

**AREC 508**  
**Agricultural Financial Management-Analysis and Methods**  
**Fall 2011**

<b>Location:</b>	332 Gifford	<b>Time:</b>	TR 11-12:15
<b>Instructor:</b>	Dawn Thilmany McFadden	<b>Office:</b>	B325 Clark
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**Office Hours:** 1 pm Wednesday or by appointment.

**Grading:** 25% Homework/Computer Labs  
35% Quizzes  
40% Project/Class Presentation

**Text:** Financial Management in Agriculture  
Barry and Ellinger, 7<sup>th</sup> Edition

**Optional Texts/Readings:** Dixit and Pindyck-Investment Under Uncertainty (any version)  
Blank-The Economics of American Agriculture: Evolution and Global Development, 2008

**Course Objective:** To develop an understanding of how financial statements are used for managerial and asset valuation issues, private investment analysis methods and their interface with public policy and natural resource issues, and how finance relates to other core fields in agricultural and resource economics: including production, natural resources and agribusiness management. Journal, business publication and media readings (including Web-based materials) are assigned to illustrate current trends and forces shaping the agricultural, national and global finance sectors, as well as how financial principles influence private and public investments in private economic activity and natural resources.

The research project/paper will be on a subject of interest to the student, with no limitations except for having a connection with some current issue or analytical method associated with agricultural finance. Expectations for the project will vary based on the student's current status (MS vs. Phd) and will be discussed further within the first month of class.

Learning Outcomes:

- 1) Students will be able to evaluate the financial performance and capital structure of farm, ranch and food enterprises using financial statements and analytical tools.
- 2) Students will be able to understand a variety of investment models, including stock equity markets and industry project investments, and use them to evaluate financial implications of investment choices.
- 3) Using financial performance and investment concepts, the student will be able to consider a variety of issues surrounding the valuation of natural resources, with specific focus on farmland values.

**Academic Integrity:** Students must uphold the academic integrity standards as explained in the university's Academic Integrity Policy of the Colorado State University General Catalog {Page 7} and the Student Conduct Code. Violations of academic integrity include, but are not limited to: cheating in the classroom, plagiarism, unauthorized possession or disposition of academic materials, falsification and facilitation of cases of academic dishonesty. This class requires a great deal of group work, but students should take responsibility for investing personally in the independent learning and development of project materials. Violations of CSU's academic integrity policies will be handled in accordance with the procedures discussed in the CSU General Catalog.

**Topics to be Covered:**

- I. Financial Statements and Analysis (3 Weeks)
- II. Capital Structure: Debt, Growth and Risk (2 Weeks)
- III. Investment Theory (4 Weeks)
  - a. Time Value of Money
  - b. Capital Budgeting
  - c. Portfolio Theory
- IV. Financial Management of Land and Natural Resources (2 Weeks)
- V. Investment with Risk and Uncertainty, Intro to Option Theory (2 Weeks)
- VI. Policy Implications for Agricultural Finance (2 Weeks)

**August 22-29-** Introduction to Agricultural Financial Management and Financial Statements  
Chapters 1 through 3 in Barry and Ellinger  
Chapter 1 Blank-Is American Agriculture Shrinking?\*

**September 5-**Analyzing Financial Statements: Ratios and Trends  
Presentation on Corporate Finance Analysis and Homework 1

Valentin, L., D.J. Bernardo and T.L. Kastens. 2004. "Testing the Empirical Relationship between Best Management Practice Adoption and Farm Profitability." *Review of Agricultural Economics*. 26(4) 489-504\*

Blank, S.C., K. Erickson, C.B. Moss, and R. Nehring. 2004. "Agricultural Profits and Farm Household Wealth." *American Journal of Agricultural Economics* 86 (5) 1299-1307.\*

Schumacher, S. and M. Boland. 2005. "The Effects of Industry and Firm Resources on Profitability in the Food Economy" *Agribusiness*, 21(1) 97-108.\*

Siebert, J.W., R. Jones, and T.L. Sporleder. 1997. "The VEST Model: An Alternative Approach to Value Added." *Agribusiness*, Vol. 13, No. 6, 561-567\*

**September 12-19-** Capital Structure's Effects on Growth and Risk  
Chapters 4 & 6 in Barry and Ellinger, Chapters 3 & 4, Blank

Barry, P.J., R.W. Bierlen, and N.L. Sotomayor. 2000. "Financial Structure of Farm Businesses Under Imperfect Capital Markets." *American Journal of Agricultural Economics*, 82(4) (November): 920-933\*

Lence, S.H. 2000. "Using Consumption and Asset Return Data to Estimate Farmers' Time Preferences and Risk Attitudes." *American Journal of Agricultural Economics*, 82(4) (November): 934-947\*

Watson, P. and D. Thilmany. "Regional Agriculture as a National Industry." Chapter 17 in Blank's *The Economics of American Agriculture*. pp. 349-375.\*

**September 26-October 3-** Investment Theory: The Time Value of Money and Capital Budgeting  
Chapters 8-11 in Barry and Ellinger

**HW1- Financial Analysis Presentations and Write-up Due (September 29)**

**Review and Quiz 1 (October 5)**

**October 10-17-** The Role of Risk in Financial Management, Performance and Portfolios  
Chapters 11-13, Blank; Additional Readings to be assigned

Lin, W. and R. Dismukes. 2006. "Supply Response Under Risk: Implications for Counter Cyclical Payments' Production Impacts." *Review of Agricultural Economics*. 29. 64-86.\*

Sun, C. and D. Zhang. 2001. "Assessing the Financial Performance of Forestry-Related Investment Vehicles: Capital Asset Pricing Model vs. Arbitrage Pricing Theory." *American Journal of Agricultural Economics*, 83(3): 617-28 \*

**HW 2- Portfolio Application**

**October 24-31-** Financial Management of Land and Natural Resources  
Chapters 12-13 in Barry et and Ellinger, Chapter 9 in Blank

Goodwin, B.K., A.K. Mishra, and F.N. Ortalo-Magne. 2003. "What's Wrong with our Models of Agricultural Land Values?" *American Journal of Agricultural Economics*, 85(3) (August):744-752.\*

Bergstrom, J.C. and Richard C. Ready. 2009. What Have We Learned from Over 20 Years of Farmland Amenity Valuation Research in North America? *Review of Agricultural Economics*. 31. 21-49.\*

Nickerson, C. and L. Lynch. 2001. "The Effect of Farmland Preservation Programs on Farmland Values." *American Journal of Agricultural Economics* 83 (2), 341-51.\*

**Quiz 2- November 8**

**November 7-14-** Investment with Risk and Uncertainty and Option Valuation  
Dixit and Pindyck, Ch. 1-3  
Lecture Notes

Hudson, D., L. House, B. Barnett, and M. Isik. 2004. "GPS, Inc.: A Case of Investment under Uncertainty." *Review of Agricultural Economics* 26(2): 303-312.\*

**November 21- Thanksgiving Break**

**November 28-December 5-**Policy Implications for Agricultural Finance  
Blank, Chapters 19 and 20

Lamb, R.L. and J. Henderson. 2000. "FAIR Act Implications for Land Values in the Corn Belt." *Review of Agricultural Economics*, 22(1):102-119.\*

Find your own Article on Financial Policies and their Effects on Financial Performance in another Region of the World

**December 6 and 8-**Project Reports presented to Class

**December 13-**Projects will be due by 5:00 p.m. (In place of Dec. 13 final)