COURSE NAME; NUMBER; SEMESTER; MEETING DAYS, TIMES, AND PLACE.
Animal Science
11:067:142  Fall 2019
TF3, Tuesday & Friday @ 12:35–1:55 PM
022 Loree Hall

CONTACT INFORMATION:
Instructor(s): Dr. Barry W. Jesse
Office Location: 213C Bartlett Hall
Phone: 848-932-9095  Email: barry.jesse@rutgers.edu
Office Hours: 10:00 AM–12:00 PM, TTh; or by appointment

Guest Speakers:
Dr. Bill Belden  326 Foran Hall  beldenwj@rutgers.edu;  848-932-5617
Dr. Anna Hausmann  213D Bartlett Hall  anna.hausmann@rutgers.edu;  848-932-9240
Dr. Larry Katz  201 Bartlett Hall  lskatz@rutgers.edu;  848-932-1946
Dr. Karyn Malinowski  155 ASB II  karynmal@njaes.rutgers.edu;  848-932-9419
Dr. Dave Reimer  Nelson Bio Labs  reimerd@las.rutgers.edu;  848-445-7394
Dr. Mehmet Uzumcu  119 Bartlett Hall  uzumcu@rutgers.edu;  848-932-6912
Dr. Michael Westendorf  213F Bartlett Hall  michael.westendorf@rutgers.edu;  848-932-9408
Dr. Carey Williams  213E Bartlett Hall  carey.williams@rutgers.edu;  848-932-5529
Dr. Aparna Zama  209A Bartlett Hall  zama@sebs.rutgers.edu;  848-932-8495

COURSE WEBSITE, RESOURCES AND MATERIALS:
- Lecture notes and supplementary readings will be posted on https://sakai.rutgers.edu.

PREREQUISITES: None

COURSE DESCRIPTION:
This course presents fundamental principles and functions important in animal science. The scientific underpinnings of modern animal science are presented, with emphasis on nutrition, reproduction, animal domestication and behavior, animal welfare and rights, genetics, and growth. The course deals with domestic animals, including both companion animals and livestock.

LEARNING GOALS:

Core Curriculum Learning Goals
This course meets the Core Curriculum requirement for Natural Sciences [NS]. On completion, students will be able to understand and apply basic principles and concepts in the physical or biological sciences, and also to explain and be able to assess the relationship among assumptions, method, evidence, arguments, and theory in scientific analysis.”

Program Learning Goals – See https://animalsciences.rutgers.edu/undergraduate/mission.html for the program learning goals (PLGs).
1. Gain broad knowledge of the Animal Science discipline to understand the future of the field and its diversity. (PLG 1)
   Assessment: Three hourly exams
2. Apply biological and chemical principles and quantitative reasoning to concepts presented in core subject areas in Animal Science such as physiology, nutrition, genetics, and reproduction. (PLG 2)
   Assessment: Three hourly exams

3. Develop an understanding of the principles of animal welfare and ethical treatment of animals. (PLG 7)
   Assessment: Three hourly exams

**Course Learning Goals**

By the end of this course you will

1. Gain an appreciation of the contributions that animals and animal products make to human well-being

2. Understand the role that basic and applied science plays in modern-day animal science

3. Obtain an overview of the varying Animal Science fields and their application to both companion animals and livestock.

**ASSIGNMENTS/RESPONSIBILITIES:**

**Grading**

3 exams @ 30% each = 90% total
11 quizzes = 10% total (the lowest quiz score will be dropped)

The quizzes will be worth 10 points each. Quizzes will be done online, via the Tests & Quizzes tool on the Sakai website. The quiz will be “live” for 7 days, beginning right after class at 2:00 PM on designated Tuesdays (see Course Schedule for quiz dates) and ending at 11:55 PM the following Monday. During those 7 days, you can take the quiz once. There is a 1 hour time limit to complete the quiz once you have started it. For technical difficulties during the quiz, contact the Sakai help desk for assistance. Please do not wait until Monday evening to take the quizzes. Inevitably that’s when technical issues crop up, and you may run out of time to complete the quiz.

**Extra Credit Opportunity**

There is an opportunity to obtain extra credit during the semester. In order to receive 5 additional points on one of your exams (typically the exam with your lowest score), you must complete the entire process to obtain medical clearance to work with animals. The procedure to obtain medical clearance to work with animals is located on the Department of Animal Science home page (https://animalsciences.rutgers.edu/undergraduate/docs/Working-With-Animals.pdf)

**ACCOMODATIONS FOR STUDENTS WITH DISABILITIES**

Please follow the procedures outlined at https://ods.rutgers.edu/students/registration-form. Full policies and procedures are at https://ods.rutgers.edu/

**ABSENCE POLICY**

Students are expected to attend all classes; if you expect to miss one or two classes, please use the University absence reporting website https://sims.rutgers.edu/ssra/ to indicate the date and reason for your absence. An email is automatically sent to me.
# COURSE SYLLABUS

## COURSE SCHEDULE:

<table>
<thead>
<tr>
<th>Lec #</th>
<th>Date</th>
<th>Lecture Topic</th>
<th>Speaker</th>
<th>Quiz Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9/3</td>
<td>Intro: Animal Ag &amp; Animal Products</td>
<td>B Jesse</td>
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<tr>
<td>2</td>
<td>9/6</td>
<td>Animal Products; Future of An Sci</td>
<td>B Jesse</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>9/10</td>
<td>Working Safely With Animals</td>
<td>D Reimer</td>
<td>Quiz 1 (Lecs 1-2)</td>
</tr>
<tr>
<td>4</td>
<td>9/13</td>
<td>Animal Diseases / Herd Health</td>
<td>A Hausmann</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>9/17</td>
<td>Animal Behavior / Animal Welfare</td>
<td>L Katz</td>
<td>Quiz 2 (Lecs 3-4)</td>
</tr>
<tr>
<td>6</td>
<td>9/20</td>
<td>Reproductive Physiology I</td>
<td>A Zama</td>
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<tr>
<td>7</td>
<td>9/24</td>
<td>Reproductive Physiology II</td>
<td>A Zama</td>
<td>Quiz 3 (Lecs 5-6)</td>
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<tr>
<td>9/27</td>
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<td><strong>Exam 1 (Lectures 1-7)</strong></td>
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<tr>
<td>8</td>
<td>10/1</td>
<td>Nutrition I</td>
<td>C Williams</td>
<td>Quiz 4 (Lec 7)</td>
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<tr>
<td>9</td>
<td>10/4</td>
<td>Nutrition II</td>
<td>C Williams</td>
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<tr>
<td>10</td>
<td>10/8</td>
<td>Nutrition III</td>
<td>C Williams</td>
<td>Quiz 5 (Lecs 8-9)</td>
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<tr>
<td>11</td>
<td>10/11</td>
<td>Animal Genetics I</td>
<td>B Jesse</td>
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<tr>
<td>12</td>
<td>10/15</td>
<td>Animal Genetics II</td>
<td>B Jesse</td>
<td>Quiz 6 (Lec 10-11)</td>
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<tr>
<td>13</td>
<td>10/18</td>
<td>Biotechnology</td>
<td>B Belden</td>
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<tr>
<td>14</td>
<td>10/22</td>
<td>Animal Domestication &amp; Animal Welfare</td>
<td>L Katz</td>
<td>Quiz 7 (Lecs 12-13)</td>
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<tr>
<td>15</td>
<td>10/25</td>
<td>Poultry</td>
<td>B Jesse</td>
<td></td>
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<tr>
<td>10/29</td>
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<td><strong>Exam 2 (Lectures 8-15)</strong></td>
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<tr>
<td>16</td>
<td>11/1</td>
<td>Companion Animals</td>
<td>L Katz</td>
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<tr>
<td>17</td>
<td>11/5</td>
<td>Swine</td>
<td>B Jesse</td>
<td>Quiz 8 (Lec 15-16)</td>
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<tr>
<td>18</td>
<td>11/8</td>
<td>Lab Animals</td>
<td>M Uzumcu</td>
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<tr>
<td>19</td>
<td>11/12</td>
<td>Sheep &amp; Goats</td>
<td>B Jesse</td>
<td>Quiz 9 (Lecs 17-18)</td>
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<tr>
<td>20</td>
<td>11/15</td>
<td><em>Sheep, goats, and swine (at farm)</em>*</td>
<td>Farm Staff</td>
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<td></td>
<td>11/19</td>
<td>Dairy Cattle</td>
<td>M Westendorf</td>
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<tr>
<td>21</td>
<td>11/22</td>
<td><em>Cattle and Horses (at farm)</em>*</td>
<td>Farm Staff</td>
<td>Quiz 10 (Lecs 19-20)</td>
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<tr>
<td>22</td>
<td>11/27</td>
<td>*No class – Thanksgiving Holiday</td>
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<tr>
<td>23</td>
<td>12/3</td>
<td>The World of Horses</td>
<td>K Malinowski</td>
<td>Quiz 11 (Lecs 21-22)</td>
</tr>
<tr>
<td>24</td>
<td>12/6</td>
<td>Equine Industry</td>
<td>K Malinowski</td>
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</tr>
<tr>
<td>25</td>
<td>12/10</td>
<td>Beef Cattle</td>
<td>B Jesse</td>
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**Note:** Due to the number of guest speakers, the Course Schedule is subject to change. If this occurs Dr. Jesse will provide notice of changes as soon as possible via announcements on Sakai.

**Two class periods (11/15; 11/22) will be held on the Cook Campus Farm with a starting location at the Round House. The Round House is located directly off of College Farm Road on Sheepfold Lane. Given the size of the class, we will need to split into two separate groups that meet for only half of the designated class period.**

If your last name begins with:

- M-Z: Report to the Round House by 12:35 PM
- A-L: Report to the Round House by 1:15 PM

**FINAL EXAM AND TIME**

Online Final exam Schedule: [http://finalexams.rutgers.edu/](http://finalexams.rutgers.edu/)

Final Exam = Thursday, December 19, 2019; 12:00-3:00 PM Loree Hall Room 022 (Lectures 16-25)
ACADEMIC INTEGRITY
The university's policy on Academic Integrity is available at http://academicintegrity.rutgers.edu/academic-integrity-policy. The principles of academic integrity require that a student:
• properly acknowledge and cite all use of the ideas, results, or words of others.
• properly acknowledge all contributors to a given piece of work.
• make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of impermissible materials or impermissible collaboration.
• obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions.
• treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress.
• uphold the canons of the ethical or professional code of the profession for which he or she is preparing.
Adherence to these principles is necessary in order to ensure that
• everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments.
• all student work is fairly evaluated and no student has an inappropriate advantage over others.
• the academic and ethical development of all students is fostered.
• the reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.
Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.

STUDENT WELLNESS SERVICES
Just In Case Web App  http://codu.co/cee05e
Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)
(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ www.rhscaps.rutgers.edu/
CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students’ efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)
(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/
The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.
Disability Services
(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / https://ods.rutgers.edu/

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: https://ods.rutgers.edu/students/documentation-guidelines. If the documentation supports your request for reasonable accommodations, your campus’s disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: https://ods.rutgers.edu/students/registration-form.

Scarlet Listeners
(732) 247-5555 / http://www.scarletlisteners.com/

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.