

GRADUATE COUNCIL: NEW COURSE PROPOSAL

Originating Unit:

Type of action: New course Full online course**

Semester and year course will take effect:

New course title:

Appropriate computer abbreviation (30 spaces or less):

Course instructional methodology:

course component types: [ugradcouncil.tcu.edu/forms/Course Component Types.pdf](http://ugradcouncil.tcu.edu/forms/Course%20Component%20Types.pdf)

New course number:

Prerequisites for new course: *include an attachment if additional space is needed*

Description of new course (catalog copy): *include an attachment if additional space is needed*

attached files can be seen and managed in Acrobat Pro by clicking on
View > Show/Hide > Navigations Panes > Attachments

Fully Online Courses**

All online courses, and /or distance learning offerings must meet State Compliance regulations as defined by specific state legislation. TCU Distance Learning is any for-credit instruction provided to a TCU student outside the State of Texas. This includes internships, clinical, video conferencing, online, or any other delivery format that crosses state lines. Contact the Koehler Center for Teaching Excellence for guidelines. Include a letter of support from the Koehler Center with this proposal.

Supporting evidence or justification: (For a new course, attach proposed syllabus, including course objectives, course outline, and representative bibliography.)

Describe the intended outcomes of the course and how they will be assessed: *include an attachment if additional space is needed*

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Additional resources required:

Faculty:

Space:

Equipment:

Library:

Financial Aid:

Other:

Change in teaching load:

Does this change affect any other units of the University? Yes No

If yes, submit supporting statement signed by chair of affected unit.

If cross-listed, provide evidence of approval by all curriculum committees appropriate to both the originating and the cross-listed units.

Chair of Originating Unit:

Name:

Unit:

Signature:

A handwritten signature in black ink, consisting of a large, stylized initial 'S' followed by several loops and a long horizontal line extending to the right.

Texas Christian University
M. J. Neeley School of Business
MSBA Program, Finance Fundamentals & Analytics,
FINA 60110, Summer 2023
1.5 credits

Instructor: Dr. Vassil Mihov
Phone: 817-257-7147
E-mail: v.mihov@tcu.edu

Course Purpose

This course is designed to help bridge the gap between your undergraduate experience and the Neeley graduate level elective courses that you will take. There will be great emphasis on critical thinking, data driven decision-making, with particular emphasis on complex analytics and modeling. Further, the course aims to prepare the MSBA students to take graduate finance electives immediately upon successful competition; thus, it is designed to review a range of finance topics covered in the required finance courses in the Neeley graduate programs.

Course Objectives

The fundamental question in finance is how to determine value. To answer this question, financial managers are typically confronted with two major types of decisions: how to identify projects that create value to the firm (investment decisions), and how to fund the company projects in a way that minimizes cost of capital and increases firm value (financial decisions). The course topics will center on these two major questions, and will examine capital budgeting and project evaluation, firm valuation, risk and return in capital markets, cost of capital, and capital structure of the firm.

Learning Objectives

- Students will understand financial tools for investment decisions, estimation of cost of capital and capital structure.
- Students will be able to value financial securities, company projects, and companies overall.
- Students will apply statistical analysis and data analytic to build financial models and make empirical estimations.
- Students will apply data driven decision-making to complex problems in order to create value.
- Students will be able to evaluate critically a situation by considering the perspectives of multiple stakeholders, identifying the critical issues involved, and evaluate the viability of alternative solutions.

Required Textbook: Berk and DeMarzo, Corporate Finance, Fifth Edition, Pearson, **with MyFinanceLab**. To obtain the license for MyFinanceLab and for the textbook, log in to D2L class page, navigate to Pearson MyLab tab under “Content,” and proceed from there. No class code is needed.

Course Structure:

The class will be conducted synchronously in person or online (TBD). In addition, the course will include asynchronous case discussions, team projects and homeworks.

D2L (TCU Online) will be the main platform for the on-line portion of this class. You need to learn how to use it effectively.

Cases: You need to acquire the following cases/articles directly from the publisher:

Graham, John R., and Campbell Harvey, 2002, How Do CFOs Make Capital Budgeting and Capital Structure Decisions? Journal of Applied Corporate Finance 15, 8-23. Free download from <https://faculty.fuqua.duke.edu/~jgraham/website/SurveyJACF.pdf> or from D2L.

Alex Sharpe's Portfolio, Colette Southam, Ivey Publishing, <https://www.iveycases.com>, Product number 9B08N020 (make sure to obtain the excel spreadsheet data file, not just the case).

“The Most Important Number in Finance”, JP Morgan Report on Market Risk Premium, free download from D2L.

H. J. Heinz: Estimating the Cost of Capital in Uncertain Times, Marc Lipson, <http://store.darden.virginia.edu/>, Darden Case Number: F-1634

The Restructuring of Danfurn LLC, Smith, David C., Halperin, Larry G., Friedman, Michael, <http://store.darden.virginia.edu/>, Darden case F-1688

Midland Energy Resources, Inc.: Cost of Capital (Brief Case), Timothy A. Luehrman, Joel L. Heilprin, Harvard Business Publishing, <http://hbsp.harvard.edu/>, product number 4129-PDF-ENG. Use this link to obtain a discounted “course pack” price for this case: <https://hbsp.harvard.edu/import/949018>.

Computing

You will need tools to assist you with the quantitative aspects of this course. We will use Excel quite extensively in case analysis so it will help to refresh you spreadsheet skills. I also strongly recommend the following two basic financial calculators: Texas Instruments BAII Plus or Hewlett-Packard HP 10B, or equivalent financial calculator apps available for iphone or android (many are free).

Course Assignments and Grades:

Class contribution and Threaded Case Discussions	250 points	25%
Self-Assessment HWs (4 @100 pts each)	400 points	40%
Team Projects (2 @ 150 pts each)	300 points	30%
Team Presentation	50 points	5%

Your final letter grade will be determined as follows: $\geq 93.00\%$ A; $90.00\% \geq$ and $< 93.00\%$ A-; $87.0\% \geq$ and $< 90.00\%$ B+; $83.00\% \geq$ and $< 87.00\%$ B; $80.0\% \geq$ and $< 83.00\%$ B-; $77.00\% \geq$ and $< 80.00\%$ C+; $73.00\% \geq$ and $< 77.00\%$ C; $70.00\% \geq$ and $< 73.00\%$ C-; $< 70.0\%$ F. Individual assignments will not be curved. I reserve the right to curve the overall grade in your favor.

Threaded Discussions:

It is important to know that the quality of what you say or write is vastly more important than the quantity, both in class and online. I will create discussion threads for most class topics, typically based on the case studies or other material due for the upcoming class. You are **required** to make an initial post to the thread question to the best of your ability, based on your analysis of the case or the assigned work, citing specific findings from your analysis, in a timely manner. Generally, your first response should be between 100 and 150 words, and will be evaluated as the most representative of your view. In addition, you are **required** to engage in responses to others at least twice per threaded discussion; the length of your responses can vary as appropriate, but the idea is to engage in a discussion and build a community, not just satisfy a grade requirement. Note that you will not be able to see others’ initial responses until you post first, so plan ahead and post early. Your follow up posts do not need to be long; we are striving to have a discussion, questions and challenge each other’s assumptions and analysis, and learn as a result. Building on points that your classmates have made is an important way to advance the discussion. Please stay current with the discussion – do not reiterate a point that was resolved already. Try to post in a timely manner, and if you are late entering a discussion, please be sure to start by reading the entire preceding discussion to get up to speed. Also note that the discussion threads will have an opening and closing times, which will be identified on D2L, before and after which you will not be able to post to the thread (but will still be available to read it).

Self-Assessment Homeworks

The self-assessment homeworks are individual in nature and cover the lectures and assigned reading for each topic area. Each HW will be taken after reading the lecture and the assigned reading. The HWs are to be taken individually, not as a team or with anyone else's help. They are open-book, but will have a strict deadline. Each question can be taken up to 3 times. Any questions turned in late will be assigned 50% of the earned score.

Team projects

You will complete two projects as a team. As part of the projects, you will collect and analyze data from actual financial statements, financial news sources, and databases. The projects will aim to develop further your understanding of the concepts of financial management by applying it to real-world type of situations. The projects also aim for you strengthen your writing skills and to learn to articulate complex quantitative analysis in an approachable and understandable way.

Final Exam

Your final exam will be team-based and will consist of your second team project, and a final team presentation.

Final Presentation

During the last in-class meeting, we will discuss the lessons learned in the contexts of the final project. Students will present a short (~10 min) presentation via zoom.

Copyright Statement

Any materials provided to you as part of this course, including but not limited to lecture notes, assignments, articles, cases, old exams, are copyrighted intellectual property of the book publisher, D2L, or myself, and are protected under the Digital Millennium Copyright Act and other laws governing intellectual property. As such, they are strictly for your class use as part of your contract with TCU, and cannot be re-distributed in any form without authorization of the copyright holder. Such re-distribution is in violation of the TCU policy on improper or unauthorized use and distribution of course materials. (<http://tcu.smartcatalogiq.com/current/Undergraduate-Catalog/Student-Policies/Academic-Conduct-Policy-Details>). Additionally, the use of unauthorized materials not provided by me that were created as intellectual property in past classes or by others is strictly prohibited and constitutes a violation of the University plagiarism policy.

TCU students are prohibited from sharing any portion of course materials (including videos, PowerPoint slides, assignments, or notes) with others, including on social media, without written permission by the course instructor. Accessing, copying, transporting (to another person or location), modifying, or destroying programs, records, or data belonging to TCU or another user without authorization, whether such data is in transit or storage, is prohibited. The full policy can be found at: <https://security.tcu.edu/polproc/usage-policy/>.

Violating this policy is considered a violation of Section 3.2.15 of the Student Code of Conduct (this policy may be found in the Student Handbook at <https://tcu.codes/code/index/>), and may also constitute Academic Misconduct or Disruptive Classroom Behavior (these policies may be found in the undergraduate catalog at <https://tcu.smartcatalogiq.com/current/Undergraduate-Catalog/Student-Policies/Academic-Conduct-Policy-Details>). TCU encourages student debate and discourse; accordingly, TCU generally interprets and applies its policies, including the policies referenced above, consistent with the values of free expression and First Amendment principles.

Disabilities Notice:

Texas Christian University complies with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973 regarding students with disabilities. If you require accommodations for a disability, please contact the Coordinator for Students with Disabilities in the Center for Academic Services, located in Sadler Hall 11. Further information can be obtained from the Center for Academic Services, TCU Box 297710, Fort Worth, TX 76129, or at 817-257-7486.

Adequate time must be allowed to arrange accommodations and accommodations are not retroactive; therefore, students should contact the Coordinator as soon as possible in the academic term for which they are seeking accommodations. Each eligible student is responsible for presenting relevant, verifiable, professional documentation and/or assessment reports to the Coordinator. Guidelines for documentation may be found at <http://www.acs.tcu.edu/DISABILITY.HTM>.

Students with emergency medical information or needing special arrangements in case a building must be evacuated should discuss this information with their instructor/professor as soon as possible.

Netiquette:

Communication Courtesy Code: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. If I deem any of them to be inappropriate or offensive, I will forward the message to the Chair of the department and the online administrators and appropriate action will be taken, not excluding expulsion from the course. The same rules apply online as they do in person. Be respectful of other students. Foul discourse will not be tolerated. Please take a moment and read the following link concerning "netiquette": <http://www.albion.com/netiquette/>

Participating in the virtual realm, including social media sites and shared-access sites sometimes used for educational collaborations, should be done with honor and integrity:

<http://ctl.t.ubc.ca/distance-learning/learner-support/communicating-online-netiquette/>

TCU Campus Resources for Students

Many resources exist on the TCU campus that may be helpful to students: Mary Coats Burnett Library (257-7117); Center for Academic Services (257-7486, Sadler Hall. 1022); the William L. Adams Writing Center (257-7221, Reed Hall 419); Student Development Services (257-7855, BLUU 2003); and Office of Religious & Spiritual Life (257-7830, Jarvis Hall), Campus Life (257-7926, Sadler Hall 2006), and the Counseling, Testing, and Mental Health Center (257-7863, Brown Lupton Health Center).

Email Notification: Only the official TCU student email address will be used for all course notification. It is your responsibility to check your TCU email on a regular basis.

Integrity

Any act that violates the academic integrity of the institution is considered academic misconduct. The procedures used to resolve suspected acts of academic misconduct are available in the offices of Academic Deans and the Office of Campus Life. Specific examples include, but are not limited to cheating, plagiarism, and collusion.

Statement on TCU's Discrimination Policy

TCU prohibits discrimination and harassment based on age, race, color, religion, sex, sexual orientation, gender, gender identity, gender expression, national origin, ethnic origin, disability, predisposing genetic information, covered veteran status, and any other basis protected by law, except as permitted by law. TCU also prohibits unlawful sexual and gender-based harassment and violence, sexual assault, incest, statutory rape, sexual exploitation, intimate partner violence, bullying, stalking, and retaliation. We understand that discrimination, harassment, and sexual violence can undermine students' academic success and we encourage students who have experienced any of these issues to talk to someone about their experience, so they can get the support they need.

[Review TCU's Policy on Prohibited Discrimination, Harassment and Related Conduct or to file a complaint: https://titleix.tcu.edu/title-ix/.](https://titleix.tcu.edu/title-ix/)

Statement on Title IX at TCU

As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep any information you share private to the greatest extent possible. However, I have a mandatory reporting responsibility under TCU policy and federal law and I am required to share any information I receive regarding sexual harassment, discrimination, and related conduct with TCU's Title IX Coordinator. **Students can receive confidential support and academic advocacy by contacting TCU's Confidential Advocate in the Campus Advocacy, Resources & Education office at (817) 257-5225 or the Counseling & Mental Health Center at <https://counseling.tcu.edu/> or by calling (817) 257-7863. Alleged violations can be reported to the Title IX Office at <https://titleix.tcu.edu/> or by calling (817) 257-8228.** Should you wish to make a confidential report, the Title IX Office will seek to maintain your privacy to the greatest extent possible, but cannot guarantee confidentiality. Reports to law enforcement can be made to the Fort Worth Police Department at 911 for an emergency and (817) 335-4222 for non-emergency or TCU Police at (817) 257-7777.

Course Schedule

Topic	Deliverables	Assigned Reading	Data Analytics
Introduction to Valuation: Decision Making, Investment Decision Rules and Capital Budgeting.	Discuss how firms make investment decisions.	Chapters 3, 7. Graham and Harvey survey article.	Build a FCF model in Excel in order to evaluate capital budgeting projects. Use NPV and IRR functions in Excel
Company Valuation	Due: HW 1;	Chapter 9 and lecture notes.	Build a FCF model in Excel in order to value a firm. Obtain data and estimate short- and long-term growth rates, profit margins, estimate a terminal value. Perform sensitivities and scenarios.
Risk and Return. Portfolio Diversification, Systematic Risk and the CAPM	Due: HW2; Threaded Discussion 1	Chapters 10, 11, and lecture notes. Case: Alex Sharpe's Portfolio	Use excel to calculate average arithmetic and geometric returns, st. deviations, covariance and correlation; Build portfolios and estimate their risk-return characteristics. Estimate beta using regression analysis. Visualize the data using graphs and charts.
Cost of Capital	Due: HW3; Team Project 1; Threaded Discussion 2.	Chapter 12 and lecture notes. Case: Heinz Cost of Capital. JP Morgan article on equity risk premium;	Use Excel to calculate expected cost of equity and debt, and capital structure weights. Use solver/goalseek to modify and update Prof. Damodaran's model on the expected equity risk premium.

Topic	Deliverables	Assigned Reading	Data Analytics
Cost of Capital	Due: HW4; Team Final Project (2). Team final presentation.		Use Excel to replicate and update the methods from the J.P. Morgan article on equity risk premium.

In addition, for those of you without a business undergraduate degree, there are several topics which would provide you with a good technical background, such as time value of money and cash flows. You can examine these on your own by looking at the following topics:

- *Financial Statements; Understanding Cash Flows* (Chapter 2); Practice Problems: Ch 2/ 2, 3, 4, 6, 7, 9, 12, 14, 19, 24
- *Valuation and Time Value of Money* (Chapters 4 and 5); Practice Problems: Ch 4/1, 2, 4, 5, 8, 9, 18, 22; Ch 5/ 1, 4, 8, 9, 10, 14, 16
- *Application of TVM to Bond Valuation and Stock Valuation* (the dividend discount model) (Chapters 6 and 9); Practice Problems: Ch 6/ 1, 3, 5, 8, 11; Ch 9/ 1, 2, 4, 6, 8, 11

Dr. Vassil Mihov

Associate Professor of Finance

Theodore and Beulah Beasley Faculty Fellow

Ralph Lowe Energy Institute Faculty Fellow



An expert in debt financing, capital structure and options markets, Dr. Mihov teaches MBA and undergraduate courses (including the Neeley Fellows honors section) and has been honored with numerous teaching awards including the Neeley Graduate Teaching Award (2018, 2004), the Neeley Fellows Distinguished Faculty Award (2016), Outstanding Professor of the Semester for TCU Pi Beta Phi (Fall 2010), a “favorite professor” in the MBA program (2021, 2020, 2018, 2017, 2015, 2014, 2013), and a Mortar Board Preferred Professor (2002, 2001). He has been a frequent speaker at conferences and universities in North America, Europe, and Asia. His publications have also appeared in the *Journal of Finance*, *Journal of Financial Economics*, *The Accounting Review*, *Journal of Corporate Finance*, *Financial Management*, and *Journal of Banking and Finance*. His professional experience includes work as a licensed commodity exchange broker and a business consultant. He holds a B.A. in Economics and Business Administration from Graceland College and Ph.D. in Finance from Purdue University. Dr. Mihov’s non-academic interests include travel, outdoor activities, chess, and live music.