Mathematics 215: Elementary Mathematics III  
Fall 2011

Instructor: Dr. Patrick J. Morandi

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<td>Math Dept: math.nmsu.edu</td>
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I check my email regularly; feel free to contact me by email if you wish. If you need to turn in an assignment or leave me a message you can do so in the math office.

Course Web Pages and Blackboard: There are two web pages for this course. The primary website for this course is

sierra.nmsu.edu/morandi/math215

At this web site you will find the syllabus, a schedule, and a list of assignments. Because this is not a secure site, you cannot get your grades here.

The secondary page is available through Blackboard at learn.nmsu.edu. At this web site you will be able to look up your grades for the course. You may also email me or another student through the Blackboard email.

If you have trouble using Blackboard, contact the office of Information & Communications Technologies at 646-1840. You can also come by my office for help.

Office Hours: My regularly scheduled office hours are listed on the primary course website. If the hours change during the semester I will announce the new hours in class.

You do not need to make an appointment if you wish to come to office hours. If you need or want to see me outside these hours, you may make an appointment with me before or after class, by phone, message, or by e-mail.

Prerequisite: A grade of C or better in Math 112 and admittance into the TEP program.

Textbook: The textbook for the course is Mathematics for Elementary Teachers, by Sybilla Beckmann (3rd edition). It comes with an Activity Manual which we will use.

Catalog Description: Probability, statistics, ratios, and proportional relationships. Experimental and theoretical probability. Collecting, analyzing, and displaying data, including measurement data. Multiple approaches to solving problems involving proportional relationships, with connections to number and operation, geometry and measurement, and algebra. Understanding data in professional contexts of teaching. Taught primarily through student activities and investigations.

Goals of the Course: As future teachers you will be teaching mathematics to children. In order to teach a subject well you need not only to know the material that you will teach, but you need to know more than what you will teach, and know it well, in order to be
able to answer questions, give alternate explanations when your students do not understand something, and be able to adjust to changes in the mathematical curriculum. Furthermore, even if you hope to teach a given grade, you should be prepared to teach anything between kindergarten and 8th grade, since what a person ends up teaching is often not what they planned to do. If you get an elementary education teaching credential in New Mexico, then you will be certified to teach anything from Kindergarten to 8th grade. What we will do in this course is explore the ideas in probability and statistics in a way to help you improve your mathematical ability, gain confidence in your ability, to introduce to you different ideas and models, and to see a variety of mathematical activities that are appropriate for people of all ages.

**Grading:** The grade for the course will be based on your performance on written assignments and exams, along with attendance and classroom visitations. The breakdown is:

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<th>Percentage</th>
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<tbody>
<tr>
<td>Assignments</td>
<td>50%</td>
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<tr>
<td>Midterms</td>
<td>25%</td>
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<tr>
<td>Attendance</td>
<td>10%</td>
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<td>Final Exam</td>
<td>15%</td>
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The grading scale is likely to be: 90% and above is an A, 80-90% is a B, 70-79% is a C, 60-69% is a D, and below 60% is an F. If you are near a borderline, factors such as class participation and effort shown may determine whether you get a higher or lower grade.

The grading of assignments and exams will be not based solely on mathematical correctness, but also on grammar, spelling, clarity, and completeness. Since a teacher’s primary task is communication, it is important that you practice communicating mathematics. I will mark a regular assignment with a letter grade. I anticipate that grammar and spelling will affect the grade up to one increment (e.g., B to B+ or B to B-), and clarity and completeness could affect a whole letter grade. In other words, particularly good clarity will improve your grade while poor clarity or grammar will hurt it. To make the course grades, I will convert letter grades to percentages via: A = 95%, B = 85%, C = 75%, D = 65%, F = 0%. A plus will add 3%, and a minus will subtract 3%, except that an A+ is 100%. I will mark an exam with points rather than with a letter grade.

To give you some feel for how I will grade your work, you can refer to the page *Grading of Work* on the course website.

**Some Expectations:** You can expect me to treat you with respect, return your assignments in a timely way, be on time to class, and be in my office during scheduled office hours. What I expect from you is to treat me and your fellow students with respect and courtesy, and not to do anything which detracts from the learning of others, including texting, talking on your phone, or web surfing during class.

**Material and Style of the Course:** The material we will cover will center on fundamental ideas of probability and statistics. The majority of class time will be spent working in groups on in-class activities. I will spend only a small amount of time lecturing; I feel that students get more out of the class by hands-on activities. By working with others, you will be able to help each other and learn from each other. While you will work in class with others, your
homework is to be written individually. However, it is possible that there will be a few assignments to be written as a group.

We may spend some class time in the Department of Mathematical Sciences’ computer lab. In particular, we will use the spreadsheet Microsoft Excel to help us obtain numerical and experimental data in a much more efficient way than could be done by hand. An online version of Excel is available when you log onto my.nmsu.edu, click on mail and calendar, then on Office at the top of the screen.

Mathematics 215 is a content course versus a methods course. That means the focus is on the mathematical concepts themselves instead of how to teach mathematics. However, the mathematics we discuss will be presented in ways appropriate for future teachers.

**Homework:** Assignments will be given approximately once a week. These will typically constitute answering questions about classroom activities, or about going beyond what we did in class. The questions will usually be to explain clearly what the activity was about, what is the point to the activity, and how multiple activities relate to each other. I will announce in class and on the websites, when an assignment is due. All of these assignments will count the same toward the course grade. Any missed assignment will, of course, count as 0%.

Assignments must be typed. You are free to use any form of word processing that you wish. You do not have to type any mathematical expression or formula that isn’t convenient to type; handwriting these is fine. Please use 12-point type and double space your work. Otherwise, you are free to choose how to format your homework. When you type up your assignments you will need to leave appropriate space to write in any mathematical expression or draw any picture that is needed. If your assignment is more than one page long, either staple the pages or use a paper clip. Please do not fold the corners of the pages.

As an aide to help you write your assignments, you can read the page *Thoughts on Writing* on the course website. As mentioned on that page, you should always proofread what you write. It is surprising how often what somebody writes is not what they intend. Proofreading helps with this problem. Reading out loud when you proofread is a good way to catch mistakes that can otherwise go unnoticed.

**Exams:** There will be two in-class midterm exams and an in-class final. The midterms will be somewhat evenly spaced throughout the semester, and each will count equally toward the final grade. The final exam period for this course is Wednesday 7 December from 8:00 to 10:00 a.m. Use of cell phones and other electronic devices are not allowed during exams unless otherwise indicated. More details about what you can use on exams will be given in class some days before the exam.

**Attendance:** Because it is important to attend class, and because we will spend so much time on hands-on activities, attendance will be taken every day, and 10% of your grade will be based on your attendance. Your attendance grade will be determined as follows: 0 to 2 unexcused absences will give you a 100% attendance grade, and each unexcused absence beyond 2 will decrease your attendance grade by 10%. I will excuse an absence for illness or an official NMSU activity provided you give me a note for your absence. You are responsible for making up work if you miss class. Any coursework will necessarily need to be made up
outside of class. Under no circumstances will missing a class will excuse you from doing an activity. Students who repeatedly miss class may be dropped before the midterm drop date.

**Late Homework Policy:** If you do not turn in an assignment on time because of an excused absence, then you may turn it in late for full credit as long as you turn it in soon after you return to class. If you did not turn in an assignment on time for any other reason, then I will accept it late for partial credit, up to 75% of full credit, provided that it is turned in within a reasonable amount of time and that you have not had too many late assignments. I reserve judgment on what reasonable means and how much credit to give. If a student turns in several late assignments, they will begin to receive a smaller percentage of credit for these. As long as a student does not abuse this policy I will accept late homework.

**Important Dates to Remember:**

- Last day to add a class: Monday 29 August
- Memorial Day Holiday: Monday 5 September
- Last day to drop with a W: Tuesday 11 October
- Last day to withdraw from the University: Friday 11 November
- Thanksgiving Break: 21 November to 25 November
- Final Exam: Wednesday 7 December, 8:00 - 10:00 a.m.

**Students With Disabilities:** If you have or believe you have a disability and would benefit from any accommodations, you may wish to self-identify by contacting the Services for Students with Disabilities (SSD) Office located at Garcia Annex (phone: 646-6840). If you have already registered, please make sure that your instructor receives a copy of the accommodation memorandum from SSD within the first two weeks of classes. It is your responsibility to inform either your instructor or SSD representative in a timely manner if services/accommodations provided are not meeting your needs.

If you have a condition which may affect your ability to exit safely from the premises in an emergency or which may cause an emergency during class, you are encouraged to discuss any concerns with the instructor and/or Mr. Michael Armendariz, SSD Coordinator. Feel free to call Ms. Angela Velasco (Interim EEO/ADA and Employee Relations Director) at 646-3333 with any questions about the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act of 1973. All medical information will be treated confidentially.