



Course Syllabus for EC 3400

Economic Decision Analysis

Fall 2019

Dr. Laura Connolly

Office Hours & Contact Information

Instructor: Laura Connolly, PhD
Office: 125 Academic Office Building
Office Hours: MW, 11:00 AM – 1:00 PM and by appointment
E-mail: leconn@mtu.edu ***PLEASE INCLUDE “EC 3400” or “EDA” IN SUBJECT LINE***
Office Phone: (906) 487-2809

*Office hours are not a one size fits all. I understand that many of you likely have another class, a job, etc. during office hours. I am available to meet outside of office hours; all you have to do is contact me to set up an alternative meeting time.

Teaching Assistant: Ms. Tomisin Akinbo
Office Hours: Tuesdays/Thursdays, 1:00 – 3:00 PM ; 126 Academic Office Building
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Course Information

Course Number: EC3400-0A & EC3400 - 0B
Course Location: M&M U115 (10AM – 0A) or EERC 229 (9AM – 0B)
Class Times: MWF 10:05 AM – 10:55 AM (0A) or MWF 9:05 AM – 9:55 AM (0B)
Prerequisites: UN 1015 and UN 1025 or Modern Language-3000 level or higher
Course Website: Canvas
Technology: Calculator, iClicker (classic or cloud)

Course Description (MT Course Catalog)

Studies economic decision-making for actions occurring over time. Covers decision tools for comparing alternatives, public project evaluation, risk and uncertainty, mutually exclusive decisions, multiple objective decisions, interest rate calculations, cash flow analysis, depreciation and taxes, cost of capital, and capital budgeting. Note: Course content, assignments, syllabus, etc. are subject to change at the discretion of the professor.

Course Learning Objectives

The purpose of this class is to learn the tools of financial and business decision making that are commonly used by engineers. This includes decisions in regards to personal finance and corporate investment and equipment. This course presents the concepts and formulas for understanding interest rates and the time value of money. Then, the course develops these methods in order to evaluate the worth of projects, capital decisions, and investments.

The course has two overall objectives: (1) To become proficient with the tools used to make effective use of capital and money, and (2) To become accurate in your analysis and calculations. All aspects of financial decision making require close attention to detail and accuracy – even small errors can be very costly. This class will help you learn to avoid errors by stressing the importance of paying attention to details, making careful calculations, and checking your work.

Upon successful completion of this course, students will be able to:

- (1) Estimate monthly/annual payments and total interest paid for personal or business loans.
- (2) Calculate the return of investments to determine if the return outweighs the cost.
- (3) Construct cash flow diagrams and use these diagrams to solve investment problems.
- (4) Identify and measure the direct and indirect costs and benefits of an alternative.
- (5) Understand how the corporate tax system influences choice of alternatives.

I hope that you will work hard, actively participate, ask questions, and perform to the best of your ability in this class. Active participation makes the lectures more enjoyable for all of us. This course requires a significant amount of practice, particularly for the first three chapters, in order to master the material. Still, the purpose of this course is to teach you something about economic decision making, not to destroy your GPA.

Required Texts

Economic Decision Analysis. 4th Edition by Roberts, M., Nelson, P., & Gale, J. Published by Pearson Custom Publishing, 2006 (ISBN-13: 978-1-256-08599-7)

*You may also use the 3rd edition (orange cover) of the textbook.

Course Outline

- Chapter 1: Time Value of Money
- Chapter 2: Nominal and Effective Interest Rates
- Chapter 3: Basic Decision Methods
- Chapter 4: Cash Flow Statements
- Chapter 5: Depreciation and Taxes
- Chapter 6: Project Evaluation Decision Methods
- Chapter 7: Capital Budgeting, Independent Project Selection
- Chapter 8: Mutually Exclusive Decisions
- Chapter 9: Financial Securities and the Cost of Capital Funds

* Additional topics will be covered if time permits.

Exams

Exams are necessary to assess your mastery of course material. There will be three midterms and one final exam given during the semester. Exam dates are as follows:

- Exam 1:** Friday, October 4th
Exam 2: Friday, November 1st
Exam 3: Friday, December 6th
Final Exam: TBD – scheduled by the university during the week of December 16th – 20th

More information on the content of the exams will be provided at the appropriate time. In order to succeed on the exams, you will need to understand the course material very well. Test questions will be similar to homework/quiz problems, example problems in class, and/or practice problems at the end of each chapter in the textbook.

Homework

Homework assignments help you achieve the mastery level necessary for exams. I will announce homework assignments at least one week in advance of the due date in class and on Canvas. You will complete each homework assignment through Canvas, the course website. There will be one homework assignment per chapter.

You will have 2 attempts for each homework. Only your highest score will count – there is no penalty for attempting the homework a second time. If you earn a grade you are satisfied with on your first attempt, then you do not need to repeat the homework. If you repeat the homework, you must repeat the entire assignment (not just the problems you missed on a previous version). However, note that the information in the problems change with each attempt and might require new calculations. You do not have to complete the homework in one sitting – you may save your progress and come back to it later.

Quizzes/Practice Exams

There will also be several quizzes throughout the semester, which will cover material taught in class and serve as a practice exam before each exam. I will announce quiz due dates at least one week in advance (in class and on Canvas). You will complete each quiz through Canvas, the course website.

You will have 2 attempts for each quiz. Only your highest score will count – there is no penalty for attempting the quiz a second time. If you earn a grade you are satisfied with on your first attempt, you do not need to repeat the quiz unless you want to. If you repeat the quiz, you must repeat the entire quiz (not just the problems you missed on a previous version). However, note that the information in the problems change with each attempt and might require new calculations. You do not have to complete the quizzes in one sitting – you may save your progress and come back to it later.

The homework assignments and quizzes will help you consistently learn the material throughout the semester and allow you to make mistakes (and learn from them) in a low-cost setting prior to the exam.

Attendance

You are expected to attend class regularly, arrive on time, participate in class discussions/assignments, and ask questions. Unfortunately, illnesses, family emergencies, etc. are a part of life and you will likely miss a few classes during the semester. While I certainly understand this, **you are still responsible for all announcements, assignments, and material that you may have missed. You should get any missed material from Canvas, one of your classmates, the textbook, and/or the recorded lectures on Canvas.** Please be aware that an absence, for any reason, is not a valid excuse for not completing a class assignment on time.

It is expected that you will respect your classmates and the instructor while in class. We are all members of an academic community where it is our shared responsibility to cultivate a climate where all students/individuals are valued and where both they and their ideas are treated with respect.

iClickers

You will regularly use an iClicker to answer questions in class. The iClicker questions let me know how well you all understand the material in real time. Additionally, they also let you know how well you understand the material presented in class. I will not use the iClickers to directly grade your attendance or to grade the accuracy of your answers. I will only grade your participation in answering iClicker questions in class. However, it is still in your best interest to answer each question honestly. **You are responsible for ensuring that your iClicker is working properly throughout the semester.**

You need to have an iClicker ready to use in class by Monday, September 9th, 2019. If you do not already have an iClicker, there are three options available to you. You may purchase an iClicker remote from the bookstore or online, download the iClicker app to use on your smart phone or tablet, or use the student web portal on your laptop. Please see <https://www.iclicker.com/students> for more information.

Both the iClicker app and the student web portal require a small subscription fee (\$15 - \$25). A new classic iClicker remote will cost you approximately \$25 - \$45. When registering through the app or student web portal, please search for "EC3400 0A Fall 2019 - 10AM" or "EC3400 0B Fall 2019 - 9AM".

Grading Policy

Evaluation for this course will be based upon the following categories:

- Exams – 60%
- Homework Assignments – 25%
- Quizzes – 10%
- iClicker Participation – 5% (0, 50 or 100 points)

In order to earn your full iClicker participation grade, you must answer at least 70% of the iClicker questions throughout the semester. If you answer at least 70% of the iClicker questions, you will earn 100 points (5/5) for your participation grade. If you answer less than 70% but more than 50% of the iClicker questions, you will earn 50 points (2.5/5) for your participation grade. If you answer less than 50% of the questions, you will earn 0 points (0/5) for your participation grade.

I will regularly post grades to the course website on Canvas. **If you feel that you were not fairly graded on an exam or an assignment, you have one week from the date grades are posted for that exam or assignment to submit a written request (feel free to email me) for a re-grade.** While requesting a re-grade does not guarantee you will receive additional points, I make mistakes from time to time and am happy to correct them when you bring them to my attention.

If you are having difficulty with any of the course material, have questions regarding your performance in the course, or have any related concerns, please meet with me or the TA during office hours or set up an alternative meeting time by email. We do ask that you review your course materials prior to a scheduled meeting (and bring them with you). This helps us better understand how to help you. Please seek help early on problems you do not understand (from me, the TA, and/or your classmates). I also encourage you to work together with your classmates -- it will save you a lot of time, effort, and frustration. The TA and I both have weekly office hours so please take advantage of them.

The grading scale used in the course is outlined below.

A	93 – 100	B	83 – 86.99	C	73 – 76.99	D	60 – 66.99
AB	87-92.99	BC	77 – 82.99	CD	67 – 72.99	F	0 – 59.99

Policy on Missed Exams & Coursework

You must take the exams when scheduled. I do my best to forewarn you well in advance of the exam dates and I hope that you will schedule your time accordingly and make arrangements for other potential conflicts. If you must miss an exam for a university sanctioned reason, **please contact me at least one week prior to the exam unless it is an emergency/unexpected reason.** In the event of an emergency, please contact me as soon as possible prior to the start of the exam. ***In order to take a make up exam, you must provide proper documentation from the Dean of Students Office for your absence.*** If the absence is approved, then you will take a make up exam at the testing center. You may be excused for one interview per semester.

Assignments that are due on Canvas must be submitted before the deadline – there are no exceptions. We all procrastinate from time to time, but you have plenty of time to complete these tasks and they can all be completed early. If you turn in any assignment, quiz, etc. after the deadline, you will receive a score of zero. However, I understand that things get busy during the semester and you may forget a deadline or something urgent may come up at the last minute. Therefore, I will drop your lowest homework grade at the end of the semester.

Technology Policy

Electronics should be used for class-related activities (i.e. taking notes, answering iClicker questions). **If you prefer to spend your time in class checking email, texting, updating your fantasy football team, online shopping, etc. please sit in the back of the classroom to minimize distraction to other students.** While we all like to think we are good multi-taskers, research shows that we can actually only focus on one thing at a time. I will also regularly post content to Canvas that you are expected to bring to class (paper or electronic form – slides, examples, etc.). Students from previous classes overwhelmingly commented that coming to class prepared with slides, examples, etc. is their number one tip for future students.

Please make sure to bring a calculator to class with you – we will use a calculator almost every day. You will need a calculator that can do basic power functions. A financial calculator is not necessary. However, a financial calculator or a calculator that you can program equations into will make solving problems easier.

Technology is a big part of our world today and can be very convenient. Email, for example, makes it very easy for us to communicate with each other. I do ask for your patience if I have not yet responded to your email. I will do my best to respond to all emails within 24 hours. Please note that response times may be longer on holidays and weekends.

Academic Integrity

You are encouraged to work together with other students to study course material and learn how to complete assignments. **In fact, I suggest that you work with other students in class to complete example problems and outside of class to complete the homework and/or practice problems in the textbook at the end of each chapter.** I know that these problems can be very time consuming to complete, but your ability to understand how to do these problems is integral to your success in this class. Working together with your classmates will save you a lot of time, effort, and frustration. However, you are responsible for all answers that are submitted in your name on Canvas, including answers to quizzes and homework assignments. You may work with other students to learn how to do these assignments, but the answers you submit for graded assignments must be your own. **You are expected to complete each exam individually with no help from anyone else though.**

I expect you to be honest regarding what days you are in class to earn your iClicker points (the grading policy allows you to miss several classes without penalty). This means that if you are not in class, your clicker should not be in class. Any attempt to earn clicker points on days you are not in class or any attempt to help another student earn clicker points on days they are not in class will result in a zero for both of your iClicker participation grades.

Any violation of these, and other reasonable standards of conduct, will be subject to disciplinary action. The first offense will result in a score of zero for that exam or assignment. Any additional offense will result in a failing grade for the entire course and I will file a report with the Dean of Students Office. We all have bad days and I understand that it is frustrating to study for hours and not achieve your desired grade or to have multiple exams on one day. However, the consequences of cheating will only make both of our days worse and simply aren't worth it in the long run. One bad test grade will not ruin your grade for the entire semester, I promise.

Academic regulations and procedures are governed by University policy. Academic misconduct cases will be handled in accordance with the University's policies. For more details on academic integrity, please review [Michigan Tech's Academic Integrity Policy](#).

Disability Services

If you have a disability that could affect your performance in any class or that requires an accommodation under the Americans with Disabilities Act, please contact your instructor or Disability Services at 906-487-1494 as soon as possible so that appropriate arrangements can be made.

Any student requiring accommodations due to a documented disability must provide me with notification of needed accommodations no later than five business days prior to the use of the accommodations. In situations where fewer than five days' notice is given, the instructor is encouraged, but not obligated, to provide accommodations. The instructor will determine, in consultation with the Testing Center in the Jackson Center for Teaching and Learning, whether these accommodations can be met.

Students who have an accommodation for extended time allowed on tests shall not be required to spend more than six hours per calendar day in final examinations. For a student with an accommodation for extended time, this may reduce the limit on examinations per day to less than the normal limit of three. To resolve time conflicts between two overlapping exams (either regular exams or final examinations), the current practices of the University shall be followed.

University Policies

Student work products (exams, essays, projects, etc.) may be used for purposes of university, program, or course assessment. All work used for assessment purposes will not include any individual student identification.

Michigan Tech is committed to advancing the mental health and well-being of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. For help or to find additional resources, contact Counseling Services at 906-487-2538 or visit the [Counseling Services website](#).

Michigan Tech has standard policies on academic misconduct and complies with all federal and state laws and regulations regarding discrimination, including the Americans with Disabilities Act of 1990. For more information about reasonable accommodations or equal access to education or services at Michigan Tech, please call the Dean of Students Office at 906-487-2212. More information is also available from the [Syllabi Policies webpage](#).