# Ec 314:002 Private and Public Investment Analysis Winter 2021 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 Term: Winter 2021

E-Mail: tinkler@pdx.edu Class Meetings: None. Class is fully

Office hours: Individual appointments on onli

Zoom. Send E-Mail to schedule.

# **Course description**

This class teaches you to solve engineering, business and personal finance problems using applied economic methods founded in economic principles. Students will learn accountancy tools sufficient to assess the financial condition of a US corporation. Recommended: junior or senior standing.

# "Remote" versus "Online" Courses at PSU

EC 314:002 is "online". As per PSU policy, it is asynchronous (no set meeting times) and has an "online" fee.

# **Course materials**

Contemporary Engineering Economics by Chan S. Park (6<sup>th</sup> or recent edition) or Engineering Economic Analysis, by Newnan, Eschenbach and Lavelle. You may not need to buy a book since there are a lot of free resources available on the website.

Deliverables (All by 11:30 pm)	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)	Sunday, March 21	15
6 discussion boards (1 dropped)	Monday of Weeks 2-7	25
1 individual Google slide	Monday of Week 8	5
1 group project organization board	Monday of Week 8	5
1 All-class comments board	Monday of Week 9	5

<b>Points</b>	<u>Grade</u>	<u>Points</u>	<u>Grade</u>	<u>Points</u>	<u>Grade</u>
92-100	A	80-81	B-	67-69	D+
90-91	A-	77-79	C+	62-66	D
87-89	B+	72-76	С	60-61	D-
82-86	В	70-71	C-	<60	F

# **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 "Content" in D2L course navigation menu.

## Week 1 (Starts Jan 4)

- Topics: Economic and engineering economic principles (Park, Chapter 1)
- Deliverables:
  - Join a Company Study Discussion Group ASAP
  - Week 1 Quiz due Sunday, Jan 10

### Week 2 (Starts Jan 11)

- Topics: Balance sheet and costs (Park, Chapters 2, 8)
- Deliverables:
  - o Discussion 1 due Monday, Jan 11
  - Week 2 Quiz due Sunday, Jan 17

# Week 3 (Starts Jan 18)

- Topics: Income statement, economic equivalence and factor notation (Park Chapters 2, 3)
- Deliverables:
  - Discussion 2 due Monday, Jan 18
  - Week 3 Quiz due Sunday, Jan 24

# Week 4 (Starts Jan 25)

- Topics: Cash flows and uniform series (Park Chapters 2, 3)
- Deliverables:
  - Discussion 3 due Monday, Jan 25
  - Week 4 Quiz due Sunday, Jan 31

# Week 5 (Starts Feb 1)

- Topics: Company background and citizenship, linear and geometric gradients (Park Chapter 3)
- Deliverables:
  - Discussion 4 due Monday, Feb 1
  - Week 5 Quiz due Sunday, Feb 7

### Week 6 (Starts Feb 8)

- Topics: Financial ratios, nominal and effective interest rates (Park, Chapters 2, 4)
- Deliverables:
  - Discussion 5 due Monday, Feb 8
  - Week 6 Quiz due Sunday, Feb 14

### Week 7 (Starts Feb 15)

- Topics: Present and future worth, MARR, CEC (Park, Chapter 5)
- Deliverables:
  - o Discussion 6 due Monday, Feb 15
  - o Midterm (Week 7 Quiz) due Sunday, Feb 21

### Week 8 (Starts Feb 22)

- Topics: AEC, capital recovery, ROR and IRR, bond markets (Park, Chapters, 6, 7, 4)
- Deliverables:
  - Discussion 7 (organize online presentation) due Monday, Feb 22
  - o Individual slide due to "Assignments" on D2L, Monday, Feb 22
  - Group presentation finalized by Tuesday, Feb 23
  - o Comments Board (Discussion 8) opens Wednesday, Feb 24
  - Week 8 Quiz due Sunday, Feb 28

### Week 9 (Starts March 1)

- Topics: MIRR, incremental Analysis, depreciation and taxation (Park Chapters, 7, 9)
- Deliverables:
  - All-Class Comments Board (Discussion 8) due Monday, March 1
  - Week 9 Quiz due Sunday, March 7 at 11:30 p

### Week 10 (Starts March 8)

- Topics: Cost-benefit analysis, inflation, real interest rates, risk and decision trees (Park Chapters, 10, 11, 12)
- Deliverables:
  - Final Exam (1 attempt only) due Sunday, March 21 at 11:30 p.m.

# **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.