

## **AREC 305**

### **Agricultural and Resource Enterprise Analysis**

#### **Location and Meeting Times**

Lectures: Mon & Wed 11:00–11:50am, Rm. 136 Biology Building  
Labs: Fri 10:00-11:40am, Rm. 218 Shepardson Building

#### **Contact Information & Office Hours**

Instructor: Daniel Mooney, Assistant Professor, Agricultural and Resource Economics  
Office: B-308 Clark Building                      Email: daniel.mooney@colostate.edu  
Phone: (970) 491–4180                              Office hours: Tue 2:00–4:00pm or by appt

Teaching Assistant: Miles Rollison, Ph.D. Student, Agricultural and Resource Economics  
Email: rollison@rams.colostate.edu  
Office hours: TBD

#### **Course Description**

This course provides an introduction to agricultural and resource enterprise analysis for undergraduates from a wide range of majors. Specifically, it focuses on the use of financial records, budgets, and other analytical tools used in business and economic decision-making.

The course is intended to build and strengthen students' technical competency, problem-solving skills, and communication around these topics and tools. This will be achieved by blending traditional classroom instruction and evaluation with weekly computer-based lab exercises. These exercises will be organized as a "mock internship" and are designed to (i) provide hands-on experience working with data in Microsoft Excel and (ii) offer practice in interpreting results and communicating findings.

Not all students who enroll in this class will pursue a business-related career; however, virtually every aspect of your life will be affected by economic decisions of some kind. Like it or not, economics will be relevant to you. Therefore, all students will nevertheless benefit from this course by gaining valuable analytical tools and the necessary knowledge to use and understand them—with the ultimate goal being to improve your ability to evaluate economic decisions as they unfold throughout your lifetime.

#### **Course Pre-requisites**

Pre-requisites for this course include AREC 202 or ECON 202 (Principles of Microeconomics) and CS 110 or BUS 150 or CIS 120 (Personal Computing), or their equivalent. Students wishing to enroll based on equivalent experience must contact the instructor via email and provide a short description of how they gained this experience.

## Course Materials

Required Textbook. Kay, R., W. Edwards, and P. Duffy. 2015. *Farm Management*, 8<sup>th</sup> edition. 2015. McGraw-Hill. ISBN-10: 0073545872.

- Previous editions acceptable; but chapter order will vary
- Two copies of the textbook (8<sup>th</sup> edition) are available to check out for 2 hour increments from the Course Reserves desk at the Morgan library.

Supplemental readings. See the Canvas course site for updates throughout the semester.

Software. We will make extensive use of Microsoft Excel and Microsoft Word. These programs are available to all students in the computer lab meeting room (Rm. 218 Shepardson).

## Grading Policies

Course grades will be based on several areas of evaluation, including examinations, participation/quizzes, and lab exercises. These components will be weighted as follows:

Lab Exercises:	200 points (12 labs @ 12 points each; 1 lab @ 56 points)
Participation/Quizzes:	90 points (Approx. 3 points per class)
Midterm Exam:	90 points
<u>Final Exam:</u>	<u>120 points</u>
Total:	500 points

Lab exercises will be assigned on an almost a weekly basis. These exercises will be considered late once the assigned deadline has passed. Late exercises will be accepted but with a two-point deduction per day. No credit will be given after suggested solutions are posted.

A participation/quiz score will be assigned for each lecture period. The score will depend on your response to questions posed in class. Questions will vary in topic and complexity, with some designed as quizzes to prepare for exams. Some absences (anticipated or not) are inevitable, and the three lowest scores will be dropped before determining final grades.

The midterm and final exam dates will be announced in advance (see below for dates). Non-attendance for exams will result in a score of zero. In the case of an unavoidable conflict with exam dates, please contact the instructor at least three weeks prior to the date.

Final grades will be assigned based on point total accumulations as follows: A = 90-100%; B = 80-89%; C = 70-79%; D= 60-69%; F = <60%. Ranges for grade categories may be adjusted downward, but will not be raised. Pluses and minuses may be awarded at the instructors' discretion.

## Learning Outcomes

There are three major learning outcomes for this course. Upon the successful completion of the course, students will be able to:

1. Demonstrate technical competency in the use of financial records, budgets, and other planning tools to inform agricultural business and resource enterprise decision-making.
2. Apply analytical problem-solving skills to real-world agricultural and natural resource issues, including the evaluation of available techniques and the selection of appropriate solution(s).
3. Interpret and communicate important enterprise analysis concepts, methods, and findings at a professional level.

## Course Topics

The topic areas to be covered in this class are organized into two units. Students who study and develop a thorough understanding of these units and topics will achieve the learning outcomes stated above. The tentative timeline and list of topics to be covered is:

Topic	Reading (KED*)	Lab Exercise
<i>Measuring Past and Current Management Performance</i>		
Agricultural Management	Chps. 1 & 2	Transactions Journal
Analyzing Net Worth	Chps. 3 & 4	Balance Sheet
Analyzing Profit and Loss	Chp. 5 (Except depreciation)	Income Statement
Capital and the Use of Credit	Chp. 19	Loan Schedules
Depreciation of Capital Assets	Chp. 5 (Depreciation, 81-85)	Depreciation Schedules
Farm Business Analysis	Chp. 6	Coordinated Records
<i>Improving Future Management Performance</i>		
Projecting Cash Inflows & Outflows	Chp. 13	Cash Flow Budgeting
Planning for Profits	Chp. 10	Enterprise Budgeting
Planning for Change	Chp. 12	Partial Budgeting
Whole Firm (Farm) Planning	Chp. 11	Linear Programming
Investment Analysis	Chp. 17	Net Present Value
Business Organization and Taxes	Chp. 14	Income Taxes

\*KED = Kay, Edwards, Duffy. 2016. Farm Management, 8<sup>th</sup> ed. McGraw Hill.

## Key Dates

Please make note of the following exam dates:

Midterm exam: Wednesday, March 6 (In class)  
Final exam: Thursday, May 9, 7:30-9:30am (Rm. 136 Biology)

## **Accommodations**

If you are a student who will need accommodations in this class due to a disability or chronic health condition, please make an appointment with me to discuss your individual needs. Any accommodation must be discussed in a timely manner (at least two weeks) prior to implementation. A verifying letter of accommodation from Resources for Disabled Students is required before any accommodation can be provided.

## **Academic Integrity**

This course will adhere to the CSU Academic Integrity Policy as found on the Student' Responsibilities page of the CSU General Catalog (<http://catalog.colostate.edu/general-catalog/policies/students-responsibilities/#academic-integrity>) and in the Student Conduct Code (<https://resolutioncenter.colostate.edu/conduct-code/>). At a minimum, violations will result in a grading penalty in the course and a report to the Office of Student Resolution Center. Violations can also result in failing the assignment, failing the course, or expulsion from CSU. The CSU writing center defines plagiarism this way:

“Plagiarism is the unauthorized or unacknowledged use of another person's academic or scholarly work. Done on purpose, it is cheating. Done accidentally, it is no less serious. Regardless of how it occurs, plagiarism is a theft of intellectual property and a violation of an ironclad rule demanding 'credit be given where credit is due.’”

CSU Writing Guides: Understanding Plagiarism (<https://writing.colostate.edu/guides/>). Accessed, January 14, 2019.

Of course, academic integrity means more than just avoiding plagiarism. It includes doing your own reading and studying. It also involves regular class attendance, careful consideration of all class materials, and engagement with the class and your fellow students.

## **Principles of Community**

The Principles of Community support the Colorado State University mission and vision of access, research, teaching, service and engagement. A collaborative, and vibrant community is a foundation for learning, critical inquiry, and discovery. Therefore, each member of the CSU community has a responsibility to uphold these principles when engaging with one another and acting on behalf of the University:

Inclusion: We create and nurture inclusive environments and welcome, value and affirm all members of our community, including their various identities, skills, ideas, talents, and contributions.

Integrity: We are accountable for our actions and will act ethically and honestly in all our interactions.

Respect: We honor the inherent dignity of all people within an environment where we are committed to freedom of expression, critical discourse, and the advancement of knowledge.

Service: We are responsible, individually and collectively, to give of our time, talents, and resources to promote the well-being of each other and the development of our local, regional, and global communities.

Social Justice: We have the right to be treated and the responsibility to treat others with fairness and equity, the duty to challenge prejudice, and to uphold the laws, policies and procedures that promote justice in all respects.

## **Mental Health**

Need Help? CSU is a community that cares for you. If you are struggling with drugs or alcohol and/or experiencing depression, anxiety, overwhelming stress or thoughts of hurting yourself or others please know there is help available. Counseling Services has trained professionals who can help. Contact 970.491.6053 or go to <http://health.colostate.edu>.

If you are concerned about a friend or peer, tell someone at by calling 970.491.1350 to discuss your concerns with a professional who can discreetly connect the distressed individual with the proper resources (<http://supportandsafety.colostate.edu/tellsomeone>). Rams take care of Rams. Reach out and ask for help if you or someone you know is having a difficult time.

## **Sexual Assault and Violence Elimination**

CSU's Student Sexual Harassment and Violence policy, following national guidance from the Office of Civil Rights, requires that professors follow CSU policy as a "mandatory reporter" of any personal disclosure of sexual harassment, abuse, and/or violence related experiences or incidents shared with the professor in person, via email, and/or in classroom papers or homework exercises. These disclosures include but are not limited to reports of personal relational abuse, relational/domestic violence, and stalking.

While professors are often able to help students locate appropriate channels of assistance on campus (e.g., see the CSU Health Network link below), disclosure by the student to the professor requires that the professor inform appropriate CSU channels to help ensure that the student's safety and welfare is being addressed, even if the student requests that the disclosure not be shared.

For counseling support and assistance, please see The CSU HEALTH NETWORK, which includes a variety of counseling services that can be accessed at: <http://www.health.colostate.edu/>. And, The Sexual Assault Victim Assistance Team is a confidential resource for students that does not have a reporting requirement and that can be of great help to students who have experienced sexual assault. The web address is: <https://wgac.colostate.edu/support/>.