

**University of Waterloo**  
**Department of Economics**  
**ECON 290: Models of Choice in Competitive Markets (Section 001)**  
**Course Outline – Spring Term 2018**

**Instructor Information**

**Instructor:** Corey Van de Waal

**Office:** HH 103

**Website:** <http://economics.uwaterloo.ca/corey-van-de-waal>

**Class Meets:** 8:30am – 9:50am on Mondays and Wednesdays.

**Classroom:** EV3 1408

**Email:** [chvandew@uwaterloo.ca](mailto:chvandew@uwaterloo.ca)

When sending email to your instructor, always use your University of Waterloo email account. “ECON 290” must appear in the subject line and the message must include your *full name and student ID number*.

**Office Hours and Other Support Resources**

**Office hours:** Mondays and Wednesdays from 10am – 11am (Starts May 7<sup>th</sup> and ends July 25<sup>th</sup>).

Office hours for the Final Exam Period will be announced in July.

Office hours are the appropriate venue for asking questions about the material from the course. Email is an inefficient method for communicating course content, and I will not respond to detailed questions regarding the material other than during class or in office hours.

If these office hours are not convenient for you, I am also available by arranging a mutually convenient appointment via e-mail.

Where to find this course outline:

This course outline is available at two locations for the duration of the term:

- Department of Economics website <http://economics.uwaterloo.ca>
- LEARN web site (requires UW user id and password) <http://learn.uwaterloo.ca>

## **Brief Summary**

Choice lies at the heart of all economic models. This course focuses on choice by consumers and firms. It explains the notion and use of utility functions and budgets, and shows how their interaction allows economists to make predictions about consumer behaviour. The constrained maximization techniques from ECON 211 are used extensively, and extended to situations covering uncertainty (risk) and time. Profit maximization by firms is explored.

There is a voluminous amount of material to cover in this course. We will attempt to get as far through the topic list as our limited time will allow.

**Prerequisite:** ECON101 or ECON100/COMM103; ECON211 or one of MATH128,138,148; ECON221 or one of ARTS280, ENVS278, KIN222, PSCI214/314, PSYCH292, REC371, SDS250R, SMF230, SOC/LS280, STAT202, 206,211,220,230,240, SWREN250R; or Math/FARM students.

**Antirequisite:** ECON301, ECON302.

## **Course Goals and Learning Objectives**

At the end of the course, students should be able to

- apply elements of microeconomic theory to understand how consumers and producers make rational decisions;
- explain the fundamental features of a competitive market structure;
- apply theoretical understanding to problems of production and costs;
- use applied economic techniques to analyze conceptual problems.

## **Textbook, Coursenotes, and Other Resources**

### **COURSE NOTES**

I have prepared a set of lecture notes that are available on LEARN augmented by attending class and taking detailed personal notes. These notes will serve as your “textbook”.

### **TEXTBOOK**

There is no required textbook for this class, and my lectures will be based on my own notes. Students are responsible for obtaining notes for lectures that they do not attend. The topics from class are all covered by standard intermediate microeconomics

textbooks (that use calculus), and I recommend that you read through the relevant sections of some such book because (a) it can provide a different perspective on material presented in class, (b) it has a more space devoted to discussions and examples, and (c) it serves as a source of exercises and practice problems. Here is a (non-exhaustive) list of such textbooks (any edition is suitable).

- Varian, H., Intermediate Microeconomics.
- Perloff, J.M., Microeconomics: Theory and Applications with Calculus.

Examinations in this course are based on the material presented as lecture content and any assigned work (which are strong complements, not substitutes...see Policy on Class Attendance).

### **Materials Available on LEARN**

As mentioned, I will be posting the course lecture slides on LEARN before each class. It is your responsibility to keep yourself current with the assigned readings as well as maintaining an understanding of the lecture content.

- Any additional course materials (news, updates, announcements) will be posted on the LEARN web site <http://learn.uwaterloo.ca>
- The LEARN site is down occasionally. Save the course materials to your computer as soon as they are posted. Always be prepared!
- Students writing test and exams are responsible to save course materials on LEARN before the access to their courses is shut off (normally on the first day of classes of the next term).

## **Course Requirements and Assessment**

The five individual assignments in this course will collectively be worth **10%** of your final grade. The two midterms will be written in the class period on the dates specified below and the results will be worth **20%** of your final grade for each midterm. The final exam will constitute **50%** of your final grade and will be comprehensive (i.e. cover all course material from beginning to end).

The course grade will be based on the weighted sum of the five assignments, the two midterm exams, and the final examination which will be held during the Official Examination Schedule. The breakdown is as follows:

<b>Assessment</b>	<b>Date of Evaluation</b>	<b>Weighting</b>
Assignments (5)	TBA	10%
Midterm #1	May 30, in class	20%
Midterm #2	July 4, in class	20%
Final Exam	TBA (July 28 – August 11)	50%
<b>Total</b>		100%

### Notes

- The format for both the midterms and the final exam will be a potential mix of multiple-choice questions and written problems.
- The midterm test will be written during the class time.
- The final exam period for the Spring Term 2018 is July 28 – August 11 inclusive. Students are expected to be available during this time. Travel plans are not acceptable grounds for granting an alternative final examination time.  
<http://uwaterloo.ca/registrar/final-examinations/examination-regulations-and-related-matters>
- The exact date and time for the final exam for this class will be determined by the Registrar's Office. The exam schedule will be posted online, will be announced in class, and posted on LEARN.
- Only the Registrar's Office can issue final grades.

This grading scheme will be implemented strictly for all students in the course (with the exception of verified illnesses – see below).

## **Examination Policy**

### *Missing a Midterm Due to Illness during the Term*

- Missing a midterm will automatically result in a grade of zero for that midterm. If the illness can be documented with a UW Verification of Illness Form (the only

acceptable document), with approval you may transfer the weight of the missed midterm to the final exam. This remedy is a privilege and not a right.

- The midterm exam schedule has been set and will not be changed for whatever reason (no make-up midterm exams will be offered).

#### *Missing the Final Exam Due to Illness*

- Missing the final exam is a very serious matter which automatically results in a grade of zero for the final exam and possibly a failing grade for the course. Please carefully read the Economics Department policy on deferred final exams for instructions.
- No deferred final exam will be provided for students who missed all the exams (including the final exam) in this course.

#### *Submission of Exam Papers*

- Late submission of exam papers is not accepted and missed submissions will receive a zero mark for whatever reason.
- Exam papers must be submitted in whole and on time in the exam room. Exam papers
  - (a) not submitted on time,
  - (b) submitted with missing pages,
  - (c) submitted elsewhere, with the exception of students with permission to write in the AS Office,
  - (d) not received at allwill receive a grade of zero for whatever reason.
- It is the responsibility of students to ensure that they write exams in the location, date, and time assigned to their section. Students writing exams in the wrong section will be assessed a 20% penalty on the final exam grade. There will be no accommodation for possible differences in exam material or content.

#### *Policy on Missed/Late Assignments and Tests*

Any assignment that is not handed in to me during the lecture at which this assignment is due will not be marked and will receive a grade of zero. If you miss that lecture due to illness and therefore cannot hand in your assignment, it will be accepted before the next lecture if and only if accompanied by a relevant medical certificate.

No make-up tests will be provided for the midterm exams. Students who miss a midterm and do not have a relevant medical certificate will receive a mark of zero. Students with a valid medical certificate will have the weight of the relevant midterm added to their final exam. If a student misses the final exam, the resulting procedure is outlined in the Economics department's Deferred Final Exam Policy, <https://uwaterloo.ca/economics/undergraduate/resources-and-policies/deferred-final-exam-policy>

## Topics covered

- i. The fundamental model of economic choice
  - (a) Alternatives and budgets
  - (b) Preferences and utility functions
- ii. Consumer choice
  - (a) Utility maximisation
  - (b) Application: the Law of Demand
- iii. Intertemporal choice
  - (a) Lifetime utility maximisation
  - (b) Application: consumption dynamics and permanent income
- iv. Producer choice
  - (a) Production technology
  - (b) Profit maximisation
  - (c) Application: returns to scale and firm size
  - (d) Cost minimisation
  - (e) Application: costs and profits
- v. Choice under Uncertainty
  - (a) Expected utility maximisation
  - (b) Application: attitudes to risk and insurance contracts
  - (c) Application: Health care in Canada
  - (d) Asymmetric Information

## Tentative Class Schedule

This class schedule is ambitious. Modifications and/or eliminations of certain content might be required given our limited time together. Any necessary modifications to the course content will be communicated to you in the regular class period.

DATE	LECTURE #	TOPICS
May 2/18	-	Introductory Lecture
May 7/18	1	The Fundamental Model of Economic Choice.
May 9/18	2	The Fundamental Model of Economic Choice.
May 14/18	3	Consumer Choice.
May 16/18	4	Consumer Choice.
May 21/18	-	Victoria Day Holiday
May 22/18	5	<i>*A Tuesday that follows a Monday Schedule to make-up for the Victoria Day Holiday*</i> Consumer Choice.
May 23/18	6	Consumer Choice.
May 28/18	7	Consumer Choice.

May 30/18	-	<b>MIDTERM #1.</b>
June 4/18	8	Intertemporal Choice.
June 6/18	9	Intertemporal Choice.
June 11/18	10	Intertemporal Choice - Producer Choice.
June 13/18	11	Producer Choice.
June 18/18	12	Producer Choice.
June 20/18	13	Producer Choice.
June 25/18	14	Producer Choice.
June 27/18	15	Producer Choice.
July 2/18	-	Canada Day Holiday
July 4/18	-	<b>MIDTERM #2.</b>
July 9/18	16	Choice Under Uncertainty.
July 11/18	17	Choice Under Uncertainty.
July 16/18	18	Choice Under Uncertainty.
July 18/18	19	Choice Under Uncertainty.
July 23/18	20	Additional Theory Topic.
July 25/18	21	Additional Theory Topic.

## **Other Policies**

### **Electronic Device Policy**

- **THE CLASSROOM IS A HANDHELD-DEVICE-FREE ZONE.**
- Turn off all handheld devices and put them away for the duration of the lecture.
- Laptop computers may only be used to view lecture material.
- Photographic devices are not permitted in class due to copyright and privacy issues.
- Audio or video recording devices are not permitted in class due to copyright and privacy issues.

### **Policy on remarking of Tests**

If you feel that your test was not marked properly, you must advise the instructor within 5 business days of the date on which the test is handed back to the class. Any student that submits a test for remarking should understand that the entire test will be remarked and that their grade may improve, remain unchanged or perhaps even decrease as a result of the remarking process.

## **Attendance Policy**

Class attendance is an integral part of your educational experience. While attendance is not an explicitly graded component of this course, it is an important factor in ensuring your complete understanding of the material presented. You are responsible for all material presented in the scheduled lecture periods whether you choose to attend lectures or not.

## **Classroom Protocols**

- I do NOT lend my personal lecture notes to students for any reason.
- In order to maintain a learning environment in this classroom, I expect the highest level of courtesy and professional behaviour from every student. In particular, be punctual and turn off all audible ringers on all devices during class.
- As a courtesy to the custodial staff, if you have coffee, water, etc., please dispose of your garbage when you leave the classroom.
- No private conversations in class will be tolerated.

## **Intellectual Property**

Students should be aware that this course contains the intellectual property of their instructor, TA, and/or the University of Waterloo. Intellectual property includes items such as:

- Lecture content, spoken and written (and any audio/video recording thereof);
- Lecture handouts, presentations, and other materials prepared for the course (e.g., PowerPoint slides);
- Questions or solution sets from various types of assessments (e.g., assignments, quizzes, tests, final exams); and
- Work protected by copyright (e.g., any work authored by the instructor or TA or used by the instructor or TA with permission of the copyright owner).

Course materials and the intellectual property contained therein, are used to enhance a student's educational experience. However, sharing this intellectual property without the intellectual property owner's permission is a violation of intellectual property rights. For this reason, it is necessary to ask the instructor, TA and/or the University of Waterloo for permission before uploading and sharing the intellectual property of others online (e.g., to an online repository).

Permission from an instructor, TA or the University is also necessary before sharing the intellectual property of others from completed courses with students taking the same/similar courses in subsequent terms/years. In many cases, instructors might be



happy to allow distribution of certain materials. However, doing so without expressed permission is considered a violation of intellectual property rights.

Please alert the instructor if you become aware of intellectual property belonging to others (past or present) circulating, either through the student body or online. The intellectual property rights owner deserves to know (and may or may not have already given their consent).

**Institutional-required statements for undergraduate course outlines approved by Senate Undergraduate Council, April 14, 2009.**

**Economics Department Deferred Final Exam Policy**

Deferred Final Exam Policy found at

<https://uwaterloo.ca/economics/undergraduate/resources-and-policies/deferred-final-exam-policy>

**Cross-listed course**

Please note that a cross-listed course will count in all respective averages no matter under which rubric it has been taken. For example, a PHIL/PSCI cross-list will count in a Philosophy major average, even if the course was taken under the Political Science rubric.

**Academic Integrity**

**Academic Integrity:** In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility. See the [UWaterloo Academic Integrity](#) webpage and the [Arts Academic Integrity](#) webpage for more information.

**Discipline:** A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to [Policy 71 - Student Discipline](#). For typical penalties check [Guidelines for the Assessment of Penalties](#).

**Grievance:** A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. [Read Policy 70 - Student Petitions and Grievances](#), Section 4. When in doubt, please be certain to contact the department’s administrative assistant who will provide further assistance.

**Appeals:** A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 - Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to [Policy 72 - Student Appeals](#).

### **Accommodation for Students with Disabilities**

**Note for students with disabilities:** [The AccessAbility Services office](#), located on the first floor of the Needles Hall extension (1401), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.

### **If you are using Turnitin® in your course**

**Turnitin.com:** Text matching software (Turnitin®) will be used to screen assignments in this course. This is being done to verify that use of all material and sources in assignments is documented. Students will be given an option if they do not want to have their assignment screened by Turnitin®. In the first week of the term, details will be provided about arrangements and alternatives for the use of Turnitin® in this course. Note: students must be given a reasonable option if they do not want to have their assignment screened by Turnitin®. See [guidelines for instructors](#) for more information.

### **Mental Health Support**

All of us need a support system. The faculty and staff in Arts encourage students to seek out mental health supports if they are needed.

### **On Campus**

- Counselling Services: [counselling.services@uwaterloo.ca](mailto:counselling.services@uwaterloo.ca) / 519-888-4567 x. 32655
- [MATES](#): one-to-one peer support program offered by Federation of Students (FEDS) and Counselling Services
- Health Services Emergency service: located across the creek from Student Life Centre

### **Off campus, 24/7**

- [Good2Talk](#): Free confidential help line for post-secondary students. Phone: 1-866-925-5454
- Grand River Hospital: Emergency care for mental health crisis. Phone: 519-749-433 ext. 6880
- [Here 24/7](#): Mental Health and Crisis Service Team. Phone: 1-844-437-3247
- [OK2BME](#): set of support services for lesbian, gay, bisexual, transgender or questioning teens in Waterloo. Phone: 519-884-0000 extension 213

Full details can be found online at the Faculty of ARTS [website](#)  
Download [UWaterloo and regional mental health resources \(PDF\)](#)  
Download the [WatSafe](#) app to your phone to quickly access mental health support information

**Territorial Acknowledgement**

We acknowledge that we are living and working on the traditional territory of the Attawandaron (also known as Neutral), Anishinaabe and Haudenosaunee peoples. The University of Waterloo is situated on the Haldimand Tract, the land promised to the Six Nations that includes six miles on each side of the Grand River.