

SCHOOL OF PUBLIC POLICY

PPOL 609 – Decision Analysis Course Outline

Course: PPOL 609 Term: Winter 2018

Decision Analysis

Section: 01

Time: Wednesdays 17:00- 20:00

Place: Nexen Technology and

Conference Center, DTC (Downtown Campus: 5th Floor, 906-8th Avenue

SW)

Instructor: Dr. Jennifer Winter and

Dr. Kent Fellows

5th floor of DTC **Telephone:** 403.210.7889 (Dr.

Winter)

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Office By appointment E-mail: jwinter@ucalgary.ca

Hours:

gkfellow@ucalgary.ca

Required Textbooks:

Avinash Dixit and Barry Nalebuff, *The Art of Strategy: A Game Theorist's Guide To Success In Business And Life, Paperback*, 2009.

Marvin Shaffer, Multiple Account Benefit-Cost Analysis: A Practical Guide for the Systematic Evaluation of Project and Policy Alternatives, 2010

Recommended Textbooks

Brian Christian and Tom Griffiths, *Algorithms to Live By: The Computer Science of Human Decisions*, 2016.

Other Readings:

Additional readings and supplemental material will be made available via a reading list or links posted on Desire2Learn. The list of lecture topics and readings will be provided in advance of

the course; the exception to this is readings on current events that will be added to the reading list on an ongoing basis (students will be notified of additions).

An introduction to decision-making topics and useful on-line resources can be found at: http://home.ubalt.edu/ntsbarsh/opre640a/partIX.htm

Desire2Learn:

Desire2Learn (D2L), a web-based course management tool, will be used in the course. Students registered in this course can log in at: https://d2l.ucalgary.ca/. Note that D2L features a class email list that will be used and I will use this list to communicate with you. It is your responsibility to ensure that D2L uses the e-mail address of your choice. The default is your University of Calgary e-mail address.

Course Description:

Decision making is complex, involving data and other information that is influenced by a variety of factors, including uncertainty, risk, assumed time frames, multiple objectives, various interests and interest groups, political and financial constraints, and unexpected changes in the decision-making environment.

This course is designed to provide an overview of the theory and process of decision analysis: a methodical and objective way of modelling, evaluating and making decisions. Students will learn a variety of models and tools to understand the complexities of contemporary policy and actions and to analyze and evaluate outcomes. These tools include game theory, benefit-cost analysis and economic or behavioral models, among others.

The objectives of this course are:

- 1) Understand basics about how decisions can and should be made
- 2) Use core set of tools to analyze decisions
- 3) Gain experience in research and strategy
- 4) Critically think about current policy issues

Classes and Readings:

The classes will consist of a combination of lectures, class discussion or experiments and guest presentations. A course syllabus will be provided in advance of the first class. Assigned readings will be indicated in the reading list posted on D2L at least a week in advance of each lecture.

Grade Determination:

| Class participation | 5% |
|---------------------|----------------------------------|
| Assignments (3) | 40% |
| Midterm Examination | 20% |
| Final Examination | 35% (Scheduled by the Registrar) |

Further instruction on methods of submission and due dates will be provided in class and on D2L. Be sure to check on D2L each week for readings and assignments.

Grading: Letter grades as described in the Faculty of Graduate Studies Calendar (see section E.1 of Calendar online) will be given for all elements of grade determination noted above. The course grade will be determined based on a weighted average of those grades according to the percentages shown above. In the event that elements are marked on a numerical (percentage) basis, they will be converted to letter grades. As a guide to determining standing, the following letter grade equivalences will generally apply:

| A+ | 97-100 | В | 75-79 | C- | 60-62 |
|----|--------|----|-------|----|-------|
| A | 90-96 | B- | 70-74 | D+ | 55-59 |
| A- | 85-89 | C+ | 67-69 | D | 50-54 |
| B+ | 80-84 | C | 63-66 | F | 0-49 |

Important Notes:

- The School of Public Policy expects the highest standards of professional conduct by students, faculty and staff. Abusive or disrespectful behavior will not be tolerated. This includes any expression of prejudice in any of its forms.
- It is the student's responsibility to be fully aware of the academic regulations outlined in the University Of Calgary Faculty Of Graduate Studies Calendar. Provisions regarding Student Misconduct (plagiarism, cheating and other academic misconduct) will be strictly enforced. Please review the University of Calgary's Regulations on Plagiarism, Cheating and Other Academic Misconduct, online:
 - http://www.ucalgary.ca/pubs/calendar/current/k-2.html http://www.ucalgary.ca/pubs/calendar/current/k-5.html
- Students seeking reappraisal of a piece of graded term work (term paper, essay, etc.) must discuss their work with the Instructor *within fifteen days* of the work being returned to the class. If not satisfied the student shall immediately take the matter to the Director of the MPP program or the Academic Director of the School and ask for a ruling and written reassessment. Should the student wish a further appeal it must be addressed to the Director and Palmer Chair of the School within 15 days of the ruling by the MPP Director or the Academic Director. For further information see the School of Public Policy Student Appeals Process at: http://www.policyschool.ca/wp-content/uploads/2017/06/Student-Academic-Appeals.pdf
- Examinations will not be given prior to the scheduled date.
- Students seeking an accommodation based on disability of medical concerns should contact Student Accessibility Services: SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities visit www.ucalgary.ca/access/ 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 Accommodation is available at:

http://www.ucalgary.ca/policies/files/student-accommodation-policy.pdf

- All material used in this course is for the sole use of the individual and should not be recopied in either print or digital format. For copyright guidelines, including those relating to photocopying and electronic copies, please refer to the Association of Universities and Colleges of Canada (AUCC) fair dealing guidelines._ http://library.ucalgary.ca/copyright/fair-dealing
- The University of Calgary complies with the requirements of the *Freedom of Information* and *Privacy Act*. The University's policy on the sharing of student information with third parties can be found here: http://www.ucalgary.ca/legalservices/pg-pi-of-student-to-subject.pdf
 http://www.ucalgary.ca/legalservices/files/legalservices/pg-pi-of-student-to-subject.pdf
- In the event of an emergency, students may be required to evacuate the building. If evacuation is ordered, follow these procedures:
 - Stay calm, do not rush, and do not panic.
 - Safely stop your work.
 - Gather your personal belongings if it is safe to do so. (keys, purses, jackets, cell phones, etc. It may be hours before you are allowed back in the building.)
 - If safe, close your office door and window, but do not lock them.
 - If directed by wardens, follow their instructions.
 - Use the closest emergency exit. Do not use the elevator.
 - Proceed to the designated Emergency Assembly point in front of the Holiday Inn on 8th avenue to the west of the Downtown Campus.
 - Do not re-enter the building or work area until you have been advised by emergency responders that it is safe to do so.

Graduate Students' Union Vice-President, Academic

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CANADA

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Emergency Assembly Point

Holiday Inn Lobby (weather permitting) 1020 8th Avenue SW Calgary, Alberta T2P 1J2 Or remain at nearest exit point

Safewalk / Campus Security: 220-5333

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