and may also consist of course examinations, term papers, or other course requirements collected or submitted as exhibits concerning academic performance.

I-3. The student shall have the right to examine all the evidence that has led to the Academic Standards Committee judgement of unsatisfactory progress, and shall be given the opportunity to discuss that evidence with the Committee. All evidence used in evaluating the student shall become a part of the student's file to reside in the Director's Office.

I-4. The Academic Standards Committee shall, after carefully weighing all evidence, formulate a sanction recommendation consistent with its judgment of the weight of the student's unsatisfactory progress. Sanctions shall include academic warning, probation, suspension, or recommended dismissal and shall be based upon definitions presented in I-9, et seq. The student, the student's advisor, and the Program Director shall be informed in writing of the Committee's decision including the sanction recommendations, prior to step I-5.

I-5. The Academic Standards Committee recommendation shall be submitted to the Graduate Program Faculty for its consideration and action. Once adopted by the Program Faculty, the Program Director shall inform the student and the student's advisor in writing of that decision. Copies of all correspondence concerning the matter shall be placed in the student's file.

I-6. The student shall have up to thirty (30) days to formally acknowledge receipt of the written faculty decision, and shall have the right to file with the Program Secretary his/her intent to appeal the decision within the same thirty-day period.

I-7. The student may appeal the decision to the Executive Committee, or may request formation of an ad hoc Appeals Committee to be formed of three Members of the Program Graduate Faculty appointed by the Program Director. The student's major advisor shall not serve on either Committee.

I-8. Upon review of the appeal and any additional evidence or information submitted by the student, the Committee hearing the appeal shall report its findings to the Graduate Faculty in the form of a recommendation to either, a) sustain the sanction, b) repeal the sanction, or c) modify that sanction to a higher or lower level.

I-9. Sanctions imposed shall be the following:

- A. Academic Warning - Ordinarily warnings shall be issued to students whose academic performance is marginal and/or indicates that more serious academic difficulty and more severe sanctions may result if the unsatisfactory performance continues.
- B. Academic Probation - Specific conditions of academic performance will be assigned for one or two semesters to those students whose unsatisfactory performance indicates failure to maintain Graduate School and Program standards and if the conditions are not satisfied at the end of the period either suspension or dismissal may result.
- C. Academic Dismissal - Students can be recommended for dismissal from the Program if the terms of probation or the terms of admission are not satisfied; or if a student fails a graduate course or courses, as defined in the Program By-Laws (Article IX, Section 2).
- D. Suspension from the Program - Under unusual circumstances of unsatisfactory performance mitigated by personal circumstances outside the student's control; or may be elected by the student to allow time for resolution of special circumstances through ordinary means.

I-10. If, after the Program process of appeal has been completed, the student judges the Program decision unfair, the student may request review by the Graduate School under procedures outlined in the Bulletin of the Graduate School in the section "Student Academic Appeals".

I-11. Final dismissal of a student from the program may be done only by the Dean of the Graduate School in accordance with established procedures.

II. Academic Dishonesty

II-1. In cases of student academic dishonesty all levels of the review process outlined in Sections I-1 through I-5 shall be followed. Once charges have been formulated by the Program Faculty, the disciplinary procedure outlined in the Bulletin of the Graduate School, section "Disciplinary Hearing Procedures" shall be followed.

Courses

Our webpage <http://www.anisci.rutgers.edu/graduate/grad-courses.shtml>, the graduate catalog (<http://www.rutgers.edu/catalogs/nb-grad.html>), and undergraduate catalog (<http://www.rutgers.edu/catalogs/nb-ug.html>) list courses and provide brief course descriptions.

For course availability, consult the current graduate and undergraduate schedules (http://clue.rutgers.edu:8880/sc_pn/plsql/sc_display.main).

Core-Area Courses

Each student must demonstrate proficiency in the four core areas of Animal Sciences and Biotechnology, Physiology, Molecular Biology and Biochemistry, and Statistics & Experimental Design. In consultation with their advisor and committee, students may select from the following list of core-area courses or choose other Rutgers or UMDNJ courses to establish proficiency in each area. (Note that 12 undergraduate credits at the 300 and 400 level may be taken and applied toward the degree.)

Note. These course lists are ever evolving and not exhaustive.

Animal Sciences

16:067:501 *Animal Biotechnology* (3) Cohick

16:067:616 *Animal Pharmaceuticals: From Discovery through Market* (3) Rhodes

Physiology

01:146:356,357 *Systems Physiology* (3) and *Systems Physiology Lab* (1) John-Alder et al. or equivalent (required of all students)

11:067:450 *Endocrinology* (3)

16:067:502 *Physiology of Reproduction* (3) Uzumcu et al.

16:067:506 *Principles of Integrative Physiology* (3) John-Alder

16:067:507 *Ruminant Nutrition* (4) Wohlt

16:067:508 *Equine Exercise Physiology* (3) McKeever

16:067:510 *Neuroendocrinology* (3) Sarkar and Advis

16:125:581 *Mammalian Physiology* (3) Scarbrough

16:709:552,553 *Nutrition: A Biochemical & Physiological Basis* (4,4) Watford et al.

16:761:580 *Molecular Basis of Physiology* (3) Ma et al.

Statistics & Experimental Design

01:960:401 *Basic Statistics for Research* (3) – Typically taken

16:960:590 *Design of Experiments* (3) – Typically taken

16:960:542 *Life Data Analysis* (3)

16:960:586 *Interpretation of Data* (3)

16:215:575 *Quantitative Ecology & Evolution* (3) – Multivariate analysis

Molecular Biology and Biochemistry

11:115:403,404 *General Biochemistry* (3,3)

16:115:503,504 *Biochemistry* (4,4)

16:115:508 *Proteins and Enzymes* (3)

16:115:511,512 *Molecular Biology and Biochemistry* (3,3) – Recommended

Molecular Biology and Biochemistry (continued)

16:115:616 *Special Topics: Homology Modeling of Protein 3-D Structure*
16:148:503 *Cellular & Molecular Signaling* (3)
16:148:504 *Developmental Biology* (3) – Recommended
16:148:514 *Molecular Biology of Cells* (3)
16:148:555 *Cell Biology & Histology* (4)
16:681:502 *Molecular Genetics* (3)
16:681:543 *Immunology* (3)
16:681:548 *Cell Surface Receptors* (3)

Additional Courses

In addition to core-area courses, students may select from an extensive list of other courses offered through Animal Sciences and other university departments. (Note that 12 undergraduate credits at the 300 and 400 level may be taken and applied toward the degree.)

Graduate School-New Brunswick Academic Calendar for Fall Term 2005

Please note new add-drop dates. Details are outlined below.

Permission from the Office of the Dean is required for: undergraduates wishing to enroll in graduate courses, credit overloads (17 credits or more including assistantship credits), and courses at Princeton, RWJ Medical School, School of Public Health, and NB Theological Seminary and the Inter-University Doctoral Consortium. Permission from the graduate program is required for courses that require a special permission number or a prerequisite override.

July - August

Term bills are mailed on a rolling basis as students register for the Fall term. To avoid late payment fees students are advised to pay immediately if they register in mid-August or later or do not receive a bill within one week of registering. **Late payment fees are currently \$125.00.** Payroll deduction is available for most students on assistantships or fellowships. Payment plans are available for others from Student Accounting, Records Hall, College Avenue Campus, 732-932-7019.

Wednesday, August 31, 2005

Deadline for Fall registration. After this date, students will be charged **\$50.00 late registration fee.**

New Students admitted for Fall 2005 may register until Friday, September 9, 2005 without a late fee.

Thursday, September 1, 2005

Fall term begins. **Complete withdrawals from the University on or after this date yield prorated refunds during the first six weeks of the semester.** Courses with less than five students are subject to cancellation.

Thursday, September 1 - Thursday, September 8, 2005

Students may **drop** courses without a W grade **in person, via the phone registration system or on the web.** An advisor's approval is **not** required for course drops during this time period. Any course dropped during this period will be removed from the transcript and tuition will not be charged.

Thursday, September 1 - Thursday, September 8, 2005

Student may **add** courses **without permission** in person, via the phone registration system or on the web.

Friday, September 9 - Thursday, September 15, 2005

Students may **drop** courses **without a W grade in person only** at the Graduate Registrar, Graduate School-New Brunswick, or their graduate program office. If students **drop via the phone registration system or on the web a W will be posted and tuition will be charged.**

Friday, September 9 - Thursday, September 15, 2005

Students may **add** courses **without permission in person only** at the Graduate Registrar, Graduate School-New Brunswick, or their graduate program office. **Students will not be able to add courses via the phone registration system or on the web. Adds must be done in person.**

Friday, September 16, 2005

As of this date, students must have the **approval of an advisor and the Graduate School-New Brunswick in order to add course(s)**. Adds must be done in person through the graduate program or dean's office.

As of this date, **drops result in a W being posted on the transcript and a tuition charge**. Drops will be **possible via phone, web or in person through the 7th week of the term (Thursday, October 20, 2005) with a W grade and tuition charge**.

As of this date, **cancellation of registration for non-payment of term bill**.

Friday, September 16, 2005

Last Day to register for the Saturday , October ^{1st} foreign language exam.

Information and applications for these exams may be obtained at the Language Lab, Seminary Place, College Avenue Campus, 732-932-7373.

Monday, October 3, 2005

Last day to file a diploma application and submit completed theses and dissertations (only one copy is now required) and candidacy forms to receive an October degree. Students who previously filed a diploma application for May 2005 must file a new diploma application by this date. Further information is available from the Graduate Registrar (Room 200F ASB, Busch Campus; 732-445-3556).

Friday, October 21 - Monday November 21, 2005

All requests for course drops and changes to audit/not for credit status (N prefix) during this time period must be approved by the dean's office. Students must request that the instructor send a paper or email memo that clearly states the student's grade and/or academic status as of the date given to the dean's office for review. **Only students in good academic standing will be permitted to drop. A W will be posted on the transcript and tuition is charged. Students are subject to failing grades at the discretion of the instructor.**

Friday, October 28, 2005

Last day to register for the Sunday, November 20th foreign language exam. Information and applications for these exams may be obtained at the Language Lab, Seminary Place, College Avenue campus; 732-932-7373.

Tuesday, November 22, 2005

No further course drops or changes to audit/not for credit (N prefix) status will be approved as of this date.

Friday, December 23, 2005

End of Fall exam period.

Research (700 level) and N-prefix registrations are to be graded either S (satisfactory), U (unsatisfactory), or INC (incomplete).

Other approved seminars, practicum, laboratory rotations, etc. coded with a P prefix are to be graded PA (pass) or NOCR (no credit).

Grades of NG (no grade given) will be posted by the Graduate Registrar for any grades left blank on rosters. NG converts to an F grade at the end of the next term. Students who have not completed work should be given an INC instead.

Students who did not attend the course should be referred to the dean's office.

Wednesday, January 4, 2006

Last day to file a diploma application and submit completed theses and dissertations (only one copy is now required) and candidacy forms to receive a January degree. Students who previously filed a diploma application for October 2004 must file a new diploma application by this date. Further information is available from the Graduate Registrar (Room 200F ASB, Busch Campus; 732-445-3556).

Graduate School-New Brunswick 2005-2006 Tuition & Fees

All fees are listed per semester

Tuition (per credit up to 12 credits)

New Jersey Resident	\$435.00 per credit
Non-Resident	\$646.70 per credit

Tuition (12 credits or more)

New Jersey Resident	\$5220.00
Non-Resident	\$7760.40

Tuition (9 credits-full-time status)

New Jersey Resident	\$3915.00
Non-Resident	\$5820.30

Computer Fees

1 credit	\$50.00
2	\$50.00
3	\$57.50
4	\$65.00
5	\$72.50
6	\$80.00
7	\$87.50
8	\$95.00
9	\$125.50
10	\$125.00
11	\$125.50
12	\$125.00

Late Fees

Late registration fee	\$50.00
Late payment fee	\$125.00
Reinstatement Fee	\$125.00

College Fees

Full time fee	\$495.50
(includes basic health)	

Part Time Fee	\$129.50
(does not include health fee)	

Health Fees

Basic	\$133.00
Major medical	\$256.50

International Health Fee

Full time students	\$256.50
(per semester)	
Part time students	\$389.50
(per semester)	

SEVIS Fee	\$100.00
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Matriculation Continued & 1 Credit of Research

College Fee	\$7.00
Computer fee	\$50.00

(from A. Bachmann, GS-NB, 7/21/05)