

EC 314-001 CRN 10905 Private and Public Investment Analysis Fall 2023 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](#),

Class meetings: Online, no scheduled meeting times

Office hours:

- Tuesday and Thursday from 1-2p.m. 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)	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, 12/08	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 9/26-Tuesday)

- Topics: Economic and engineering economic principles (Park, Ch. 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, 10/01

Week 2 (Starts 10/02)

- Topics: Balance sheet and costs (Park, Chs. 2, 8)
- Deliverables: Discussion 1 due Monday, 10/02
 - Week 2 Quiz due Sunday, 10/08

Week 3 (Starts 10/09)

- Topics: Income statement, economic equivalence and factor notation (Park Chs. 2, 3)
- Deliverables: Discussion 2 due Monday, 10/09
 - Week 3 Quiz due Sunday, 10/15

Week 4 (Starts 10/16)

- Topics: Cash flows and uniform series (Park Chs. 2, 3)
- Deliverables: Discussion 3 due Monday, 10/16
 - Week 4 Quiz due Sunday, 10/22

Week 5 (Starts 10/23)

- Topics: Company background and citizenship, linear and geometric gradients (Park Ch. 3)
- Deliverables: Discussion 4 due Monday, 10/23
 - Week 5 Quiz due Sunday, 10/29

Week 6 (Starts 10/30)

- Topics: Financial ratios, nominal and effective interest rate (Park, Chs. 2, 4)
- Deliverables: Discussion 5 due Monday, 10/30
 - Week 6 Quiz due Sunday, 11/05

*Week 7 (Starts 11/06) **Veterans Day observed November 10th (PSU closed)***

- Topics: Present and future worth, MARR, CEC (Park, Ch. 5)
- Deliverables: Discussion 6 due Monday, 11/06
 - Midterm (Week 7 Quiz) due Sunday, 11/12

Week 8 (Starts 11/13)

- Topics: AEC, capital recovery, ROR and IRR, bonds (Park, Chs., 6, 7, 4)
- Deliverables: Discussion 7 due Monday, 11/13
 - Group presentation finalized by Tuesday, 11/14
 - Discussion 8 opens Wednesday, 11/15
 - Week 8 Quiz due Sunday, 11/19

*Week 9 (Starts 11/20) **Thanksgiving Holiday, November 23rd and 24th (PSU closed)***

- Topics: MIRR, incremental Analysis, depreciation, taxation (Park Chs, 7, 9)
- Deliverables: Discussion 8 due Monday, 11/20
 - Week 9 Quiz due Sunday, 11/26

Week 10 (Starts 11/27)

- Topics: Cost-benefit analysis, inflation, real interest rates, risk and decision trees (Park Chs, 10, 11, 12)
- Deliverables: Final Exam (1 attempt only) due Friday, 12/08

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.