AGRICULTURAL ECONOMICS 3603

AGRICULTURAL FINANCE

Fall Semester 2016

Professor: Rodney Beard

Class Meets: Tues and Thurs: 14:00 – 15:50, room: L-328

Tuesdays – Lecture L328

Thursdays – Lab class L328 (This may change look out for an announcement on Piazza)

Office Hours: After class, and by appointment.

Virtual office hours: on Piazza

Agricultural Economics 3603 is a study of the tools used in finance and the agricultural and agribusiness lending industry. The course is designed for students planning careers involving financial decision making and for those who may enter the agricultural credit field.

The course assumes students have a basic understanding of accounting. Prerequisites include AGEC 3213 and AGEC 3423.

Course Objectives

After completing the course, students should be able to:

- 1) Understand key financial relationships important to personal and agribusiness success.
- 2) Understand time value of money concepts and be able to conduct capital investment analyses.
- 3) Prepare and interpret financial statements used for agricultural firms.
- 4) Understand the relationships between firm growth and leverage, liquidity, and risk.
- 5) Understand the different financial institutions that serve agriculture and understand lending procedures terms and costs.

Required Textbook: I will base the course around Charles B. Moss, Agricultural Finance, Routledge, 2013.

Recommended Readings:

Gitman, Lawrence J., and Chad j. Zutter. "Principles of Managerial Finance: Brief 7 Pearson, 2015.

Additional readings may be recommended in class.

The Wall Street Journal is an excellent way to keep up with current developments in financial markets and other contemporary financial topics. You are encouraged to read the Wall Street Journal daily and bring topics of interest to class.

Attendance and participation:

Attendance will be extremely important to successful performance in this course. Good class notes, and the review of those notes are the essential requisites for success in this class. 10% of the course grade will be allocated to participation. This means active participation.

Assessment:

Participation 10% Lab exercises (Coursework) 40% Mid-term exam 20% Final Exam 30%

Mid-term and Final Exam

There will be one two-hour mid-term exam 20% and a final comprehensive exam 30%, consisting of short answer question and calculation problems. The final exam is cumulative so it will cover all the material in the course. If the grade for the final exam is higher than the grade for the mid-term the higher grade will be given for both. Both exams will consist of short answer questions and problems. No make-up exams will be given unless arrangements are made with the instructor.

Grading

Letter grades will be assigned based on your final numerical average in the class based on the following percentage scale (subject to instructor adjustment):

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A = 4.0 (90-100)
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A - = 3.7 (85-89)

B + = 3.3 (82-84)

B = 3.0 (78-81)

B - = 2.7 (75-77)

C + = 2.3 (72-74)

C - = 1.5 (64-67)

D = 1.0 (64-67)

F = 0 (below 60)

Feel free to discuss your performance and standing in the class at any time with the instructor.

Academic Integrity

Students are expected to know, understand and comply with the ethical standards of the university. In addition, students have the obligation to inform the appropriate official of any acts of academic dishonesty by other students of the university. Academic dishonesty is defined as **a student's use of unauthorized assistance with intent to deceive** an instructor or other such person who may be assigned to evaluate the student's work in meeting course and degree requirements. Examples of academic dishonesty include:

Plagiarism

Plagiarism is the use of another person's distinctive ideas or works without acknowledgement. The incorporation of another person's work into one's own requires appropriate identification and acknowledgement, regardless of the means of appropriation. The following are considered to be forms of plagiarism when the source is not noted:

- Word for word copying of another person's ideas or works
- **The mosaic** (interspersing of one's own works here and there while, in essence, copying another's work)
- The paraphrase (the rewriting of another's work, yet still using their fundamental idea or theory)
- **Fabrication** (invention of or counterfeiting of sources)
- **Submission** of another's work as one's own
- Neglecting quotation marks on material that is otherwise acknowledged.

Acknowledgement is not necessary when the material used is common knowledge (Common knowledge means that everyone know that everyone knows that everyone knows..the material (Fagin, Halpern, Moses and Vardi, *Reasoning about knowledge*, The MIT Press, 1995)).

Cheating

Cheating involves the **possession, communication or use of information, materials, notes, study aids, or other devices not authorized** by the instructor in any academic exercise, or communication with another person during such an exercise. Examples of cheating are:

- Copying from another's paper or receiving unauthorized assistance from another during an academic exercise or in the submission of academic material
- Using a calculator when its use has been disallowed
- Collaborating with another student or students during an academic exercise without the consent of the instructor

Fabrication

Fabrication involves inventing or counterfeiting information, i.e. creating results not obtained in a study or laboratory experiment. Fabrication, on the other hand, involves the

deliberate alteration or changing of results to suit ones needs in an experiment or other academic exercise.

Disabilities

If you have any condition, such as a physical or learning disability, that will make it difficult for you to carry out your work as outlined here or that will require academic accommodations, please notify the instructor as soon as possible and/or contact Student Disability Services.

Lab classes:

These will be held on the Thursday. We will work on class exercises in the second class (lab class) you should bring your laptop computers to this class as you will need them to do the exercises. These exercises will consist of a set of pre-prepared interactive notebooks (Jupyter notebooks, see http://jupyter.org/) that you should work through. These notebooks are accessible from the class webpage on Moodle or using the QR codes in the course outline below. Or on my Jupyterhubserver for which a login and password will be provided to each of you in class.

If you wish to install Jupyter on your own computer you can do so by installing Anaconda which can be downloaded from https://www.continuum.io/downloads
Versions for Windows, OS/X and Linux are available.

Webpage and online materials:

The class webpage may be found on Moodle at http://202.205.89.101/neweol/, from Moodle you will find links to all the resource material we will use in class.

This term we will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates, the TA, and myself. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza. If you have any problems or feedback for the developers, email team@piazza.com.

Find our class page at: https://piazza.com/cau.edu.cn/fall2016/agec3603/home

To access Piazza you first need to sign-up which can be done here https://piazza.com/cau.edu.cn/fall2016/agec3603 or by scanning the QR-code:



Handouts will be made available for downloading from the course webpage. The handouts supplement lectures and their contents may be covered on exams.

AGEC 3603 COURSE OUTLINE

| Week | Lecture | Lab | Readings |
|------|--|---|-----------------------------|
| 1 | Introduction | No lab (holiday) | Moss, Chapter 1 |
| | Lecture Notes: Handout: | | |
| 2 | Capital Structure of Agriculture and the US Financial System Lecture Notes: Handout: | Discussion Of capital structure and internal theory of the firm | Moss, Appendices A and C |

| 3 | Financial Institutions and Markets I Lecture notes: Handout: | Introduction to software for lab (Bring your own computer) | Moss, Chapters 1-2 |
|---|---|--|--------------------|
| 4 | Holiday | Holiday | |
| 5 | Financial Institutions and Markets II Lecture continues previous lecture | L ab exercise | Moss, Chapters 1-2 |
| 6 | Financial Ratios I Lecture notes: | Lab exercise | Moss, Chapter 3 |

| | Handout: | | |
|----|---------------------|---------------|-----------------|
| 7 | Financial Ratios II | Lab exercise | Moss, Chapter 4 |
| | Handout: | | |
| 8 | Revision | Practice exam | |
| 9 | Mid-term exam | | |
| 10 | Capital budgeting I | Lab exercise | Moss Chapter 5 |
| | Lecture notes: | | |

| | Handout: | | |
|----|--|---------------------------|----------------|
| 11 | Capital budgeting II Lecture continues | Lab exercise Continued | Moss Chapter 5 |
| 12 | Investment under uncertainty I Lecture notes: Handout: | Lab exercise | Moss Chapter 6 |
| 13 | Investment under uncertainty II Lecture continues | Lab exercise Continued | Moss chapter 6 |

| 14 | Debt choice I Lecture notes: Handout: | Lab exercise | Moss Chapter 7 |
|----|---|---------------------------|----------------|
| 15 | Debt choice II Lecture continues | Lab exercise Continued | Moss Chapter 7 |
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| 16 | Conclusion | Revision | |
| 17 | Review Week | No classes | |
| 18 | Final Exam | | |