MTH 243 Introduction to Statistics (CRN 44026)

Spring 2019

INSTRUCTOR:	Michael Renne	EMAIL:	rennem@linnbenton.edu
OFFICE:	BC-101	OFFICE HOURS:	TR 2:30-3:20 pm
CLASSROOM:	BC-234	TIME:	TR 12:30 – 2:20 pm

REQUIRED TEXT:	Introductory Statistics by Illowsky & Dean
	You can find a free electronic copy at
	https://openstax.org/details/books/introductory-statistics

CALCULATOR: A graphing calculator is **required**, and the TI 83/84 family is recommended.

Description: An introductory statistics course emphasizing interpretation of statistical results. The course focuses on sampling procedures, experimental design, descriptive statistics, and inferential statistical techniques to analyze survey and experimental data from a wide range of fields including health care, biology, psychology, physics and agriculture. Includes basic concepts in graphical interpretation of one and two variable data, probability, probability distributions (binomial, normal, t-Distribution, and chi-square), confidence intervals for means and proportions, and hypothesis testing.

Prerequisites: MTH 111 College Algebra or equivalent with a grade of "C" or better.

Student Learning Outcomes: Upon completion of the course, the student will be able to:

- 1. Collect, organize, analyze, and interpret data.
- 2. Interpret and calculate basic probabilities.
- 3. Create appropriate designs of observational studies and experiments to address issues in a variety of fields including healthcare, biology, agriculture, psychology, and physics.
- 4. Apply inferential statistics methods to address issues in a variety of fields.

HOW TO GET POINTS:		GRADIN	<u>G</u> :
Participation	20 %	А	90 - 100 %
Quizzes (4 @ 12% each)	48 %	В	80 – 89.9 %
Cumulative Final Exam	32 %	С	70 – 79.9 %
		D	60 – 69.9 %
Total	100 %	F	0 – 59.9 %

FINAL EXAM: The <u>comprehensive</u> final exam is worth 32% of your grade and will be administered in class on Tuesday, June 11th, from 2:30 pm to 4:20 pm. Missed exams cannot be made up unless arranged in advance.

COURSE PARTICIPATION: There are several ways that course participation is graded. They are described below. **Missed participation points cannot be made up.**

1. Attendance

Showing up on time and avoiding distractions during scheduled class periods earns 1 point for each day. Points may be deducted for tardiness, leaving early, or egregious inattention.

2. In-Class Activities

Each day that you are expected to work on an activity in class (see tentative schedule below), you will earn 1 point for working diligently on the activity for the duration of the activity. You will be expected to bring an internet-connected device to class every day. If this presents an insurmountable challenge for you, see me immediately.

QUIZZES: There are four 45-minute quizzes, each of which is worth 12% of your course grade. Each quiz will be graded as A, B, C, D, or F on each exercise. The overall quiz grade will be a weighted average of the individual exercise grades and will correspond to your course grade as below. **Missed quizzes cannot be made up.**

Letter	Course	Letter	Course	Letter	Course
Grade	Grade	Grade	Grade	Grade	Grade
A +	13%	А	12%	A -	11%
B +	10%	В	9%	В -	8%
C +	7%	С	6%	C -	5%
D +	4%	D	3%	D -	2%
F +	1%	F	0%		

Quizzes are roughly in order of difficulty, with each one likely to be more challenging than the previous one. Furthermore, the quizzes are aligned with the course outcomes and the textbook as follows:

- Quiz 1 is aligned with outcome 1 and chapters 1 & 2 of the textbook.
- Quiz 2 is aligned with outcome 2 and chapters 3 thru 6 of the textbook.
- Quiz 3 is aligned with outcome 4 and chapters 7 thru 9 of the textbook.
- Quiz 4 is aligned with outcome 3 and will incorporate elements from all chapters, 1 thru 9.

(Tentative Senedate)						
		Μ	Т	W	R	F
WEEK 1	4/1		Intro, Activity, & Ch. 1		Chapter 1, 2, & Activity	
WEEK 2	4/8		Chapter 2 & Activity		Chapter 3 & Activity	
WEEK 3	4/15		Chapter 3 & Activity Quiz 1		Chapter 3 & Activity	
WEEK 4	4/22		Chapter 4 & Activity		Chapter 5, 6 & Activity	
WEEK 5	4/29		Chapter 6 & Activity		Chapter 7 & Activity	
WEEK 6	5/6		Chapter 8 & Activity Quiz 2		Chapter 8 & Activity	
WEEK 7	5/13		Chapter 9 & Activity		Chapter 9 & Activity	
WEEK 8	5/20		Chapter 9 & Activity		Chapter 9 & Activity	
WEEK 9	5/27		Experiment/Study Design Quiz 3		Experiment/Study Design	
WEEK 10	6/3		Q & A Quiz 4		Review for Final Exam	
FINALS		6/11 →	<mark>Cumulative Final</mark> <mark>2:30 – 4:20pm</mark>			

(Tentative schedule)

Important Dates:

4/8:	The last day to drop.
5/17:	The last day to withdraw.
5/27:	Holiday, no school.

HELP: If you have any questions, please ask. I will help you whenever I can. You will find me in my office during my office hours or any other time you can catch me. There are free tutors that can help you when you are having difficulties. Don't hesitate to take advantage of these or any other resources offered by the college in support of your learning.

Academic Dishonesty & Student Conduct: If there are any incidents of cheating, an incident report will be sent to the Director of Admissions, and it will have severe consequences for the student. Furthermore, students are expected to abide by all LBCC policies regarding student conduct.

Special Circumstances: Students who may need accommodations due to documented disabilities, who have medical information which the instructor should know, or who need special arrangements in an emergency should speak with their instructor during the first week of class. If you believe you may need accommodations but are not yet registered with the Center for Accessibility Resources (CFAR), please visit the <u>CFAR Website</u> for steps on how to apply for services or call 541-917-4789.

Request for Special Needs or Accommodations: Direct questions about or requests for special needs or accommodations to the LBCC Disability Coordinator, RCH-105, 6500 Pacific Blvd. SW, Albany, Oregon 97321, Phone 541-917-4789 or via Oregon Telecommunications Relay TTD at 1-800-735-2900 or 1-800-735-1232. Make sign language interpreting or real-time transcribing requests 2-4 weeks in advance. Make all other requests at least 72 hours prior to the event. LBCC will make every effort to honor requests. LBCC is an equal opportunity educator and employer.

LBCC Comprehensive Statement of Nondiscrimination: LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see Board Policy P1015 in our <u>Board Policies and Administrative</u> <u>Rules</u>. Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: <u>linnbenton-advocate.symplicity.com/public_report</u>

Statement of Inclusion: To promote academic excellence and learning environments that encourage multiple perspectives and the free exchange of ideas, all courses at LBCC will provide students the opportunity to interact with values, opinions, and/or beliefs different than their own in safe, positive and nurturing learning environments. LBCC is committed to producing culturally literate individuals capable of interacting, collaborating and problem-solving in an ever-changing community and diverse workforce.

Basic Needs: If you have difficulty affording groceries or accessing enough food to eat every day, or if you lack a safe and stable place to live, and you believe that this may affect your performance in this course, then you are urged to contact the Single Stop Office for support. The Single Stop Office can help students get connected to resources for help.

Email: <u>SinglestopatLBCC@linnbenton.edu</u> Web: <u>https://www.linnbenton.edu/current-students/student-support/</u> Phone: (541) 917-4877

LBCC Email and Course Communications: You are responsible for all communications given in class or sent via Moodle and/or to your LBCC email account. You are required to use your LBCC provided email account for all email communications at the College. You may access your LBCC student email account through Student Email and your Moodle account through Moodle.

Changes to the Syllabus: I reserve the right to change the contents of this syllabus due to unforeseen circumstances. You will be given notice of relevant changes in class, through a Moodle Announcement, or through LBCC e-mail.