



## AAE 320: FARMING SYSTEMS MANAGEMENT

AAE 320 001 (3 credits) 2020 Fall

Professor Paul D. Mitchell

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608-320-1162

**Instruction Mode:** Face-to-Face Classroom Instruction. Contact instructor for online options.

**Schedule and Location:** MWF 9:55 – 10:45 in DeLuca Forum, Morgridge WID

This 3-credit course meets for three 50-minute class period each week over the semester with the expectation that students will work on course activities for a minimum of 2 hours out of classroom for every class period. This syllabus includes additional information about meeting times and expectations for student work.

**Course Description:** Students will learn basic economic principles and their application to the management of agricultural production systems and gain an appreciation of the complexity of U.S. agriculture. The main topics include the economics of optimizing farm production, farm financial analysis and tax consequences of business arrangements, and how federal commodity support programs work from a farmer perspective. In addition, we cover several special topics to expose students to some of the complex issues impacting US agriculture.

**Prerequisite(s):** AAE 215, ECON 101, or 111      **Designations/Attributes:** None

**Office Hours:** TTh 11 AM – 12 PM or by appointment.

Following university policy, office hours will be conducted remotely via Zoom. I will send out links to students via email. Occasional exceptions can be made if we both agree and we must follow physical distancing and health recommendations.

**Course Page:** <https://aae.wisc.edu/pdmitchell/aae-320/> (**not in Canvas**)

Materials will be posted regularly, including presentations, lecture videos, readings, podcasts, and spreadsheets, as well as discussion assignments, problem sets, exams, and answer keys. Lecture videos will be posted online before class meetings. Classroom time will be used for answering questions on the lectures, working problems sets, and discussion of special topics. Materials from previous years will remain posted to be updated as the semester progresses. Canvas will be used to collect student assignments and to post student grades.

### Textbook

No textbook is required. If interested, the “classic” farm management text is *Farm Management*, 9<sup>th</sup> ed. R.D. Kay, W.M. Edwards, and P.A. Duffy. Dubuque, IA: McGraw Hill. 2019.

Students will have costs for printing the materials freely available on the course page.

### Course Objective

For students to understand basic economic principles and their application to the management of agricultural production systems and to gain an appreciation of the complexity of U.S. agriculture.

## Grading

Grades will be calculated based on the following weights

Problem Sets	20%
Class Discussion & Participation	20%
Mid-Term Exams (2 x 20% each)	40%
Cumulative Final Exam	20%

Grading Scale:

$\geq 93$	A	$78 \leq \text{and} < 83$	BC	$< 60$	F
$88 \leq \text{and} < 93$	AB	$70 \leq \text{and} < 78$	C		
$83 \leq \text{and} < 88$	B	$60 \leq \text{and} < 70$	D		

## Problem Sets

Students will be assigned several (8 or more) problem sets based on lectures and discussion. As a flipped class, students will come to lecture with questions, work together in groups and we will work through example problems similar to the problem sets in the classroom. Problem sets will be posted on the Course Page (WordPress). Students will submit completed problem sets electronically as clearly readable scans or photos to Canvas (maybe email). Answer keys will be posted on the WordPress page soon after submission ends. Grading will take longer for the grader to complete and post to Canvas.

## Class Discussion and Participation

The course will examine multiple special “issues” on food and agriculture with short readings, videos, and/or podcasts posted on the course page for students to complete before class. Students will complete a Discussion Sheet of short discussion questions to be submit electronically before class; sheets submitted later will be given half credit. During class, students will discuss the materials and additional questions in small groups or online in Zoom Breakout Rooms, then summarize responses to the class as a whole. The goal is for students to learn some facts about each issue and to understand some of their complexity.

## Exams

There will be two mid-term exams and a cumulative final. Exams will be posted via Canvas (or email) with a limited time for completion. Exams will be open book and notes. Students will submit completed exams electronically as clearly readable scans or photos to Canvas (maybe email). Exam questions will be developed from class lectures, materials posted on the course page and discussed in class and the problem sets. Previous exams and keys will be available on the course page to aid your studies. Questions will consist of true/false, multiple choice, and short answer problems, but mostly mathematical problems. Expect questions to challenge your understanding and use of managerial concepts and tools. Graded exams will be returned as quickly as possible.

I will announce exams at least 1 week in advance, but likely earlier.

**Final Exam: December 12 (Saturday), 12:25 – 2:25 PM**

## Final Comment

Occasionally it becomes necessary to change the grading scheme, topics covered, or other course details. I reserve the right to do so, but I will discuss such changes with students during lecture.

## **Outline of Topics Covered in AAE 320**

### I. Introduction

1. Course Overview
2. Wisconsin Agriculture and the US Food System

### II. Production Economics

1. Partial Budgeting
2. Single Input Production Economics
3. Multiple Input Production Economics
4. Cost Economics

**EXAM #1**

**(ABOUT OCTOBER 9<sup>TH</sup>)**

### III. Farm Finance

1. Balance Sheets
2. Depreciation
3. Income Statement

### III. Taxes, Business Arrangements and Farm Transfer

1. Overview of Taxes on Farms
2. Business Arrangement Alternatives
3. Tax Considerations for Farm Transfer

**EXAM #2**

**(ABOUT NOVEMBER 6<sup>TH</sup>)**

### IV. U.S. Farm Policy and Programs

1. Commodity Support Programs
2. Crop Insurance Programs

### V. Agricultural Sustainability

1. Definitions and Concepts
2. Programs and Impacts
3. Technology Change

**FINAL EXAM**

**(DECEMBER 12, 12:25 PM – 2:25 PM)**

### Special Topics

- Agriculture and Water Quality
- Dairy Farming in Wisconsin and Consolidation
- The More-On Principle
- Inelasticity in Agriculture and Food
- Beginning Farmers
- Agriculture and Rural Poverty
- Impacts of Technological Change in Agriculture
- Diversity in Agriculture

## Coronavirus Pandemic and COVID-19

### Badger Pledge

I encourage everyone to read the Badger Pledge (<https://smartrestart.wisc.edu/badgerpledge/>) about how we all need to work together to prevent the spread of the coronavirus and promote our collective health. In brief, it is about preventing the coronavirus spread by wearing face coverings and social distancing broadly defined, monitoring ourselves for symptoms and staying home and getting tested as needed. During this pandemic, agriculture has been considered an essential industry. Workers have been expected to continue working so that we can all eat. We are no different. Our activities are essential, but we need to take common sense precautions.

### UW-Madison Face Covering Guidelines (<https://d1cjb8q1w2lzm7.cloudfront.net/wp-content/uploads/sites/22/2020/06/Cloth-face-cover-guidance-06-22-20-final.pdf>)

While on campus all employees and students are required to wear appropriate and properly fitting face coverings while present in any campus building unless working alone in a laboratory or office space. CDC guidelines on appropriate and properly fitting face coverings and how to wear them correctly: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-to-wear-cloth-face-coverings.html>.

### Face Coverings During In-person Instruction Statement (COVID-19)

Individuals are expected to wear a face covering while inside any university building. Face coverings must be worn correctly (i.e., covering both your mouth and nose) in the building if you are attending class in person. If any student is unable to wear a face-covering, an accommodation may be provided due to disability, medical condition, or other legitimate reason.

Students with disabilities or medical conditions who are unable to wear a face covering should contact the McBurney Disability Resource Center (<https://mcburney.wisc.edu/>) or their Access Consultant if they are already affiliated. Students requesting an accommodation unrelated to disability or medical condition, should contact the Dean of Students Office (<https://doso.students.wisc.edu/>).

Students who choose not to wear a face covering may not attend in-person classes, unless they are approved for an accommodation or exemption. All other students not wearing a face covering will be asked to put one on or leave the classroom. Students who refuse to wear face coverings appropriately or adhere to other stated requirements will be reported to the Office of Student Conduct and Community Standards (<https://conduct.students.wisc.edu/>) and will not be allowed to return to the classroom until they agree to comply with the face covering policy. An instructor may cancel or suspend a course in-person meeting if a person is in the classroom without an approved face covering in position over their nose and mouth and refuses to immediately comply.

### Quarantine or Isolation due to COVID-19

Student should continually monitor themselves for COVID-19 symptoms and get tested for the virus if they have symptoms or have been in close contact with someone with COVID-19. COVID-19 symptoms include fever or chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, diarrhea. Use the UW COVID-19 Symptom Tracker to see if

you should get tested: <https://doso.students.wisc.edu/>. See the UW COVID-19 Testing page for locations and how to get tested: <https://www.uhs.wisc.edu/medical/testing/>

Student should reach out to instructors as soon as possible if they become ill or need to isolate or quarantine, in order to make alternate plans for how to proceed with the course. Students are strongly encouraged to communicate with their instructor concerning their illness and the anticipated extent of their absence from the course (either in-person or remote). The instructor will work with the student to provide alternative ways to complete the course work.

## **Additional Information**

### **Academic Calendar and Religious Observances**

See: <https://secfac.wisc.edu/academic-calendar/#religious-observances>

### **Academic Integrity Statement**

By virtue of enrollment, each student agrees to uphold the high academic standards of the University of Wisconsin-Madison; academic misconduct is behavior that negatively impacts the integrity of the institution. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these previously listed acts are examples of misconduct which may result in disciplinary action. Examples of disciplinary action include, but is not limited to, failure on the assignment/course, written reprimand, disciplinary probation, suspension, or expulsion.

### **Accommodations of Students with Disabilities**

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform me of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. I will work either directly with you or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA. See the McBurney Disability Resource Center: <https://mcburney.wisc.edu/>.

### **Diversity and Inclusion Statement**

Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world.