

ANIMAL SCIENCE 067 UNDERGRADUATE CURRICULUM NEWSLETTER

November 1, 2010

TO: Students/Faculty/Staff
FROM: Dr. Daniela Sharma, Undergraduate Program Director
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Department website: <http://animalsciences.rutgers.edu/>

REGISTRATION FOR SPRING 2011 BEGINS NOV. 7!!

Registration for the Spring 2011 Semester begins on November 7th and continues through November 21st. Students with 105 or more degree credits can register on November 7. To find out when you can register, go to: <http://nblogistrar.rutgers.edu/undergrad/s10prereg.htm>, or look at the table at the end of this newsletter. You should schedule a meeting with your academic advisor prior to registering for classes.

OTHER IMPORTANT DATES

Winter Session: Last day for registration without a late fee	12/6/2010
Last Day of Fall Semester	12/13/2010
Reading Days	12/14 - 12/15
Exams Begin	12/16/2010
Exams End	12/23/2010
First Day of Winter Session	12/23/2010

PLAN FOR ALL SEMESTERS, NOT JUST THE NEXT ONE! ALWAYS CHECK WHEN COURSES ARE OFFERED

When deciding on classes for next semester, don't stop there -- keep going! You should always have a schedule of courses for your remaining semesters. There are many Animal Science courses that are only taught a certain semester, or alternate years, so you need to plan ahead. Check the Course Offerings schedule: <http://animalsciences.rutgers.edu/undergraduate/ug-courses-offered.html> and our Suggested Sequence of Courses <http://animalsciences.rutgers.edu/undergraduate/ug-sequence.html> to help create your course plans.

USE DEGREE NAVIGATOR TO PLAN/REVIEW GRADUATION REQUIREMENTS

The Degree Navigator (DN) program (<http://nbdn.rutgers.edu>) lists courses completed by a student. The program also visualizes and records course completion for the college, major (curriculum option), and/or minor requirements. The DN serves as an important advising tool for both student and faculty advisor, and as a record of completion of curriculum requirements.

PREREQUISITE OVERRIDES – ASK THE COURSE INSTRUCTOR

Can't register for a course you want to take? If you haven't yet completed a required course at Rutgers or have not had a transfer course declared equivalent and listed on your transcript, you may be able to obtain a signed prerequisite override form from the instructor. With the form in hand, register in person at Martin Hall (Room 205).

SPECIAL PERMISSION NUMBERS – November 4th

This year, the special permission numbers won't be released to our department faculty until Thursday, November 4th. Please contact the course instructor or farm staff (for Animal Practicum) for special permission numbers starting November 4th.

ADVANCED EQUINE HEALTH CARE & MANAGEMENT 398 OFFERED OFF CAMPUS

Dr. Fugaro will teach this course at the Centenary College Equestrian Center, 220 Middle Valley Road, Long Valley, NJ during Spring 2011. The course will be taught Wednesday nights from 6:00 to 9:00 pm. Students need to provide their own transportation to this course. Enrollment is limited to 20 students from Rutgers.

NEUROENDOCRINOLOGY 11:067:410 OFFERED SPRING 2011

Dr. Sarkar teaches this course in alternate spring semesters. The course is taught jointly with 16:067:510. For undergraduates it is conducted as a lecture course: a comprehensive study of the interrelationships between the central nervous system and the endocrine system in the mammal. The course will fulfill the category "select three from the following" in the Prevet/Research option or serve as an elective.

RECENT ADVANCES IN ENDOCRINOLOGY 16:340:612, 2 credits. This graduate level course will provide students a comprehensive review of endocrinology, focusing on molecular and cellular mechanisms and recent advances in the field, as well as providing opportunities for critical thinking and problem solving exercises. Contact the instructor, Dr. Andrzej Pietrzykowski andrepi@aesop.rutgers.edu for more information.

ANIMAL PHARMACEUTICALS: FROM DISCOVERY TO MARKET 16:067:616, 3 credits.

Dr. Linda Rhodes, AlcheraBio, LLC teaches this graduate-level course, which is open to seniors by special permission number. The course will introduce students to the processes of discovery, formulation, development (including safety and effectiveness), and registration of new animal drugs as well as an overview of the worldwide animal health market; lecture/discussion format; real-world examples presented by visiting expert scientists. Please contact Dr. Rhodes for information. lrhodes@alcherabio.com

NEW COURSE: TOPICS IN COMPANION ANIMAL ISSUES II: ANIMALS HEALTH

Starting Spring 2011, juniors and seniors can take this 1-credit topics course taught by Dr. Julie Fagan. In this course, students will be reviewing the companion animal health care industry, and through a program developed by the Red Cross, learn first aid techniques for companion animals. For more information, contact Dr. Fagan (Fagan@rci.rutgers.edu, 732-932-8354).

WINTER SESSION COURSES

There are several experience-based courses and other general education courses that are offered in the Winter Session. Please check their website for more information: <http://wintersession.rutgers.edu/>

PRODUCTION ANIMAL SCIENCE/ANIMAL INDUSTRIES OPTION STUDENTS

ENROLL IN LIVESTOCK PRODUCTION & MANAGEMENT & LAB 336, 338

(note: course name will change to Production Animal Management & Lab)

This is a required course for Production Animal Science and Animal Industries (except Agribusiness) students but it also fulfills the experience requirement for the Pre-vet/Research and Lab Animal Science options. It will be taught every odd-numbered Spring Semester (2011, 2013, etc). Students wanting to be veterinarians or work in the pharmaceutical/animal health industries gain valuable knowledge and skills needed for the agricultural/animal industries (dairy, beef, poultry, swine, sheep/goat). Contact Dr. Westendorf for information at westendorf@aesop.rutgers.edu.

With the changes in faculty and Livestock Management courses, students in Production Animal Science and Animal Industries (except Agribusiness) need to coursework consisting of at least 5 credits to replace the loss of the second part of the Livestock Management course and lab. Please consult with Dr. Sharma for a list of alternate courses.

HOW TO REGISTER FOR ANIMAL PRACTICUM

To register for Animal Practicum, you will need to contact the Farm Staff member and establish course and time requirements. Also, you will need to be cleared to work with animals for this course. Only then will they issue you a special permission number.

Species	Winter	Spring	Farm Staff
Dairy	01	DC	John Bugowski, Dairy Barn, 932-9300
Horse	--	HO	Dr. Sarah Ralston, ralston@aesop.rutgers.edu
Lab Animal	02	LA	Dr. Mehmet Uzumcu, uzumcu@aesop.rutgers.edu
Sheep/Goat	03	SH	Laura Comerford, Farrowing House, 932-9350
Swine	04	SW	Laura Comerford, Farrowing House, 932-9350

Section HO has a prerequisite of Horse Management 11:067:384. Section 02/LA has a prerequisite of Laboratory Animal Sciences: Management and Techniques 11:067:275. A particular Animal Practicum section/species can be taken only once for degree credit. However, more than one section/species can be taken for degree credit. Animal Practicum 200 is offered during the fall and spring semester, the Winter Session, and during the first Summer Session term. Course number 204 is used for the second Summer Session term. Animal Practicum 200 and Animal Practicum 204 are the same course.

SHOW AN ANIMAL ON AG FIELD DAY AND EARN ONE CREDIT

Animal Handling, Fitting, and Exhibition (11:067:175) will be offered between Spring Break and Ag Field Day in cooperation with the Society of Animal Science. Special permission numbers may be obtained for Dairy (DC), Goat (GO), Sheep (SH), and Swine (SW) from Dr. Sharma (sharma@aesop.rutgers.edu) and for Horse (HO) from Dr. Ralston (ralston@aesop.rutgers.edu). Students showing Seeing Eye Puppies in the 4-H Dog Show may obtain special permission numbers for section DO from Dr. Jesse (jesse@aesop.rutgers.edu)

MAKE SURE YOU ARE CLEARED TO WORK WITH ANIMALS!

Animal Practicum, Animal Handling, Fitting and Exhibition, Research in Animal Science, Animal Nutrition Lab, and Dairy Cattle AI all require work with animals. These courses have animal handling protocols that have been reviewed and approved by the Rutgers University Animal Care and Facilities Committee. A condition of enrollment in these courses is that students complete an Occupational Health Questionnaire and be cleared to work with animals. Clearance may span 1 to 5 years depending on your health. To obtain a health questionnaire, you need to first register at <http://orsp.rutgers.edu/acfc/?csid=156>. After this online registration, you will be emailed a health questionnaire (your name will be typed on the form). Fill out, sign, and submit this form directly to the Occupational Health Department at Hurtado Health Center. The information you provide is kept confidential. Please comply with these regulations for your health and safety.

HOW TO CHANGE YOUR ANIMAL SCIENCE OPTION

To change your option, fill out a Change of Option form: <http://sebs.rutgers.edu/forms/>. You'll need the signature of the Undergraduate Program Director, and then bring the form to Room 205 Martin Hall. Course substitutions with advisor approval can be submitted on a "Request to Update Individual Program in DN" form to Room 205, Martin Hall. For help/questions contact Dr. Sharma.

NEW BRUNSWICK UNDERGRADUATE CATALOG IS ONLINE

Please view/review a description of the Animal Science 067 program; graduation requirements for the major http://catalogs.rutgers.edu/generated/nb-ug_current/pg665.html, or the minor in Animal Science http://catalogs.rutgers.edu/generated/nb-ug_current/pg732.html, the minor in Equine Science http://catalogs.rutgers.edu/generated/nb-ug_current/pg740.html; or the minor in Companion Animal Science http://catalogs.rutgers.edu/generated/nb-ug_current/pg1371.html.

STUDIES IN ANIMAL SCIENCE 411

This course provides credits for students engaged in educational activities that differ from research activities. There are two sections: SP (Special Projects), and TA (Teaching Assistant). For section SP, by-arrangement credits for faculty-supervised student projects that are not considered research (e.g., literature searches, topic reviews, and written reports). For section TA, the student receives 1.5 credits for teaching assistant-related activities in designated courses (e.g., Animal Nutrition Lab; Student Coordinator/Supervisor for Ag Field Day animal shows). Contact Dr. Daniela Sharma for a special permission number. Since you can't sign up for different sections within the same course, students with TA or Supervisor/Coordinator roles and special projects credits, ask Dr. Sharma for registration instructions.

ENROLL IN TECHNIQUES IN EQUINE EXERCISE PHYSIOLOGY 403

Open to students with prior research experience. Taught in a small-group learning format, this course supplements laboratory studies with formal classroom sessions on the scientific method and the theory of various techniques used in equine exercise physiology research. Permission of Dr. McKeever (Bartlett 003, 732-932-9390, mckeever@aesop.rutgers.edu) is required.

A MINOR MUST BE DECLARED AND APPROVED

For the minor(s) to appear on the transcript and be received, it must be declared and approved. The declaration form is available at the Office of Academic Programs and Research, Room 205, Martin Hall, or online at: <http://sebs.rutgers.edu/forms/> Please check the undergraduate catalog for the course requirements of your minor(s).

FINDING COURSES: USE RUTGERS ONLINE SCHEDULE OF CLASSES

Some courses are taught online or at locations off campus. If you are unsure, check the course synopsis or look in all three "Campus Locations" in the online Schedule of Courses: New Brunswick on-campus, New Brunswick on-line, and New Brunswick off-campus.

MEDICAL AND VETERINARY ENTOMOLOGY 11:370:406, 3 CREDITS

This new course in Entomology covers insects and other arthropods in relation to human and animal annoyance and disease. This course will satisfy the category "select three from the following" in the Preveter/Research option or serve as an elective. It can also serve as an alternate to Animal Diseases for Companion Animal option students.

EARN CREDITS & EXPERIENCE: STUDENT TO PROFESSIONAL INTERNSHIP NETWORK

The Student to Professional Internship Network (SPIN) affords students the opportunity to gain experience related to their course of study or career interests while earning academic credits to fulfill their SEBS experience-based education requirement. Credits are earned through the completion of academic assignments while the student is engaged in part-time or full-time work experience within business, industry, government or non-profit organizations. Find out more: <http://sebsspin.rutgers.edu/index.html>

2010-2011 INTERNATIONAL SUMMER SCHOLARSHIPS

International Programs at the School of Environmental and Biological Sciences is proud to announce the 2010-2011 International Summer Scholarships. These scholarships are specifically geared towards SEBS students who are interested in enhancing and strengthening their curriculum studies with an international summer learning experience. Students may submit an online application starting December 15, 2010. The last day to apply is February 15, 2011. Contact Monica Emery, at 732-932-8165, x306, Memery@aesop.rutgers.edu

CONSIDERATIONS FOR PREVETERINARY STUDIES

1. Economic Systems: The Preveterinary Medicine/Research option requires one course: Economics, People and Environment (11:373:101). Consideration should be given to taking the two-semester course sequence as an equivalent: Principles and Applications of Microeconomics (11:373:121) or Introduction to

Microeconomics (01:220:102), and then Principles and Applications of Microeconomics (11:373:121) or Introduction to Macroeconomics (01:220:103). The two-semester course sequence may be a wise choice for you for two reasons: (a) if you switch to the Animal Industry or Laboratory Animal Science option, the two-course sequence is required; and (b) a better business background for Veterinary Medicine is obtained.

2. Second Area VI Course: A number of veterinary colleges require a public speaking course. Thus, consideration should be given to taking Fundamentals of Public Speaking (04:192:220), rather than Scientific and Technical Writing (01:355:302).

WHAT'S AN "OR EQUIVALENT"?

"Or equivalent" is often stated in the catalog and refers to a course similar in content or at a higher level that may substitute for a required course. Many courses that are offered infrequently or have ceased to be offered may require an "or equivalent". Examples of "or equivalents" in our curriculum are:

- General Microbiology (11:680:390) for General Microbiology (01:447:390)
- Introduction to Microeconomics (01:220:102) for Principles and Applications of Microeconomics (11:373:121)
- Calculus I (01:640:135) for Precalculus College Mathematics (01:640:115)
- Statistics I (01:960:211) or Introductory Statistics for Business (01:960:285) for Basic Statistics for Economics (01:960:201)
- Extended General Physics (01:750:201, 202) or General Physics (01:750:203, 204, 205, 206) for Physics for the Sciences (01:750:193, 194)

Course substitutes/or equivalents may also apply in Area VI, Oral and Written Communication, Experience-Based Education, 9 credits, and elsewhere in our curriculum. This stresses the need to seek advisory counsel.

USE CURRICULUM AND UNSPECIFIED ELECTIVES TO YOUR ADVANTAGE

Production Animal Science, Companion Animal Science, and the Laboratory Animal Science options require that 6 credits of electives be completed. For all options, it is also necessary to complete unspecified electives (1-20 credits) to fulfill the graduation requirement of 128 credits. Courses that are selected to complete these credit requirements should reflect your interests and career goals, but you need to have the approval of your faculty advisor. These free electives allow students to complete a minor or even a double major while majoring in Animal Science at New Brunswick. Another opportunity is to participate in the undergraduate student exchange program with Delaware Valley College and Penn State. These schools offer a variety of courses in equine, livestock, or dairy that would also fulfill these free electives and allow you to further develop an area of specialization.

DELAWARE VALLEY COLLEGE/PENN STATE EXCHANGE PROGRAMS

In the Fall 2011 semester it will be possible to take courses at Delaware Valley College or Penn State (see listing below). This program is structured primarily for students in their junior/senior years. Separate formal applications must be made for each exchange. Forms are available from Dr. Sharma. Acceptance is dependent on academic performance and justification of how the exchange will strengthen/broaden your education and career options. You will formally register for these courses at Rutgers and pay Rutgers tuition and student activity fees. Transportation as well as room and board would be at your cost and paid to the host institution. Complete course descriptions and prerequisites for exchange courses are available through our home page, <http://animalsciences.rutgers.edu/undergraduate/ug-student-exchange.html> Consult with your faculty advisor to determine how participation in these exchange programs can enhance your curriculum and education while completing a degree in Animal Science at Cook College.

Table of Spring Registration Dates and Undergraduate degree credits

Spring: Registration begins	11/7/2010	105 or greater Undergraduate degree credits
Spring: Registration	11/8/2010	105 or greater Undergraduate degree credits
Spring: Registration	11/8/2010	90 or greater Undergraduate degree credits
Spring: Registration	11/9/2010	90 or greater Undergraduate degree credits
Spring: Registration	11/9/2010	75 or greater Undergraduate degree credits
Spring: Registration	11/10/2010	75 or greater Undergraduate degree credits
Spring: Registration	11/10/2010	60 or greater Undergraduate degree credits
Spring: Registration	11/11/2010	60 or greater Undergraduate degree credits
Spring: Registration	11/11/2010	45 or greater Undergraduate degree credits
Spring: Registration	11/12/2010	45 or greater Undergraduate degree credits
Spring: Registration	11/13/2010	45 or greater Undergraduate degree credits
Spring: Registration	11/14/2010	30 or greater Undergraduate degree credits
Spring: Registration	11/15/2010	30 or greater Undergraduate degree credits
Spring: Registration	11/15/2010	20 or greater Undergraduate degree credits
Spring: Registration	11/16/2010	20 or greater Undergraduate degree credits
Spring: Registration	11/16/2010	1 or greater Undergraduate degree credit
Spring: Registration	11/17/2010	1 or greater Undergraduate degree credit
Spring: Registration	11/17/2010	0 Undergraduate credits ONLY
Spring: Registration	11/18/2010	0 Undergraduate credits ONLY
Spring: Registration	11/18/2010	All Students
Spring: Registration	11/19/2010	All Students
Spring: Registration End	11/20/2010	All Students