

MATH 1800 Business Statistics

Fitchburg State University

3 undergraduate credits

40 instructional hours

Instructor: TBD

Office Hours: Friday's----**Course Schedule:** July 12 - August 13, 2021

Textbook: *Introductory Statistics* Illowsky and Dean, OpenStax, 2016

Course Materials: You will need access to a spreadsheet software system (Excel, Numbers, or Google Sheets).

Course Content: Topics covered in this course include descriptive methods, probability distributions, estimation, testing, analysis of variance and regression analysis. *Prerequisite:* none

Grading: The final grade will be based tests (40%), homework (20%), quizzes (15%), and a final exam (25%). The standard Fitchburg State plus/minus grading system will be used.

FSU	4.0	3.7	3.5	3.3	3.0	2.7	2.5	2.4	2.0	1.7	1.5	1.3	1.0	0.0
Letter	A	A-	A- /B+	B+	B	B-	B-/C+	C+	C	C-	C- /D+	D+	D	F
Numerical	95- 100	92- 94	89-91	86- 88	83- 85	80-82	77-79	74- 76	71- 73	69-70	67-68	64- 66	60- 63	0- 59

Homework: Homework will be assigned every day. On occasion, homework will be will be discussed in class. So on these days your homework grade includes participation in these discussions and the completeness of your own work. Finally, the weekly quizzes will be on the homework problems.

Quizzes: In-class activities and announced quizzes (typically on Thursday) can happen throughout the semester. Quizzes will typically be on uncollected HW problems. Quizzes are worth 10% of your grade.

Exams: There will be two tests during the semester each worth 20% and one final exam worth 25%. If an exam is missed, you must contact the instructor (via email) within 12 hours to have any chance to make up the exam. If you missed the exam for a legitimate reason, you must make up the exam before the class following the exam. Which excuses are considered legitimate is up to the discretion of the instructor and the instructor may require documentation and/or direct contact from the Dean of Student and Academic Life.

Academic Honesty: I expect each student to be honest with themselves and with me and I expect to see YOUR work. I know what the INTERNET might say, I want to know what you say. If you work closely with another student, you should indicate that on your homework. All students should be aware of and follow the college's Academic Integrity Policy which can be found on page 43 of the Undergraduate and Graduate Course Catalog. Any acts of cheating on an assessment (homework, quiz, or exam) will earn the student a score of zero on that assessment and may result in a formal accusation to be reported to the student's Dean, as outlined in the Course Catalog.

Expectations:

1. Attendance will be taken every day and students are expected to attend class and lab.
2. Leave all distractions such as newspapers, crossword puzzles, iPods, and work for other courses at home or in your backpack.
3. Turn off all cellphones in class. If you have a child in daycare or are an EMT please set your phone to silent and step outside if you must answer a call.
4. Your enthusiasm, your questions, and your excitement are always welcome in class. Please leave bad attitudes and egos at home.

How to succeed in this class:

1. Come to class, participate, and take notes.
2. Ask lots of questions.
3. Visit me in office hours, email me, and visit the Math Center (third floor of the library).
4. Ask lots of questions.
5. Keep up with homework and reading the text.

Students with Disabilities: If you have a disability and require accommodations, please contact the me during the first two weeks of class or as soon as you become aware of the need, so that your learning needs may be met. You will need to provide documentation of your disability to the Disability Services office first on the third floor of Hammond. The Disability Services office will help to decide what accommodations are required and will give you a form to present to your instructor.

Extended Campus Library Services

The Gallucci-Cirio Library at Fitchburg State University provides a full range of library services including borrowing privileges; document delivery (books and articles mailed to your home); Interlibrary Loan; reference assistance via: phone, email, IM, Blackboard's Collaboration and Elluminate tools, Skype and in-person; library instruction; research help and more. Any questions relating to library services should be directed to the Linda LeBlanc, Access Services Librarian, at 978-665-3062 or dllibrary@fitchburgstate.edu. There is also a special section for Distance Learning and Extended Campus Services at <http://fitchburgstate.libguides.com/dlservices> outlining the wide range of services available to you and how to access them.

Tentative Course Schedule

The course outline is tentative and I will modify accordingly depending on the pace of the class.

Week 1: Descriptive Statistics

Session 1: Introduction: Data and Statistics

Session 2: Descriptive Statistics: Tabular and Graphical Presentations

Session 3: Descriptive Statistics: Numerical Measures

Session 4: TA Review Session

Week 2: Probability Distributions

Session 5: Introduction to Probability

Session 6: Discrete Probability Distribution

Session 7: Continuous Probability Distribution

Session 8: Exam review session

Session 9: Exam 1

Week 3: Sampling Distribution

Session 10: Continuous Probability Distribution

Session 11: Sampling Distribution

Session 12: Sampling Distribution

Session 13: (flex for adjustment)

Session 14: TA Review Session

Week 4: Statistical Inferences

Session 15: Interval Estimation

Session 16: Hypothesis Testing

Session 17: Inference About Means and Proportions

Session 18: exam review

Session 19: Exam 2

Week 5: Statistical Inferences on Population Variances

Session 20: Inference About Means and Proportions

Session 21: Inference About Population Variances

Session 23: (flex for adjustment)

Session 23: Semester Review Session

Session 24: Final Exam