

ENG MGT 6211 - Advanced Financial Management

Course Syllabus

Spring 2022 Semester

Course Overview

Principles of financial organization and management in the technological enterprise; demands for funds; internal and external supply of funds; budgetary control; reserve and dividends policy. Emphasizes systems approach and problems of engineering design and automation as they influence financial decisions. Prerequisite: ENG MGT 1210, ENG MGT 5210, or equivalent.

Room and Meeting Time: Zoom meetings only for both on-campus and distance students
Thursday 4:00-6:30 pm central (live online attendance is not required)

Instructor: David Enke
enke@mst.edu
Office: Engineering Management 221
Phone: 573-341-4749
Hours: By appointment or when in office

Textbook: No textbook is required for this course. Free, detailed course notes will be available on Canvas (<https://umsystem.instructure.com/>). Nonetheless, the course material will follow the notation and chapters from the textbook “Financial Management: Theory and Practice,” 16th Edition, Eugene Brigham and Michael Ehrhardt, *Cengage South-Western*, 2019; ISBN-13: 9781337902601.

Software: None required.

Grading: Four Take-Home Tests, worth 100 points each, for 400 points total.

Course topics and take-home test due dates are listed on the lecture schedule. Tests are due by 1:00 pm central on the listed due date. Late take-home tests will be accepted for a maximum of two days after the original due date. An amount of 10% will be deducted from the take-home test for each day the test is late. Makeup tests will not be allowed after the assigned dates (except for extenuating circumstances). Given that the tests are take-home, with two weeks to complete the tests, it is not expected that make-up tests will be necessary. Nonetheless, if required, in most instances the student will be expected to take any makeup tests early. The instructor must approve makeup tests at least one week prior to the regular test being made available to students.

Course Requirements

Students need to have taken ENG MGT 1210, ENG MGT 5210, or an equivalent course, i.e., students are expected to understand and be able to use the fundamentals of engineering economy, including the time value of money, calculating and converting interest, calculating the present value, annual value, and future value of cash flows, determining the internal rate of return, and calculating and using depreciation. Refresher material on these topics can be found in the referenced course textbook in Chapter 4 (Time Value of Money), Chapter 10 (Basics of Capital Budgeting: Evaluating Cash Flows), and Chapter 11 (Cash Flow Estimation and Risk Analysis).

Course Material

Handouts, class lecture notes, take-home tests, and take-home test solutions will be posted on Canvas (<https://umsystem.instructure.com/>). Students will be instructed during the first class period on how to utilize the Canvas classroom web site. The lecture notes are in Adobe Acrobat pdf format. One, two, three, and six slide per page formats are available. Students can use Adobe Acrobat Reader (<http://get.adobe.com/reader/>) or another pdf reader to view the lecture slides.

Course Schedule

The online course lecture schedule (<http://web.mst.edu/~enke/courses/ENGMGT6211/>) is subject to change and will be updated as necessary to facilitate the teaching of the course material. Students will be notified through Canvas or alerted in class when significant changes are made to the lecture schedule.

Test Schedule

Topics for each take-home test will be announced in class and are posted on the online lecture schedule. The instructor reserves the right to change test dates and topics to better accommodate the students and/or coverage of the material. Students will be provided ample warning of test date changes. All test are due by 1:00 pm central on the schedule due dates. Open book, open note, take-home tests are due (uploaded to Canvas) on the following dates:

Test 1: Due Thursday, February 24th, 2022, by 1:00 pm central

Test 2: Due Thursday, March 24th, 2022, by 1:00 pm central

Test 3: Due Thursday, April 21st, 2022, by 1:00 pm central

Test 4: Due Thursday, May 12th, 2022, by 1:00 pm central

Course/Test Topics

Test topics from the referenced textbook to be covered in ENG MGT 6211 include the following (with content available in the provided notes); students are expected to already know the material in Chapters 4, 10, and 11 of the textbook, i.e., the basics of engineering economics as taught in ENG MGT 5210:

Test 1 Chapter 1: An Overview of Financial Management and the Financial Environment

Chapter 2: Financial Statements, Cash Flows, and Taxes

Chapter 3: Analysis of Financial Statements

Test 2 Chapter 5: Bonds, Bond Valuation, and Interest Rates

Chapter 6: Risk and Return

Chapter 7: Valuation of Stocks and Corporations

Test 3 Chapter 8: Financial Options and Applications in Corporate Finance

Chapter 9: The Cost of Capital

Chapter 13: Corporate Governance

Test 4 Chapter 14: Distributions to Shareholders: Dividends and Repurchases

Chapter 15: Capital Structure Decisions

Chapter 20: Hybrid Financing: Preferred Stock, Warrants, and Convertibles

Grading Scale

The following grading scale will be used for graduate students (the instructor reserves the right to modify the scale):

90-100% (A letter grade); 80-89.99% (B); 70-79.99% (C); Below 70% (F)

Statement about Copyright, FERPA, and Use of Video

It is vitally important that our classroom environment promote the respectful exchange of ideas. This entails being sensitive to the views and beliefs expressed during discussions whether in class or online. Please obtain instructor permission before recording any class activity. It is a violation of University of Missouri policy to distribute such recordings without authorization and the permission of all who are recorded. More information is provided (<https://www.umsystem.edu/ums/elearning/policies>).

Accessibility and Accommodations

It is the university's goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on a disability, please contact Student Accessibility and Testing at (573) 341-6655, email dss@mst.edu, or visit <http://dss.mst.edu/> for information.

Student Honor Code and Academic Integrity

The Honor Code all students are expected to follow can be found at the following link: <http://stuco.mst.edu/honor-code/>. Page 30 of the Student Academic Regulations handbook describes the student standard of conduct relative to the University of Missouri System's Collected Rules and Regulations section 200.010, and offers descriptions of academic dishonesty including cheating, plagiarism and sabotage (<http://registrar.mst.edu/academicregs/index.html>), all of which will be reported to the Vice Provost for Academic Support. Additional guidance including the University's Academic Dishonesty Procedures is available at <http://academicssupport.mst.edu>. Other resources for students regarding ethics and integrity can be found at the following link: <http://academicssupport.mst.edu/academicintegrity/studentresources-ai>.

Student Well-Being and UCARE

Student Well-Being provides counseling services, health promotion initiatives, and prevention programs to empower the S&T community to thrive and enhance personal, academic, and professional success. Department office hours are Monday-Friday, 8am-5pm. On the website (<https://wellbeing.mst.edu/>), you can find information related to individual and group counseling, wellness consultations and trainings, resources for many health and wellness topics, and help for mental health crisis situations.

Any of us may experience strained relationships, increased anxiety, feeling down, alcohol/drug misuse, decreased motivation, challenges with housing and food insecurity, and any other number of mental health or well-being concerns. If you notice these or other alarming concerns in a friend or fellow student and would like to consult with a Care Manager, please make a UCARE referral for support and assistance (<https://go.mst.edu/ucare-report>).

Nondiscrimination, Equity, and Title IX

Missouri S&T is committed to the safety and well-being of our campus community, and to creating an environment free from discrimination and harassment.

The University does not discriminate on the basis of race, color, national origin, ancestry, religion, sex, pregnancy, sexual orientation, gender identity, gender expression, age, disability, protected veteran status, and any other status protected by applicable state or federal law. As used in this policy, the word “sex” is also inclusive of the term “gender.”

Additionally, US Federal Law Title IX states that no member of the university community shall, on the basis of sex, be excluded from participation in, or be denied benefits of, or be subjected to discrimination under any education program or activity. Violations of this law include sexual harassment, sexual assault, dating/domestic violence, and stalking.

In accordance with the University of Missouri’s Collected Rules and Regulations, all faculty and staff are required to report any information concerning discrimination disclosed through communication including, but not limited to, direct conversation, email, social media, classroom papers and homework exercises to the Equity Officer/Title IX Coordinator.

Office of Equity and Title IX

Equity Officer and Title IX Coordinator: Dr. Paul Hirtz

Phone: (573) 341-7734

Location: 900 Technology Drive, Suite 500

E-mail: equity@mst.edu

Classroom Egress Maps

For all in-person instruction, faculty should explain where the classroom emergency exits are located. Classroom egress maps are posted at <http://designconstruction.mst.edu/floorplan/>.

Additional Finance, Investment, and Financial Engineering Courses

I currently teach two other courses related to finance, investment, and financial engineering: ENG MGT 5212 and ENG MGT 6213 (co-listed with SYS ENG 6613). Further details on each of the aforementioned courses can be found at http://web.mst.edu/~enke/courses/main_courses.html.

ENG MGT 5212: Intelligent Investing covers practical real-world approaches to personal investment, including understanding the selection and valuation of stocks, bonds, mutual funds, exchange traded funds, commodities, and real estate investment trusts using fundamental and technical analysis, as well as how to construct an investment/retirement portfolio using stock screening and various investment and trading strategies.

ENG MGT 6213 / SYS ENG 6613: Financial Engineering covers financial derivatives, in particular options, futures, forwards, and swaps, as well as various derivative strategies for hedging, risk management, and speculation. Models for measuring portfolio Value-at-Risk (VaR), as well as using GARCH and EWMA for forecasting volatility and correlation, will also be discussed.