



**AEC 340.01W: AGRICULTURAL FINANCE**  
COURSE SYLLABUS  
Summer II 2022

**INSTRUCTOR INFORMATION**

**Instructor:** Dr. Rafael Bakhtavoryan

**Office Location:** Agricultural Science Building, Room 229

**Office Hours:** Mondays through Fridays, via email

**Office Phone:** (903) 886-5367

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**University Email Address:** [Rafael.Bakhtavoryan@tamuc.edu](mailto:Rafael.Bakhtavoryan@tamuc.edu) (please, use only this email address and put "AEC 340" in the subject of the email)

**Preferred Form of Communication:** Email

**Communication Response Time:** Within 24 hours Monday through Friday

**COURSE INFORMATION**

**Class Meeting:** Web-based

**Readings**

**Required:** PowerPoint Presentations: These will be provided on D2L.

**Recommended Textbook:** *Fundamentals of Agribusiness Finance* by Ralph W. Battles and Robert C. Thompson, Jr. Iowa State University Press, Iowa, 2000 (ISBN 0813820693).

**Lecture Topics:**

**Chapter 1: Introduction to Agribusiness Finance**

The Role of the Financial Manager; Legal Forms of Business Organization; Objective of the Firm: Maximize Wealth; Agribusiness Finance; Agribusiness Producers; Flow of Funds in the Economy; Importance of Finance to Agribusiness; Domestic Trends in Agribusiness Finance; International Trends.

**Chapter 2: Agribusiness Loans: Legal Issues, Terms, and Interest Rates**

Promissory Note; Parties to Loan Transactions; Security Agreement; Mortgages Versus Deeds of Trust; Other Loan Terminology; Life Cycle of a Loan; Default and Foreclosure; Determinants of Interest Rates.

*The syllabus/schedule are subject to change.*

### **Chapter 3: Time Value of Money, Loan Calculations, and Analysis**

Part 1: The Time Value of Money; The Process of Compounding; The Process of Discounting; Simple Interest vs. Compound Interest; Intraproduct Compounding and Discounting; Inflation or Purchasing Power Implications; Effective Annual Rate (EAR or EFF); Calculating Interest Rate and the Number of Periods; The Rule 72.

Part 2: Annuities; Future Value of Annuities; Present Value of Annuities; Perpetuities; Annuities with Intraproduct Compounding; Amortized Loans; Building a Loan Amortization Schedule; Finding an Interest Rate and the Number of Periods with Annuities.

Part 3: Determining the Annual Percentage Rate; Refinance Analysis; Cash Budgeting.

### **Chapter 4: Capital Budgeting and Leasing**

Part 1: The Cost of Capital; The Payback Method; Simple Rate of Return.

Part 2: Net Present Value; Benefit-Cost Ratio; Internal Rate of Return; Income Taxes and Capital Budgeting; Leases and Leasing; Real Property; Personal Property.

### **Chapter 5: Financial Statements**

Financial Statements; The Income Statement; The Statement of Owner's Equity; The Balance Sheet; Generally Accepted Accounting Principles and the Farm Financial Standards Council; The Accrual-Adjusted Income Statement; The Statement of Cash Flows.

### **Chapter 6: Financial Statement Analysis**

Ratio Analysis; Liquidity Ratios; Solvency Ratios; Profitability Ratios; Repayment Capacity Ratios; Financial Efficiency Ratios; Loan-to-Value Ratio; Common-Size Statements; Horizontal Analysis.

### **Chapter 7: Risk in Agribusiness**

Financial and Business Risk; Risk and Return; Attitudes toward Risk; Sources of Business Risk in Agriculture; Risk Management in Agriculture.

## ***Course Description***

Analysis of capital investments, interpretation of financial statements, capital structure considerations for agricultural firms, farm real estate pricing, and financial intermediation in agriculture.

## ***Student Learning Outcomes***

After studying all materials and resources presented in this course, students will be able to:

1. Describe the principle of time-value of money and apply this concept to valuing cash flows and capital investment opportunities.
2. Read and analyze financial statements for the purpose of evaluating investment decisions.
3. Understand the conceptual relationship between the expected return and the relevant risk of individual assets and a portfolio of assets.
4. Understand the concept of cost of capital and role of leverage and apply these concepts in the determination of the optimal capital structure.

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# COURSE REQUIREMENTS

## ***Minimal Technical Skills Needed***

Students are expected to know how to use the learning management system (D2L will be used heavily in this class), Microsoft Word, and PowerPoint.

## ***Financial Calculator***

A financial calculator is required for this course and it is strongly recommended that you get one for homework assignments and exams, where you will normally be required to deal quickly with cash flow problems. The *Texas Instrument BA II Plus* financial calculator is a good one to use for this course. Get one and learn how to use it right away. Step-by-step instructions on how to use the *Texas Instrument BA II Plus* financial calculator will be provided in the manual which will be made available to students at the beginning of the semester as well as in the PowerPoint presentations when numerical examples are discussed. Also, I strongly recommend that you watch YouTube videos on how to use *Texas Instrument BA II Plus* financial calculator (a free *BA financial calculator* app can be downloaded and installed on your phone). **Ultimately, it is students' responsibility to know how to use financial calculator in this course.**

## ***Student Responsibilities or Tips for Success in the Course***

1. Read the assigned PowerPoint presentations.
2. Complete and turn in course assignments and exams at the scheduled time.
3. Use the web to actively seek out other finance sources that fit your learning style and help you better understand the material.
4. Be prepared for exams.

## GRADING

Your grade for the semester will be a weighted average of homework assignments, four equally weighted exams, and a **COMPREHENSIVE** final exam.

Homework assignments	10%
Exam 1	15%
Exam 2	15%
Exam 3	15%
Exam 4	15%
Final exam	30%

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80%-89.99%

C = 70%-79.99%

D = 60%-69.99%

F = 59.99% or below

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## **Assessments**

**HOMEWORK ASSIGNMENTS (HAs):** Homework assignments are assigned regularly (see the course outline at the end of the syllabus) and must be completed individually. As a form of experiential learning, HAs help students sharpen their analytical skills. Students must turn in their HAs via D2L according to the course outline. HAs must be completed by 11:30 p.m. (Central Time) on the due date.

**EXAMS:** Other than for university-excused absences or a valid doctor's excuse, no make-up exams will be given. If an exam is missed a grade of zero will be assessed for it. All exams must be taken on D2L. You will have 1 hour and 30 minutes to take the exam. Final exam is **COMPREHENSIVE** and you will have 2 hours to complete it on D2L.

## **TECHNOLOGY REQUIREMENTS**

### **LMS**

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

[https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\\_support.htm](https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm)

YouSeeU Virtual Classroom Requirements:

<https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements>

## **ACCESS AND NAVIGATION**

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or [helpdesk@tamuc.edu](mailto:helpdesk@tamuc.edu).

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

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## COMMUNICATION AND SUPPORT

### Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

### Interaction with Instructor Statement

The instructor's communication response is stated clearly (see page 1).

## COURSE AND UNIVERSITY PROCEDURES/POLICIES

### *Course Specific Procedures/Policies*

No late assignments will be accepted and a grade of zero will be assessed for them.

### Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

### *University Specific Procedures*

#### Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:

<https://www.britannica.com/topic/netiquette>

#### TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

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## **Academic Integrity**

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

### [Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

### [Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

## **Students with Disabilities - ADA Statement**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

### **Office of Student Disability Resources and Services**

Texas A&M University - Commerce

Gee Library - Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: [studentdisabilityservices@tamuc.edu](mailto:studentdisabilityservices@tamuc.edu)

Website: [Office of Student Disability Resources and Services](#)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

## **Nondiscrimination Notice**

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

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## **Campus Concealed Carry Statement**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

## **COURSE OUTLINE**

### **AEC 340.01W: Agricultural Finance Summer II 2022 WEB-BASED**

<b>Lecture #</b>	<b>Weekday</b>	<b>Date</b>	<b>Topic/All assignments are due on specific dates listed below by 11:30 p.m. For example, Homework Assignment_Ch1 is due July 11 by 11:30 p.m., or Homework Assignment_Ch2 is due July 13 by 11:30 p.m., or EXAM 1 is due July 18 by 11:30 p.m.</b>
1	Mon	11-Jul	Syllabus, D2L tutorial, installing a free <i>BA financial calculator</i> app on your phone Chapter 1. Introduction to Agribusiness Finance Homework Assignment_Ch1
2	Tue	12-Jul	Chapter 2. Agribusiness Loans: Legal Issues, Terms, and Interest Rates
3	Wed	13-Jul	Chapter 2. Continued, Homework Assignment_Ch2
4	Thur	14-Jul	Chapter 3. Time Value of Money, Loan Calculations & Analysis Part 1
5	Fri	15-Jul	Chapter 3. Part 1 Continued, Homework Assignment_Ch3_Part 1
6	Mon	18-Jul	<b>EXAM 1. Chapters 1, 2, and Chapter 3_Part 1</b>
7	Tue	19-Jul	Chapter 3. Time Value of Money, Loan Calculations & Analysis Part 2

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8	Wed	20-Jul	Chapter 3. Part 2 Continued, Homework Assignment_Ch3_Part 2
9	Thur	21-Jul	Chapter 3. Time Value of Money, Loan Calculations & Analysis_Part 3
10	Fri	22-Jul	Chapter 3. Part 3 Continued, Homework Assignment_Ch3_Part 3
11	Mon	25-Jul	<b>EXAM 2. Chapter 3_Part 2 and Chapter 3_Part 3</b>
12	Tue	26-Jul	Chapter 4. Capital Budgeting and Leasing_Part 1
13	Wed	27-Jul	Chapter 4. Part 1 Continued, Homework Assignment_Ch4_Part 1
14	Thur	28-Jul	Chapter 4. Capital Budgeting and Leasing_Part 2
15	Fri	29-Jul	Chapter 4. Part 2 Continued, Homework Assignment_Ch4_Part 2
16	Mon	1-Aug	<b>EXAM 3. Chapter 4_Part 1 and Chapter 4_Part 2</b>
17	Tue	2-Aug	Chapter 5. Financial Statements
18	Wed	3-Aug	Chapter 5. Continued, Homework Assignment_Ch5
19	Thur	4-Aug	Chapter 6. Financial Statement Analysis
20	Fri	5-Aug	Chapter 6. Continued, Homework Assignment_Ch6
21	Mon	8-Aug	<b>EXAM 4. Chapters 5 and 6</b>
22	Tue	9-Aug	Chapter 7. Risk in Agribusiness
23	Wed	10-Aug	Chapter 7. Continued, Homework Assignment_Ch7
24	Thur	11-Aug	<b>FINAL EXAM. Chapters 1 through 7</b>

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