MATH 129-002
Survey of Mathematics
Spring 2014

Instructor: Andrew W. Herring   **Text:** *Mathematics All Around*
Email: herring@unm.edu   Thomas L. Pirnot, 5th ed.
Office Hours: Tuesday 3:30-4:30 pm   **Office:** SMLC 317
               Wednesday 10:00-10:50 am
               Friday 12:00-1:00pm

ATTENDANCE: Attendance is mandatory. I will call out names everyday that there is not a test or quiz. If you come to class late, it is your responsibility to make sure your name is taken off the absent list **right after** class. On quiz days, attendance will be taken from the quizzes; so, even if you cannot complete the quiz, turn in a piece of paper with your name on it. If a student has three or more unexcused absences he/she **may be dropped** from the course. Tardiness or early departure will be regarded as an absence. Please note that it is your responsibility to drop the course if you stop attending. A failing grade may be assigned if a student stops attending and does not drop. If you miss a class when an assignment was given, it is up to you to know this and turn it in on time. Make sure you check the places that these may be posted, LEARN or email. However, not every assignment will be posted; so, make friends in class from whom you can get this information.

HOMEWORK: Your daily homework is your most important effort in this course. It is imperative that you do all of the suggested problems, especially the hard ones, because this is how you actually learn the material. Expect 2-3 hours of homework for every hour of class meeting time (on average **6-9 hours per week**). Keep all of your homework together in a folder so that if you are having trouble in the course, you can bring it with you when you come to office hours or get tutoring. Occasionally, there will be homework to be turned in for a grade. These will be averaged into your quiz grade. **When this happens, you are to write out the directions and the problem statement. At the top of the page, you should have the page number of the book and the date the assignment is due along with your name. Multiple pages should always be stapled. All homework is due at the beginning of class.**
In addition, **you will have web homework on MyMathLab that will be worth 20% of your grade**. Make sure you check the MyMathLab website daily for assignments and deadlines. You will need to obtain an access code for the MyMathLab feature of the course. These are sold with new copies of the text at the UNM bookstore. If you don't mind electronic text books, one can also purchase an access code online from the publisher-such a purchase includes an electronic copy of the text (I believe that this is the most economical way to gain access to MyMathLab and the text).

MANIPULATION QUIZZES: These will happen **at least** once each week. The quiz problems will be very similar to the homework problems, if not the same. Some of the quizzes will be in-class and announced, but some will be pop quizzes. **No make-up** quizzes will be given, even if you have an excused absence. This is why the two lowest

quiz scores will be dropped at the end of the semester. The average of these quizzes will count for approximately a test grade.

<u>READING QUIZZES:</u>   You will have a reading quiz every class period that does not have another assessment planned (such as a test or a manipulation quiz.)   This will be quizzing the material that I will be covering in lecture that class period. You will not be given problems to solve on reading quizzes. These quizzes will cover section objectives, definitions and important descriptions in boxed areas or in boldface in your text. **You can use any hand written notes you have taken on the section during the quiz**.   It is up to you to prepare the appropriate sections for the day. Your reading quiz average will count as approximately a test grade. I will drop your 2 lowest reading quizzes in preparing the average. There will be NO MAKE-UP reading quizzes no matter what the excuse is.

<u>EXAMS:</u> There will be three in-class exams. You must show all of your work and use proper mathematical notation to receive full credit. A correct answer without work will receive 0 points. If you **must** miss an exam, you **must** contact me **before** the day of the exam in order to discuss a make-up test. Make-up tests will be given only for excused, well documented absences. If you miss an exam without contacting me, you may be dropped from the course.

<u>PAPER:</u> There will be one paper due on **Monday, March 10th**. This should be on a famous mathematician, mathematical idea, or discovery. It should be 2 pages, 12pt font, Times New Roman, double spaced, with 1inch margins on all sides. We will talk more about the structure of the paper when the due date gets closer, but start thinking about your topic now. It is recommended that you start researching as soon as you have chosen the topic. This paper will count as approximately a test grade.

<u>FINAL EXAM:</u> The final exam will be given on **Wednesday, May 14th, 10:00am-12:00pm**. It will be **comprehensive** and worth 20% of your overall grade.

<u>IMPORTANT NOTE:</u> Notes of any kind, 3x5 cards, books, cell phones, computers, headphones etc. are **not allowed** on any tests, including the Final Exam.

<u>EXTRA CREDIT:</u> NONE! Please do not ask for `extra credit'! Go to class, do your homework, come to my office hours, visit CAPS, form study groups, address any struggles with the material **on time** and you should be in good shape!

GRADING: To get full credit on graded work students must address all mathematical components presented by the problem, showing all steps and calculations. The use of proper notation, well structured procedures, and legibility will be taken into account when assigning points. Your grade will be determined based on your performance on the following:

> 4 in class tests, 36% of final grade (9% each)
> Weekly quizzes, written homework and class group work worth 7% of final grade
> Reading quizzes, 7% of final grade
> Paper, 10% of final grade
> Cumulative final exam, 20% of final grade
> MyMathLab, 20% of final grade

COMMUNICATION: Please check LEARN, MyMathLab, and your **UNM** e-mail daily. I will frequently send important information and updates to one of these systems.

STUDENT BEHAVIOR: According to the Code of Conduct as stated in the Policies and Regulations for UNM, student activities that interfere with the rights of others to pursue their education or to conduct their University duties and responsibilities will lead to disciplinary action. This includes any activities that are disruptive to the class and any acts of academic dishonesty. Students are expected to behave in a courteous and respectful manner toward the instructor and their fellow students. Students should turn off their cell-phones before the beginning of each class. Students may be dropped from a class for inappropriate behavior.

Students with Disabilities: We accommodate students with documented disabilities. During the first two weeks of the semester, those students should inform the instructor of their particular needs.

A Word of Advice: If you are struggling with the material, seek help IMMEDIATELY!

EXTRA HELP: In addition to my office hours, there is extra help available at:
        - *CAPS*: Center for Academic Program Support. Located on the 3rd floor of Zimmerman Library, 277-4560
        - *MEP* Engineering Annex, room 210, or call the study group at 277-8795
        - *CATS*: Counseling and Therapy Services, Student Health Center, 277-4537. (For test anxiety, etc.)

Registration, Drop, and Grade Change Deadlines: The Department of Mathematics and Statistics will adhere to ALL registration deadlines published by the Office of the Registrar in the schedule of classes. It is the student's responsibility to be aware of these deadlines.

Tuesday, January 21st, Classes Begin

Friday, January 31st, 5:00 PM, Last Day to Add or Change Sections
Last Day to Change Grade Mode (loboweb)

Friday, February 14th, 5:00 PM, Last Day to Change Grade Mode (in person)

Sunday, March 16th through Saturday March 22nd, University Holiday-Spring Break

Friday, April 18th, 5:00 PM, Last Day to Drop without Dean's Permission

Friday, May 9th, 5:00 PM, Last Day to Drop with Dean's Permission

TIMELINE FOR MATH 129 SPRING 2014

Week	Section	Suggested Book Problems	Section Name
1	1.1	5-45 EOO, 65-71 ODD	Problem Solving
20-Jan	1.2	1-31 ODD; 33,35,39,47,48	Inductive/deductive Reasoning
	2.1	1,3,13,19,22,25,29,31,35,39,43,47,69,71,73,75	The Language of Sets
2	2.2	1-15 ODD; 19,21; 25-41 ODD; 49,53	Comparing Sets
27-Jan	2.3	1-69 ODD	Set operations
	2.4	1-41 ODD	Survey Problems
3		Test #1 Review	
3-Feb		TEST #1	
4	3.1	1-51 ODD	Statements, Connectives and Quantifiers
10-Feb	3.2	1-37 ODD; 47-63 ODD	Truth Tables
	3.3	1-7 ODD; 9,13,17,21-67 ODD; #75	Conditional and Biconditional
5	3.4	1-39 ODD	Verifying Arguments
17-Feb	8.1	1-67 ODD; 79,81,83	Percents, Taxes and Inflation
6	8.2	1-23 ODD; 37,39,43-53 ODD; 57,59	Interest
24-Feb	8.3	1-39 ODD	Consumer Loans

Week	Section	Suggested Book Problems	Section Name
7		Test #2 Review	
3-Mar		**TEST #2**	
8	14.1	1-39 ODD	Organizing and Visualizing Data
10-Mar	14.2	1-35 ODD; 41-47 ODD	Measures of Central Tendency
	14.3	1-39 ODD; #44	Measures of Dispersion
9		SPRING BREAK	
17-Mar			
10		REVIEW CHAPTER 14	
24-Mar	12.1	1-33 ODD; #37,39,41,43,45,47	Introduction to Counting Methods
	12.2	1-37 ODD	The Fundamental Counting Principle
11	12.3	1-69 ODD	Permutations and Combinations
31-Mar		Review for Test #3	
12		**TEST #3**	
AP 7	4.1	1-19 ODD; 29-39 ODD; 49,51,53	Graphs, Puzzels, and Map Coloring
	4.2	1,3,5,7,9,15,17,21,25,29	The Traveling Salesman Problem
13	4.3	1,3,9-19 ODD	Directed Graphs
AP 14	5.1	1-69 EOO(every other odd)	Evolution of Numeration Systems
14	5.2	1-61 EOO(every other odd)	Place value Systems
AP 21	5.3	1-73 odd; 81-84 all	Calculating in Other Bases
15			
AP 28		**Test #4**	
16		**Review for final exam week**	
5-May			
17		**final exam week**	
12-May		**Final Exam: Wednesday 14th May, 2014 10:00am-12:00pm**	

Materials from weeks 12 through 15 (highlighted in blue above) subject to change, although the date of Test 4 is fixed.