



Math 106 – 5522
Structure of Mathematics 2
TR 10:20 – 11:45 (Sierra 223)

Instructor: Jim Michelena

E-mail: michelenaja@mjc.edu

Office: Sierra Hall 231

Phone: (209) 575-7833

Course web page: <http://www.mymathlab.com>

Course ID: michelena74073

Office Hours: M–Th 9:40 am – 10:10 am; T and Th 11:30 am – 12:30 pm; other hours can be scheduled

Course Description

Math 106 is a course that covers elementary probability, statistics, and geometry for prospective elementary school teachers. It also includes Euclidean geometry, measurement, and analytic geometry.

Textbook and other materials

- Mathematical Reasoning for Elementary Teachers by Calvin Long, Duane DeTemple, and Richard Millman; 7th edition, Pearson
- MyMathLab student access code

Prerequisite

A grade of a “C” or better in Math 105.

Grades

The point spread will be as follows:

Homework - 10%, Activities - 15%, Exams - 45%, Final Exam - 30%

Course Grade

If you receive greater than or equal to 89.5%, you will receive an A. If you receive greater than or equal to 79.5% you will receive at least a B. If you receive greater than or equal to 69.5%, you will receive at least a C. If you receive greater than or equal to 59.5%, you will receive at least a D. Otherwise you may receive an F.

Homework

Homework will be assigned daily online and will have a due date. Late homework **WILL NOT** be accepted. It is your responsibility to understand the homework that is assigned online. If you do not do the homework, you may not be very successful in this class. Homework is an **essential** component of your learning in this course.

Activities

The activities will be assigned intermittently throughout the semester. We will have many activities during the semester and each activity will be weighted differently. They will consist of activities that will relate to the material given in class.

Exams

There will be three exams given in class during the term. These exams will be completed in class and will contain the materials covered in the lectures, homework, and in the book. If you cannot attend the class on the day of an exam it is **your responsibility** to notify me in advance. Otherwise, there will be no make-up exams.

Final Exam

If you do not take the final exam, you will not receive a passing grade. The final exam will be a cumulative exam, which is scheduled for Tuesday, April 25th from 10:00 am to 12:50 pm.

Extra Notes

1. If a student cheats on an assignment, he/she will be given a zero on it and notification will be sent to the Dean of SME and the Director of Student Success.
2. The exams will be completed without books, notes, cell phones, and other people unless I tell the whole class that they can use any of these materials.
3. If a cell phone goes off during class, the student will need to talk to me after class. So turn them off or put them in silent mode when you enter the classroom.
4. I will be taking roll every day. If you miss more than three class sessions, you will be strongly recommended not to return to class. It is your responsibility to drop the class.
5. If you miss class during the first two weeks or do not log onto the MyMathLab software during the first week, you may be dropped from the class.
6. If you have a disability or any problems taking notes or tests, notify me right away.

Course Learning Outcomes:

Students successfully completing MATH 106 should be prepared to:

1. Analyze and solve level appropriate problems including elementary probability, statistics, geometry, and applications.
2. Effectively communicate, using appropriate mathematical notation, processes and strategies in solving level appropriate problems including elementary probability, statistics, geometry, and applications.

Required Learning Goals (SLOs)

Upon satisfactory completion of this course, the student will be able to:

- design and perform statistical experiments.
- organize, present, and interpret data in both graphical and numerical form.
- calculate and interpret the common statistical measures of central tendency and dispersion.
- design and perform probability experiments.
- calculate probabilities of simple and multi-stage events.
- use probability to design simulations of real life situations, to perform the simulations, and interpret the results.
- state the essential characteristics of two- and three-dimensional figures.
- calculate area, volume, and surface area of figures, using both standard and nonstandard units.
- define similarity and congruence of triangles and apply the definitions to solve problems.
- use the principles of transformation geometry to prove facts about geometric objects.
- identify, use, and evaluate resources available to elementary mathematics teachers.
- select appropriate problem-solving strategies and use the strategies to solve problems.

Important Dates

Start Date: 01/09/2017

Refund Date: 01/22/2017

Drop without 'W' Date: 01/22/2017

Pass No Pass Date: 02/07/2017

Last Day to Drop Date: 04/03/2017

End Date: 04/29/2017

Disclaimer: The instructor reserves the right to make any adjustments necessary in the operations of this course that in his judgment are warranted to better meet the students.

Schedule

Monday	Tuesday	Wednesday	Thursday
1/9	1/10 Introduction, 8.1	1/11	1/12 8.2
1/16 NO SCHOOL	1/17 8.3	1/18	1/19 9.1
1/23	1/24 9.2	1/25	1/26 9.3
1/30	1/31 Review	2/1	2/2 Exam #1
2/6	2/7 10.1, 10.2	2/8	2/9 10.2, 10.3
2/13	2/14 10.3, 10.4	2/15	2/16 10.4, 10.5
2/20 NO SCHOOL	2/21 11.1	2/22	2/23 11.2
2/27	2/28 11.3	3/1	3/2 12.1
3/6	3/7 12.2	3/8	3/9 12.3
3/13	3/14 Review	3/15	3/16 Exam #2
3/20	3/21 13.1	3/22	3/23 13.2
3/27	3/28 13.3	3/29	3/30 14.1
4/3	4/4 14.2	4/5	4/6 14.3
4/10	4/11 14.4	4/12	4/13 Review
4/17	4/18 Exam #3	4/19	4/20 Review