

AGRIBUSINESS FINANCIAL MANAGEMENT
FARE*3400
FALL 2010

INSTRUCTOR:	Rahman Khokhar, Room 322, J.D. MacLachlan Building Phone ext 53667 Email: rkhokhar@uoguelph.ca [Please include FARE*3400 in all email subjects]
CLASSES :	Tue and Thu 11:30AM - 12:50PM; MCLN 101
OFFICE HOURS:	Tuesday. 10:15 – 11.30 or by appointment
PREREQUISITES:	BUS*2230
COURSE WEBSITE:	http://courselink.uoguelph.ca

COURSE OVERVIEW:

FARE*3400 is an introduction to the study of the theory and applications of finance to food, agricultural and resource industries. The course will focus on developing the theory and tools to undertake resource and policy valuation, capital budgeting, financial risk and other short term financial analysis and long term investment analysis. Emphasis is placed on applications of the financial theory and techniques to food, agribusiness, and resource business situations. Individuals who are skilled at financial analysis in the food, agribusiness and resources industries are in great demand throughout the world. This course provides a unique hands-on experience at utilising financial theory and concepts for the achievement of investment and risk analysis objectives in agribusiness. This course will provide students with an additional insight on the applicability and limitation of the financial analysis tools under different situations.

FARE*3400 is intensive, and requires a commitment from the student. The course will progress in a linear fashion. Understanding the material in one class is dependent on understanding the materials covered in previous class(es). Therefore, it is essential to keep up with the materials covered. Students are strongly encouraged to attend every class and spend a sufficient amount of time on their own to review the materials before attending the next class.

LEARNING OUTCOMES

At the end of the course, students are expected to possess a broad knowledge of financial theory and practice as it pertains to the food, agribusiness and resource sectors. This will involve applying quantitative and computer-based analytical techniques to real-world agribusiness problems. Specific course content includes topics in financial management, risk models, and the evaluation of financial assets and business alternatives.

At the end of the course, students should be able to:

- Understand and explain fundamental concepts of financial theory.
- Conduct short and long term financial analysis of food, agribusiness and resource industries.
- Identify and explain salient factors necessary in financial analysis of food, agribusiness and resource industries, and search, gather and critically evaluate financial and market information.
- Assess the relative applicability and limitations of alternative financial analysis tools.
- Develop proficiency in applying financial theory to food, agribusiness and resources industries.

At the end of the course students will:

- Have attained basic knowledge of some of the key issues facing financial managers in the food, agricultural and resource industries.
- Have developed a thorough understanding of the peculiarity of agribusiness financial analysis.

In order to meet the above objectives, students are expected to have READ assigned materials before class and be able to discuss them as required.

TEXTBOOK:

There is no specific textbook for this course. The course material will consist of case studies, book chapters and lecture notes. Copies of supplementary materials will be placed on course reserve. Throughout the course I will provide lecture notes.

SUPPLEMENTAL READINGS:

BOOKS:

Ross, S.A., R.W. Westerfield, J.F. Jaffe and G.S. Roberts. 2007. Corporate Finance. 6th Canadian Edition or any earlier edition. McGraw-Hill Ryerson.

Amram, M. and N. Kulatilaka. 1999. Real Options. Managing Strategic Investment in an Uncertain World. Harvard Business School Press, Boston, Massachusetts.

Battles, Ralph W., Robert C. Thompson, Jr. 2000. Fundamentals of Agribusiness Finance. Blackwell Publishing.

Brealey, R., Myers, S., Partington, G., and D. Robinson. 2000. Principles of Corporate Finance. McGraw-Hill Book Company.

Copeland, T. and V. Antikarov 2001. Real Options. A Practitioners Guide. Texere LLC New York

Higgins, R. (2007 or earlier). Analysis for Financial Management. McGraw Hill Book Company.

Holden, Craig W. 2004. Excel Modeling in the Fundamentals of Corporate Finance, Prentice Hall; 2nd edition.

Hovey, M. 2002. Spreadsheet Modeling in Corporate Finance, Prentice Hall.

McCahery, Joseph A. and L. Renneboog (Eds.). 2003. Venture Capital Contracting and the Valuation of High-technology Firms.

Penson, Jr., John B. and Lins, David A. 1980. Agricultural Finance: An Introduction to Micro and Macro Concepts. Prentice-Hall, Inc., Englewood Cliffs, N.J.

Warren F. Lee, Michael D. Boehlje, Aaron G. Nelson and William G. Murray .1988. Agricultural Finance, 8th Edition, Iowa State University, Ames.

JOURNALS & OTHER RESOURCES

- Agricultural Finance Review
- Agribusiness: International Journal
- Journal of Agribusiness
- American Journal of Agricultural Economics
- Canadian Journal of Agricultural Economics
- The Journal of Finance
- The Journal of Finance and Quantitative Analysis

AgEcon Search: <http://ageconsearch.umn.edu/>

Ontario Ministry of Agriculture, Food and Rural Affairs, OMAFRA:
 Budget Tools for Agricultural Enterprises:
www.omafra.gov.on.ca/english/busdev/bear2000/Budgets/budgettools.htm
 Farm Business Decision Calculators:
www.omafra.gov.on.ca/english/busdev/downtown.htm

ASSESSMENT

All works will be assessed on an individual basis except for Term Project reports where group work is expected. For the Term Project reports, group members will share the same grade. Note that each student in the group will be assigned 75% of the final project mark; the other 25% is an individual mark moderated by each student’s peer and self assessment rating. Students’ final grade will be calculated based on the following:

		Due
Assignment 1	10%	October 7 th 2010 in Class
Assignment 2	10%	November 11 th 2010 in Class
4 Quizzes [2 Blackboard and 2 in Class]	10%	Variable
Midterm exam 1	20%	October 14 th 2010 in Class
Midterm exam 2	20%	November 25 th 2010 in Class
<u>Group Term Project</u>	<u>30%</u>	TBA
<u>Total</u>	<u>100%</u>	

All deadlines must be met unless you make prior arrangements with the instructor and have a valid excuse. There will be no make-up for missed classes or quizzes. Late assignments and project works will receive a penalty of 5% per day Please contact the instructor ahead of time if

there are extenuating circumstances (e.g., health, bereavement, job interviews, athletic events, and family commitments) for late work. As set by the UoG's academic regulations, students wishing to claim medical or compassionate reasons must comply with the appropriate academic regulations reported in the current University of Guelph undergraduate calendar. See the undergraduate calendar for information on regulations and procedures for Academic Consideration www.uoguelph.ca/registrar/calendars/undergraduate/current.

INSTRUCTION METHODS

The course will consist of conventional lectures and in-class discussion. Some of the course materials are available through Blackboard. Make sure you monitor Blackboard.

EMAIL

Most communication regarding the course will be sent by email, USING YOUR OFFICIAL UNIVERSITY EMAIL (USERNAME@uoguelph.ca). Please make sure you monitor it. No changes of email address are possible.

TOPICS

1. Introduction Agribusiness Finance
2. Review of Financial Statements
3. Financial Forecasting
4. Financial Valuation of Resource and Agricultural Policy
5. Capital Budgeting
6. Contingent Claim Valuation
7. Venture Capital Valuation
8. Risk Management and Insurance

TERM PROJECT – 30% OF FINAL GRADE

Group Term Project: Financial/Investment Feasibility Analysis

Grade breakdown: 20% on written report and 10% for a poster and poster presentation. The term project report should not exceed 15 pages but there may be supporting materials and analysis in the appendix. Details on the project are attached. The objective of the project is to allow students with an opportunity to conduct investment feasibility analysis. Your ultimate objective is to try to conduct a rigorous financial analysis of an investment project and to convince potential investors that you can run a profitable agribusiness. As aspiring entrepreneurs the project will give you with the opportunity to pitch your ideas to the investors - a panel of business expertises.

Each group will develop a poster based on the term project and present this poster [**November 30, 2010 in FARE**]. The instructor will meet with each group at least three times during the term

to discuss the project and review the progress. Final project is due on **December 2st 2010 at 4:30 pm.**

ASSIGNMENTS – 20% OF FINAL GRADE - DUE DATE

There are **TWO** assignments in this course. Assignments are due in-class.

Assignments 1	Thursday, October 7 th 2010
Assignments 2	Tuesday, November 11 th 2010

EXAMS – 40 % OF FINAL GRADE

Exams are short case & problem-based. They are closed books, comprehensive, individual exams. Exam I will be held on October 14th 2010 during lecture time (20%). Exam II will be held on November 25th 2010 during lecture time (20%).

QUIZZES -10% OF FINAL GRADE

There are **FOUR** quizzes in this course. Quizzes are worth 2.5% each. Quizzes will be given in class and through Blackboard. FARE*3400 is primarily quantitative, so, the quizzes will be problem oriented. If you are not in class (and have not informed me in advance) you will get a zero for the in-class quiz that day. You will get zero for all missed Blackboard quizzes. All quizzes will be time constrained and in-class quizzes will be closed book/closed notes.

CODE OF CONDUCT

The University of Guelph is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of Academic Integrity (on line at www.academicintegrity.uoguelph.ca) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University (related information can be found on line at www.uoguelph.ca/registrar/calendars/undergraduate/current).

STUDENTS WITH DISABILITIES

Students with disabilities are required to inform the Centre for Students with Disabilities (CSD) of accommodation needs for examinations on or before the last date for withdrawal from a course without failure. Students must forward a copy of such CSD accommodation to the instructor immediately upon receipt. If a disabled student chooses NOT to take advantage of a CSD accommodation and chooses to sit for a regular exam, a petition for relief may not be filed after the examination is complete. The CSD website is: www.slcs.uoguelph.ca/csd.

COURSE OUTLINE - TENTATIVE

1. Introduction Agribusiness Finance

- 1.1. Foundation of Financial Management
- 1.2. Financial Decisions and the Firm's Objective
- 1.3. Finance and Social Responsibility and Ethics
- 1.4. Types of Business Organizations
- 1.5. Uniqueness of Agribusiness Firms

2. Review of Financial Statements

- 2.1. Understanding Financial Statements and Cash Flows
 - 2.1.1. Balance sheet format and classification (e.g., assets, liabilities, equity)
 - 2.1.2. Income statement format and classification
 - 2.1.3. Statement of cash flows
- 2.2. Evaluating a Firm's Financial Performance
 - 2.2.1. Turnover ratios
 - 2.2.2. Liquidity ratios
 - 2.2.3. Long-term debt (leverage) ratios
 - 2.2.4. Profitability ratios
- 2.3. Sustainable Growth
- 2.4. Current Asset Management
- 2.5. Applications

3. Financial Forecasting

4. Financial Valuation of Policy

- 4.1. The Time Value of Money
 - 4.1.1. The Impact of Time on Financial Decisions
 - 4.1.2. Future value of a single cash flow
 - 4.1.3. Future value of a series of cash flows
 - 4.1.3.1. Equal cash flows
 - 4.1.3.2. Unequal cash flows
 - 4.1.4. Present value of a single cash flow
 - 4.1.5. Present value of a series of cash flows
 - 4.1.5.1. Equal cash flows (Annuity)
 - 4.1.5.2. Infinite series of equal cash flows (Perpetuity)
 - 4.1.5.3. Unequal cash flows
 - 4.1.6. Equivalence of present and future value
 - 4.1.7. Applications
- 4.2. Risk and Uncertainty
 - 4.2.1. The Impact of Risk on Financial Decisions
 - 4.2.2. Types of Risk and Uncertainty
 - 4.2.3. Principle of Increasing Risk
 - 4.2.4. Portfolio Theory and Diversification
 - 4.2.5. Applications

5. Capital Budgeting and Investment Analysis

5.1. Discounted Cash Flow Analysis

- 5.1.1. Payback period rule
- 5.1.2. Discounted payback rule
- 5.1.3. Average accounting return rule
- 5.1.4. Profitability index rule
- 5.1.5. Net present value (NPV) rule
- 5.1.6. Internal rate of return (IRR) rule
- 5.1.7. Problems with the internal rate of return rule
- 5.1.8. Sensitivity analysis and Scenario analysis
- 5.1.9. Breakeven analysis
- 5.1.10. Cost of capital

5.2. Income Tax and Capital Structure: Miller and Modigliani propositions

5.3. Acquiring Resources (Lease versus Buy)

5.4. Applications

6. Contingent Claim Valuation

6.1. Real Options and Valuation

6.2. Applications

7. Venture Capital Valuation

7.1. Stages of venture capital investment

7.2. Basic valuation approach

7.3. Applications

8. Risk Management and Insurance

8.1. The impact of Risk on Financial Decisions

8.2. Business versus Financial Risk

8.3. Mitigating Risk and Uncertainty

8.4. Principles of Insurance

8.5. Types of Insurance

8.6. Introduction to Value-at-risk

8.7. Applications