Economics 311 (L01) (Computer Applications in Economics)

Instructor: Heidi Esau
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Lecture Location: SS 020
Lecture Days/Time: MWF 12:00 – 12:50

Office: SS 350
Office Hours: T: 11:00am-12:00pm, W: 2:00pm-3:00pm or by appointment

(Fall 2021)

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**
Sept 8 – Sept 15, 2021
Introduction to Spreadsheets with Graphs and Charts.
Graphing and summarizing data using Excel.

**Lectures 2 & 3**
Sept 17 – Oct 6, 2021
Basic Concepts of Financial Economics.
- Interest Rates
- Mortgage Loans
- Present Worth Analysis
- Basic Concepts of Financial Economics.

October 18, 2021
Midterm Test

**Lectures 4 & 5**
| |  • Cash Flow Analysis  
| |  • Sensitivity Analysis

**Lectures 6 – 9**

| |  • Database Tools  
| |  • Statistical Functions  
| |  • Statistical Functions for Databases  
| |  • Pivot Tables  
| |  Downloading economic data from CANSIM II, OECD, and other web sources and importing it into Excel.

**Monte Carlo Simulation**

| Dec 1 – Dec 6, 2021 | Monte Carlo Simulation.  
| |  • Estimating probabilities  
| |  • Measuring risk  
| |  • Decision making tool

**Prerequisites/corequisites:**
Economics 201.

**Required Textbook(s):**
None.

**Recommended Textbook(s):**

**Books on Reserve:**
Fundamentals of Corporate Finance, 10th Canadian Edition by Ross, Westerfield, Jordan, and Roberts

**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](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 and Final Examination Details:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Due Dates</th>
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<tbody>
<tr>
<td>Midterm</td>
<td>20%</td>
<td>October 18, 2021</td>
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| Assignments      | 8% each| Due dates: September 29, 2021  
|                  |        | October 8, 2021          |
|                  |        | December 6, 2021          |
| 1 Project        | 16%    | Due date: November 15, 2021 |
| Final Examination| 40%    | TBA                       |

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

If a student’s letter grade on the final exam exceeds their midterm(s) letter grade, the weight of the midterm(s) may be transferred to the final exam at the discretion of the instructor. The student must have written the midterm(s) or provided supporting documentation for the absence(s) such as a medical note or statutory declaration.

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](https://www.ucalgary.ca/pubs/calendar/current/e-2.html).

Course material dealing with a particular assignment will typically be covered in class at least 5 days before the assignment is due; thus, assignments can be completed at any time up to and including the due date. Given these factors, only situations where someone can document illness or domestic affliction for an extended period (i.e., the entire 5 days prior to the due date) would possibly warrant shifting the assignment weight to the final exam. Furthermore, technical problems can be expected to occur with computer systems (and internet availability) so it may be a good idea to not wait until the last minute to submit your assignment.

All other course components will also be accessed, submitted, and returned through D2L.

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](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](https://www.ucalgary.ca/pubs/calendar/current/g-6.html). Under no circumstance will this be accommodated by the Department.

Tests and exams WILL NOT involve multiple choice questions and / or fill-in-blank questions.

All examinations will be **open-book** and **computer based**.
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 and Intellectual Honesty:
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
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.

Student committing academic misconduct during the final exam will not receive a passing grade for the course.

For information on the Student Academic Misconduct Policy, Procedure and Academic Integrity, please visit: https://www.ucalgary.ca/pubs/calendar/current/k-3.html

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 policy on Student Accommodations is available at
https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure

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/access-information-privacy

Copyright Legislation:
See the University of Calgary policy on Acceptable Use of Material Protected by Copyright at
https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

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.
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.

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
   E-mail: econrep@fasaucalgary.ca
   Website: 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 societyofundergradsineconomics@gmail.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! 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].

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. Assignments and Project are to be submitted by 12:00 pm on the date due via Dropbox, before the folder becomes unavailable. Answers to assignments will be either discussed in class shortly after each assignment falls due or posted on D2L. For this reason, late assignments will be given a score of zero, although you may still wish to have the work corrected and returned without a score being recorded.
3. 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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2021-8-13