Course Syllabus - EC 314

Public and Private Investment Analysis - Summer 2015

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Introduction

This course will examine the tools required to analyze expenditures that yield benefits over time (investments). The focus on the time value of money will allow students to analyze choices in a variety of security, loan, and equipment investment decisions. The main objectives are to prepare engineers for their PE exams and to provide engineers, economists and others with a shared language and understanding of basic finance topics.

Prerequisites

There are no prerequisites for this course. However, a reasonable math background, MTH 95, is a practical requirement.

Contact Information

Rather than emailing questions, I encourage you to ask your questions in class, we can also start discussions on D2L if there is a need.

Preferred email: wilker2@pdx.edu

D2L email: Do not use. I will not respond.

My office hours will be by appointment only. I am an adjunct professor, as such I do not have my own office on campus. My work office is nearby campus at the KOIN center, so we can find a location nearby that is mutually convenient. If you make an appointment and fail to show up without first canceling, I will penalize you one homework grade. These slots are intended for you to ask questions about course material, I encourage you to work in teams to answer questions about the weekly homework assignments.

Textbooks

I have assigned Engineering Economic Analysis, by Newman, Lavelle, and Eschenbach, 12th edition. If the 12th edition is unavailable, earlier versions are also acceptable but all readings and suggested questions will be from the 12th edition.

I am comfortable with any engineering economics textbook you choose, but it is your responsibility to figure out the relevant readings from the descriptions of the subject matter. The table of contents for the 12th edition will be posted to the D2L website to help you make the correspondences. Many students may find the textbook unnecessary given the online resources. "Schaum's Outline of Engineering Economics” by Sepulveda, Souder and Gottfried is a useful second reference if you are having trouble with time value of money.
Online Resources

We will make significant use of online resources and technology, primarily in the form of the course D2L website. D2L is our main platform for weekly homework assignments, case studies, and any supplemental readings. Should you have technical problems with D2L or your computer please resolve them yourself with the general campus help desk or D2L help (http://www.psuonline.pdx.edu/). You will also find a tutorial on how to use D2L on your D2L landing page.

You are responsible for learning how to use D2L.

The course D2L landing page will have several important links:

- Calendar of topics, deadlines, and due dates
- Table of contents for 12th edition book
- Weekly homework assignment
- Case studies to be used for group projects

Pay particular attention to the course content tab in the upper left. This is where most of the online work starts. The calendar tool will show weekly homework deadlines. These are hard deadlines. Having a disruption in D2L or internet connectivity in the hour or two before does not change the deadline, it means you should plan on finishing the assignments in advance of the deadline.

Assessments and Grade Policy

Your grade in the class will be based on your performance on the online assignments, a group presentation of a case study, classroom participation, and an in class final exam. There will not be any online quizzes, in class pop quizzes, or midterm exams.

The optimal study pattern is to:

- Read the required material
- Attend the class lectures
- Try some practice questions at the back of the chapter (or in other available resources)
- View the questions on the D2L website
- Work in a team to solve the questions
- Homework from the previous week will be reviewed at the beginning of each week

Grades will be based on your accumulated points for all assignments and class participation, subject to a final adjustment (i.e. curve). The breakdown of possible points is as follows:

**Weekly Homework – 50% of final grade**

- There will be weekly homework assignments posted on the D2L site. The homework will be released on Wednesday mornings after Tuesday lectures, and will be due the following Monday at 9am. Each assignment will have release and due dates on the course calendar. There is no time limit to complete the assignments
- Submission dates and time are firm. LATE ASSIGNMENTS WILL NOT BE ACCEPTED UNDER ANY CIRCUMSTANCE
• There will be seven equally weighted weekly homework assignments
• The two lowest scored assignments will be dropped. Only your five highest scored assignments will count towards your final grade. You have the option of not completing two assignments for any reason of your choosing, or submitting all and keeping the best five point totals
• The two dropped scores are intended to be a buffer for technical failures, illness, bad days and other bad luck. I will take care of this adjustment at the end of term. You need not do anything
• Your homework must be submitted on the D2L site. Incomplete homework will count the same at not submitting. There is no partial credit for completing some of the questions

**Group Presentation – 10% of final grade**
• Each class participant must take part in a group presentation. There will be a signup sheet available on the first day of class. If you are not able to find a group on the first day of class, contact me and I will add you to a group
• The presentation will be up to 20 minutes in length with time for any questions
• A case study will be assigned for each class session based on the topic being covered in class and available on the D2L site
• Presentations can be conducted on PowerPoint and should be emailed to the course instructor in advance or brought to class on a USB flash drive

**Class Participation – 10% of final grade**

**Final Exam – 30% of final grade**
• The final exam will be offered on the last day of the term
• It will be an in class test
• Attendance is mandatory. If you have a prior conflict, notice must be provided in advance and any alternative arrangements must be provided in writing by the course instructor

**Course Schedule**
The class schedule will be maintained and updated on the D2L course website. Not all material in the textbook will be covered. The following is a list of the material that will be covered during the course:
• Chapter 1—Making Economic Decisions
• Chapter 2—Estimating Engineering Costs and benefits
• Chapter 3—Interest and Equivalence
• Chapter 4—Equivalence for Repeated Cash Flows
• Chapter 5—Present Worth Analysis
• Chapter 6—Annual Cash Flow Analysis
• Chapter 7—Rate of Return Analysis
• Chapter 8—Choosing the Best Alternative
• Chapter 9—Other Analysis Techniques
• Chapter 14—Inflation and Price Change
Additional content may be added depending on how quickly we can cover the material listed above. More detailed descriptions of the chapters will be posted on the D2L website so that additional online resources or textbooks can be substituted for the recommended textbook.

Class lectures will be presented in PowerPoint, however, they will NOT be provided to students at any time. This is for several reasons:

- I prefer to use whiteboards, but due to the classroom setup and the fact that my handwriting is difficult to decipher, I have opted to use PowerPoint to present definitions and solutions to problems
- There will be additional content that is not directly presented on the slides and will be missed if class lectures are not attended
- Homework assignments and final exams will be based on what is covered in class, not just the content covered on the slides
- Guest lecturers may not present in PowerPoint

Other Rules

- Begging for grades will result in an immediate lowering of your course grade by a full letter grade
- Cell phones must be silenced including any audible vibrations
- Laptops or other devices are permitted during class lectures
- Schedule an appointment at the first sign of trouble—not as a last resort
- In this classroom, we support and value diversity. To do so requires that we:
  - Promote a culture of respect toward all individuals
  - Respect the privacy, property, and freedom of others
  - Reject bigotry, discrimination, violence, or intimidation of any kind
  - Practice personal and academic integrity and expect it from others
  - Promote the diversity of opinions, ideas, and backgrounds, which is the lifeblood of a university

For additional information, please see the Office of Affirmative Action & Equal Opportunity at http://www.pdx.edu/diversity/affirmative-action.

Accommodations are collaborative efforts between students, faculty, and the Disability Resource Center. If you have a documented disability and require accommodation, you must arrange to meet with the course instructor prior to or within the first week of the term. The documentation of your disability must come in writing from the Disability Resource Center (faculty letter). For more information on the Disability Resource Center, please see http://www.drc.pdx.edu/.

Academic honesty is expected and required of students enrolled in this course. Suspected academic dishonesty in this course will be handled according to the procedures set out in the Student Code of Conduct.

I am sympathetic to family emergencies but you must inform me as soon as possible. If the notice is verbal, please email me with your understanding of our agreement.