Animal Science 101
Principles of Animal Science
FALL 2015

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Office: Plumas 203A
Phone: 898-6250

Lab Co-instructor: Clay Carlson, M.S.
Email: ccarlson2@csuchico.edu
Office: Plumas 203A
Phone: 898-6694

Class Schedule: T, TH 9:30-10:20 – Lecture
Room: GLENN HALL 212 (lecture only)

Lab Schedule: Section 2: T 11:15 -1:50
Location: FARM 003 (unless alternate
3: T 2:15 - 4:50 location specified.) See attached
4: TH 11:15 -1:50 directions to the University Farm.
5: TH 2:15 - 4:50

Office Hours: Tues./Thurs. 9:00 – 9:30 am; Thurs. 10:30 am-1:30 or by
appointment. Please do not hesitate to ask me for an appointment if these times do
not work for you. I am here to help you learn!

Required text: Scientific Farm Animal Production. An Introduction to Animal

Computer Use: Communication for this course will be conducted via Blackboard Learn. This
includes email communications and course announcements. It is the student’s responsibility to
check online regularly for any announcements regarding the course. If a lab is not posted to
Blackboard Learn by 6 pm of the day before that lab/activity; the instructor will bring copies to
class.

Labs
- Labs are mostly held out at the University Farm. Let me know if you do not
have a ride so we make sure you have transportation. It has never been a
problem with any of my past students.
- Laboratory Manual: Lab handouts will be posted on Blackboard Learn
prior to lab. It is required that students download and bring lab
handouts to each lab.

Course content: An overview of principles of Animal Science and the
interrelationships of domestic animals and mankind. The course introduces some
basic biology of animals including cell function, genetics, anatomy and physiology,
reproduction, nutrition, animal health and disease, animal products, and animal
behavior. The laboratory component will provide hands-on animal experiences to
complement the lecture.
Statement of Student Learning Objectives/Outcomes (SLO’s)

1. Students must demonstrate an introductory understanding of fundamental concepts of life science as illustrated in plants and animals, or the course must emphasize these concepts in a study of some specific part of the life sciences. Examples are:
   a. students will be able to describe the basic cell function
   b. students will be able to describe basic cell division
   c. students will be able to understand basic genetic theory
   d. students will be able to understand basic concepts in gene expression

2. Students must have a laboratory component or similar activity in the life science and inquire into the life forms of the universe. Students will demonstrate understanding and appreciation of the methodologies of the natural science as investigative tools and the limitation of scientific inquiry.
   a. students will be able to demonstrate basic techniques in biotechnology
   b. students will be able to demonstrate basic techniques in hematology
   c. students will be able to demonstrate basic microbiological techniques
   d. students will be able to demonstrate basic techniques in small animal restraint
   e. students will be able to demonstrate basic data collection procedures
   f. students will be able to demonstrate basic skill in live and post-mortem animal evaluation
   g. students will meet (at minimum) the GE writing requirements

Grading

Quizzes (50 pts each: 7 will be taken: no make-ups) 350
   ✓ Quizzes will usually be given during lab
   ✓ Quizzes will usually cover two weeks of material/including lab material and reading
   ✓ Every quiz will count toward your grade, none are dropped.

Laboratory exercises (completed during each lab session) 150
Research Project Work (Paper, participation) 100
In class quizzes; Blackboard Learn quizzes 50
No Comprehensive Final – last quiz given at scheduled final

Total 650 pts

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Remember—students earn grades, teachers merely assign them, do your best at all times.
Quizzes
When scheduled, quizzes will be given at the beginning of each lab session and typically will cover the previous two week’s lecture and laboratory information. Punctuality is important to ensure that each student has the maximum amount of time to complete the quiz. Makeup-quizzes will only occur if pre-arranged with the professor.

Recording of scores
If a student feels an error in grading has been made, the student has one week from the time of the assignment is returned to them (or the grade is posted on the web, whichever is later) to request a review of the grade. You should retain all graded items until a final course grade is assigned.

Course Policies:

Student Responsibility
- Students are strongly advised not to miss class or labs since this time may be difficult or impossible to make up.
- It is the student’s responsibility to inform the instructor and arrange for alternate assignments when a class is missed for an excused reason such as illness or academic field trip.
- Students are expected to pay attention and participate in class meetings.
- It is the student’s responsibility to meet all appropriate deadlines for adding, withdrawing, etc. These deadlines can be found on the University web site at: http://www.csuchico.edu/schedule/
- No assignments will be accepted after the assigned due date without prior permission of the instructor
- Unstapled assignments – multiple page assignments without a staple will receive a score of 0.
- Use of tobacco products is not allowed during class or lab.
- Students are expected to turn off all pagers, cell phones, ipods, mp3 players, and other electronic devices during class time. Headsets and ear buds should be removed at the beginning of class or lab.
- All class participants are expected to exhibit respectful behavior to other students and the instructor.
- All students have the right and privilege to learn in the class, free from harassment and disruption.
- Inappropriate or disruptive behavior will not be tolerated, nor will lewd or foul language.
- The class follows the standards set in the Code of Students Rights and Responsibilities (EM 96-38) and students are subject to disciplinary action for violation of that code.
- Courses in agriculture commonly include activities where potential hazards exist. Students are expected to conduct themselves in a safe manor at all times.
Plagiarism Detection
The campus subscribes to the Turnitin.com plagiarism prevention service, and you may be required
to submit written assignments to Turnitin.com. Your work will be used by Turnitin.com for plagiarism detection and for no other purpose.

University Policies
University policies will be enforced in the course (see the catalog for a list of university policies).

Final Exams
All classes are required to meet for one two-hour period during finals week for instruction or examination. Most classes meet in their normal room according to the special schedule listed on the University web site. Your final will be your last quiz and will be held during the scheduled final time. It is not cumulative.

Cheating and Plagiarism
Cheating and plagiarism are considered as the most serious offenses in the teaching-learning process, as it erodes the integrity of the student/faculty relationship. Students are reminded that the University Policy on Academic Honesty will be enforced in this class. The policy is available in the Catalog. Students are reminded that turning in someone else's homework or project is considered cheating. Students working together on individual assignments (ex. homework) are reminded to do their own work and turning in essentially identical work as another student is not acceptable.

If there is evidence that you have been involved in any form of academic dishonesty, you will receive an “F” grade for the course, be locked from Vista, and a report will be provided to Student Judicial Affairs for further action.

Students with Disabilities:
“Americans with Disabilities Act: If you need course adaptations or accommodations because of a disability or chronic illness, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Please also contact Disability Support Services (DSS) as they are the designated department responsible for approving and coordinating reasonable accommodations and services for students with disabilities. DSS will help you understand your rights and responsibilities under the Americans with Disabilities Act and provide you further assistance with requesting and arranging accommodations.”
Academic Rigor
Academic rigor means the consistent expectation of excellence and the aspiration to significant achievement. It should pervade the entire atmosphere of the University—teaching and learning, curriculum, evaluation of student and faculty, outreach, admissions, advising, and student life.

Rigorous Learning
Rigorous students are part of the equation of rigorous teaching and learning. A rigorous education is vigorous, difficult, deeply satisfying work, and it requires a lifestyle conducive to achieving excellence. College is not a temporary diversion or a period of entertainment, but a fundamental piece of student character, citizenship, and employment future. A diploma and good grades from a demanding institution count for something. Rigorous students

- Set high personal standards, develop a strong sense of purpose, come to class well prepared, and complete assignments on time.
- Develop an effective relationship with the instructor, in and outside of class, and make the most of University advising and other services.
- Treat fellow students and the classroom environment with complete respect. Give each class full attention and participation. Do not miss class, arrive late, or leave early.
- Accept continuing responsibility for learning and for grades earned.
- Approach each class in a professional manner, as if the class were real employment. Treat a full-course load as full-time work and spend no less time on it. Determine exactly what is expected.
- Experiment with all teaching and learning strategies used in classes, and also determine which work best for them.
- Demonstrate complete honesty and integrity.

Rigorous Teaching
Rigorous faculty are role models for the behaviors and accomplishments the University seeks to promote. They demonstrate a high level of professionalism and commitment to the University and to their discipline and inspire in students an excitement about learning. Guiding students toward excellence, they

- Communicate high expectations and demonstrate them through a demanding syllabus and well-prepared classes.
- Encourage student-faculty contact in and out of class and offer conscientious advising and consistent availability.
- Encourage collaboration and active learning, fully involving students in the learning experience.
- Provide students early, prompt, and frequent feedback and develop appropriate assessment strategies.
• Emphasize time on task, clearly communicate time required for learning, make it clear that full-time study is full-time work, and design learning experiences so that homework matters.

• Develop approaches and strategies geared to diverse talents and ways of learning, while maintaining high standards of accountability.

Reduce opportunities to engage in academic dishonesty and challenge its occurrence.”
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<tr>
<th>Wk</th>
<th>Day</th>
<th>Date</th>
<th>Lecture</th>
<th>Reading</th>
<th>Lab</th>
<th>Lab Location</th>
<th>Quiz</th>
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<td>1</td>
<td>T</td>
<td>8/25</td>
<td>Animal Contributions to Human Needs</td>
<td>Ch 1</td>
<td>Introduction to livestock species</td>
<td>Univ. Farm 003</td>
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<td>2</td>
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<td>U.S. Animal Industries: An Overview</td>
<td>Ch 2 Pgs 17-31</td>
<td>Animal products Ch 8 pg 129-136</td>
<td>Univ Farm meats lab</td>
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<td>3</td>
<td>T</td>
<td>9/8</td>
<td>Genetics: Cell physiology</td>
<td>Online Reading</td>
<td>Cell components/Hematology Start Research Project – Sheep Unit</td>
<td>Univ. Farm 003</td>
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<td>Genetics: Mitosis &amp; Meiosis</td>
<td>Ch 12</td>
<td>DNA extraction Plumas Hall - TBA</td>
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<td></td>
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<td>9/17</td>
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<td>Pgs 200-204</td>
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<td>5</td>
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<td>Genetics: Gene Expression</td>
<td>Ch 12</td>
<td>DNA fingerprinting Plumas Hall - TBA</td>
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<td>Genetic Change Through Selection</td>
<td>Ch 13</td>
<td>Animal Selection and Evaluation Univ. Farm 003</td>
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<td>7</td>
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<td>Nutrients and Their Functions</td>
<td>Ch 15</td>
<td>Paper Overview; Literature Research Univ. Farm 003</td>
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<td># 3 in lab wk 5-6</td>
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<td>8</td>
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<td>Digestion and Absorption of Feed</td>
<td>Ch 16</td>
<td>Nutrition Univ. Farm 003</td>
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<td>Reproduction: Male</td>
<td>Ch 10 Pgs 165-174</td>
<td>Reproduction: Male Parts of Ch 11 Univ. Farm 003</td>
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<td># 4 in lab wk 7-8</td>
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<td>Reproduction: Female</td>
<td>Ch 10 Pgs 158-163 and 171-178.</td>
<td>Reproduction: Female Parts of Ch 11 Univ. Farm 003</td>
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<td>11</td>
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<td>Growth and Development</td>
<td>Ch 18</td>
<td>Growth: using egg Ch 8 143-144 Univ. Farm 003</td>
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<td># 5 in lab wk 9-10</td>
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<td>12</td>
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<td>Anatomy and Physiology</td>
<td>Ch 18 and Online</td>
<td>Heart and Lung Univ Farm meats lab</td>
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<td>13</td>
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<td>11/17</td>
<td>Animal behavior</td>
<td>Ch 22</td>
<td>Animal behavior Univ. Farm 003</td>
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<td>14</td>
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<td>Animal Health and Disease</td>
<td>Ch 21</td>
<td>Animal Health Univ. Farm 003</td>
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<td>15</td>
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<td>12/8</td>
<td>Issues in Animal Agriculture</td>
<td>Ch 23</td>
<td>Conclude Animal Health Plumas Hall - TBA</td>
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<td>16</td>
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<td>Final Exam 12-1:50 pm: Quiz 7</td>
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<td>Final given in lecture room.</td>
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**Where is the FARM 003 classroom at the University Farm?**

311 Nicholas C. Schouten Ln. Chico, CA 95928

- Once you get to the University Farm’s main entrance, go south on the main road and turn right on the first paved road to the west (by the Dairy Unit). *If you drove over the speed bumps, you missed the road...*

- Drive past the large yellow pavilion (which you will see on the left) and turn left at the first paved road.

- The FARM classrooms are next to the yellow pavilion, turn in and park in the large gravel parking lot. Find our classroom, FARM 003.

- There are several restrooms adjacent to our classroom and the pavilion.

- Speaking of parking, try to carpool if you can to save on fuel. Many of you will need your own vehicle to get back to campus for classes but do what you can to carpool. It’s a great way to meet your classmates and develop study groups.

- Play close attention to the weather forecast: we will be working outside so it will either be really hot (fall semester) or really wet and cold (spring semester). Wear appropriate attire, what I call “grubbies”, clothes you don’t mind getting wet, dirty or muddy. Bring sunscreen or a raincoat, whichever is more appropriate for your semester.

- Bring drinking water since there is not a drinking fountain nearby and consider bringing your lunch or a snack. There is no food or drink allowed in the FARM classrooms but you are welcome to eat outside in the parking area.

**Labs start at :15 past the hour** so don’t get a speeding ticket trying to get to the University Farm. Watch out for trains. DO NOT try to beat the train or drive around the railroad arms, your life is too precious to risk it. Besides, the CA Highway Patrol and Butte County Sheriff patrol these back roads a lot so watch out because they’re watching for you.

*Remember the University Farm is a working farm with slow-moving heavy equipment, livestock, and many other lab activities. Speed limit signs are posted and ENFORCED. Watch your speed when entering the farm and drive safely at all times.*