Math 120Q - 1M: Elementary Functions

Fall 2013
Course Syllabus

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Class Meetings: Room 141 BDK Science MWF 1:50-2:50
Office Hours: see Course Web-site

Text: Precalculus – Graphical, Numerical, Algebraic 8th Ed. by Demana, Waits, Foley & Kennedy

Calculators: Students are required to have a graphing calculator, either a TI-83 Plus or TI-84. You may not use a graphing calculator which has Symbolic Algebra Capability, for example a TI-89, TI-92 or Voyager 200. Unless specifically stated, calculators are only used to verify your work!

Outline of Course Material: The course will cover the Preliminary Chapter, Appendix A.1 – A.3 (review) and Chapters 1 - 5 of Demana, Waits et al. The central idea of this course is functions (1) linear, quadratic, polynomial, rational, exponential, logarithmic, and trigonometric functions, (2) applying transformations to these functions (3) domain and range issues and (4) their behavior: zeros, asymptotes, maximums and minimums, "end" behavior etc. plus supplementary material (handouts) available on the course web-site.

Grading

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<tbody>
<tr>
<td>Review Test</td>
<td>50 pts</td>
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<tr>
<td>Three 100 point tests</td>
<td>300 pts</td>
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<tr>
<td>Quizzes</td>
<td>75 pts (quiz average times 75)</td>
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<tr>
<td>Homework</td>
<td>75 pts (homework average times 75)</td>
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<td>Final Exam</td>
<td>200 pts</td>
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<td>Total</td>
<td>700 pts</td>
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Letter grades will be determined by the standard 90% - 80% - 70% - 60% scale applied to 700 points. Scores within 3 percentage points of the 90% – 80% – 70% - 60% cut-offs will be modified by pluses or minuses. For example, an A- is between 90% (inclusive) and 93% while a B+ is between 87% and 90% (exclusive).

How Classes Will Be Run

Lecture notes on the material to be covered will be passed out at the beginning of each class; this way you will have a complete set of notes on what was covered in class. Part of each class you'll be working on in-class exercises which are intended to lead you through the process of learning and understanding the course material. The best way to learn math is to do math.

1. In order for this to work properly you must come prepared to work the exercises in class. This means that you have read and understood the assigned reading since class exercises will be based on the material you read.
2. Homework (due the next class period) will be assigned each day based on the material you read to prepare for class and based on the in-class exercises. The intention is that you will leave class knowing how to do the homework assigned.
3. Generally I will not go over assigned homework problems in class. If you have homework questions you can either seem me outside of class during my office hours, arrange an alternate time to see me outside of class, check out the math workshop, or e-mail me questions.
Class Attendance & Class Attendance Bonus: You are expected to attend every class. If a class is missed you are still responsible for any missed material (i.e. all lecture notes are on-line). If you miss no more than 3 classes, 20 points will be added to your total points for the course. Note: Absences due to legitimate university sponsored events will not be counted provided I receive notification ahead of time.

Homework: Daily homework will be assigned and checked that it’s done.

Expectations for Homework Assignments: Odd numbered problems are assigned so that you may check your answers (answers to odd number problems are in the back of the book); otherwise solutions are given on the homework assignment sheet or suggestion on how to check your answer. Since you can check your work all homework questions must be correct! If you are having difficulty with a problem you are responsible for obtaining help either from me, from the Math workshop or from another classmate who may help you with the problem (but not to do the problem for you).

Rules for Homework Assignments

1. All homework must be done in pencil (that way you can erase your mistakes)
2. Your name (or names – see below), date and homework assignment number MUST appear clearly at the top of the page.
3. For each problem write down the page number and question number, copy the question, show work indicating how you got the answer, and “box” the answer. I want to see that you actually solved the problem instead of merely copying down the answer in the back of the book.
4. Do NOT rip pages out of a spiral bound note book. Do not use scrap paper. Use clean ruled 3-hole punched 8 ½ by 11 notebook paper.
5. Please staple or clip multiple pages together,

Homework not conforming to the above will result in loss of credit. I’m serious!

Pairs of students (no more than 2) may collaborate on homework and submit a single copy; both names should appear on the paper. This does not give license to split the assignment with each person only doing half; work on the assignment together.

Late homework will not be accepted if passed in more than one class meeting late. For example, a homework assignment due on Wednesday will not be accepted if passed in after the following Friday. This is because it’s important to keep up with the material

Quizzes and Homework: At the end of class each Friday there will be a quiz with questions taken from the homework; that is you will have seen the quiz question before though constants may be changed! Quizzes will be worth 10 points with lowest quiz grade dropped. The average of the remaining quizzes will be scaled to 75 points.

Make up quizzes will not be given but if you know you will be absent from class because of a university sanctioned (e.g. athletic) event, you may make arrangements to take the quiz early.

One-Time Test Retake: If you do poorly on one test you will be allowed to redo the same test as a take home. The test grade earned will be the average of the in-class test and the take home retake. For example if you make a 50% on the in class test and a 100% on the take home retake, your grade for that test will be 75%.

1. You may only do this only once!
2. You are not allowed to consult with anyone on the retake. This especially applies to other class members and math workshop tutors. You may make free use of your text book, class notes, class handouts, course website materials and/or homework assignments but no other sources. Think serious about Wittenberg’s Code of Academic Integrity!
3. You will have one week to complete the take home test (but you may hand it in early). You do not need to hand in the original in-class test.
4. Since time is not a factor for the take-home retake, grading will be stricter. Therefore it is strongly suggested that you do not copy correct answers from the in-class test to your take home retake as grading will be stricter. Redo each question.
5. If you elect to retake a test you must contact me within 24 hours of the time a return the test so that I can give you a clean copy for the retake.
6. Obviously this offer is not valid for the final exam.

**Honor Code.** All quizzes and tests will carry the standard pledge which must be signed:

*I affirm that my work upholds the highest standards of honesty and academic integrity at Wittenberg and that I have neither given nor received unauthorized assistance.*

Note: If you do take a quiz early you are not allowed to discuss it with anyone and if you know someone who has taken a quiz early you are not allowed to ask questions of them.

This is especially important for a take home retake. You may not, repeat not, seek help from anyone. If you have questions see me.

An honor violation involving a test will result in a grade of 0 on that test for all parties. An honor violation involving a quiz will result in a grade of 0 on that quiz plus a loss of 10 points (out of a possible 75) from the quiz point totals. A report will be submitted to the Honor Council (which is not good!)

Note: Homework assignments are not pledged.

**Classroom Behavior:** Over the years a couple or three things began happening in class that really bug me! So I'm going to request that you do the following

1. Please - Switch off your cell phones and no texting in class.
2. Please - don't get up in the middle of class to visit the water fountain or the rest room - unless it is ABSOLUTELY NECESSARY

Thank you!

**How to Succeed in this Course**

1. Complete each reading assignment before it’s covered in class. Read each assignment three times. First time read it straight through to get the general picture of the material. Second time read it slowly and carefully to get all the details. Third time read it to review what you read and take notes on the 3rd read through!
2. Pay particular attention to the Examples in the text which are excellent.
3. Do all the homework problems; write them up neatly – and don’t get behind.
4. 3 to 1 rule: For every hour in class spend 3 hours studying outside of class
5. Don't Memorize – Understand! Figure out a learning strategy that works for you
6. Use a set of 5 x 7 note cards for a study guide. Write down important definitions, theorems, formulas, and techniques/examples for solving standard math problems but keep it short
7. If you don’t understand something ask questions and/or get help. See me, drop by the math workshop, ask a buddy!
Course Web Site (including Weekly Syllabus): Go to

http://www4.wittenberg.edu/academics/mathcomp/shelburne/Math120/index.html

or go to the Current Course page of the Mathematics and Statistics Program: Department of Mathematics and Computer Science web site. Copies of PowerPoint notes and all handouts can be found here.

http://www5.wittenberg.edu/academics/math/coursewebsites.html

Finally – Your learning in this course is important to me. I invite you to talk with me about ways to ensure your full participation in this course. Please be aware that Wittenberg is committed to providing reasonable accommodations for students with documented disabilities. If you are eligible for course accommodations because of a disability, you need to register with the Academic Services Office, 206 Recitation Hall. After you register, give me your self-identification memo from Academic Services and arrange to talk with me about your learning needs privately in a timely manner. Early identification at the start of the term is essential to ensure timely provision of services. If you have questions or would like more information about services for students with disabilities, please contact the Academic Services, 206 Recitation Hall, extension 7891 or by e-mail at rperry@wittenberg.edu