

Course: Math 227, Elementary Statistics **Room:** CMS 222
 Section 28762 – Lecture **Time:** T Th 4:10 pm – 5:35 pm
 Section 28763 – Lab **Time:** T Th 5:45 pm – 6:40 pm

Textbook: Fundamentals of Statistics, Informed Decisions Using Data, by Michael Sullivan III, 5th edition.

In addition to the book, the class requires access to the publisher's courseware, MyStatLab. The textbook sold at the LAMC bookstore is bundled with the MyStatLab access code.

Course Id: MyStatLab Course Id: **antoniou35168**

Prerequisite: Successful completion of Math 123C, or Math 125, or Math 134, or Math137 **OR** a high school (HS) GPA of at least 3.0 **OR** a HS GPA of at least 2.6 and have enrolled in HS Precalculus **OR** a HS GPA less than 2.6 and have enrolled in HS Calculus.

Instructor: Dr. Nikolas Antoniou
 Office Hours: T Th: 1:00 pm – 1:55 pm Location: CMS 247
 Phone Number: (818) 635-8313
 Email: antonind@lamission.edu or antonind@faculty.laccd.edu

Important Dates:

- Tuesday, 08/27 Class Begins
- Sunday, 09/08 Last Day to Add to Class
- Sunday, 09/08 Last Day to Drop without a "W" (Online)
- Sunday, 11/17 Last Day to Drop with a "W" (Online)
- Thursday, 11/28 No Class - Thanksgiving
- Thursday, 12/05 Last Day of Class
- **Tuesday, 12/10 FINAL exam: 5:30 pm – 7:30 pm**

Student Learning Outcomes

Upon completion of this course, the student should be able to

1. Use probability concepts to solve problems and interpret their results.
2. Demonstrate proficiency in descriptive statistics and inferential analyses to draw conclusions about a population.

Course Description:

The course is an introduction to statistical concepts and it covers the following topics: descriptive and inferential statistics, construction of statistical tables, display data with statistical graphs, correlation and regression, probability, statistical distributions, central limit theory, testing hypotheses & confidence interval of a single population for population mean, proportion, and standard deviation, inference about two population proportions and means, tests for independence and the homogeneity of proportions, and ANOVA. The course utilizes statistical computer software to generate graphs, solve problems using statistics, perform simulations, and to analyze and interpret data.

The computer program **StatCrunch**, which is part of the MyStatLab courseware, will be used for this purpose. Students enrolled in Math 227 are required to purchase access to MyStatLab, an

online courseware. Instructions on how to register for MyStatLab are attached at the end of this syllabus.

The following chapters from the book will be covered:

- Chapter 01 - Data Collection: 1.1 - 1.5
- Chapter 02 - Organizing and Summarizing Data: 2.1 - 2.3
- Chapter 03 - Numerically Summarizing Data: 3.1 - 3.5
- Chapter 04 - Describing the Relationship between Two Variables: 4.1, 4.2
- Chapter 05 - Probability: 5.1 - 5.4
- Chapter 06 - Discrete Probability Distributions: 6.1, 6.2
- Chapter 07 - The Normal Probability Distribution: 7.1 - 7.3
- Chapter 08 - Sampling Distributions: 8.1, 8.2
- Chapter 09 - Estimating the Value of a Parameter: 9.1 - 9.3, B.2 (Std Dev/Variance)
- Chapter 10 - Hypothesis Tests Regarding a Parameter: 10.1 - 10.3, B.3 (Std Dev/Variance)
- Chapter 11 - Inferences on Two Samples: 11.1 – 11.4, B.5 (Two Std Dev/Variations)
- Chapter 12 – Additional Inferential Techniques: 12.1, 12.2
- Section ANOVA: - Analysis of Variance (ANOVA): B.6 and Notes CN.1

NOTE: B.2, B.3, B.5, B.6 refer to the “Additional Topics in Appendix B” of the book, accessible through eText of MyMathLab. CN.1 refers to class notes found in the class web site.

Canvas: All class material such as assignment grades, study guides, answers to test questions, class notes etc. will be posted and communicated through Canvas. It is highly recommended that you visit this site often and particularly before you start studying. Please do not send me emails through Canvas. Instead use the email address at the beginning of this syllabus whenever you need to communicate with me.

Calculators: The use of a scientific calculator will be allowed both in class and during the tests. However, you may not use a graphing calculator or a TI 83/84.

Homework: Students are responsible to complete the assigned homework as each section is completed. Homework will be assigned and graded through MyStatLab, it will be due on the dates of the tests, and it will include the material covered by the test. Review of the assigned homework will take place at the beginning of every session. Students are encouraged to do all the assigned homework. It will help develop the skills and knowledge necessary for the exams.

Tutoring: Free tutoring is available at

- the STEM Center at CMS 121 : Mo-Th 11am – 7pm
- the LRC Math Lab located in the Library building, Room 215: Mo-Th 09:00am – 6:00pm and Friday 10:00am – 4:pm

Read the textbook: The textbook provides a very good level of mathematical rigor. Read the text carefully and pay particular attention to the examples and illustrations. They are well-structured and they demonstrate the underlining concepts and theories with sufficient details to help you solve the exercises at the end of each section.

You will gain a lot more from the lectures if you have read the applicable sections of the book ahead of time. Moreover, the lectures are designed as a supplement to and not as an alternative to the textbook. Students are expected to master all topics in the textbook that are part of the syllabus regardless of whether they are mentioned in the lecture, unless otherwise indicated.

Caution: The textbook uses tables for finding probabilities of the various probability density functions. However, our lectures and all homework assignments will only use StatCrunch. You are allowed to use StatCrunch for quizzes and tests.

3 Attempt Limit

A state policy limits students to 3 attempts per course. Receiving a grade of "W" for a course counts as an attempt, regardless of when the course was taken. Withdrawal on or before the "Last Day to Drop without a "W" (Online)" date will not count as an attempt.

Classroom Rules:

Student Conduct: Students are expected to adhere to all school policies as described, and to abide by the standards of student conduct as described in the Los Angeles Mission College Catalog. Any infringement upon the rights of the other students in class, such as talking or disruptive behavior will not be tolerated.

Attendance: Attendance is mandatory for all class meetings and for both class sections. Coming to class late or leaving early is disruptive and discourteous. If you want to succeed in this course, you cannot afford to miss classes. Students may be dropped after 2 absences, but it is your responsibility as a student to drop a class if you decide to stop attending. The procedure for dropping classes is detailed in the Los Angeles Mission College Catalog. **Two** tardiness or **two** early leaves will count as **one** absence. All students appearing on the grade roster at the end of the semester will receive a grade regardless of whether they had been attending classes or not. Thus, your failure to drop a class may result in a grade of "F".

Cheating: Any form of academic dishonesty will not be tolerated. If caught, you will be given a zero for that particular exam. The event will be reported to the Math Department Chair who will forward the report to the VP of student services for disciplinary action, which may include suspension or expulsion. This is addressed specifically addressed in the Los Angeles Mission Catalog under Standards of Student Conduct and Disciplinary Action violation 9803.12
Dishonesty: Dishonesty, such as cheating or knowingly furnishing false information to colleges.

Electronic Devices: The operation of electronic devices such as laptops, cell phones, iPods, MP3 players, earphones, PDAs, tablets, and the like is not allowed in the class. Make sure that all such devices are turned off and placed away from your desk: place them inside your purses, briefcases, packets, your cars, etc. First time offenders, violating this policy, will get a warning. Subsequent violations will result in a 20% reduction of your next test's score. If the violation occurs during a test, it will be considered cheating with consequences spelled out in the "Cheating" section of this syllabus.

Food: No food or drinks (except water) are allowed inside the classroom.

Assessment:

1. In class tests; There will be five classroom tests, on the days noted in the attached schedule. The lowest score of these five tests will be dropped and it will not count for your final grade. Tests will be given through MyStatLab and they will require extensive use of StatCrunch.
2. Homework will be assigned and corrected through MyStatLab. It will be due on the dates of the tests and it will include the material covered by the test. No late homework will be accepted. It will count for a maximum of 15% of your final grade.
3. Project: there will be two projects that will count for a maximum 10% of your final grade. Details instructions for this assignment will be given in class during the semester.
4. Final Exam: There will be a comprehensive, 2-hour final examination, covering all course material taught. It will be given through MyStatLab.
5. There will be **no make-up** exams for any of the semester tests, lab activities, or the final test. Students are expected to take all exams. Missed examinations will receive a grade of zero. You cannot pass the class if you do not take the final exam.

Grading:

Tests (4 x 12.5%)	50%
Project	10%
Homework	15%
Final Exam	25%

Grade Assignment

90 - 100%	A
80 - 89%	B
70 - 79%	C
60 - 69%	D
Below 60%	F

For borderline cases, completion of assignments and level of continuous improvement are considered.

No Incomplete grades will be given.

Accommodations for DSPS students:

Students requesting academic accommodations should use the following procedure:

Step 1: Obtain documentation of your disability from a licensed professional. You may contact DSPS to request a ***Disability Verification Form***.

Step 2: Make an appointment to meet with a DSPS Specialist to review your documentation and discuss reasonable accommodations. To schedule a meeting, please call DSPS at (818)364-7732.

Step 3: Bring your disability documentation to your DSPS appointment. The DSPS office is located in room 1018 of the Instructional Building.

Step 4: *Each semester*, reach a written accommodation agreement with the DSPS Specialist and your instructor.

To be most effective, students should complete this process by the end of the 3rd week of the semester. Tests with required accommodations must be taken at the DSPS office.

Management of Stress and Mental Health:

If you, or someone you know is in distress due the pressure of succeeding in school and contending with work, financial issues, relationships, managing time effectively, getting enough sleep, etc., please visit the Student Health Center (SHC), which offers a broad range of confidential student services including counseling and mental health services. The SHC is located in the Campus Services building between the President's Office and the Business Office. The SHC webpage is www.lamission.edu/healthcenter and the phone number is 818-362-6182. The National Suicide Prevention Lifeline number is 800-273-8255.

Pearson's MyStatLab Student Registration Instructions

To register for **Fall 2019 Math 227-28762 Antoniou**:

1. Go to www.pearson.com/mylab.
2. Under Register, select **Student**.
3. Confirm you have the information needed, then select **OK! Register now**.
4. Enter your instructor's course ID: **antoniou35168**, and **Continue**.
5. Enter your existing Pearson account **username** and **password** to **Sign In**.

You have an account if you have ever used a MyLab or Mastering product.

- If you don't have an account, select **Create** and complete the required fields.
6. Select an access option.
 - a. Use the access code that came with your textbook or that you purchased separately from the bookstore.
 - b. If available for your course
 - Buy access using a credit card or PayPal account.
 - Get a 14 days temporary access. (The link is near the bottom of the screen.)
 6. From the You're Done! page, select **Go To My Courses**.
 7. On the My Courses page, select the course tile **Fall 2019 Math 227-28762 Antoniou** to start your work

To sign in later:

1. Go to www.pearson.com/mylab.
2. Select **Sign In**.
3. Enter your Pearson account **username** and **password**, and **Sign In**.
4. Select the course tile **Fall 2019 Math 227-28762 Antoniou** to start your work.

To upgrade temporary access to full access:

1. Go to www.pearson.com/mylab.
2. Select **Sign In**.
3. Enter your Pearson account **username** and **password**, and **Sign In**.
4. Select **Upgrade access** from the course tile **Fall 2019 Math 227-28762 Antoniou**.
5. Enter an access code or purchase access with a credit card or PayPal account.