Course Content
“Econometrics” is a separate field in economics, and concerns measurement issues related to economic models and data. It combines economic theory, statistics, and computer science. What distinguishes econometrics from statistics is the attention to the failure of many standard assumptions, which arises from the nature of economic relationships and the lack of controlled experimentation.

This is the first course in the Econ365/366 sequence. Our focus will be on the classical linear regression model. We will consider how to choose estimation rules consistent with the model under study, and focus on sampling properties of estimators, on the computer implementation of the techniques to obtain results from empirical applications, and on examining the validity of the assumptions we make.

The aim of both Econ365 and Econ366 is to introduce you to the important ideas associated with elementary econometrics. This introduction should provide you with a solid background for undertaking basic empirical research and also prepare you for more advanced courses at the undergraduate and graduate levels.

Although traditional lectures form a fundamental part of this course, active learning is also core as understanding really only results by applying the ideas and concepts. To assist you, there are weekly laboratory classes, assignments, in-class worksheets, practice exercises, in-class random, short quizzes, along with usual formal term tests and final examination. These should be viewed as tools for you to assess your understanding of the material.

The course material for this sequence of courses is theoretical in nature and we will use matrix algebra extensively. Therefore a strong background in matrix algebra is necessary for success in this course.

Prerequisites: These are available here. I will be assuming that all students registered in the course have the prerequisites and that anyone who remains in the course without the prerequisites does so at their own risk.

Lectures
Tuesdays: 2:30 to 5:20pm in Engineering Computer Science (ECS) 108.

Traditional lectures constitute the main form of instruction in this course. While lecture overheads will be available from CourseSpaces, I will be elaborating on those in class. Also, there will be random in-class quizzes to help you engage with the course material and to deepen your understanding of them. Therefore, attending classes is very important for success in this course.

Laboratory/Tutorial Classes
These will be held weekly on Fridays 12:30 to 1:20pm or 2:30 to 3:20pm in Clearihue (CLE) A031 for labs or David Strong Building (DSB) C126 for tutorials depending on the material to be covered. Exercises for each laboratory/tutorial class will be posted on CourseSpaces – on these exercise sheets will be information on which room to go for the class for that week. We will be using the EViews econometrics package throughout this course.
but the labs will also offer you a chance to get some familiarity with the R language and environment for statistical computing and graphics, if you are not already familiar with it. These classes will cover formal class material and will run all through the term, starting the first week of term (September 6th). A teaching assistant will be leading these classes. TA’s name and office hours will be posted on CourseSpaces in due course.

The goal of the lab sessions is primarily to assist you to figure out how to implement the techniques learnt during lectures in empirical applications. The implementation process undertaken in the labs should also help you understand better the material learnt during lectures. In addition the lab/tutorial material should help you prepare better for the empirical questions in assignments and tests. Therefore, it is highly important that you attend these sessions.

**Textbook**


If you wish to refer to additional texts then you may find the following books useful, but please note that the notation in these books may not conform with that given in Vogelvang and in lectures, nor may the material covered perfectly overlap.


**CourseSpaces**

- CourseSpaces is used extensively for the course. All students are expected to be fully functional with the system.
- The lecture notes, assignments, practice exercises, sample tests, solutions etc. will be posted in CourseSpaces. Please note that the lecture notes online are only outlines of the actual lectures. It is very important to attend my lectures.
- All announcements will be posted in CourseSpaces. Students are advised to check it frequently.

**Evaluation and Grading**

**IN-CLASS POP QUIZZES: 10%**. There will be at least five in-class pop quizzes that will be randomly undertaken during class. These are to encourage active learning and to offer opportunities to engage with the course material as well as for you (and me) to assess your understanding. Having difficulty completing a quiz is a signal for you to work on the related material.

At the end of the term, I will calculate course grades with 10% assigned to these quizzes and also with no weight to the quizzes and this 10% then assigned to the final (which will make the final worth 45%). Whichever gives the better grade for an individual student will be the course grade assigned to that student.

**ASSIGNMENTS (3): 18%**. The assignments will provide you further opportunities to engage with the course material. They will also help you understand the material better as you try to apply the knowledge obtained from lectures/labs/textbook to specific contexts. Finally, the assignments are designed to prepare you for the examinations.

Assignments will be posted on September 25, October 23 and November 26.

**Notes:**

- Usually you will have about a week to complete them.
- While I encourage group learning, the solutions to the assignments, including the computer outputs, you submit must be your own independent work.
- Please use your own words to answer the assignments to avoid plagiarism.
- Please put your assignment in the Econ 365 box outside the Main Economics Office by 4 p.m. on the due date (given on the assignment). In order to ensure that your grade gets properly recorded, please provide clearly your name, student number, laboratory section number and course number on the front page of your assignment.
- No late assignment will be accepted. If you miss an assignment due to medical reasons, and can provide
me with an appropriate medical certificate, the weight of the uncompleted assignment will then be reassigned equally to the other assignments.

TERM TESTS: 36%. Test 1 is scheduled for October 8, while Test 2 is scheduled for November 5. Both tests will be held in HSD A240 starting at 2:30pm and will be 75 minutes in duration. After the tests, there will be lectures in the regular classroom starting at 4pm.

FINAL EXAMINATION: 36%. The final exam will be comprehensive and will be a 3 hour exam. Time and venue will be decided by Examinations branch.
The examinations provide me with information regarding your understanding of the course material but they are also helpful in informing you about the level of your learning in the course. The interpretation of the grades given in the table below should be helpful for the latter.

Note: For the Term Tests and the Final Examination you will be allowed to bring a “formula sheet” (hand-written or typed on both sides of one 8 1/2 x 11 inch sheet of paper) with *formulae only*. If your formula sheet has other information besides formulae, it will be taken away. Details regarding examinable material and the format of the test/exam will be provided in class closer to time.

LETTER GRADES: All assessment in this course will be assigned a numerical score. Each will then be appropriately weighted to give a total score for the course out of a possible 100%. The following will be used.

<table>
<thead>
<tr>
<th>Undergraduate Grading Scale</th>
<th>Grade Point Value</th>
<th>Percentage *</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A+</strong></td>
<td>9</td>
<td>90 – 100</td>
</tr>
<tr>
<td><strong>A</strong></td>
<td>8</td>
<td>85 – 89</td>
</tr>
<tr>
<td><strong>A-</strong></td>
<td>7</td>
<td>80 – 84</td>
</tr>
</tbody>
</table>

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.

| **B+**                      | 6                 | 77 – 79      |
| **B**                       | 5                 | 73 – 76      |
| **B-**                      | 4                 | 70 – 72      |

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.

| **C+**                      | 3                 | 65 – 69      |
| **C**                       | 2                 | 60 – 64      |

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.

| **D**                       | 1                 | 50 – 59      |

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.

- Note that E grades will not be assigned.
• Students should review the University’s more detailed summary of grading.

**Course Outline:**

**Topic 1:** *The Mean Model using Matrix Algebra*

**Topic 2:** *The Classical Multiple Linear Regression Model*

**Topic 3:** *Thinking About Unbiasedness & Consistency of LS Estimator a Little More*

**Topic 4:** *Deterministic Assumptions*

**Course Policies**

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

- 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.

**Examinations**

Attendance at all scheduled examinations is mandatory. Consideration for missed examinations will be given only on the basis of documented illness, accident or family affliction, and for no other reasons. In the event of a missed final examination, students are advised to follow the procedures outlined in the [University Calendar](#).

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.

**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 show up in the first seven 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.

Please note that the **last day for adding courses** is September 20 for first-term and full-year courses and the **last day for dropping courses without penalty of failure** is October 31 for first-term courses. September 17 is the **last day for 100% reduction of tuition fees** for standard first term and full year courses.
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.

All lecture notes and course materials that I make available to the class, and all exams and quizzes are my intellectual property, and are made available to students for instructional purposes only. Please note that students may not distribute my lecture notes or any exams or quizzes from the course without my permission, and that to do so, through note-sharing sites or other means, violates the Policy on Academic Integrity.

University 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. See General University Policies

Accessibility
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.

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.

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.

Learning Outcomes
This course will provide you with opportunities to acquire intellectual, academic and practical skills in:

- Inquiry, analysis, and problem solving
- Critical thinking
- Numerical literacy
- Critical evaluation of quantitative information
- Application of statistical methods to real life data using a statistical software to answer policy-relevant questions.

Please note that many of these learning outcomes overlap with the University’s general Learning Outcomes.