MATH 250: Statistics I

Location: Evening

Address:	1001 Rogers Street Columbia, MO 65216
Section:	19FALL1/MATH/250/EVA

Semester Credit Hours: 3

Class Day(s) and Time(s): Wednesday 5:30 PM - 9:30 PM from August 26, 2019 to October 19, 2019

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Course Information

Catalog Description

Introduction to descriptive and inferential statistics. Topics include collection of data, numerical and graphical descriptive methods, linear correlation and regression, probability concepts and distributions, confidence intervals and hypothesis testing for means and proportions.

Prerequisite: Grade of C or higher in MATH 104, or a score of 20 or higher on the math portion of the ACT or a score of 480 or higher on the math portion of the SAT or a passing score on the Columbia College math placement exam. G.E.

Additional Notes

Classroom Policies

Mobile Phones/Devices - Please silence telephones and put away any devices that may be a distraction in class. Repeated offences will not be tolerated.

Attendance - Every class period is important and attendance is required for the full length of every class period. There will be an exam in week 4 and in the final week of class, if you do not have a legitimate excuse and contact me in advance, those exams may not be made up. If you know you will miss class for any reason please contact me before the missed class period. You are expected to get notes and any relevant make-up information from a classmate.

Breaks - We will have one 10-15 minute break near the midpoint of each class period. Shorter breaks may happen as needed.

Late Grades - Late items are not accepted without a significantly serious excuse.

E-Mail Policies

I do my best to be available via email during normal business hours and often in the evenings. Prior to exams I will make an extra effort to be available from 5-9 PM for immediate response to questions. On other days I will try to respond in a timely manner, and if you do not hear back within 24 hours please feel free to follow up.

As part of TruitionSM, students will receive their course materials automatically as described below.

Gould. (2017). Essential Statistics with MyLab Math Plus (2nd). Pearson. eText

Bookstore Information

Visit https://www.ccis.edu/bookstore.aspx for details.

eText Information

If a course uses an eText, (see textbook information above) the book will be available directly in Desire2Learn (D2L) seven days before the session begins, if registered for courses prior to that date. Upon first login to VitalSource, students should use their CougarMail email address; alternate email addresses cannot be used. More information about how to use the VitalSource platform, including offline access to eTexts, can be found in D2L.

Physical Course Materials Information

Students enrolled in courses that require physical materials will receive these materials automatically at the shipping address on file with Columbia College. Delivery date of physical materials is dependent on registration date and shipping location. Please refer to confirmation emails sent from Columbia College for more details on shipping status.

Returns: Students who drop a class are responsible for returning any physical course materials that were shipped. To initiate a return, visit Ingram Returns to generate a pre-paid return label. Materials from dropped courses must be returned within 30-days of receipt. Failure to return physical items from a dropped course will result in a charge to the student account for all unreturned items.

Note: Students who opt-out of having their books provided as part of <u>TruitionSM are responsible</u> for purchasing their own course materials.

Technology Requirements

THIS IS A TECHNOLOGY-ENRICHED COURSE WHICH COMBINES IN-SEAT INSTRUCTION WITH ONLINE LEARNING.

Participation in this course will require the basic technology for all classes at Columbia College:

- A computer with reliable internet access
- A web browser
- Acrobat Reader
- Microsoft Office or another word processor such as Open Office

For more information, see technical requirements.

Course Learning Outcomes

- 1. Construct and interpret appropriate graphical displays of qualitative and quantitative data.
- 2. Describe distributions of quantitative data in terms of shape, center, and spread.
- 3. Use appropriate methods to explore and describe the relationship between two qualitative or two quantitative variables.
- 4. Compute and interpret probabilities and conditional probabilities and use probabilities to determine if events are independent.
- 5. Solve applied problems involving discrete and continuous random variables, including the binomial and normal random variables.
- 6. Compute and interpret point estimates and interval estimates for a mean or proportion.
- 7. Test hypotheses for a single mean or proportion using P-values and interpret the results.
- 🔊 Grading

Grading Scale			
Grade	Points	Percent	
A	900 - 1000	90-100%	
В	800 - 899	80-89%	
С	700 - 799	70-79%	
D	600 - 699	60-69%	
F	0 - 599	0-59%	
Grade Weights			
Assignment Category	Points	Percent	
Online Learning Activity	150	15%	
Midterm Exam	200	20%	
Final Exam	300	30%	
Course Notes	175	18%	
Homework	175	18%	
Total	1000	100%	

Schedule of Due Dates

Week 1		
Assignment	Points	Due
Week 1 Homework	25	Week 2 Class
Chapter 1,2 Notes	25	Week 2 Class
Week 2		
Assignment	Points	Due
MyLabsPlus Quiz 1	25	Sunday by 11:59 PM
Chapter 3,4 Notes	25	Week 2 Class
Week 2 Homework	25	Week 3 Class
Week 3		
Assignment	Points	Due
MyLabsPlus Quiz 2	25	Sunday by 11:59 PM
Chapter 5 Notes	25	Week 4 Class
Week 3 Homework	25	Week 4 Class
Week 4		
Assignment	Points	Due
MyLabsPlus Quiz 3	25	Sunday by 11:59 PM
Chapter 6 Notes	25	Week 4 Class
Week 4 Homework	25	Week 5 Class
Midterm Exam	200	In Class
Week 5		
Assignment	Points	Due
MyLabsPlus Quiz 4	25	Sunday by 11:59 PM
Mldterm Exam Returned		In Class
Chapter 7 Notes	25	Week 5 Class
Week 5 Homework	25	Week 6 Class
Week 6		
Assignment	Points	Due
MyLabsPlus Quiz 5	25	Sunday by 11:59 PM

Assigameနt 9 Notes Week 6 Homework	Points 25	ັງໄໝ k 6 Class Week 7 Class
Week 7		
Assignment	Points	Due
MyLabsPlus Quiz 6	25	Sunday by 11:59 PM
Chapter 10 Notes	25	Week 7 Class
Week 7 Homework	25	Week 8 Class
Week 8		
Assignment	Points	Due
Final Exam	300	In Class

C Assignment Overview

Online Component Expectations

This course uses an online learning application called MyLabsPlus, which is designed to accompany your textbook. You must have access to MyLabsPlus in order to complete the online graded quizzes for this course. There are 6 MyLabsPlus quizzes worth 25 points each. Each quiz includes 10 - 21 items. There is a 1 hour time limit, and problems for each week may be accessed multiple times before the deadline for each module. You will be allowed two attempts for every quiz. They are assigned during Weeks 2 - 7 and will cover content from Chapters 1 - 10 of the textbook.

Assignments

eText Notes

Each week you should engage with the course material outside of the classroom. The online text provides a means to highlight and create notes and study flashcards. I will request access to each of your course texts early in the class and check them each week BEFORE CLASS for notes on the assigned reading. That means each week you should come to class having read the chapters we will be covering and prepared with questions. We will discuss sharing/following eText notes in the first week of class.

<u>Homework</u>

Assignments will be given in class or posted each week shortly after class. These assignments will be due before the following week's class. These assignments may be a mixture of homework problems and activities related to the week's materials and will fall under the "homework" category of your final course grade.

The purpose of homework is to give you a chance to apply concepts from the reading and class, and homework gives me a chance to see and evaluate your work. Homework solutions must be organized and presented professionally so that I can follow your work and identify where any mistakes are made.

Examinations

There will be a 90 minute midterm exam at the beginning of the class in week 4 and a 2-hour final exam in the second half of week 8. A calculator is allowed in exams, but the questions will not require one.

E Course Outline

Click on each week to view details about the activities scheduled for that week.

Week 1: Defining Statistics & Visualizing Data (Ch. 1 & Ch. 2)

Week 1 Homework Chapter 1,2 Notes

Week 2: Describing a Single Variable & The Relationship Between Two Variables (Ch. 3 & Ch. 4)

MyLabsPlus Quiz 1

MyLabsPlus Quiz 1 (Covers Sections 1.1 - 1.4, 2.1 - 2.3)

Chapter 3,4 Notes

Week 2 Homework

Week 3: Thinking About Random Events and Describing Random Processes (Ch. 5 & Ch. 6)

MyLabsPlus Quiz 2 MyLabsPlus Quiz 2 (Covers Sections 3.1 – 3.5, 4.1, 4.2, 4.4)

Chapter 5 Notes Week 3 Homework

Week 4: Midterm on Chapters 1-5 (90 minutes) and More Work with Distributions (Ch 6.)

MyLabsPlus Quiz 3 MyLabsPlus Quiz 3 (Covers Sections 5.1 – 5.4)

Chapter 6 Notes Week 4 Homework Midterm Exam

Week 5: The Central Limit Theorem & Confidence Intervals (Ch. 7)

MyLabsPlus Quiz 4 MyLabsPlus Quiz 4 (Covers Sections 6.1, 6.2, 7.1 – 7.3)

MIdterm Exam Returned

Chapter 7 Notes Week 5 Homework

Week 6: Hypothesis Testing and Inference for Proportions and Means (Ch. 8 & Ch.

9)

MyLabsPlus Quiz 5 MyLabsPlus Quiz 5 (Covers Sections 8.1, 8.2, 9.1 – 9.3)

Chapter 8 & 9 Notes Week 6 Homework

Week 7: Chi-Square Tests (Ch. 10)

MyLabsPlus Quiz 6 MyLabsPlus Quiz 6 (Covers Sections 10.1 – 10.3)

Chapter 10 Notes Week 7 Homework

Week 8: Review and Final Exam

Final Exam

Additional Resources

Online databases are available at library.ccis.edu. You may access them using your CougarTrack login and password when prompted.

Technical Support

If you have problems accessing the course or posting your assignments, contact your instructor, the Columbia College Technology Solutions Center, or the D2L Helpdesk for assistance. If you have technical problems with the VitalSource eText reader, please contact VitalSource. Contact information is also available within the online course environment.

- Columbia College Technology Solutions Center: CCHelpDesk@ccis.edu, 800-231-2391 ex. 4357
- D2L Helpdesk: helpdesk@d2l.com, 877-325-7778
- VitalSource: support@vitalsource.com, 1-855-200-4146

Online Tutoring

Smarthinking is a free online tutoring service available to all Columbia College students. Smarthinking provides real-time online tutoring and homework help for Math, English, and Writing. Smarthinking also provides access to live tutorials in writing and math, as well as a full range of study resources, including writing manuals, sample problems, and study skills manuals. You can access the service from wherever you have a connection to the Internet. I encourage you to take advantage of this free service provided by the college.

Access Smarthinking through CougarTrack at Students -> Academics -> Resources.

Columbia College Policies and Procedures

The policies set forth in the **Policy Library** are the current official versions of College policies and supersede and replace any other existing or conflicting policies covering the same subject matter. For more information on policies applicable to students, see **Student Policies**. For more information on policies applicable to the entire Columbia College community, see **College-Wide Policies**.

Students are expected to read and abide by the College policies. Policies of particular interest to students include, but not limited to the following:

- Graduate Grading Policy
- Undergraduate Grading Policy
- Registration Policy and Procedures
- Withdrawal Policy
- Alcohol and Other Drugs Policy
- Family Educational Rights and Privacy Act (FERPA)

Additional Policies:

Academic Integrity and Plagiarism

Academic integrity is a cumulative process that begins with the first college learning opportunity. Students are responsible for knowing and abiding by the **Academic Integrity Policy and Procedures** and may not use ignorance of either as an excuse for academic misconduct. Additionally, all required papers may be submitted for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers may be included in the Turnitin.com reference database for the purpose of detecting plagiarism. This service is subject to the Terms and Conditions of Use posted on the Turnitin.com site.

Disability Resources

If you have a disability that requires an accommodation, please speak with the instructor and consult the Student Accessibility

Resources office. Student Accessibility Resources staff will determine appropriate accommodations and will work with your instructor to make sure these are available to you. To find additional information, see our **ADA and Section 504 Policy for Students**.

Notice of Non-Discrimination and Equal Opportunity:

The College has a process through which students, faculty, staff and community members who have experienced or witnessed incidents of discrimination, harassment, or retaliation on the basis of protected status, can report their experiences to a College official. For more information, see our Non-Discrimination and Equal Opportunity Policy and Complaint Resolution Procedure.

Title IX and Sexual Misconduct

The College is committed to addressing the issues of discrimination, harassment and sexual misconduct in the educational and workplace landscape and will continue to modify policies, procedures and prevention efforts as needed. For more information, see the College's **Title IX and Sexual Misconduct Policy**.

Course Policies and Procedures:

Attendance Policy

Columbia College students are expected to attend all classes and laboratory periods for which they are enrolled.

For classes with an online component, attendance for a week includes submitting any assigned online activity. Assigned activities are scheduled prior to the course commencing. Assigned activity due dates are subject to change based on actual course progression and will be adjusted as necessary. Attendance for the week is based upon the date work is submitted. A class week is defined as the period of time between Monday and Sunday (except for week 8, when the work and the course will end at 11:59 PM Central Time on Saturday.) The course and system deadlines are based on the Central Time Zone.

Students are directly responsible to instructors for class attendance and work missed during an absence for any cause. If absences jeopardize progress in a course, the College reserves the right to drop or withdraw students from classes. For additional information, see the Administrative Withdrawal for Non-Attendance heading in the **Withdrawal Policy**.

CougarMail

All students are provided a CougarMail account when they enroll in classes at Columbia College. You are responsible for monitoring email from that account for important messages from the College and from your instructor.

Students should use email for private messages to the instructor and other students. The class discussions are for public messages so the class members can each see what others have to say about any given topic and respond.

Late Assignment Policy

All classes rely on participation and a commitment to your instructor and your classmates to regularly engage in the reading, discussion and writing assignments. You must keep up with the schedule of reading and writing to successfully complete the class.

No late assignments will be accepted without the prior approval of the instructor.

Acceptance of a late assignment is at the discretion of the instructor.

Make-up examinations may be authorized for students who miss regularly-scheduled examinations due to circumstances beyond their control. Make-up examinations must be administered as soon as possible after the regularly scheduled examination period and must be administered in a controlled environment.

Student Conduct

All Columbia College students, whether enrolled in a land-based or online course, are responsible for behaving in a manner consistent with Columbia College's **Student Conduct Code** and **Acceptable Computing Use Policy**. Students violating these policies or any other College policy will be referred to the office of Student Affairs and/or the office of Academic Affairs for possible disciplinary action. The Student Code of Conduct, the **Student Behavioral Misconduct Policy and Procedures**, and the Acceptable Computing Use Policy can be found in the Policy Library at **ccis.edu/policies**. The adjunct faculty member maintains the right to manage a positive learning environment all students must adhere to the conventions of online etiquette when enrolled in a course with an online component.