Adam Smith’s Invisible Hand (1776)

Every individual necessarily labours to render the annual revenue of the society as great as he can. He generally neither intends to promote the public interest, nor knows how much he is promoting it...He intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for society that it was no part of his intention. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it.¹

This course continues where Economics 203 left off. The objective is to provide an intermediate level introduction to some of the more advanced topics in microeconomics. We discuss Adam Smith’s invisible hand and how it is formalized in the first fundamental theorem of welfare economics. However, most of the term we spend on the question when the invisible hand does not work, i.e. under what circumstances we encounter market failure. Reasons for market failure are asymmetric information, externalities and public goods.

In order to analyze these questions, which some of you might not have seen before, we will use game theory quite often. It is important that you feel comfortable with the basic concepts in game theory and it might be a good idea to refresh your memory by reviewing the relevant chapters in your micro text book.

Recommended but not required textbook: It is not necessary to buy a new text book for this course. Just use the text book you bought for ECON203.

¹ Taken from the article by Helen Joyce, “Adam Smith and the Invisible Hand,” +plus, issue 14, website: http://plus.maths.org/issue14/features/smith/.
Additional readings may be added during the term. These readings will illustrate important applications of the concepts discussed in the lecture. It is not necessary to read these articles in order to prepare for the exams.

Course Web Page: [https://app-ca.tophat.com/e/271477](https://app-ca.tophat.com/e/271477)

We will be using the Top Hat (www.tophat.com) classroom response system in class. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or via text message (SMS).

You can visit [http://tinyurl.com/THStudentRegistration](http://tinyurl.com/THStudentRegistration) for the Student Quick Start Guide which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system. Please register by providing your STUDENT ID. This will allow me to match your grades from class participation, in-class answers, and homework assignments with your exam grades. An email invitation will also be sent to your email account (if you don’t receive this email, you can register by visiting our direct Top Hat course URL: [http://app.tophat.com/e/271477](http://app.tophat.com/e/271477)).

Top Hat requires a subscription.

It is expected that students will check the Top Hat course page frequently for updates and information relevant to the course.

Email or call Top Hat Support team if you have any questions/concerns: support.tophat.com support@tophat.com 1 (888) 663-5491

Every student should save this phone in their contacts: (647) 931-6504

**Evaluation.** The course evaluation will be based on a mix of shorter and longer problems asked on two midterm and one final exam, short bi-weekly homework assignments that you have to submit via Top Hat, and a mix of in-class questions and attendance. Most of the questions will require analytical (math) skills, but I will also test your intuition.

Grades are based on

1. two midterm exams (50 minutes long): Midterm 1 covers material taught in weeks 1- 4 and is held on February 8. Midterm 2 covers material taught in weeks 5-8 and is held on March 15. Both exams are in-class, closed book, closed notes exams. Once both your midterm exams are graded, the exam with the lower (higher) score carries a weight of 9% (29%).
2. Bi-weekly homework assignments (10%). I will pick the 5 homework assignments with the highest scores to count towards this grading component with 2% weight on each of these 5 assignments.
3. Class attendance. If you show up for 15 lectures over the course of the term, you get 1% for class attendance.
4. Class participation. I will occasionally ask a question during class that you will be able to answer via Top Hat. If you get 30% or more of the questions I ask over the course of the term correct, you will get 1% for class participation.

5. One final exam (cumulative, 3 hours long), worth 50%. The exam date is to be announced by UVic record services. I advise you not to make travel plans until after the examination timetable has been finalized by record services. If you wish to finalize your travel plans at an earlier date you should book flights that depart after the end of the examination period. There will be no special accommodation if travel plans conflict with the examination.

Ensuring your progress in this course

- **Lecture Notes available before the lecture.** In order to better take notes in the lecture, you can download the lecture notes before class.

- **Bi-weekly, graded homework assignments:** I will assign bi-weekly homework assignments through Top Hat and will release the answer key once you've handed them in. While any particular homework assignment doesn’t carry a lot of weight towards your course grade, I encourage you to work through the problems to gauge your understanding of the material. Most students will find that carefully solving the practice problems significantly increases their understanding of the material. Students are encouraged to work on these problems in groups after first attempting them individually. However, you must submit your answers to the homework assignments individually.

- **Practice Midterm and Final Exams:** In addition to the bi-weekly problem sets, practice exams will give you a better idea about the length and the format of your actual exam.

- **How to use answer keys effectively.** Try to solve the problems to which you have an answer key without consulting the answer key first. Compare your answers with the answer key and make notes of anything that remains unclear to you after having gone over the answer key. Come see me in my office hours to ask the questions that remain unresolved after looking at the answer key.

- **Office hours and labs:** Make use of the office hours and labs! Don’t wait till the day before the exam if you have difficulties following the lecture. It’s much better to clear up any confusion as soon as you feel lost. Labs will go over the answer key of the bi-weekly homework assignments and provide additional explanations. Labs are not mandatory.

Syllabus

<table>
<thead>
<tr>
<th>Topics</th>
<th>Week</th>
</tr>
</thead>
</table>
1. Overview, warm-up exercises  
2. General Equilibrium  
3. Choice under Uncertainty  
4. Asymmetric Information  
5. Externalities  
6. Public Goods

DEPARTMENT OF ECONOMICS UNDERGRADUATE COURSE POLICIES

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.

Attendance:
Students are expected to attend all classes in which they are enrolled (Attendance Policy). Students who do not attend classes must not assume that they have been dropped from a course by a department or an instructor. Courses that are not formally dropped will be given a failing grade, students may be required to withdraw, and will be required to pay the tuition fee for the course.

An instructor may refuse a student admission to a lecture or laboratory because of lateness, misconduct, inattention or failure to meet the responsibilities of the course. Students who neglect their academic work, including assignments, may be refused permission to write the final examination in a course. Instructors must inform students at the beginning of term, in writing, of the minimum attendance required at lectures and in laboratories in order to qualify to write examinations.

Students who are absent because of illness, an accident or family affliction should report to their instructors upon their return to classes.

Grading:
A primary purpose of evaluation and grading is to further effective teaching and learning. Any practices which assign a predetermined percentage of students a specific grade, that is, a certain percentage get A, another percentage get B and so on, without regard to individual achievement are prohibited.

The table below shows the official grading system used by instructors in arriving at final assessments of student performance.

Undergraduate Grading Scale
<table>
<thead>
<tr>
<th>Grades</th>
<th>Grade Point Value</th>
<th>Percentage *</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>9</td>
<td>90 – 100</td>
<td>An A+, A, or A- is earned by work which is technically superior, shows mastery of the subject matter, and in the case of an A+ offers original insight and/or goes beyond course expectations. Normally achieved by a minority of students.</td>
</tr>
<tr>
<td>A</td>
<td>8</td>
<td>85 – 89</td>
<td></td>
</tr>
<tr>
<td>A-</td>
<td>7</td>
<td>80 – 84</td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>6</td>
<td>77 – 79</td>
<td>A B+, B, or B- is earned by work that indicates a good comprehension of the course material, a good command of the skills needed to work with the course material, and the student's full engagement with the course requirements and activities. A B+ represents a more complex understanding and/or application of the course material. Normally achieved by the largest number of students.</td>
</tr>
<tr>
<td>B</td>
<td>5</td>
<td>73 – 76</td>
<td></td>
</tr>
<tr>
<td>B-</td>
<td>4</td>
<td>70 – 72</td>
<td></td>
</tr>
<tr>
<td>C+</td>
<td>3</td>
<td>65 – 69</td>
<td>A C+ or C is earned by work that indicates an adequate comprehension of the course material and the skills needed to work with the course material and that indicates the student has met the basic requirements for completing assigned work and/or participating in class activities.</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>60 – 64</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>50 – 59</td>
<td>A D is earned by work that indicates minimal command of the course materials and/or minimal participation in class activities that is worthy of course credit toward the degree.</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>0 – 49</td>
<td>Failing grade. F is earned by work, which after the completion of course requirements, is inadequate and unworthy of</td>
</tr>
<tr>
<td>Grade</td>
<td>Grade Points</td>
<td>Percentage Range</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>--------------</td>
<td>------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>N</td>
<td>0</td>
<td>0 – 49</td>
<td>Failing grade. Did not write examination or complete course requirements by the end of term or session; no supplemental.</td>
</tr>
<tr>
<td>DEF</td>
<td>n/a</td>
<td>n/a</td>
<td>Deferred status granted. Used only when deferred status has been granted because of illness, an accident or family affliction. See Deferred Status.</td>
</tr>
</tbody>
</table>

* The grading scale for the evaluation of course achievement at the University of Victoria is a percentage scale that translates to a 9 point GPA/letter grade system. The 9 point GPA system is the sole basis for the calculation of grade point averages and academic standing. Standardized percentage ranges have been established as the basis for the assignment of letter grades. The percentage grades are displayed on the official and administrative transcripts in order to provide fine grained course assessment which will be useful to students particularly in their application to graduate studies and for external scholarships and funding. Comparative grading information (average grade [mean] for the class), along with the number of students in the class, is displayed for each course section for which percentage grades are assigned.

Release of Grades

Instructors are permitted to release final grades informally to students in their classes, on request, as soon as the grades have been forwarded to the Office of the Registrar by the school or department.

Student records are confidential. Instructors may release grades only to the student concerned, unless they have the student’s permission to release the grades to a third party. Where grades are posted, only student numbers will be shown. Students are given the option at the beginning of a course to not have their grades posted.

Review of an Assigned Grade

If the instructor or Chair/Director does not agree to a review of the grade, then a formal request for review of a grade, including the grade review fee of $25, may be submitted to Undergraduate Records, normally within 21 days of the release of grades.

Students must keep all written work returned to them by the instructor during the term and make any work available that forms part of the grade to be reviewed. The Office of the Registrar will make available completed final examinations when necessary.
The Office of the Registrar will send all materials involved in the grade review to the department Chair/Director, who will then arrange an independent evaluation of the grade (see individual faculty procedures).

The grade determined by means of a review will be recorded as the final official grade, regardless of whether it is the same as, higher than or lower than the original grade.

Requests for review or other consideration based on compassionate grounds such as illness are governed by separate regulations (see the entry Academic Concessions and the entry Deferred Status).

**Late assignments:**
Late assignments will not be accepted unless prior arrangement has been made with the course instructor.

**Academic Concession for work that will be completed before course grades are submitted by the instructor.** A student whose academic performance is affected by injury, family or personal affliction, or illness should immediately consult with University Counselling Services, University Health Services, or another health professional, and may request, directly from the course instructor, deferral or substitution of a mid-term test or examination, or of other work which is due during the term. This request must be accompanied by supporting documentation from the health professional and must specifically cover the date of the missed examination or assignment deadline. It should normally be dated on or before the exam/deadline date and be submitted to the instructor within 10 days of this date.

All work for which a Concession is approved must be completed before course grades are submitted by the instructor.

If the request for deferral or substitution of term work is denied, a student may appeal as described under **Appeals** in the Calendar.

If make-up tests are assigned, they will be scheduled by the Department on designated Friday afternoons at 2:30 p.m. Students must be registered for these tests by their instructors in order to be permitted to take them.

**Academic Concession for work that will be completed after course grades are submitted by the instructor.** In the event of a missed final examination, or submission of an assignment after grades are submitted by the instructor, students must submit a Request for Academic Concession (RAC) to Undergraduate Records with the required official documentation from a health professional within 10 working days of the end of the examination period. The RAC form is available on the Undergraduate Records website ([http://www.uvic.ca/registrar/students/forms/index.php](http://www.uvic.ca/registrar/students/forms/index.php)).

**Travel Plans**
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. There will be no special accommodation if travel plans conflict with the examination.

**Students with a Disability**

The University aims to provide equal opportunities and access for all students to enjoy the benefits and privileges of its classes and curriculum and to meet the syllabus requirements. Reasonable and appropriate accommodation will be made available to students with documented disabilities (physical, mental, learning) in order to give them the opportunity to successfully meet the essential requirements of a course. The accommodation will not alter academic standards or learning outcomes, although the student may be allowed to demonstrate knowledge and skills in a different way.

Students with disabilities seeking academic accommodation are expected to contact the [Resource Centre for Students with a Disability](http://web.uvic.ca/centre) as early as possible to avoid a delay in service, to initiate the process of determining and arranging appropriate academic accommodation in individual situations.

In order to receive course-based and exam-based accommodations, instructors must be notified of student needs. For example, if a student requires additional time on exams, assistance with note-taking or a substitute assignment, the instructor needs to be informed.

**Policy on Inclusivity and Diversity**

The University of Victoria is committed to promoting, providing and protecting a positive, supportive and safe learning and working environment for all its members.

**Course Repeats:**

According to the University of Victoria Calendar [http://web.uvic.ca/calendar](http://web.uvic.ca/calendar)

“A student may not attempt a course a third time without the prior approval of the Dean of the Faculty and the Chair of the Department in which the course is offered unless the calendar course entry states that the course may be repeated for additional credit. A student who has not received this approval may be deregistered from the course at any point and may be asked to withdraw from his or her declared or intended program.”

In order to request permission to attempt this course for the third time, you must follow the instructions provided under the link [Repeating Courses](http://www.uvic.ca/socialsciences/economics/undergraduate/home/course%20policies/index.php)

Failure to obtain permission will result in deregistration from the course.