

University of Arkansas
Agricultural Economics and Agribusiness
AGEC 5143 Financial Management in Agriculture
Fall 2019, TR 9:30-10:45, HOEC 0217

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Home page (Blackboard Learn) URL: <https://learn.uark.edu>

Office Hours: MWF 10:40-11:30 a.m., TR 11:00-11:30 a.m., but I encourage you to contact me at most any time. If I am busy when you stop by, we will arrange for a mutually convenient time to meet. If you set an appointment and subsequently find out you cannot make it, please call or e-mail me and leave a message to that effect.

Primary Text:

Ross, Stephen A., Randolph W. Westerfield, Jeffrey Jaffe, Bradley D. Jordan. *Corporate Finance*. McGraw-Hill Irwin, 11th edition, 2016. Or you may want to use another edition (for example McGraw-Hill Irwin 9th edition, 2010; 10th edition, 2013; 12th edition, 2019), but there are some differences. FYI, the 9th and 11th editions are requested to be on reserve.

Optional Texts on Reserve at Mullins Library:

Moss, Charles B. *Agricultural Finance*. New York: Routledge, 1st edition, 2013. ISBN 978-0-415-59904-7 (hbk), 978-0-415-59907-8 (pbk) or in the Mullins Library Catalog, 2012, ISBN 978-0-203-54935-3 (ebk) and 020357935X (ebk). DOI: 10.4324/9780203549353

Barry, Peter J., and Paul N. Ellinger. *Financial Management in Agriculture*. Prentice Hall, 7th edition, 2012. ISBN-10: 0-13-503759-X; ISBN-13: 978-0-13-503759-1.

These books and some other reference materials have been requested and may be found at the Main Reserve Desk in Mullins Library <https://library.uark.edu/search/r> or in the Library Catalog.

Readings: Assigned as the course progresses (on reserve at Mullins Library <https://library.uark.edu/search/r>).

Course objectives: The main objective of the course is to provide students with a working knowledge of financial management concepts and their applications to problems faced by firms that operate in the agricultural sector. The course covers the basic tools of financial analysis, including financial arithmetic and asset evaluation under risk. Topics covered include management of current assets, capital budgeting, cost of capital, and capital structure.

Procedure: Background material for the class will be drawn from books, research reports, journals, magazines, and instructor's notes. The instructor will discuss in class the readings and provide illustrations of concepts and techniques that students will be asked to apply to specific problems solved in class and homework assignments.

Attendance and Out-of-Class Work: This is a graduate course. You are expected to be in class. Class participation and discussion is expected and is an important element of the class. In order to be successful, the average student will be expected to prepare for each class by engaging in a minimum of six hours of out-of-class work per week for the three credit hours earned.

Group Activities: Group activities are an important part of this class. The instructor will assign students to a group. Groups will be asked to prepare and present "Adopt-A-Company" reports.

For the "Adopt-A-Company" activities, each group will be asked to select an agribusiness company of their choice with the instructor's approval. Groups are asked to select a company that has existed for at least 5 years and for which there is readily available data. Be sure to choose a parent company, not just a subsidiary. You will be asked to follow this company throughout the semester and provide written reports and brief in-class presentations. No two groups can select the same company. Companies are available on a "first come, first serve" basis. Mullins Library resources are available at: <https://uark.libguides.com/content.php?pid=94611>

Group Grading: Each member of the group will receive the same grade on the group's reports and case studies. However, to encourage participation of all group members, you will be asked, near the end of the semester, to

allocate points to other members of your group. Each person in the group will be given the following number of points to allocate.

$$(\text{Number of students in your group} - 1) \times 50$$

No one individual can be given more than 100 points or less than 0. Each person's ratings of other group members will be held strictly confidential. The points will be used to adjust individual members' group grades for the semester.

Exams, Assignments and Grading: In class exams during the semester will be over material since the previous exam except when materials in previous sections are required to accomplish the task in the current section. The final exam is comprehensive. No exams will be given early or late for specific individuals for other reasons unless verified medical emergencies. If you have a legitimate excuse for missing the exam on the day that it is scheduled, your final exam percentage will be averaged in for the exam you missed. Contact the instructor prior to the exam as soon as you are aware of a conflict. If you do not have a valid excuse, a zero will be averaged in.

All assignments must be handed in at the *beginning* of the class period on the day that they are due or earlier. Late assignments will be graded with a zero. The lowest assignment score will be dropped. Adopt-A-Company reports cannot be dropped.

The per cent weighting of the exams and assignments will be as follows:

Adopt-A-Company Reports	20	Tentatively #1 Sep. 24, #2 Nov. 21
Assignments	10	Various dates to be announced (tba)
Exam I	20	October 8, tentative
Exam II	20	November 26, tentative
Comprehensive Final Exam ¹	30	December 19, 8:00-10:00 am

Letter grades will be assigned based on your final weighted numerical average.

A	=	90-100	B-	=	60-65	D+	=	47-49
A-	=	80-89	C+	=	57-59	D	=	43-46
B+	=	74-79	C	=	53-56	D-	=	40-42
B	=	66-73	C-	=	50-52	F	<	40

The instructor reserves the right to adjust these grade ranges, but only to the extent they benefit students. For example, you might earn an A with an 89 average or a B with a 65 average), but this will not be done until final averages are computed at the end of the semester after the final exam. If at any time during the semester you wish to discuss your performance in the course, please come by my office for a visit.

Academic Honesty: Do not cheat. All papers submitted for this course must be original and may not have been submitted for another course without the instructor's knowledge. Copying or plagiarism is not allowed. Plagiarism includes copying verbatim text, paragraphs, sentences, etc. from other sources without properly quoting, noting, or citing the source. If you are caught cheating, campus procedures will be followed to exact the appropriate punishment. The campus policy on academic honesty states:

"As a core part of its mission, the University of Arkansas provides students with the opportunity to further their educational goals through programs of study and research in an environment that promotes freedom of inquiry and academic responsibility. Accomplishing this mission is only possible when intellectual honesty and individual integrity prevail." "Each University of Arkansas student is required to be familiar with and abide by the University's 'Academic Integrity Policy' which may be found at <https://honesty.uark.edu/policy/index.php>. Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor."

Inclement Weather Policy: If University decides to close, have a delayed opening, or calls for an early dismissal (575-7000, or <https://emergency.uark.edu>), our class will not meet if applicable. For example, if the University has

¹ The final exam policy for accommodation of students having three or more final exams on the same day may be found at: <https://catalog.uark.edu/undergraduatecatalog/academicregulations> and <https://registrar.uark.edu/registration/final-exam-schedule>

an early dismissal time of earlier than 2:50, our class will not meet. Some of you have a more difficult commute to class than do others. The instructor leaves it to the student's personal judgment to determine whether to attend class during inclement weather. For information on the University's hours and Razorback Transit routes, check the University's Weather page at <https://emergency.uark.edu> whenever the weather is bad.

Emergency Procedures: Many types of emergencies can occur on campus; instructions for specific emergencies such as severe weather, active shooter, or fire can be found at <https://emergency.uark.edu>.

Severe Weather (Tornado Warning):

- Follow the directions of the instructor or emergency personnel
- Seek shelter in the basement or interior room or hallway on the lowest floor, putting as many walls as possible between you and the outside
- If you are in a multi-story building, and you cannot get to the lowest floor, pick a hallway in the center of the building
- Stay in the center of the room, away from exterior walls, windows, and doors

Violence / Active Shooter (CADD):

- CALL- 9-1-1
- AVOID- If possible, self-evacuate to a safe area outside the building. Follow directions of police officers.
- DENY- Barricade the door with desk, chairs, bookcases or any items. Move to a place inside the room where you are not visible. Turn off the lights and remain quiet. Remain there until told by police it's safe.
- DEFEND- Use chairs, desks, cell phones or whatever is immediately available to distract and/or defend yourself and others from attack.

Course Materials Protection

Tape-recording and/or any other form of electronic capturing of lectures is expressly forbidden. Be aware that this is a legal matter involving intellectual property rights as described below:

State common law and federal copyright law protect my syllabus and lectures. Whereas you are authorized to take notes in class thereby creating derivative work from my lecture, the authorization extends only to making one set of notes for your own personal use and no other use. You are not authorized to record my lectures, to provide your notes to anyone else or to make any commercial use of them without expressed, prior permission from me.

Persons authorized to take notes for the Center for Educational Access, for the benefit of students registered with the Center, will be permitted to do so, but such use still is limited to personal, non-commercial use. Similarly, you are permitted to reproduce notes for a student in this class who has missed class due to authorized travel, absence due to illness, etc. However, to be clear, any class notes must not be sold or made available for any commercial use.

Miscellaneous: Turn off cell phones and other electronic devices prior to class. No tobacco products in class. If you want to request reasonable accommodations for this class due to a disability, you must first register with the Center for Educational Access (CEA) and hand-deliver an official Accommodation Letter from the CEA. For details, see: <https://cea.uark.edu>.

Disclaimer: The instructor reserves the right to alter the contents, requirements, and/or scheduling of this course as he sees fit.

**AGEC 5143 Financial Management in Agriculture
Course Outline²**

- I. Introduction (Beierlein chapters 1, 2, 6; Barry et al. chapters 1, 2, 20; Ross et al. chapter 1) Aug 27
 - A. U.S. Food and Fiber Industry (Class 1; Beirlein ch. 1; Barry ch.1)
 - B. Role of Financial Management (Classes 1-2; Ross ch.1, Barry ch. 1, 2; Beirlein ch. 2)
 - C. Business Organization (Class 2; Ross ch. 1, Barry ch. 20, Beierlein ch. 6)

- II. Financial Analysis and Planning (Ross et al. chapters 2, 3, 15, 26; Barry et al. chapters 3, 4, 5 pp. 134-151)
 - A. Analyzing Firm Performance (Classes 2-5; Ross ch. 2, 3, 15; Barry ch. 3, 4) Labor Day Holiday, no class
 - 1. Financial Statements (download Ellinger, P.N., B.L. Ahrendsen, and C.B. Moss, 2012. "Balance Sheet and Income Statement Issues in ARMS." *Agricultural Finance Review* Vol. 72, Issue 2: 247-253, by searching for the journal title at <https://libraries.uark.edu> and then selecting Emerald Journals)
 - 2. Ratio Analysis (download Ahrendsen, B.L. and A.L. Katchova, 2012. "Financial Ratio Analysis using ARMS." *Agricultural Finance Review* Vol. 72, Issue 2: 262-272, by searching for the journal title at <https://libraries.uark.edu> and then selecting Emerald Journals)
 - 3. Dupont Analysis
 - B. Taxes (Classes 6-7)
 - C. Financial Planning (Classes 6-7; Barry ch. 5 pp. 134-51; Ross ch. 26; Brealey & Myers Ch. 28)
 - 1. Financial Forecasting
 - 2. Short-Term Financing
 - D. Financing Plans (Class 8)
 - 1. Financing Current Assets
 - 2. Financing Depreciable Assets
 - 3. Financing Fixed Assets
 - 4. Repayment Plans for Fixed and Depreciable Assets
 - E. Financial Feasibility (Class 8)

- III. Present Value Concepts (Ross et al., chapters 4, 8, 9; Robison & Barry, chapters 3, 5)
 - A. First Principles of Finance (Classes 8-9)
 - 1. Perfect Capital Market Assumptions
 - 2. The Investment Decision
 - 3. The Consumption Decision
 - B. Discounting Cash Flows (Classes 9-10)
 - 1. Definitions
 - 2. Future and Present Value of a Lump Sum
 - 3. Annuity
 - 4. Perpetuity
 - C. Valuing Bonds (Class 10)
 - 1. Various Bonds
 - 2. Interest Rates and Bond Prices
 - 3. Yield to Maturity, Term Structure and Spot Rates
 - D. Valuing Common Stocks (Classes 10-11)
 - 1. Dividend Growth Models
 - 2. Estimating Growth Rate
 - 3. Estimating Discount Rate
 - 4. Price-Earnings Ratio

Exam I (Class 13) Oct. 8 tentative

- IV. Capital Budgeting (Ross et al., chapters 5, 6)

² See academic semester calendar for important dates: registrar.uark.edu/academic-dates/academic-semester-calendar

- A. Investment Decision Methods (Classes 12-14)
 - 1. Net Present Value
 - 2. Payback Period
 - 3. Average Accounting Return
 - 4. Internal Rate of Return
 - 5. Profitability Index
 - B. Investments of Unequal Lives (Class 14)
 - 1. Matching Cycles
 - 2. Equivalent Annuity
 - C. Estimating Cash Flows for NPV Analysis (Classes 15)
 - 1. Incremental Cash Flows
 - 2. Inflation
- V. Risk (Calculating Discount Rates) (Ross et al. Chapters 10-13) No class on Fall break
- A. Return and Risk (Classes 16-17)
 - 1. Expected Return
 - 2. Variance
 - B. Systematic and Unsystematic Risk (Classes 18)
 - 1. Systematic Risk
 - 2. Unsystematic Risk
 - 3. Diversification
 - C. Capital Market Line (Class 18)
 - D. Security Market Line (Class 19)
 - E. Capital Asset Pricing Model (Class 19)
 - F. Characteristic Line (Class 19)
 - G. Arbitrage Pricing Theory (Class 20)
 - H. Beta Determinants (Class 21)
 - 1. Growth
 - 2. Size
 - 3. Business Risk
 - 4. Financial Leverage
 - I. Cost of Capital (Classes 22)
 - 1. Weighted Average Cost of Capital
 - 2. Cost of Equity Capital
 - 3. Cost of Debt Capital
 - 4. With Taxes
 - 5. Finding the Correct Beta
- Exam II (Class 26) Nov. 26, tentative**
- VI. Capital Structure (Ross et al., chap 14-17)
- A. Efficient Capital Markets (Classes 24-25)
 - B. Long-Term Financing (Class 25)
 - C. Capital Structure (Classes 25-28) Thanksgiving Break, no class on Nov. 22 and 24
 - 1. Impact of Financial Leverage
 - 2. Modigliani and Miller Propositions I and II
 - 3. Limits to Leverage
 - a. Financial Distress Costs
 - b. Agency Costs of Debt
 - c. Growth
 - 4. Agency Costs of Equity
 - 5. Static Tradeoff Theory
 - 6. Pecking-Order Theory
 - 7. Other Capital Structure Ideas and Observations
- VII. Dividend Policy (Class 28, Ross et al. chap 19)