

BUS 111B, Statistics I

3 credits, 4 hours lecture, 2 hours lab

Instructor

Instructor Name: Chithra Udayashankar

Office location: CC 210

Phone number: 780-792-6356

Email: Chithra.Udayashankar@keyano.ca

Office Hours

Monday 10:00 am – 12:00 pm

Wednesday 04:00 pm - 06.00 pm

Thursday 12:30 pm – 02:30 pm

Delivery Method(s):

In-person – offered in person (face-to-face) on campus.

Hours of Instruction & Location

Day	Time	Location
Tuesday	08:00 am -09:20 am	S 273
Thursday	08:00 am -09:20 am	S 273
Friday	10:00 am -11:50 am	S 273

Required Resources

Book:

Donnelly, R. (2020). Business Statistics -- MyLab Statistics with Pearson eText, Third edition.

ISBN-10: 0134782925 • ISBN-13: 9780134782928

Please register for MyLab Statistics in order to access quiz, assignments, and exams related to the course. Instructions are provided on MOODLE under course orientation.

The access code for MyLab Statistics and the e-text is available at the Keyano bookstore.



Software:

Microsoft Excel

Hardware:

A Laptop (Windows or Mac) - See hardware requirements in the section Computer System Requirements

Assessment Details and Dates

Assessment	Weighting	Course Learning Outcome
Introduction Forum Plagiarism Tutorial Class Participation	5%	
4 Chapter Quizzes	25%	CLOs 1 - 6
10 Chapter Assignments	10%	CLOs 1 - 6
4 Lab Exercises	10%	CLOs 1, 2, 5, & 6
Mid-term Exam	25%	CLOs 1 - 4
Final Exam	25%	CLOs 5 and 6

Assignments

Assignments must be completed via Pearson's MyLab Statistics website, as such, access to MyLab Statistics is mandatory. Your instructor will go over the instructions during the first lecture. The assignments cover chapters learned in class.

Labs

In the real business world, most statistical analyses are conducted using computer software. This is one of the industry standards for analyzing statistics and as such we will be employing EXCEL in this course. Please download and install Microsoft EXCEL prior to the start of the course on your personal computer if possible (see MOODLE). There are four labs that are designed to introduce students to the main features of data organization and analyses (both descriptive and inferential). The labs serve to demonstrate how data analyses covered in the course can be conducted with the statistical software. Labs are conducted in class and are due at the end of the class. The first session of the lab will be a technology workshop in which the students are introduced to the technology required to complete labs and relevant analyses and given the opportunity to ask the instructor questions. As well tutorials will be done during lab sessions. Tutorials will provide practice into technology and course material covered. Unlike labs, tutorials are instructor-assisted. All labs and tutorials are due at the end of the class.



Quizzes

Quizzes will be administered during lab sessions. They will be close-book assessments covering chapters completed prior to the week of the quiz. The structure of the quiz will be a hybrid of multiple choice and direct answer questions.

Examinations

The examinations (mid-term and final) will be close-book in-person assessments administered during the scheduled session. Study guides for the scope of the exams will be provided by the instructor.

Proposed Course Schedule

Week and Class Dates	Topics, Readings	Graded Assessments (%)
Week 1	Course Introduction, Course Outline,	Introduction Forum (1%)
Aug 29,30	Moodle, and MyLab Statistics Registration	Plagiarism Certificate (1%)
Week 2 Sep 3,5 & 6	Introduction to Business Statistics Displaying Descriptive Statistics Chapters 1 (All sections) and 2 (Sections 2.1 – 2.4, 2.6)	Assignment # 1: Chapters 1 and 2 (1%)
Week 3 Sep 10,12 & 13	Calculating Descriptive Statistics Chapter 3 (Sections 3.1 – 3.6)	Lab # 1 – Descriptive Statistics (3%) Assignment # 2: Chapter 3 (1%)
Week 4 Sep 17,19 & 20	Introduction to Probabilities Chapter 4 (Sections 4.1 to 4.3)	Quiz #1: Chapters 1 – 3 (5%) Assignment # 3: Chapter 4 (1%)
Week 5 Sept 24, 26 & 27	Discrete and Continuous Probability Distributions Chapters 5 and 6(Sections 5.1 – 5.3;6.1 – 6.3)	Assignment # 4: Chapters 5 and 6 (1%)
Week 6 Oct 1, 3 & 4	Sampling and Sampling Distributions Chapter 7(Sections 7.1 – 7.5)	Quiz #2: Chapters 4 – 6 (6%) Assignment # 5: Chapter 7 (1%)
Week 7 Oct 8, 10 & 11	Confidence Intervals Chapter 8	Assignment # 6: Chapter 8 (1%)
Week 8 Oct 15, 17 & 18	Hypothesis Testing for a Single Population Chapter 9 (Sections 9.1 to 9.5)	Mid-term Exam (Ch 1 - 7) (25%) Assignment # 7: Chapters 9 and 10 Assignment (1%)
Week 9 Oct 22, 24 & 25	Hypothesis Tests Comparing Two Populations Chapter 10(Sections 10.1, 10.2,10.4)	Lab # 2 and Lab #3 - Hypothesis Testing for Single Populations and Hypothesis Tests Comparing Two Populations (4%)
Week 10 Oct 29, 31 Nov 1	Chi-Square Tests Hypothesis Tests for Population Variance Chapters 12 and 13	Quiz #3: Chapters 8 – 10 (7%) Assignment # 8: Chapters 12 and 13 (1%)
Week 11 Nov 5, 7 & 8	Analysis of Variance (ANOVA) Procedures Chapter 11 (Sections 11.1 and 11.3)	Lab # 4: Analysis of Variance (3%) Assignment # 9: Chapter 11 (1%)
We1k 12 Nov 12, 14 & 15	Reading Days – No Class	



Week 13 Nov 19, 21 & 22	Correlation and Simple Linear Regression Chapter 14 (Sections 14.1 and 14.3)	Assignment # 10: Chapter 14 (1%)
Week 14	Correlation and Simple Linear	Quiz #4: Chapters 11 -14 (7%)
Nov 26, 28	Regression	
& 29	Chapter 14 (Sections 14.7)	
Week 15	Final Exam Review	
Dec 3		

Please Note:

- The date and time allotted to each topic are subject to change.
- Students will have access to their Moodle course shells for 15 days following completion of their course.
- Every effort has been made to ensure that the information in this course syllabus is accurate at
 the time of publication. Keyano College reserves the right to change the course syllabus content if
 it becomes necessary so that course content remains relevant. Any changes to the course
 syllabus during the semester will be communicated to students in writing by the instructor in a
 timely manner. A revised course syllabus will be posted to the LMS.
- A minimum GPA of 1.7 or higher is required for students to remain in good academic standing and progress to the next semester, unless otherwise indicated for a specific program.

Keyano Performance Requirements and Student Services

Student Responsibilities

As a student, it is your responsibility to contact the Office of the Registrar to complete the required forms, including the <u>Withdrawal/Drop Form</u>. All forms are available on the <u>College website</u>. Please refer to the important dates listed in the Academic Schedule in the <u>Keyano College credit calendar</u> and/or on the <u>College website</u>. It is the responsibility of each student to be aware of the guidelines outlined in the <u>Student and Academic Policies</u>.

Student Attendance

Class attendance is helpful for two reasons: First, class attendance maximizes a student's learning experience. Second, attending class is an excellent way to keep informed of matters relating to the course administration (e.g., the timing of assignments and exams). Ultimately, you are responsible for your learning and performance in this course. It is the responsibility of each student to be prepared for all classes. Absent students are responsible for the material covered in those classes, and students must ensure they are ready for their next class, including completing any missed assignments and notes.

Course Evaluation

Midterm exams and term work is to be completed at the time/date indicated in your course syllabus. It is the expectation of the College that students make every reasonable effort to complete all course



evaluation, including, quizzes, midterms, and exams, as scheduled. In the event of an emergency, rescheduling of exams and/or extensions are only provided at the discretion of the course instructor. Students should contact the instructor as soon as they are able, to notify them of missing an evaluative component. Instructors will use discretion in deciding whether circumstances justify granting a reschedule and/or extension.

Regular term quizzes, midterms, and exams are not eligible for deferral and/or date extension accommodations. Students with accommodations, please refer to Accessibility Services.

Final Exams are subject to deferral processes, please refer to the current <u>Keyano College Credit</u> Calendar.

Academic Integrity & Misconduct

Academic integrity requires commitment to the values of honesty, trust, fairness, respect, and responsibility. It is expected that students at Keyano College will adhere to these ethical values in all activities related to learning, teaching, research, and service. Any action that contravenes this standard, including misrepresentation, falsification, or deception, undermines the intention and worth of scholarly work and violates the fundamental academic rights of members of our community.

Academic dishonesty takes many forms:

- Plagiarism or the submission of another person's work as their own,
- The use of unauthorized aids in assignments or examinations (cheating),
- Using Artificial Intelligence (AI) to complete coursework (without instructor approval),
- Collusion or the unauthorized collaboration with others in preparing work,
- The deliberate misrepresentation of qualifications,
- The willful distortion of results or data,
- Substitution in an examination by another person,
- Submitting unchanged work for another assignment, and
- Breach of confidentiality.

In all academic work, the ideas and contributions of others must be appropriately acknowledged and work that is presented as original must be, in fact, original. Using an AI-content generator (such as ChatGPT) to complete coursework without proper attribution or authorization is a form of academic dishonesty. If you are unsure about whether something may be plagiarism or academic dishonesty, please contact your instructor to discuss the issue.

The consequences for academic misconduct range from a verbal reprimand to expulsion from the College. More specific descriptions and details are found in the *Student & Academic Policies* section of the <u>Keyano College credit calendar</u>. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights, Academic Integrity, and Non-Academic Misconduct Policies.

To ensure your understanding of plagiarism and academic integrity, you are required to complete the online <u>Understanding Academic Integrity tutorial</u> (https://keyano.libwizard.com/f/academic-integrity-tutorial) and submit the certificate of completion to your instructor(s).



Online Learning

Technology and internet connectivity will impact your online learning experience. You may be required to watch online videos, take online quizzes, or participate in live online classes. Live/virtual courses will be hosted in Microsoft Teams or Zoom. For all course delivery types, you will access your course outline, course syllabus and course resources on Keyano's learning management system: Moodle (iLearn). Login in using your Keyano College operates in a Windows-based environment and having access to the correct tools for online learning is essential.

Computer System Requirements

Keyano College software are Windows based.

Minimum Requirements and Recommended Upgrades for Windows (preferred system) and Apple devices

These minimum standards are required for a Windows computer/laptop (OS 10 or 11) and a MacIntosh (OS 10.14 or above).

- 1. Windows 10 Operating System or above.
- 2. 4GB of RAM. Recommended upgrade to 8GB of RAM.
- 3. 10GB+ available hard drive storage space. Note installing Microsoft Office 365 requires 3GB of available hard drive space.
 - a. Install the Microsoft Office 365 suite (~3GB) *
- 4. Microphone, webcam, and speakers (All modern laptops have these three accessories built-in). However, a headset or earbuds with a microphone is also recommended.
- 5. Windows has built-in anti-virus/malware software. It is essential to install system updates to keep your device secured regularly.

*Microsoft Office 365 is free to Keyano students.

Tablets, iPads, and Chromebooks are **not** recommended: They may not be compatible with your programs such as lockdown browsers used for assessments and/or Microsoft Office 365.

Computer Software

Students have access to Microsoft Office 365 and Read & Write for free using Keyano credentials.

See Recommended Technology for more information.

Recording of Lectures and Intellectual Property

Students may only record a lecture if explicit permission is provided by the instructor or Accessibility Services. Even if students have permission to record a lecture or lecture materials, students may not share, distribute, or publish any of the lectures or course materials; this includes any recordings, slides, instructor notes, etc., on any platform. Thus, no student is allowed to share, distribute, publish, or sell



course-related content without permission. It is important to recognize that the Canadian Copyright Act contains provisions for intellectual property. The <u>Academic Integrity Policy</u> provides additional information on Keyano College's expectations from students as members of the intellectual community.

ITS Helpdesk

If you have issues with your student account, you can contact the ITS Helpdesk by emailing its.helpdesk@keyano.ca or calling 780-791-4965.

Specialized Supports

Keyano College is committed to Keyano students and their academic success. There is a variety of student support available at Keyano. All student services are available during Keyano business hours: Monday to Friday, 8:30 a.m. to 4:30 p.m. The College is closed on statutory holidays. If you require support outside of regular business hours, please inform the support service team, and they will do their best to accommodate your needs.

Accessibility Services provides accommodations for students living with disabilities. Students with documented disabilities or who suspect a disability can register to discuss their current learning barriers and possible accommodations. Students are required to request accommodations for each term. Please note that requesting accommodations is a process and requires time to arrange. Contact the department as soon as you know you may require accommodations to ensure timely implementation. For accessibility supports, adaptive technology, learning strategies and disability-based funding, please register with Accessibility Services by emailing wellness/, or scanning this gr code below.



Wellness Services offers a caring, inclusive, and respectful environment where students can access free group and individual support to meet academic and life challenges. Mental Health Coordinators provide a safe and confidential environment for you to seek help with personal concerns. Our Wellness Navigator offers support with finding basic needs such as housing, financial and nutritional support, and outside referrals when needed. Wellness Services welcomes students to participate in group sessions that address topics including mindfulness and test anxiety throughout the academic year. Individual appointments can be made by emailing wellness.services@keyano.ca, or visiting www.wellnessxp.net/wellness/, or scanning this qr code below.



The **Library** provides students with research, information, and educational technology services and spaces as they engage in their studies. The Library is located at CC-166 or www.keyano.ca/library. Library staff are available to help students online and in person throughout the semester. Librarians offer individual and small group consultations booked using the online Book A Librarian calendar. The library also provides virtual research and subject guides to help you with your studies. Find the guide that supports your course-related research by viewing the complete list of online Subject Guides. To start your



research and access citation guides (APA, MLA, Chicago, or IEEE), visit the <u>Research Help page</u>. The library's collections (including print and online materials) are searchable using <u>EDS (EBSCO Discovery Service)</u> on <u>www.keyano.ca/library/find</u>. The library offers a Loanable Technology collection to support students accessing and using technology. For an up-to-date list of technology available for borrowing, visit the library's <u>Loanable Technology webpage</u>. For a detailed list of library resources and services, go to <u>www.keyano.ca/library</u>. For all inquiries, please email <u>askthelibrary@keyano.ca</u> or chat with us online.

The Academic Success Centre (ASC) provides free academic support services to registered students, such as tutoring, writing support, facilitated study groups, workshops, and study space. Academic Content Specialists are available in Business, Mathematics, Science, English, Humanities, Power Engineering, Upgrading/College Prep, and more. Peer Tutors are available to provide peer academic support to students in all college programs, such as Nursing, Business, Education, Environmental Science, among others. Students are encouraged to visit the Academic Success Centre at CC-119 to discuss strategies for academic success. Specialists in the Academic Success Centre also work with students to develop academic success plans, time management skills, study strategies, and homework plans. For additional information, please email Academic.Success@keyano.ca

Work Integrated Learning (WIL) is located in the ASC in CC-119. Career Services WIL staff assist students with their program-related WIL and co-op placements, provide resume advice, and support with using the GradLeaders platform. Additionally, they coordinate several career fairs for students throughout the academic year and host coop and resume workshops for students. Students can reach WIL by emailing: WIL@keyano.ca or by visiting them in person.

Course Syllabus Template Version 1.0

Every effort has been made to ensure that the information in this course syllabus is accurate at the time of publication. Keyano College reserves the right to change the course syllabus content if it becomes necessary so that course content remains relevant. Any changes to the course syllabus during the semester will be communicated to students in writing by the instructor in a timely manner. A revised course syllabus will be posted to the LMS.



Signatures & Date	
Name of Instructor:	
Instructor Signature:	
Date:	
Name of Course Lead:	
Course Lead Signature:	
Date:	
Name of Chairperson/Program Manager:	
Chairperson/Program Manager Signature:	
Date:	