



Course Outline

UNIVERSITY STUDIES

Statistics 151
Introduction to Applied Statistics I
Fall, 2012

3 CREDITS
5 HOURS PER WEEK

INSTRUCTOR: Louis Dingley

INSTRUCTOR: Louis Dingley
PHONE NUMBER: (780) 791-4832
E-MAIL: Louis.dingley@keyano.ca
OFFICE NUMBER: 245A

OFFICE HOURS:

| | |
|-----------|-----------------|
| Tuesday | 2:00 – 3:00 PM |
| Wednesday | 9:00 – 11:00 AM |
| Thursday | 1:00 – 3:00 PM |

HOURS OF INSTRUCTION:

| | | |
|-----------|------------------|-----------|
| Tuesday | 10:00 – 11:50 AM | Room S205 |
| Wednesday | 8:00 – 8:50 AM | Room S110 |
| Thursday | 10:00 – 11:50 AM | Room S110 |

COURSE DESCRIPTION:

This is a first course in quantitative analysis and provides an introduction to the fundamentals of statistical theory and analysis.

PRE-REQUISITE(S):

Math 30 pure

COURSE OUTCOMES:

The student will be able to:

1. Students will learn to apply descriptive and inferential statistics.
2. Students will become competent in the application of statistical computer software.

REQUIRED RESOURCES:

Agresti, A. and Franklin, C. (2012). *The art and science of learning from data*, 3rd ed. New York: Freeman.

TOPICS TO BE COVERED:**Please Note:**

This course outline may be modified to facilitate unforeseen time constraints. Date and time allotted to each topic is subject to change.

Syllabus**Part I: Gathering and Exploring Data**

| | |
|---|-----------|
| Statistics: The art and science of learning from data | Chapter 1 |
| Exploring data with draphs and numerical summaries | Chapter 2 |
| Association: Contingency, correlation, and regression | Chapter 3 |
| Gathering data | Chapter 4 |

Part II: Probability, Probability Distributions, and Sampling Distributions

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|--------------------------------|-----------|
| Probability in our daily lives | Chapter 5 |
| Probability distributions | Chapter 6 |
| Sampling distributions | Chapter 7 |

**** Midterm Exam – Chapters 1, 2, 3, 4, 5, 6, 7 (Date: Thursday, October 18, 2012)**

Part III: Inferential Statistics

| | |
|------------------------------------|------------|
| Confidence Intervals | Chapter 8 |
| Significance test about hypotheses | Chapter 9 |
| Comparing two groups | Chapter 10 |

Part IV: Analyzing Associations and Extended Statistical Methods

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|--|------------|
| Analyzing associations between categorical variables | Chapter 11 |
| Analyzing associations between quantitative variables: | Chapter 12 |
| Comparing Groups: Analysis of Variance | Chapter 14 |
| Review | |

MOODLE

Go to <http://ilearn.keyano.ca>

This course is supported through Moodle. Assignments, readings and handouts will be posted on Moodle. Login information will be provided by your instructor.

EVALUATION:

| Evaluation | Percent | Due Date |
|----------------------|----------------|----------------------|
| Homework Assignments | 10% | TBA |
| Lab Assignments | 10% | TBA |
| Midterm Exam | 30% | October 18, 2012 |
| Lab Exam | 10% | November 28, 2012 |
| Final Examination | 40% | TAB – Dec. 10 to 19* |

*** - Do not make holiday plans until the final exam dates are announced.**

GRADING SYSTEM:

| Letter Grade | Description | Grade Points |
|--------------|--------------|--------------|
| A+ | | 4 |
| A | Excellent | 4 |
| A- | | 3.7 |
| B+ | | 3.3 |
| B | Good | 3 |
| B- | | 2.7 |
| C+ | | 2.3 |
| C | Satisfactory | 2 |
| C- | | 1.7 |
| D+ | | 1.3 |
| D | Minimal Pass | 1 |
| F | Failure | 0 |

Students intending to transfer to other institutions should strive for a ‘C-’ as a minimum. Transfer information on each course is available at the [Alberta Council on Admission and Transfers](#).

If all assignments are not completed the student will receive a grade of F.

Students should consult:

http://www.keyano.ca/current_students/examinations/index.htm

IMPORTANT DATES:

| | |
|-------------------------|--|
| September 18, 2012 | Courses dropped after this date will be designated “W”. (A withdrawal (W) is not reflected in your GPA) |
| October 18, 2012 | Mid-term examination |
| October 26, 2012 | Courses dropped after this date will be designated “WF”. (A withdrawal failure (WF) counts as a 0 in your GPA calculation) |
| December 7, 2012 | Last day of classes |
| December 10 to 19, 2012 | Final Exams |

COLLEGE POLICIES

Equality, Equity and Respect

The Keyano College is committed to providing an environment of equality, equity and respect for all people within the College community. All members of this community are considered partners in developing teaching and learning contexts that are welcoming to all. Faculty, staff, and students are encouraged to use inclusive language to create a classroom atmosphere in which students' experiences and views are treated with equal respect and valued in relation to their gender, ethnic and cultural background, and sexual orientation.

Students should consult:

http://www.keyano.ca/Committees/IRA/Individual_Rights_Policy.asp

Plagiarism and Cheating

Every student expects to be treated and evaluated fairly in a course. Plagiarism and cheating robs everyone of this right.

No student may submit words, ideas or data of another student or person as his or her own in any writing, project, assignment, quiz, electronic presentation, exam etc. Any work used that is not the student's own must be clearly cited as belonging to someone else. There are penalties for using other's work and not citing it. The Student's Rights & Responsibilities document clearly outlines these penalties and the appeal process.

- No learner can obtain information from another student during an exam.
- No learner can bring unauthorized information (paper or electronic) into an exam or quiz.
- No student can submit work done in another course for grading in this course without the written prior approval of the course instructor.
- No student can submit copyright protected or commercially produced materials as part or all of an assignment without proper citation & permission.

Student Rights & Responsibilities

Students should consult the Keyano College Credit Calendar or online at:

<http://www.keyano.ca/Media/Collections/Calendars/Keyano.Calendar1112-10-full.pdf>

Specialized Supports and Duty to Accommodate

Disability Support Services: Learner Assistance Program

If you have a documented disability or you think that you would benefit from some assistance from a Disabilities Counsellor, please call or visit the Disability Supports Office 780-792-5608 to book an appointment (across from the library). Services and accommodations are intended to assist you in your program of study, while maintaining the academic standards of Keyano College. We can be of assistance to you in disclosing your disability to your instructor, providing accommodations, and supporting your overall success at Keyano College.

Specialized Supports and Duty to Accommodate

Specialized Support and Duty to Accommodate are aligned with the office of Disability Support Services: Learner Assistance Program (LAP) guided by federal and provincial human rights legislation, and defined by a number of Keyano College policies. Keyano College is obligated by legislation to provide disability-related accommodations to students with identified disabilities to the point of undue hardship.



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5 HOURS PER WEEK

Louis Dingley, Instructor

Date

Reviewed and approved by:

Guy Harmer, Dean

Date