Economics 311 (L01) (Computer Applications in Economics)

Instructor: Heidi Esau
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Email: Heidi.Esau@ucalgary.ca

Lecture Location: SS 20
Lecture Days/Time: MWF 12:00 – 12:50

Office: SS 350
Office Hours: T: 11:00-12:00, W: 3:00-4:00
or by appointment

Fall 2022

Course Description:
The main goal of this blended learning course is to provide proficiency in practical applications of economics using computers. Students learn about the elementary and advanced features of spreadsheets using Excel and using the economic databases to find economic data. Examples will be drawn from Engineering Economics and Financial Economics.

Course Learning Outcomes:
By the end of the course students are supposed to be

- literate in Excel (comprehend terminology, apply appropriate techniques) for various types of data summaries and analysis;

- able to obtain data from various sources, and import it into Excel. This includes selecting and using the appropriate format for graphing different types of data;

- able to explain the time value of money, the underlying concepts, and to assess loans, mortgages, bonds, term deposits and other business projects using multiple methods in Excel;

- able to defend his/her choice of the most profitable alternative, and to perform a sensitivity analysis using advanced Excel techniques;

- able to use advanced Excel database tools to compile, summarize and organize data including a PivotTables.
## Course Outline:

### Introduction and Lecture 1

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<th>Date</th>
<th>Topic</th>
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### Lecture 2

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<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Sept 16 – 26, 2022</td>
<td>Managing Data</td>
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<td>• Organizing Data Sets</td>
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<td>• Data Analysis and Functions</td>
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<td>• Charts</td>
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### Lectures 3

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<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td>• Interest Rates</td>
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<td>• Mortgage Loans</td>
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<td>• Present Worth Analysis</td>
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**October 21, 2022**  
Midterm Test

### Lectures 4 & 5

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td></td>
<td>• Cash Flow Analysis</td>
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<td>• Sensitivity Analysis</td>
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### Lectures 6 – 9

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<th>Date</th>
<th>Topic</th>
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<tr>
<td></td>
<td>• Database Tools</td>
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<td>• Statistical Functions</td>
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<td>• Statistical Functions for Databases</td>
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<td>• Pivot Tables</td>
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<td>• Pivot Charts</td>
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<td>Downloading economic data from CANSIM II, OECD, and other web sources and importing it into Excel.</td>
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### If Time Allows – Lecture 10

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<th>Date</th>
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<tr>
<td>Nov 30 – Dec 7, 2022</td>
<td>Visual Basic for Applications</td>
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<td></td>
<td>• Basics of programming in Excel</td>
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<td>• Review</td>
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### Prerequisites/corequisites:

Economics 201.

### Required Textbook(s):

None.

### Recommended Textbook(s):

Books on Reserve:
The list of reserve titles, if any, is posted at the course D2L site.

Desire2Learn:
This course will make use of the Desire2Learn (D2L) platform. Students who are registered in the course can log on at http://d2l.ucalgary.ca through their student centre. Please note that D2L features a class e-mail list that may be used to distribute course-related information. These e-mails go to your University of Calgary e-mail addresses only.

Grade Determination:

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<th>Component</th>
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<tbody>
<tr>
<td>MIDTERM EXAM</td>
<td>20%</td>
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<tr>
<td>FINAL EXAMINATION</td>
<td>40%</td>
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<tr>
<td>Assignments (3)</td>
<td>24%</td>
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<tr>
<td>TERM PROJECT</td>
<td>16%</td>
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100%

Examination Details:
Tests and exams WILL NOT involve multiple choice questions.

Calculators, cellphones, textbooks, course notes, and other electronic devices will not be allowed during the writing of tests or final examinations. Students are reminded that simply being able to access their cellphone during an exam is academic misconduct.

The midterm will be held in class on October 21, 2022.

All examinations will allow a “cheat sheet” (details to be provided) and be computer based.

Grading Policies:
The official grading system will be used. See http://www.ucalgary.ca/pubs/calendar/current/f-1-1.html.

Students must receive a passing grade on the final exam to pass the course. Students committing academic misconduct during the final exam will not receive a passing grade for the course.

If a student’s letter grade on the final exam exceeds their midterm(s) letter grade, the weight of the midterm(s) is (are) transferred to the final exam. The student must have written the midterm(s) or provided supporting documentation for the absence(s).

As per the Writing Across the Curriculum Statement in the Calendar, writing and grading thereof will be a factor in the evaluation of student work. See https://www.ucalgary.ca/pubs/calendar/current/e-2.html.

Any student work which remains undistributed after the last day of classes will be available to students through the instructor’s office during the instructor’s office hours.
The final examination will be comprehensive, scheduled by the Registrar, held in a classroom, and last 2 hours. If a student cannot write their final exam on the date assigned by the Registrar’s Office, they need to apply for a deferred exam https://www.ucalgary.ca/pubs/calendar/current/g-6.html. Under no circumstance will this be accommodated by the Department.

THERE WILL BE NO MAKEUP OR DEFERRED QUIZZES/TESTS/EXAMS under any circumstances, nor may the quizzes/tests/exams be written early. Students unable to write the quizzes/tests/exams because of documented illness, family emergency, religious observance, or university-sanctioned event will have the weight shifted to the final examination; otherwise a grade of zero will be assigned.

Reappraisal of Grades:
For Reappraisal of Graded Term Work, see Calendar I.2
http://www.ucalgary.ca/pubs/calendar/current/i-2.html

For Reappraisal of Final Grade, see Calendar I.3
http://www.ucalgary.ca/pubs/calendar/current/i-3.html

Academic Misconduct and Intellectual Honesty:
Academic Misconduct refers to student behavior that compromises proper assessment of students’ academic activities and includes: cheating; fabrication; falsification; plagiarism; unauthorized assistance; failure to comply with an instructor’s expectations regarding conduct required of students completing academic assessments in their courses; and failure to comply with exam regulations applied by the Registrar.

Statement of Intellectual Honesty, see Calendar K.4
https://www.ucalgary.ca/pubs/calendar/current/k-3.html

Plagiarism and Other Academic Misconduct
https://ucalgary.ca/student-services/student-success/learning/academic-integrity

Academic Accommodations:
Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services. SAS will process the request and issue letters of accommodation to instructors. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policies on Student Accommodations are available at https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Polices-Accommodation-for-Students-with-Disabilities-Procedure.pdf and https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Student-Accommodation-Policy.pdf.

Freedom of Information and Protection of Privacy (FOIP) Act:
Personal information is collected in accordance with FOIP. Assignments can only be returned to the student and will be accessible only to authorized faculty and staff. For more information, see https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/faq-privacy-faculty-members.pdf and https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/faq-privacy-students.pdf
Internet and Electronic Communication Device information:
The use of cell phones for any purpose in class is prohibited. Computers and tablets may be used for
note taking only unless otherwise authorized by the instructor.

Copyright Legislation:
See the University of Calgary policy on Acceptable Use of Material Protected by Copyright at
https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Acceptable-Use-of-
Material-Protected-by-Copyright-Policy.pdf. Students who use material protected by copyright in
violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

Recording of Lectures:
Recording of lectures is prohibited, except for audio recordings authorized as an accommodation by SAS
or an audio recording for individual private study and only with the written permission of the instructor.
Any unauthorized electronic or mechanical recording of lectures, their transcription, copying, or
distribution, constitutes academic misconduct. See https://www.ucalgary.ca/pubs/calendar/current/e-6.html.

Instructor Intellectual Property:
Course materials created by instructors (including presentations and posted notes, labs, case studies,
assignments and exams) remain the intellectual property of the instructor. These materials may NOT be
reproduced, redistributed, or copied without the explicit consent of the instructor. The posting of course
materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of
extracts of these course materials with other students enrolled in the course at the same time may be
allowed under fair dealing.

Important Dates:
Please check: http://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html

Student Organizations:
Faculty of Arts Students’ Association (F.A.S.A.):
   Economics Department Representative
   Office: SS 803, E-mail: econrep@fasaucalgary.ca and Web: www.fasaucalgary.ca.

Society of Undergraduates in Economics:
   https://www.ucalgarysue.com/.

Society of Undergraduates in Economics is a student run organization whose main purpose is to assist
undergraduate economics students to succeed both academically and socially at the University of
Calgary. Services include access to the exam bank, career events such as Industry Night and information
sessions, mentorship programs, and social events for members. They invite you to join by
contacting SUE at sue@ucalgarysue.com.

Faculty of Arts Program Advising and Student Information Resources:
   • Have a question, but not sure where to start? The Arts Students’ Centre is your information
     resource for everything in Arts! Drop in at SS102, call them at 403-220-3580, or email them at
     artsads@ucalgary.ca. You can also visit the Faculty of Arts website at
http://arts.ucalgary.ca/undergraduate which has detailed information on common academic concerns, including program planning and advice.

- For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at 403-210-ROCK [7625] or visit them in the MacKimmie Library Block.

**Student Support and Resources:**

- See https://www.ucalgary.ca/registrar/registration/course-outlines for information on campus mental health resources, the Student Ombuds’ Office, Student Success Centre, Safewalk, and Emergency Evacuation and Assembly.
- Online writing resources are available at https://ucalgary.ca/student-services/student-success/writing-support.

**Notes:**

1. Students are responsible for all assigned material, e.g., supplementary material posted on D2L, regardless of whether or not the material was covered in class.

2. Please note that the following types of emails will receive no response: emails not addressed to anyone in particular; emails where the recipient’s name is not spelled correctly; anonymous emails; emails in which the sender has not identified which course and section he/she is taking; and, emails involving questions that are specifically addressed on this course outline.

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2022-08-12