



ECON 180 A01

Introduction to Economics and Financial Project Evaluation

Winter Session: 2024 09 – CRN 11080, 1.5 units, classes on Tuesdays, Wednesdays and Fridays, 11:30 AM to 12:20 PM, September 4 to December 4, Zoom links provided on an individual lecture basis via Brightspace.

UVic Land Acknowledgement

We acknowledge and respect the Ləkʷəŋən (Songhees and Esquimalt) Peoples on whose territory the university stands, and the Ləkʷəŋən and WSÁNEĆ Peoples whose historical relationships with the land continue to this day.

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Office Hours: Mondays noon to 2 PM, Zoom

Stable Zoom link: <https://uvic.zoom.us/j/84255395747?pwd=gNO1INhiDLFOoY0umzoR9I7lcGbKYa.1>

Course Content

A concentrated introduction to principles of economics, project management, and financial project evaluation and selection for Engineering students. Economics topics include supply and demand, multipliers¹ and tax incidence. Financial project evaluation topics include discounted cash flow, benefit-cost analysis, financial accounting, and decision-making considering depreciation, inflation, taxes and risk. Project management topics include work breakdown structures, the critical path method and crashing. Assumes competency in calculus, algebra and familiarity with computer spreadsheet software.

¹ Please note that this term, multipliers will only be covered in an optional lecture.

Learning Outcomes

The course structure table includes a list of project evaluation techniques covered by this course.

For each technique listed, students will be able to:

- Explain the intuition behind the technique
- Interpret the standard notation and jargon used by the technique (for example, be able to read the standard notation used for discounted cash flow analysis)
- Interpret graphs and tables commonly used by practitioners of the technique (e.g. supply and demand or cash flow diagrams)
- Evaluate simple projects using the technique, and standard notation
- Summarize the results of these evaluations
- For the same simple projects, produce graphs and tables commonly used by practitioners of the technique

Course prerequisites/corequisites

Completion of MATH101 – Calculus II (1.5) and admission to BEng or BSEng program.

Textbook and Software

ECON 180 makes use of a wide variety of online materials in lieu of a single textbook. All required materials are free to UVic students, and will be linked to on Brightspace. Students are also expected to use the desktop version of Microsoft 365, in particular Word and Excel. Microsoft 365 is available for free to UVic students: <https://www.uvic.ca/systems/services/computerssoftware/microsoft365/index.php>

Brightspace

Brightspace is used extensively for the course. All students are expected to be fully functional with the system. The lecture notes will be posted in *Brightspace*. Please note that the lecture notes online are only outlines of the actual lectures.

All announcements will be posted in *Brightspace*. Students are advised to check it frequently.

Grading

Grading Scheme

The course grade is determined as follows:

3 homework projects, each carrying a weight of 20%.

2 in-person midterm exams, with the best mark out of the two carrying a weight of 10%

1 in-person final exam worth 30%

Mandatory/Essential Course Components

To complete the course, student must receive a non-zero grade for at least 2 projects, attend and submit at least one of the two in-person midterm exams, and attend and submit the (in-person) final exam. If you do not meet these requirements, you will receive an “N” grade, no matter what your score in the rest of the course is. An “N” is a failing grade, and counts as a ‘0’ in GPA calculations.

Dates of Assessments, Due Dates of Assignments

Projects:

All three projects are to be submitted via Brightspace. **Projects will be marked exactly as submitted.** If you submit a draft or another course’s assignment by mistake, that’s what will be marked. **No exceptions.** However, you are allowed to resubmit your project as often as you wish before the due date; by default only the most recent submission before the deadline will be marked.

Please note that the project due dates listed below are preliminary, and may change in response to class needs and student feedback. Such changes will always be announced via a Brightspace announcement.

Project 1: Due September 27, 2024, by 11:59 PM, Victoria B.C. time.

Project 2: Due October 25, 2024, by 11:59 PM, Victoria B.C. time.

Project 3: Due December 4, 2024, by 11:59 PM, Victoria B.C. time.

Midterms:

At the time of writing, room bookings for the midterms have been requested but not confirmed, and so the dates below should be considered preliminary. This course outline will be updated with the midterm dates and locations once this information is available.

Both midterms take place during the scheduled class time. Expected coverage is preliminary and subject to change. A detailed announcement regarding midterm coverage will be sent via Brightspace once each midterm has been sent to printing.

Midterm 1: October 2, 11:30 AM to 12:20 PM, Location TBA

Expected Coverage: Lectures 2 – 9 (September 6 to September 24, inclusive).

Midterm 2: November 1, 11:30 AM to 12:20 PM, Location TBA

Expected Coverage: Lectures 11 – 21 (September 27 to October 23, inclusive).

Final exam:

The final exam will be in person and take place during the December exam period. It is cumulative, and all material in the course is fair game for testing. A detailed announcement regarding final exam coverage will be sent via Brightspace once the final exam has been sent to printing.

Grading Scale

A+	A	A-	B+	B	B-	C+	C	D	F or N
90-100	85-89	80-84	77-79	73-76	70-72	65-69	60-64	50-59	0-49

Students should review the University's more detailed [summary of grading](#).

Missing Assessments

Late projects will receive a mark of zero, period, no exceptions. In the absence of a pre-approved extension, due dates for projects will NOT be extended, even by one minute. Extensions must be arranged *before* the project is due, except in the case of your 'mental health voucher' (see below). If you ask for an extension five seconds after the assignment or project is due, your request will be declined.

Though projects get a mark of zero if submitted after the due date, it is possible to get an extension that changes the due date for you. There are three main types:

- **Mental health voucher.** Every student automatically starts the course with a 'mental health voucher' good for a 3-day (72-hour) extension. **This is the *only* extension that can be granted after the original due date**, and you only have one, so make sure you use it when doing so is most valuable to you. If you find yourself having to submit a project late, if it's three days late or less, submit your project, and write in the comment 'I'm using my mental health voucher' on Brightspace. You should also send me an e-mail at willmore@uvic.ca so that I can alert the TA to your submission. This is a one-use voucher, so if you use it when submitting a project that's one minute late, the entire voucher will be gone. Keep that in mind. **This voucher CANNOT be used for the in-person tests or for the final exam.**
- **Extension due to excessive coursework.** It's not my intention to overburden you with work at the same time all your other courses are doing the same. If you have, say, three midterms and two projects due the same week as an ECON 180 assignment, send me an e-mail **ahead of time** requesting an extension. I'll work with you to find an extension that is appropriate for your case and fair to other students. Along with your e-mail, please send evidence of the due dates of the other projects, midterms, etc. (even Brightspace screenshots or forwarded announcements are enough).
- **Extension due to illness or other personal issues.** If you have a personal issue that you believe is grounds for an extension (mental or physical health, varsity trip, etc.) then send me an e-mail requesting an extension before the deadline for the relevant assignment or project. I will do my best to find an extension that is appropriate for you and fair to other students, but depending on the exact circumstances I may not be able to do so. You do not need to share any private information when sending me an e-mail. If I need additional information, I will let you know, and I will do my best to keep it to the minimum details necessary to justify an extension.

Should students encounter a situation where they miss both midterms or the final exam, they may qualify for an academic concession. Missing a midterm results in a mark of zero for the midterm. There is no problem with missing one midterm, as only the highest grade out of both midterms is used. However, there are no deferred/late midterms in this course, and a student who does not attend and submit either

midterm is expected to receive an N (incomplete and failed) grade. If a student misses both midterms for a reason for which the university requires accommodation (e.g. illness), it may be possible to put the weight of the midterms on the final exam. To apply for this, a student is required to indicate the specific grounds on which they are requesting an academic concession and to provide a justification outlining the impact of the circumstances on their ability to complete course requirements via a Request for In-course Extension form. To do this, please [fill in the form and follow the instructions on the form](#). I will not respond to informal requests of academic concessions. In case you miss the final exam, fill in a [request for a deferral](#).

Students are advised not to make work or travel plans until after the examination timetable has been finalized. Students who wish to finalize their travel plans at an earlier date should book flights that depart after the end of the examination period. Students do not qualify for an academic concession if travel plans conflict with the examination.

Course Policies

This course adheres to the [Undergraduate Course Policies](#) of the Department of Economics that deal with the following issues:

- Academic concessions
- Academic integrity (plagiarism and cheating)
- Attendance
- Grading
- Inclusivity and diversity
- Late adds
- Late assignments
- Repeating courses
- Review of an assigned grade
- Sexualized violence prevention and response
- Students with a disability
- Term assignments and debarment from examinations
- Travel plans
- Waitlists

The following policies are explicitly included because of their importance:

Waitlist Policies

- Instructors have no discretion to admit waitlisted students or raise the cap on the course.
- Students on the waitlist should discuss with the instructor how to ensure they are not behind with coursework in the event they are admitted.
- Registered students who do not participate as specified in this outline during the first 7 calendar days from the start of the course may be dropped from the course.
- Registered students who decide not to take the course are responsible for dropping the course and are urged to do so promptly out of courtesy toward waitlisted students.
- Waitlist offers cease after the last date for adding courses irrespective of published waitlists.

Academic Integrity

Academic integrity requires commitment to the values of honesty, trust, fairness, respect, and responsibility. Students are expected to observe the same standards of scholarly integrity as their academic and professional counterparts. A student who is found to have engaged in unethical academic behaviour, including the practices described in the [Policy on Academic Integrity](#) in the University Calendar, is subject to penalty by the University.

Review [What is Plagiarism](#) for the definition of plagiarism. Note: Submitted work may be checked using plagiarism detection software.

Student Code of Conduct

The Humanities, Science, and Social Sciences Faculties have adopted this [Student code of conduct](#). Please, review.

University Policies

- University Calendar - Section "[Information for all students](#)"
- [Creating a respectful, inclusive and productive learning environment](#)
- [Accommodation of Religious Observance](#)
- [Student Conduct](#)
- [Non-academic Student Misconduct](#)
- [Accessibility](#)
- [Diversity / EDI](#)
- [Equity statement](#)
- Discrimination and Harassment [Policy](#)
- [Policy on Human Rights, Equity and Fairness](#) - The University is committed to promoting, providing and protecting a positive, supportive and safe learning and working environment for all its members.

Sexualized Violence Prevention & Response

UVic takes sexualized violence seriously, and has raised the bar for what is considered acceptable behaviour. Students are encouraged to learn more about how the university defines sexualized violence and its overall approach by visiting www.uvic.ca/svp. If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). Contact sypcoordinator@uvic.ca.

Resources for Students

[UVic Learn Anywhere](#) - UVic Learn Anywhere is the primary learning resource for students that offers many learning workshops and resources to help students with academics and learning strategies.

[Centre for Accessible Learning](#) - Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, you are free to approach me; however, you must register with the [Centre for Accessible Learning](#) (CAL) for formal arrangements to be made. The CAL staff are available by appointment to assess specific needs,

provide referrals and arrange appropriate accommodations. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

[Centre for Academic Communication](#) - Offers coaching on [academic integrity](#), including preventing accidental plagiarism. Provides support to students with time management, reading, writing, speaking, understanding academic expectations, and other aspects of academic communication as well as creating academic posters, blogposts, PowerPoint slides, and e-portfolios.

[Health Services](#) - University Health Services (UHS) provides a full service primary health clinic for students, and coordinates healthy student and campus initiatives.

[Support Connect](#) - a 24/7 mental health support service for students

- Toll-free (calls from North America): 1-844-773-1427
- International collect calls: 1-250-999-7621

[Counselling Services](#) - Counselling Services can help you make the most of your university experience. They offer free professional, confidential, inclusive support to currently registered UVic students.

[Indigenous Student Services](#) - Indigenous UVic students have access to many sources of support on campus. Before, during and after your time at UVic, you are encouraged to explore programs and services available to you, such as [Indigenous counselling services](#) and the [Elders in Residence](#), as well as non-academic programs that may be of interest to you.

[International Student Support](#) - The University of Victoria offers a number of resources to support international students as they pursue their studies. UVic's [International Centre for Students](#) is the primary office supporting international students on campus at the university-wide level and provides various supportive program through the [UVic Global Community Initiative](#), including a Mentorship Program and Conversation Partner Program.

For academic advising-related questions, students in the Economics Department are also encouraged to meet with the Economics Undergraduate Advisor (Brooklynn Comish-Trimble, ecadvice@uvic.ca) as well as an academic advisor in the [Academic Advising Centre](#) early in their studies to help map out a plan to declare a major and complete university program requirements. Other resources include the [Centre for Academic Communication](#) and the [Math and Stats Assistance Centre](#).

The International Student Liason in the Economics Department is Dr. Paul Schure who can help you connect with other international and domestic students in the Department. His email address is schure@uvic.ca. Please, reach out if you are interested.

Course Experience Survey (CES)

I value your feedback on this course. Towards the end of term you will have the opportunity to complete a confidential course experience survey (CES) regarding your learning experience. The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future.

When it is time for you to complete the survey, you will receive an email inviting you to do so. If you do not receive an email invitation, you can go directly to the [CES log-in](#). You will use your UVic NetLink ID to

access the survey, which can be completed on your laptop, tablet or mobile device. I will remind you nearer the time, but please be thinking about this important activity, especially the following three questions, during the course.

What strengths did your **instructor** demonstrate that helped you learn in this course?

Please provide specific suggestions as to how the **instructor** could have helped you learn more effectively.

Please provide specific suggestions as to how this **course** could be improved.

Course Structure

The coverage below is preliminary and may change in response to class needs and student feedback. Readings and other material will be listed on a lecture-by-lecture basis on Brightspace.

Lecture	Day	Month	Topic	Assessment Due
1	4	Sep	Introduction	
2	6	Sep	Incremental Benefit Cost Analysis	
3	10	Sep	Introduction to Excel	
4	11	Sep	The Time Value of Money	
5	13	Sep	The Minimum Acceptable Rate of Return	
6	17	Sep	APRs & Interest Rate Conversions	
7	18	Sep	Discounted Cash Flow Analysis I	
8	20	Sep	Discounted Cash Flow Analysis II	
9	24	Sep	Discounted Cash Flow Analysis Intuition	
10	25	Sep	DCFA with Excel	
11	27	Sep	Net Present Value (NPV)	Project 1
12	1	Oct	Projects with unequal lifetimes	
Midterm 1	2	Oct	Midterm 1	Midterm 1
13	4	Oct	Equivalent Annual Cost & Economic Lifetime	
14	8	Oct	The Internal Rate of Return	
15	9	Oct	The External Rate of Return	
16	11	Oct	Supply and Demand	
17	15	Oct	Price Controls	
18	16	Oct	Who pays a tax?	
19	18	Oct	Elasticity and Tax Incidence	
20	22	Oct	Monopolies & Cartels	
21	23	Oct	Recent inflation in Canada	
22	25	Oct	Measuring Inflation with the CPI	Project 2
23	29	Oct	Adjusting for Inflation	
24	30	Oct	Financial Accounting	
Midterm 2	1	Nov	Midterm 2	Midterm 2
25	5	Nov	Introducing Taxes	

26	6	Nov	Capital Cost Allowances	
27	8	Nov	One-Sided Sensitivity Analysis	
28	15	Nov	Switching Values & Payback Periods	
29	19	Nov	Decision Trees	
30	20	Nov	One-Sided Sensitivity & Excel	
31	22	Nov	Probabilistic Sensitivity with Monte Carlo	
32	26	Nov	Work Breakdown Structures	
33	27	Nov	Gantt Charts & AON Diagrams	
34	29	Nov	The Critical Path	
35	3	Dec	A Crashing Example	
36	4	Dec	Multipliers	Project 3

Economics Department guidelines on E-mail Correspondence

Emails should be limited to critical matters, such as inability to attend class, an exam, or prolonged illness, and should include the course name and number in the subject line. Questions on course material should be asked during office hours or in class. The standard format for writing a letter must be used. This means it should begin with a salutation (e.g. Dear...), include full sentences and it must conclude with a signature that includes your **full name and V#**. Text message lingo should not be used.

Instructor Addendum: Despite the above guidelines, I'm happy to answer occasional student questions on course content via e-mail, with two caveats. First, I ask that you please try to solve the problems on your own or by consulting with your classmates before reaching out to me. By the time you send me a message, you should have exhausted your other options for help (including the optional material posted on Brightspace). Second, as there are a large number of students in the course, any given student should be contacting me only infrequently for help.

Use of AI

For the purposes of this course, use of generative AI is viewed in the same light as getting help from a classmate. If it would not be appropriate or allowed if another student were doing it for you, then it's not appropriate or allowed for (e.g.) ChatGPT to do it for you, and the same restrictions regarding citations, plagiarism, etc. apply. This also means that in cases where you are allowed to seek help from classmates, you are allowed to use generative AI. Please note that, similarly to unsupported statements from a classmate, material created by generative AI, in response to queries by yourself or someone else, is not considered to be an authoritative source.