



FIN 450 (01W) - Financial Modeling Spring 2024

*Department of Accounting & Finance
College of Business
Texas A&M University-Commerce*

Course Syllabus: Spring 2024

Instructor: Dr. Geoffrey VanderPal

Office Location: Online (Monday and Friday 12 to 1 PM CST)

Office Hours: By Appointment

Email: VanderPalGeoffrey@tamuc.edu

Communication Response Time: 24 to 48 hours

Course Description and Objectives

This course is intended for students who wish to implement the concepts of finance studied in introductory and other finance courses using Microsoft Excel and other software programs. The course provides students with the opportunity to develop the skills needed to build financial models. The course primarily focuses on models used for valuation, capital budgeting, cost of capital, and portfolio models. Prerequisites: FIN 304 and FIN 400.

Credit Hours: 3

Textbook:

Building Financial Models

Author: Tjia, John

Publisher: MCG

Edition: 3rd

ISBN: 978-1260108828

<https://www.mhprofessional.com/building-financial-models-third-edition-the-complete-guide-to-designing-building-and-applying-9781260108828-usa>

Learning Outcomes:

1. Students can utilize Excel functions and keyboard shortcuts.

Students can use Excel's finance functions in time value of money and capital budgeting problems, can use the Data Analysis tools to run regressions, can utilize logical, lookup and date functions, and can set up multiple scenarios for use in scenario and sensitivity analysis. Students can navigate the Excel environment efficiently using keyboard shortcuts.

2. Students can create organized, functional financial models in Microsoft Excel.

Students can explain why organization of a model is important and can demonstrate how the form of a model contributes to its function. Students are able to link multiple cells and worksheets together, are able to fix cell references and can address circular reference errors.

3. Students can build a balance sheet, income statement and statement of cash flows in Excel.

Students can use relevant revenue, cost, asset, liability and equity data to produce financial statements in Excel. Students are able to demonstrate an understanding of the interrelatedness of these statements by creating formulas that appropriately link the data in one statement to that in the others.

4. Students can explain the impact of working capital management on the firm's free cash flows.

Students can explain the cash cycle and how it is impacted by receivables and payables management. Students can create working capital schedules in Excel and use them to analyze turnovers, credit policies and cash needs.

5. Students can explain the relationship between capital expenditures, depreciation expenses and free cash flows.

Students know the difference between straight-line and accelerated depreciation and can create depreciation schedules of both in Excel. Students can use the financial statements and depreciation schedules to determine capital expenditures. Students can show how capital expenditures impact the cash flow of the firm.

6. Students can show how debt and equity decisions are modelled in financial schedules and how

they appear throughout the financial statements.

Students can create debt schedules in Excel involving multiple sources, maturities and seniorities of debt. Students can model the relationships between net income, common equity and payout policies.

7. Students can find the intrinsic value of an enterprise by using the Discounted Cash Flow technique.

Students can use financial statements and other pertinent information to calculate free cash flows and a firm's weighted average cost of capital. Students can create a valuation model in Excel using DCF methods.

Course Schedule:

WEEKS	CHAPTERS	ACTIVITY
WEEK 1 Jan 10 - 14	Chapter 1: A Financial Projection Model Chapter 2: Best Practices	<ul style="list-style-type: none"> • Introduction (Non -gradable activity) • Discussion #1 • Quiz #1
WEEK 2 Jan 15 - 21	Chapter 3: Setting the Stage	<ul style="list-style-type: none"> • Assignment #1 • Quiz #2
WEEK 3 Jan 22 - 28	Chapter 4: The Model Building Toolbox: F Keys and Ranges	<ul style="list-style-type: none"> • Discussion #2 • Quiz #3
WEEK 4 Jan 29 – Feb 4	Chapter 5: The Toolbox	<ul style="list-style-type: none"> • Assignment #2 • Quiz #4
WEEK 5 Feb 5 - 11	Chapter 6: Accounting in Modeling	<ul style="list-style-type: none"> • Discussion #3 • Quiz #5
WEEK 6 Feb 12 - 18	Chapter 7: Building a Pilot Model	<ul style="list-style-type: none"> • Assignment #3 • Quiz #6

WEEK 7 Feb 19 - 25	Chapter 8: Circular References and Iterative Calculations	<ul style="list-style-type: none"> • Discussion #4 • Quiz #7
WEEK 8 Feb 26 - Mar 3	PREPARE FOR THE MID-TERM EXAM OVERVIEW OF CHAPTERS 1- 8	<ul style="list-style-type: none"> • MID-TERM Assignment
WEEK 9 Mar 4 - 10	Chapter 9: Variations on Balancing	<ul style="list-style-type: none"> • Discussion #5 • Quiz #8
G um,gm	SPRING BREAK (MAR 11- 15)	
WEEK 10 Mar 18 – 24	Chapter 10: The Cash Sweep and Interest Calculations	<ul style="list-style-type: none"> • Assignment #4 • Quiz #9
WEEK 11 Mar 25 - 31	Chapter 11: Reorganizing the Model	<ul style="list-style-type: none"> • Discussion #6 • Quiz #10
WEEK 12 Apr 1 - 7	Chapter 12: Scenarios and Other Tips	<ul style="list-style-type: none"> • Assignment #5 • Quiz #11
WEEK 13 Apr 8 - 14	Chapter 13: Ratios Chapter 14: Forecasting Guidelines	<ul style="list-style-type: none"> • Discussion #7 • Quiz #12
WEEK 14 Apr 15 - 21	Chapter 15: Discounted Cash Flow Valuation	<ul style="list-style-type: none"> • Assignment #6 • Quiz #13
WEEK 15 Apr 22 - 28	Chapter 16: Using VBA for Balancing	<ul style="list-style-type: none"> • Discussion #7 • Quiz #14

WEEK 16 Apr 29 – May 05	PREPARE FOR THE FINAL EXAM OVERVIEW OF CHAPTERS 1-17	• FINAL Assignment
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MARKS BREAKDOWN:

ACTIVITIES	POINTS
Discussion	210 Points (7*30)
Quiz	280 Points (14*20)
Assignment	300 Points (6*50)
Mid Term Assignment	90 Points (1*90)
Final Assignment	120 Points (1*110)
Total	1000 Points

Grading System

This chart shows final course grades given certain point values.

POINT VALUE	GRADE
90%-100%	A
80-89%	B
70-79%	C
60-69%	D
Below 60%	F

Quizzes

There will be online quizzes administered on D2L throughout the course of the semester which will earn you 26% of the course grade. The announcement of quiz date and time will be made prior to the administration of the quiz on D2L.

Discussion Question Criteria:

All **initial responses** are due the **Thursday** of the discussion question's assigned week per its due date. All responses to other students' posts must be submitted by Sunday midnight of the assigned week. To obtain credit for *participation* posts, an initial discussion question response must also be posted in the week. **Participation only will not be accepted.**

Note that points will be deducted if response posts are not substantive, or if posts do not adequately and comprehensively fulfill discussion topic requirements. *All parts to the discussion questions should contain at least 5-6 complete sentences reflecting substantive content.*

All students are expected to participate in the Discussion Board(s). Posts and replies must be submitted by the stated deadline and written professionally. Please avoid using text or Instant Message style. Posts and replies must be respectful in content and tone.

All communications will take place through TAMUC official website (D2L) or TAMUC email.

AI use policy:

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided, the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized

another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty

13.99.99.R0.10 Graduate Student Academic Dishonesty

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: [Netiquette http://www.albion.com/netiquette/corerules.html](http://www.albion.com/netiquette/corerules.html)

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>

ADA Statement

Students with Disabilities

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

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 sexualorientation, gender identity, or gender expression will be maintained.

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.