

Lindenwood University

MTH 14100 Basic Statistics (11-week)

Instructor: Dr. Rita Kottmeyer

Office: Lindenwood University Cultural Center LUCC 210

Email: rkottmeyer@lindenwood.edu

Telephone: 636-949-4523 (I respond to email within 2 business days. If you leave a voice message using a cell phone, I might not be able to interpret it. Send an email in addition to the voice message. Put your call back number in your email.)

Office Hours: Mon, Tues, Wed 9:30AM – 4:30 PM; Thursday and Friday by appointment

Course Description: IMH 14100 Basic Statistics (3) (GE-Math) This course is an introduction to the theory and applications of statistics, including probability, descriptive statistics, random variables, expected values, distribution functions, and hypothesis testing. Offered every term. Prerequisites: C or better in IMH 05100 or passing the placement test

Course Objectives:

The student should be able to:

1. Organize raw data into frequency distribution tables and display the data graphically.
2. Calculate and understand descriptive statistics of a data set.
3. Solve counting problems using trees and various multiplication rules.
4. State the definition of probability and calculate and apply probabilities of events.
5. Identify probability distributions and apply specific distributions.
6. Identify the properties of the normal distribution, use the normal distribution in applications.
7. Compute and interpret confidence intervals.
8. Use hypothesis testing.
9. Use correlation and linear regression for describing relations between two variables

General education program student learning outcomes (SLOs):

This course addresses the following SLOs:

1. Students should be able to draw from a variety of disciplines to arrive at coherent, educated opinions.
2. Students will think critically and analytically.
3. Students will effectively engage in creative thinking.

Book and Materials:

Title: Fundamentals of

Statistics Author: Michael

Sullivan Edition: 4th

MyStatLab

1-Semester Access Card (INCLUDES eTEXT and Looseleaf paper copy) ISBN: **9780321869463**
(available at Book-X-Change)

We will cover Chapters 1 thru 10 of this text

A calculator will be required for this course. I recommend the TI 30X IIS (\$15 or less). Be certain that a salesperson does not try to sell you the TI 30X without the IIS suffix. It is a totally different calculator and cannot handle some of the topics that you will encounter.

The book illustrates and references a TI-83 or TI-84 graphing calculator (\$100 or more). If you have the TI-83 or TI-84 and know how to use it, that will work well. If you do not know how to use it, be prepared to spend a considerable amount of time learning it. We cannot do that in the QLC.

Working Smart:

This is an online course. As such it is dependent not only on the electrical and internet infrastructure but also on the responsible practices of its participants. Failure to meet deadlines will result in loss of

points. Keep your work organized and save it frequently as you are working.

Students should plan for alternate locations to access the internet in the event of a power outage. Remember that there are computers available at the main campuses and at most of the sites.

Working to the Schedule:

This is an 11-week course. The material is the same as in a traditional 15 week course. Part of the time that you spend working will be the 4 hours that you would ordinarily be in class (hence, required videos, discussion boards, and Powerpoint lectures). Homework, reading and studying are in addition to those 4 hours.

Canvas and Pearson Issues:

If you have problems with Canvas or Pearson, notify me. In all likelihood, I will not be able to solve your problem but I can at least take it into account. For direct help, go through the Canvas or Pearson online support centers. For username/password issues, contact the Lindenwood help desk (helpdesk@lindenwood.edu). Do not save all of your work for the weekend, because there might not be any assistance.

Students with Disabilities:

If you have a disability or believe you may have a disability that requires reasonable accommodations for participation in this course, you must contact Jeremy Key, Student Support and Accessibility Coordinator, at 636-949-4510 or jkey@lindenwood.edu and notify your professor during the first week of class so that accommodations can be made. Reasonable accommodations will be made to ensure that students with disabilities have a fair opportunity to perform at their potential. Students are responsible for providing the instructor with a Campus Accessibility Faculty Notification Form specifying classroom accommodations. Your academic advisor can also help with this process.

Subject To Change:

The course syllabus is subject to change if the instructor deems it necessary in order to accomplish the course objectives. Students will be notified in writing of all substantive changes to the course syllabus. I will notify students via e-mail if the syllabus changes.

Recording and Electronic Devices:

During classroom testing, the use of cameras, video, audio taping devices, or any other kinds of electronic devices (including telephones, tablets, Google glasses, and Bluetooth devices) is allowed only after obtaining permission from the instructor; otherwise, the use of such devices is prohibited.

Electronic devices used for prosthetic or accessibility purposes may only be used after the faculty member has received a signed accommodation letter from the Accessibility Officer. Any recordings made may not be redistributed to anyone not a member of the class without the express written permission of the instructor and all student subjects of the recording.

Additional Course Help:

Tutoring is available through Smarthinking.

There is also free face to face tutoring in the Quantitative Learning Center (QLC). See the schedule in PCCCommon after July 10.

There are video links and other material in Canvas and in MyStatLab.

Homework Assignments, Sample Quizzes, Midterm and Final Exams:

There are sample quizzes and homework assignments for each chapter. The due dates are listed in the schedule. There is no grace period for these. The computer will automatically start deducting 10% per week for late assignments. Make sure you complete the material and hit "Save and Submit" before the due date.

Communication:

I have regular office hours and office hours by appointment. I am a full time faculty member, program director, advisor, and wear many hats. I might be in a committee meeting, advising students, or be working in the QLC when you call or email. If you want an in person visit, it is wise to make an appointment. **Check your LionMail frequently. That is how I will contact you. When I send out a class announcement, it automatically goes to LionMail.**

Copyright Statement

It is the intent of Lindenwood University that all members of the University community comply with the provisions of the United States Copyright Law. This Copyright policy serves to uphold the University's commitment to protecting the principles of intellectual property, as well as, protect the rights of its faculty to make appropriate use of copyrighted works for acceptable educational purposes. This policy applies to all University faculty, staff, and students who wish to make use of copyrighted works, whether in print, electronic, or other form. Implicit in this policy is the "Fair Use Act" which applies across the board to uses in the traditional classroom environment and the TEACH Act which is an exception to the "Fair Use Act" for distance learning. Students may not distribute copies of copyrighted materials to other students. This includes PowerPoints, handouts, podcasts, etc.

Academic Integrity at Lindenwood: (This comes from the University)

Lindenwood University students belong to an educational community invested in the exploration and advancement of knowledge. Academic integrity is a critical part of that investment: all students have a fair opportunity to succeed, and as such, all students owe their classmates, instructors, administrators, and themselves the duty of scholarly and creative work untainted by plagiarism, dishonesty, cheating, or other infringements of academic integrity. In turn, instructors, staff, and administrators will also uphold these policies in order to promote student intellectual development and preserve the integrity of a Lindenwood degree.

As part of this educational community, students are expected to familiarize themselves with the university's policies on Academic Honesty in the Lindenwood University Student Handbook and to adhere to these policies at all times. Students are also encouraged to consult the resources of the university library and the Writing Center/Academic Success Center for assistance in upholding the university honesty policy.

Academic Dishonesty includes plagiarism, cheating, and lying or deception.

- Cheating is giving or receiving unauthorized aid on an examination, assignment, or other graded work. Regardless of where the aid comes from—e.g., cell phone, crib sheet, or another student—it qualifies as academic dishonesty.
- Lying/Deception refers to dishonest words, actions, or omissions directed at University personnel by a student in order to improve the academic or financial standing of any student at the University.
- Plagiarism is the fraudulent presentation of another person's ideas or work as the student's

own.

- When a student, whether by accident or design, does not properly acknowledge sources in any academic assignment where original work is expected, that student is stealing the ideas and effort of another.
- For all assignments completed entirely or in part out of class, the instructor reserves the right to interview the student about the work to verify authorship. A student who is unable to demonstrate a basic understanding of the submitted work will be reported for academic dishonesty and an appropriate penalty will be applied.

CONSEQUENCES OF ACADEMIC DISHONESTY

The penalty for the first reported offense of academic dishonesty will be determined by the instructor and may result in a reduced or failing grade on the work/test, failure in the course, or other appropriate penalty. Upon a first report of dishonesty, the student is also required to complete an online Academic Integrity Tutorial. A charge for the tutorial will be applied to the student's Business Office account. For undergraduate students, a second offense will result in failure of the class, and a third offense will lead to expulsion from the university. Graduate students will be expelled after a second offense is reported.

Any questions concerning this policy should be directed to the Associate Provost, who maintains confidential records of academic dishonesty reports. These records are accessible only to the Provost and Associate Provost and are not linked to the student's academic or financial records at the University.

Cheating is planned – it is never unintentional. Therefore, the penalty assessed in instances of cheating will be severe, and may include failure in the course.

Schedule and Grading

Grading Scheme, Points and Due Dates for IMH14100 OL Summer 2016 (11-Week Course)

Item	Pts Posibl	Total Points	Due Date and Time (can finish before deadline)	Notes
MyStatLab Homework Problems		100		
Chapter 1	10		Sun, July 17 11:59 PM	MyStatLab homework problems are found at the Pearson Site. Multiple attempts Allowed - Untimed Highest score recorded
Chapter 2	10		Sun, July 24 11:59 PM	
Chapter 3	10		Sun, July 31 11:59 PM	
Chapter 4	10		Sun, Aug 7 11:59 PM	
Chapter 5	10		Sun, Aug 14 11:59 PM	
Chapter 6	10		Sun, Aug 21 11:59 PM	
Chapter 7	10		Sun, Aug 28 11:59 PM	
Chapter 8	10		Sun, Sept 4 11:59 PM	
Chapter 9	10		Sun, Sept 11 11:59 PM	
Chapter 10	10		Sun, Sept 18 11:59 PM	
MyStatLab Review Quizzes		100		
Chapter 1	10		Sun, July 17 11:59 PM	Located in MyStatLab Multiple attempts Allowed - Untimed Highest score recorded
Chapter 2	10		Sun, July 24 11:59 PM	
Chapter 3	10		Sun, July 31 11:59 PM	
Chapter 4	10		Sun, Aug 7 11:59 PM	
Chapter 5	10		Sun, Aug 14 11:59 PM	
Chapter 6	10		Sun, Aug 21 11:59 PM	
Chapter 7	10		Sun, Aug 28 11:59 PM	
Chapter 8	10		Sun, Sept 4 11:59 PM	
Chapter 9	10		Sun, Sept 11 11:59 PM	
Chapter 10	10		Sun, Sept 18 11:59 PM	

Midterm Exam (60 min)		50	Timed online	Wk before MT grades
Final Exam (120 minutes)		100	9:30 am Sat. Sept 24	LUCC
Grand Total		350		
Bonus Points for Orientation		10		
Total Points	Grade	Based on 350 points		
90% of points available	A	315		
80% of points available	B	280		
70% of points available	C	245		
60% of points available	D	210		
Less than 60% of points available	F	< 210		

You can track your points in MyStatLab. (I will need to enter them

manually in Canvas. They will not be available immediately in Canvas.)

As with all courses, this schedule is subject to change to accommodate unforeseen circumstances.

