MATH 137 PRE–STATISTICS ALGEBRA
SYLLABUS
SPRING 2014

Section 0362 (MWF12:30—2:25 PM) in CMS 127)

LOS ANGELES MISSION COLLEGE

INSTRUCTOR: BAMDAD SAMII

➢**Office hours:**

MW 10:20 – 12:15	in **CMS 124**
T 11:55 – 1:55	in **CMS 121**
TH 11:55 – 1:55	In **CMS 124**
or by appointment	in **CMS 124**

➢**Phone number:**

818-833-3379

➢**Email:**

samiib@lamission.edu

➢**Web:**

www.lamission.edu/~samiib

Text:

The textbook for Math 137 is on line and free through the open learning initiative. I will give you directions on how to access the material on the first day of class.

Prerequisites:

A grade of C or better in math 112, or appropriate skill level demonstrated through the math placement process.

Course Description:

Math 137 is a new class created to address the increasing demand of students needing statistics. The class includes topics from Beginning Algebra, Intermediate Algebra, as well as some beginning statistics. This class should better prepare students for Statistics than our traditional Math 115/125 sequence. **However, this class should not be taken by Math/ Science/Business/Nursing majors. This class does not satisfy the math requirement for the AA degree. To earn your**

Key Elements of Math 137

Critical Thinking and Growth Mindset: One of the main goals of math 137 will be to develop real world critical thinking skills. Remember intelligence, critical thinking, and math proficiency are not fixed quantities. Even if you think of yourself as not a math person, you are not stuck in this mindset. Our brains can grow and change. Any student can become a critical thinker. It just takes effort and the belief that we can change. Therefore there will be “exploring” exercises in almost every class, that help us not only develop critical thinking skills, but will help us understand algebra and statistics at a much higher level.

Productive Persistence: Studies show that students who are allowed to struggle and work through problems do much better in the long run than those who are given the answers right away. With this in mind, you will be expected to work hard and figure out material during activities. You will eventually get the answers, but I will not always give you answers to questions right away. I know this is hard on you, but we have seen huge gains in problem solving and critical thinking skills because we allow you to struggle some. Think of it this way. In the workplace, your employer is going to ask you to be able to work through situations and figure things out on your own. In real life, you do not have someone with an answer key standing by to help you.

In-class discovery based activities: In most math courses, you listen to a lecture and then go home and try to do problems that are similar to what the teacher taught in lecture. Math 137 is a little different. The emphasis of the course is not to do problems by yourself for homework. Instead, you will be expected to work with your fellow students to solve problems during class. Also the activities are meant to challenge you and teach you the topics at a higher level. In other words, the in-class activities are really the most important part of the class. That is where the real learning begins.

Reading/Writing/Presenting: The goal in Math 137 is to teach you to apply Algebra and Statistics to the world around you. The study of Statistics is really the study of information. Employer’s number one request is that their employees can look over information, critically think to help find a solution, and then be able to present their solutions in written reports and verbal form. With that being said Math 137 will incorporate a lot of reading, writing assignments and verbal presentations to your classmates.

Grading:

Tests: 40% of the grade

There will be 4tests during the semester. **The tests will be cumulative and include problems similar to those from previous tests**. *Your lowest test score will be replaced with your score on the Final.*
There will be no make-up tests given without prior authorization or an official medical notice.

HW and Classwork 25% of the grade

The bulk of your assignment points are given during class when you do in-class activities. If, for any reason, you arrive to class late, miss class, leave class early, or do not work diligently on the problems or material assigned, you will lose your classwork points for the day. Your homework will usually be to go through some of the on-line material, complete the "Learn by Doing" exercises, take notes and a checkpoint quiz, and finish any in-class activities. I will collect your OLI notes on the day of the test. The OLI checkpoint quizzes are automatically graded and the grades are sent to me every day as well as how many of the OLI learn by doing exercises you have done. If you are absent, work through the OLI material and take the checkpoint quiz. Then try some of the activities. These will be posted on my website. I do accept late assignments (OLI notes, Journal Assignments, Class Assignments and late projects) but there is a 30% late penalty. So the highest grade you can get for a make-up assignment is 70%. So if you miss a day of class for any reason, the highest grade you can get on those assignments is 70%. It is vital to your success in the class, that you do all the problems and material assigned before the test. It is very difficult to pass exams if you have not worked through the material. Assignments, Activities, OLI notes, and OLI Checkpoint Quizzes are worth 25% of your grade in the class.

"Learning is not something that happens to students, it is something that happens by students."

Projects/Presentations: 15% of the grade

You are required to do three large applied projects with real world applications of the material we have learned. The first project will be to write a data analysis report (chapter 2). The second project will be to make a Power Point project on the topic of Linear and Nonlinear modeling (chapters 3 & 4). The last project will be a group project which will analyze two way tables with probability (chapter 5). Each project will be worth 5% of your grade, so projects and presentations will be worth 15% of your grade in the class.

Final: 20% of the grade

The final is on December 9 , 12:30 – 2:30 PM and covers the entire semester.

90—100%	**A**
80—89%	**B**
70—79%	**C**
60—69%	**D**
0—59%	**F**

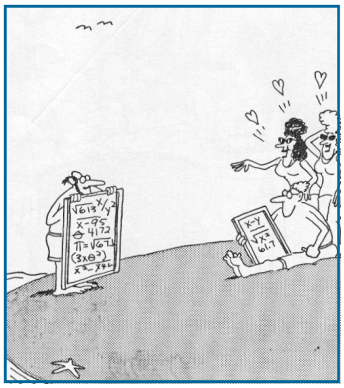
Attendance:

Attendance is not part of your grade but it is a crucial part of learning and a major factor in your success. *You may be excluded if you have an excessive number of unexcused absences or tardiness but it is your responsibility to drop the class if you do not want to continue. Please do not assume that I will necessarily exclude you.*

Calculators:

You will need a statistics calculator. Cell phone, Ipods, and graphing calculators are **not** allowed on exams.

Student Learning outcomes:



Upon completion of this course, a successful student will be able to:

Construct, evaluate, and analyze mathematical models, specifically linear and exponential functions, to represent relationships in quantitative data at a 70% proficiency level.

Other resources:

Tutoring:

If you have questions and cannot make it to my office hours, or you just like to get more help, free tutoring is available at the STEM center located in CMS 121.

Counseling Office:

The Counseling Office is located in the student services annex and provides assistance with academic goals,Career planning, and personal concerns. All students are strongly urged to make an appointment with a counselor prior to registering for classes for the purpose of establishing a program of study.

(*www.lamission.edu/counseling*)

Disabled Students Programs & Services (DSPS):
The DSPS office is located in the instructional building room 1018. (*www.lamission.edu/dsps*)

If you are registered through the DSPS office and need special accommodations, please let me know as soon as possible so I can arrange for them.

Study Skills:

The learning resource center is an excellent source for study skill and academic help.
I also really like the following website for tips on how to be a successful learner in a math class.
http://mathcs.slu.edu/undergrad-math/success-in-mathematics

Classmates' contact information:

STANDARDS OF STUDENT CONDUCT:

Dishonesty, such as cheating, knowingly furnishing false information to instructors and college personnel, turning in work that is not one's own (plagiarism) will be grounds for disciplinary action at LAMC according to the Standards of Student Conduct. The penalty may range from no credit for the assignment up to an "F" grade and disciplinary action.

Important dates:

Last day to add a class:	**2/21**
Last date to drop without a W:	**2/23 (online only)**
Last date to drop with a W:	**5/11 (online only)**

Teaching Philosophy:

I believe that that the most important aspect of learning mathematics is the development of critical reasoning. I find this belief to be driving force in my passion for teaching mathematics. Some of you may pursue mathematics beyond the minimum required courses, but the majority will choose not to go beyond that. The ability to think logically and reason abstractly will be a skill that you will use beyond your school years and in your everyday life whether you realize it or not. I always try to build my lectures and examples with the goal of developing the reasoning for using each skill and method. Learning mathematics begins with understanding the "why" rather than the "how". Every time a new topic is introduced I will try to make sure that you understand why we are going to adopt a certain method of doing the problems. A good example should not only demonstrate the skill needed for solving a problem, but also the reason that skill is the right skill or at least the preferred skill.

"I expect you all to be independent, innovative, critical thinkers who will do exactly as I say!"

I also believe that once you have the necessary foundation then most mathematics is learned by doing. A lecturer's role is to provide basic directions, clarify the reasons for taking certain steps and point out the pitfalls of each method. After that you should be provided the opportunity to practice those skills in class preferably in small groups so that you can learn from each other's mistakes and benefit from explaining your methods to others.

Please note:

This class does not satisfy the AA requirement but successful completion of the subsequent Statistics course (Math 227) will satisfy both the AA degree and transfer requirements.

The only class that you would be eligible to take will be Math 227 (Statistics).

If you choose to change your major or take any other transfer level math classes you will have to take Math 115 and Math 125.

Some courses in the Physical and Biological Sciences selection of the General Education degree requirement have a prerequisite of Math 115 or Math 125. You will not be able to take those courses. The following courses do not have a math requirement and you are eligible to take any of these courses:

Physical and Biological Sciences:

Section A: *Astronomy 1 and 5, Geography 1 and 15, Physical Science 1 and 14*

Section B: *Anatomy 1, Anthropology 101, Biology 3, Physiology 1*