Course: Principles of Mathematics I (Math 215), Fall 2015
Meeting time & Location: (Section 4494) W 6:45 PM - 9:55 PM, GC-320
Instructor: Wendy Tu, PhD, EdS
Office Hours: 6:10 – 6:45 PM W
e-mail: miaowe@wlac.edu Please include "Math 215" in the subject field of your message.

We will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates and myself. Rather than emailing questions to me, I encourage you to post your questions on Piazza. If you have any problems or feedback for the developers, email team@piazza.com.

Find our **class page** at http://piazza.com/wlac/fall2015/math215/home

Prerequisite: Completion of Math 125/128 with a grade of C or better

Course Description: This course helps students understand topics in mathematics, including sets, logic, probability, number systems, descriptive statistics, and regression analysis. It is recommended for prospective elementary school teachers.

Course Materials:

Textbook (***required***): Johnson, D.B. & Mowry, T.A. (2003). *Mathematics: A Practical Odyssey, 5th ed.*, Brooks/Cole, Cengage learning. ISBN: 0-534-40059-0
Calculator (***required***): Graphing calculators such as TI-83 or TI-84 are highly recommended but not required. However, scientific calculators are required to complete the homework assignments as well as the tests. Topics on using the calculator will be given in class whenever needed. No cell phones or any other electronic devices can be used to replace the calculator.

Homework Assignments: Assignments are posted on Piazza.com but will not be collected.

Assessments:

- 40%: Three tests (One lowest grade will be replaced by the average of all three tests)
  - Test #1: Chaps 1 & 2
  - Test #2: Chap 3
  - Test #3: Chap 4
- 30%: Teaching assignment (Instructions are posted on Piazza.com)
- 30%: Comprehensive final exam

Grading:

Percentage cutoff	Grade
89.5%	A
79.5%	B
69.5%	C
59.5%	D
Below 59.5%	F

Important Dates:

- 9/11: Last day to drop to receive enrollment fee and tuition refund
- 9/11: Last day to drop to avoid a "W" on permanent record
- 11/20: Last day to drop to receive a guaranteed "W"

General rules on tests/exams:

1. There are **no makeup tests for any reason**. No tests will be given prior to the scheduled date either. Lowest test score will be replaced by the average of four test scores if you do not miss any one test. If you have to miss one test, the missing one will be replaced by 80% of your final exam. If you have to miss more than one test, you will be dropped from the class.

2. Tests are closed book and closed-notes. No scratch papers are allowed during the test. No sharing of the calculator is permitted (if calculators are required for the test). Cell phone should be turned off (not on vibrate) and stored away. If cell phone is seen during the test, you will be treated as cheating on a test.

3. On the test date (including final exam), the test will not be given to a student 15 minutes late or after someone finishing the test, whichever comes first

4. Students are bound by the Code of Academic Conduct and Reporting Policy that addresses issues of academic dishonesty. If you are caught cheating on an exam, you will receive a grade of zero for that exam and the incident will be reported and become part of your permanent record. Please note that a zero grade assigned as a result of academic dishonesty will **not** be treated as the lowest score.

Attendance/Participation: Good attendance and active participation are crucial for the success of this class. Please arrange your schedule accordingly prior to enrolling the class. Frequently missing the class is not acceptable. Coming late or leaving early is also unacceptable. You may be dropped from the class for an accumulation of absence (including being tardy/leaving early) of 3 hours. Absence is defined as not showing up in class regardless of the reasons (being sick, attending jury duty, attending funerals, going on business trips, or whatever). However, it is still your responsibility to drop the class if you do not wish to complete. Failure to drop in a timely manner might result in an F on your academic record. Final exam will not be given to a student who missing excessively from the class. In general, you should expect to spend 3-4 hours every day in reviewing the materials covered, completing the homework, and previewing the materials to be covered in the next class meeting.

Students are expected to have all the necessary course-related materials/handouts ready when coming to the class. Cell phones and any electronic devices should be turned off (not on vibrate) and put away. No cell phones and materials unrelated to the class should be visible during the class. All students should participate in discussions and work on practicing sample questions given inside the class. Any disruptive behavior includes but is not limited to talking; listening to any musical instruments, reading materials other than classroom text, and obstruction or disruption of classes may result in the exclusion from the class.

Students are responsible for all the announcements made in the class.

College-wide Student Learning Outcomes:

- **Critical Thinking**: Classroom activities and assignments will require you to use sound reasoning to analyze, solve and interpret problems.
- **Communication**: You are expected to show and explain your work in a clear, well-organized manner in the assignments you turn in.
- **Quantitative Reasoning**: This is the core of your mathematics learning experience and will be demonstrated in all the work you do in this course.
- **Apply self-assessment and reflection strategies** to learn from your mistakes and to seek better methods to solve particular problems.
- **Civic Responsibility**: Students are expected to respect classmates as well as the instructor. This includes refraining from disruptive behavior (coming late, leaving early, wandering in and out of class, eating/drinking during class, side conversations, instant messaging, etc) and practicing positive behaviors (cooperation, civility, helpfulness, constructive engagement in class activity).
- **Technical Competence**: Utilize the appropriate technology – including web-based systems and hand-held graphing calculators – as well as pencil-and-paper methods for "skill drills" and problem solving.
- **Cultural Diversity**: Respect for all classmates and appreciation of the universality of mathematics in diverse cultures.
- **Ethics**: All students will maintain the highest standards of academic honesty. You may NOT give or receive help on tests or quizzes, and you may not turn in someone else's work as your own. *NOTE: If you are discovered committing any act of academic dishonesty (cheating), you will receive no credit ("zero") for the test or assignment AND you will be suspended from class AND the case will be referred to the Vice-President for Student Affairs for further disciplinary action. For further information see the WLAC Catalogue and Schedule of Classes.*
- **Aesthetics**: Mathematicians often talk about a "beautiful" or "elegant" method of solving a problem.

Math 215 Course Student Learning Outcomes:

- Recognize valid and invalid uses of inductive and deductive reasoning.
- Understand basic set operations.
- Compute and interpret probability.
- Analyze data using descriptive statistics.
- Conduct linear regression analysis.
- Locate and utilize supplemental resources online and in textbooks.

Student achievement of SLOs will be assessed by means of tests as well as informal measures such as class participation, classwork, and student self-assessment.

Tentative Course Calendar

Week	Class Activities
#1 (9/2)	Class Introduction Logic (Download handouts from Piazza.com)
#2 (9/9)	Logic (Cont'd) 2.1 Sets and Set Operations *Teaching Assignment #1*
#3 (9/16)	2.3 Introduction to Combinatorics 2.4 Permutations and Combinations
#4 (9/23)	Chaps 1 & 2 Review *Teaching Assignment #2*
#5 (9/30)	*Test #1 (Chaps 1 & 2)* 3.2 Basic Terms of Probability
#6 (10/7)	3.3 Basic Rules of Probability 3.6 Conditional Probability
#7 (10/14)	Chap 3 Review *Teaching Assignment #3*
#8 (10/21)	*Test # 2 (Chap 3)* 4.1 Population, Sample, and Data
#9 (10/28)	4.2 Measures of Central Tendency 4.3 Measures of Dispersion
#10 (11/4)	4.6 Linear Regression
#11 (11/11)	***No Class Tonight!***
#12 (11/18)	*Teaching Assignment #4* 4.4 The Normal Distribution
#13 (11/25)	4.5 Polls and Margin of Error Chap 4 Review
#14 (12/2)	*Teaching Assignment #5*
#15 (12/9)	*Test #3 (Chap 4)* Final Review
#16 (12/16)	***Final Exam (6:45 – 8:45 PM)***