

INTE 296

Discover Statistics

Section EC

Winter 2019

This syllabus is subject to change and any changes will be posted in the Announcements section of your eConcordia portal.

Disclaimer: In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

About the Course

The Instructional Team:

Instructor: Yogendra P. Chaubey

Instructor Contact Information: inte296@econcordia.com

Please allow for two business days for a response to e-mail inquiries. You may also post your question on the class discussion board, which serves as the main medium for communication for course-related issues.

Course Description

No doubt that the field of statistics has become increasingly prevalent in modern society. As consumers, it is not simply a matter of deciphering what is presented to us, but it is also important to be conscious about what has not been divulged. The goal of this introductory-level course is to give you the tools to conduct research, analyse and interpret data, and most importantly, to make informed decisions.

This course develops the basic understanding of Statistics, which is a scientific discipline to interpret data and make inferences about populations from smaller subsets. The tools for understandings of data evolve from the area of probability, the foundations of which are explored in the course.

The mathematical background necessary for the course is simply basic arithmetic and algebra and may be suited to students in social sciences and humanities. The student going through this course is expected to learn techniques useful for research methods in quantitative sciences. This introductory-level course is designed for students with basic mathematical skills (high school mathematics is all that is needed).

This course consists of 11 lessons; after a detailed introduction to the understanding of various types of data of interest through numerical summaries and visualization through lessons 1-3, lesson 4 deals with understanding relationship between two variables. The next two chapters introduce the concept of probability and probability distributions that help in understanding the methods of inference.

This is approximately half of the course. The rest of the course (Lessons 7-11) is devoted to understanding of statistical principles and methods for making decisions about populations, including proportions, means and relationships between variables. Using multiple procedures (z-score, t-test, etc.), the student will be able to use sample data to make inferences about a given population under investigation.

Course Material

The material for this course consists of a required textbook and the INTE 296 course website which includes the video lectures, assignments and other course material.

Required Textbook

Textbook Title: Introductory Statistics – Exploring The World Through Data

Author: Robert Gould, Colleen Ryan, Jim Stallard and Michelle Boué

ISBN10: 978-0321-82365-6

Publisher: Pearson, Toronto, Canada

Edition: Canadian Edition.

This textbook is only available online as an e-book through the course website. Once you purchase your account to access the online course, register your Texidium account first.

- The electronic textbook materials can be downloaded from Texidium Windows or Mac mobile apps.
- The electronic textbook materials can be printed in the Texidium desktop apps for Windows and Mac or the online version.
- Purchase of the e-book also allows access to online resources for the student. An important online resource is the web-based statistics software known as *StatCrunch* that will be explained and used through out the course.

Course Website

The course website can be accessed at www.econcordia.com.

Your eConcordia account will be valid until the end of the term for which you are registered.

Your account will allow you to access the online course material, which includes videos, notes, discussion boards, all graded course components, useful links, readings and many more resources from the course website for the duration of the term.

Assessments

Graded Assessments:

Assignment 1 – Lessons 1 and 2	4%
Quiz 1 (online) – Lesson 1	6%
Assignment 2 – Lessons 3 and 4	4%
Quiz 2 (online) – Lessons 2 and 3	6%
Assignment 3 – Lessons 5 and 6	4%
Quiz 3 (online) – Lessons 4 and 5	6%
Assignment 4 – Lessons 7 and 8	4%
Quiz 4 (online) – Lessons 6 and 7	6%
Assignment 5 – Lessons 9 and 10	4%
Quiz 5 (online) – Lessons 8 and 9	6%
Quiz 6 (online) – Lessons 10 and 11	6%
Quizzes (best 5 of 6)	30%
Final Exam (In class; will cover Lessons 1-11)	50%

Description of Graded Assessments

Assignments:

The assignments are based on the material learned through the examples, and practice questions. The students will have approximately 2 weeks to complete an assignment. The students must respect the due dates, as no extension to the deadline will normally be provided. The students may discuss the assignments amongst themselves, as this may provide a better understanding of the material provided, however, each student must submit their own assignment.

Quizzes:

Each quiz will comprise of a series of multiple-choice, true-false, and/or short-answer questions. Questions will be randomized and automatically generated from a pool of possible questions so that each student will have a “unique” assessment. The quiz opens at 12:01am on the scheduled day and closes at 11:59pm. Quiz 1 will cover the content from Lesson 1, Quiz 2 will be

based on content from Lessons 2 and 3, Quiz 3 will cover Lessons 4 and 5, Quiz 4 will cover Lessons 6 and 7, Quiz 5 will cover Lessons 8 and 9, and Quiz 6 will cover Lessons 10 and 11.

You will NOT be able to redo a quiz if you encounter a computer or connection problem. There will be six (6) online quizzes. The best 5 of the 6 quiz results will be counted and there is no replacement quiz for missing (or not able to complete) a quiz, whatever the reasons are.

Grades

In order to view your grades throughout the semester, click on the My Grades link in your eConcordia portal.

It is your responsibility to ensure your work has been received (to be verified as outlined in your assignment instructions) and to contact your TA via e-mail for clarification if you have any questions concerning your grades.

Your final letter grade for the course will be posted in your [myConcordia Portal](#) at the end of the term.

Grading Distribution

Letter Grade	% Grade		Letter Grade	% Grade	
A+	89 to	100	C	64 to	67.99
A	85 to	88.99	C-	60 to	63.99
A-	82 to	84.99	D+	57 to	59.99
B+	78 to	81.99	D	53 to	56.99
B	74 to	77.99	D-	50 to	52.99
B-	71 to	73.99	F	0 to	49.99
C+	68 to	70.99			

Policies:

Late Submissions and Extensions

- It is your responsibility to ensure that if you are unable to complete your work by the deadline or complete an assessment on the assigned date, you must request an extension beforehand from the instructor of the course.
- Extensions will be granted only to students who are able to provide a reasonable, verifiable, medical note before the deadline.
- In the case of emergencies, it is your responsibility to notify your instructor via e-mail or phone as soon as the issue arises in order to determine the course of action required for the matter at hand.
- If the assignment is incomplete (i.e., you omit answering questions, you do not provide any evidence of having worked out the problem), you will not be permitted to resubmit it with corrections.
- Vacations and travel plans (work-related or otherwise) are not considered valid reasons for late submissions of or an inability to complete assignments, quizzes and exams.
- Please note that you are responsible for the version of the work you upload to the website. If you upload the incorrect version of your work to the website, you can resubmit the correct version prior to the deadline. If you fail to meet the deadline, the version of your work located on the website is the one that will be graded.

Important Information

Topic	Link
Academic Integrity	Academic Integrity
Academic Integrity Quiz	How to take the quiz
Access Centre for Students with Disabilities	ACSD
Concordia Library Citation & Style Guides	Citing - Help & How-to
Course Communication Tools	Communication
eConcordia Policies	Policies

Final Exams Information	Final Exams
Helpdesk/Support	FAQ
Refunds	Refunds
Technical Requirements	Technical Requirements
Tips for Studying Online	Studying Tips

INTE 296 - Discover Statistics Agenda Winter 2019

All deadlines indicated are on the due date listed by 11:59 PM unless otherwise indicated.

Week 1: January 7 - January 13	
	Review the Course Outline and Agenda
	Navigate the Course Website
	Lesson 1: Introduction to Data
January 07	Discussion Board opens at 2 PM.
January 08	Basic Math Review
January 08	Orientation Test available
Week 2: January 14 - January 20	
	Lesson 2: Visualizing Data
January 14	<p>Attend the Virtual Orientation Session @ 2:00 PM Virtual Classroom: http://connect.econcordia.com/inte296</p> <p>(Virtual room will be available at least 15 minutes prior to the start of the session. Enter your name in the "Guest" field to enter the room. Do NOT log-in with your eConcordia account).</p>
January 14	Orientation Test due
Week 3: January 21 - January 27	
	Lesson 3: Numerical Summaries of Centre and Variation
	<p>Orientation to StatCrunch https://www.youtube.com/watch?v=f-hMxX3Fbil&list=PLBE055F65E43B4973&index=2&t=0s</p>
January 21	Last day to add or swap courses in this term
January 21	DNE Date: Academic withdrawal deadline (with tuition refund)
January 22	Assignment 1 (Lessons 1 and 2) opens
January 25	Quiz 1 (Lesson 1)
Week 4: January 28 - February 3	
	Lesson 4: Exploring Relationships Between Variables
January 28	<p>Attend the Q & A Session @ 2:00 PM Virtual Classroom: http://connect.econcordia.com/inte296</p>
Week 5: February 4 - February 10	
	Lesson 5: Probability: The Tool for Describing Variation
February 05	Assignment 1 due
February 05	Assignment 2 (Lessons 3 and 4) opens

February 08	Quiz 2 (Lessons 2 and 3)
Week 6: February 11 - February 17	
	Lesson 6: Modelling Random Events: The Normal and Binomial Models
Week 7: February 18 - February 24	
	Lesson 7: Survey Sampling and Statistical Inference
February 19	Assignment 2 due
February 19	Assignment 3 (Lessons 5 and 6) opens
February 22	Quiz 3 (Lessons 4 and 5)
Mid-Term Break: February 25 - March 3	
February 25	Mid-term break begins.
March 01	President's Holiday - University closed.
March 03	Mid-term break ends.
Week 8: March 4 - March 10	
	Lesson 8: Hypothesis Testing for Population Proportions
March 05	Assignment 3 due
March 05	Assignment 4 (Lessons 7 and 8) opens
March 08	Quiz 4 (Lessons 6 and 7)
Week 9: March 11 - March 17	
	Lesson 9: Hypothesis Testing for Means
March 11	Attend the Q & A Session @ 2:30 PM Virtual Classroom: http://connect.econcordia.com/inte296
Week 10: March 18 - March 24	
	Lesson 10: Relationships Between Categorical Variables
March 18	DISC Date: Academic withdrawal deadline from winter-term courses. (Without tuition refund)
March 19	Assignment 4 due
March 19	Assignment 5 (Lessons 9 and 10) opens
March 22	Quiz 5 (Lessons 8 and 9)
Week 11: March 25 - March 31	
	Lesson 11: Comparing Several Means: One-Way Analysis of Variance
Week 12: April 1 - April 7	
April 01	Course Evaluation released
April 02	Assignment 5 due
April 05	Quiz 6 (Lessons 10 and 11)
April 06	Last day for instructor-scheduled tests or examinations
Week 13: April 8 - April 13	

April 08	Attend the Final Exam Review Session @ 2:30 PM Virtual Classroom: http://connect.econcordia.com/inte296
April 13	Deadline to complete the course evaluation.
April 13	Last day of classes
Examinations Period: April 16 - May 5	
April 19	University closed
April 20	University closed
April 21	University closed
April 22	University closed
	Final Exam date, time and location is posted on your MyConcordia Portal