

Ec 314:002 CRN: 40863 Private and Public Investment Analysis Winter 2024 Syllabus

Portland State is located in the traditional homelands of the Multnomah, Wasco, Cowlitz, Kathlamet, Clackamas, Watlala Bands of Chinook, Tualatin Kalapuya, Molalla, and many other indigenous nations who made their homes along the Columbia and Willamette Rivers. By recognizing these communities, we honor their legacies, their lives, and their descendants.

Instructor: Dr. Sarah Tinkler, tinkler@pdx.edu

Class meetings: Online, no scheduled meeting times

Office hours:

- Tuesday and Thursday from 1-2p on Zoom (link on Canvas)
- Wednesdays from 12-2p in URBN 450E
- by appointment on Zoom (send email to schedule)

Course Description

Students learn how to solve engineering, business and personal finance problems using applied economic methods founded in economic principles. Students will learn how to evaluate the financial condition of a publicly-traded company. Junior or senior standing recommended.

Course materials (not required/plenty of materials available free on Canvas)

Contemporary Engineering Economics by Chan S. Park (6th or recent edition) or *Engineering Economic Analysis*, by Newnan, Eschenbach and Lavelle.

Deliverables (All by 11:30 p.m)	Deadlines	%
8 quizzes (2 attempts/1 dropped)	Sundays, end of Weeks 1-6, 8-9	35
1 midterm (2 attempts)	Sunday, end of Week 7	10
Final exam (1 attempt)	Friday, March 22	15
8 discussions	Monday of Weeks 2-9	40

Advice for EC314

- The class gradually gets harder and peaks in Week 7
- Set early deadlines for yourself if other classes have Sunday/Monday deadlines.
- This course develops a critical competency. Fair warning: There are easier ways to get University Studies credit than taking an engineering economics course.
- Academic honesty is assumed. All else is referred to the Dean of Students.

Course calendar:

Click on a “Week” under “Modules” on Canvas.

Week 1 (Starts January 8)

- Topics: Economic and engineering economic principles (Park, Chapter 1)
- Deliverables: Join a Company Study Discussion Group ASAP. Go to “People” then “Groups” in left-hand menu on Canvas.
 - Week 1 Quiz due Sunday, January 14

Week 2 (Starts January 15) **University Closed on Monday for Martin Luther King Jr. Day**

- Topics: Balance sheet and costs (Park, Chapters 2, 8)
- Deliverables: Discussion 1 due Monday, January 15
 - Week 2 Quiz due Sunday, January 21

Week 3 (Starts January 22)

- Topics: Income statement, economic equivalence and factor notation (Park Chapters 2, 3)
- Deliverables: Discussion 2 due Monday, January 22
 - Week 3 Quiz due Sunday, January 28

Week 4 (Starts January 29)

- Topics: Cash flows and uniform series (Park Chapters 2, 3)
- Deliverables: Discussion 3 due Monday, January 29
 - Week 4 Quiz due Sunday, February 4

Week 5 (Starts February 5)

- Topics: Company background and citizenship, linear and geometric gradients (Park Chapter 3)
- Deliverables: Discussion 4 due Monday, February 5
 - Week 5 Quiz due Sunday, February 11

Week 6 (Starts February 12)

- Topics: Financial ratios, nominal and effective interest rate (Park, Chapters 2, 4)
- Deliverables: Discussion 5 due Monday, February 12
 - Week 6 Quiz due Sunday, February 18

Week 7 (Starts February 19)

- Topics: Present and future worth, MARR, CEC (Park, Chapter 5)
- Deliverables: Discussion 6 due Monday, February 19
 - Midterm (Week 7 Quiz) due Sunday, February 25

Week 8 (Starts February 26)

- Topics: AEC, capital recovery, ROR and IRR, bonds (Park, Chapters 6, 7, 4)

- Deliverables: Discussion 7 due Monday, February 26
 - Group presentation finalized by Tuesday, February 27
 - Discussion 8 opens Wednesday, February 28
 - Week 8 Quiz due Sunday, March 3

Week 9 (Starts March 4)

- Topics: MIRR, incremental Analysis, depreciation, taxation (Park Chs, 7, 9)
- Deliverables: Discussion 8 due Monday, March 4
 - Week 9 Quiz due Sunday, March 10

Week 10 (Starts March 11)

- Topics: Cost-benefit analysis, inflation, real interest rates, risk and decision trees (Park Chapters 10, 11, 12)
- Deliverables: Final Exam (**1 attempt only**) due Friday, March 22

Course Policies:

Affirmative Action

Portland State University supports equal opportunity for all, regardless of age, color, disability, marital status, national origin, race, religion or creed, sex or gender, sexual or gender identity, sexual orientation, veteran status, or any other basis in law.

Disability Resources at PSU

Students with accommodations approved through the Disability Resource Center are responsible for contacting the faculty member prior to, or during, the first week of term to discuss any accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval should contact the DRC immediately.