## MATH 113 SYLLABUS ~ Spring 2015

TEXT: Algebra and Trigonometry by Blitzer,
$2^{\mathrm{ND}}$ Custom Edition for UMD
Optional: Student Solutions Manual

INSTRUCTOR: OFFICE HOURS and ROOM: EMAIL:

Math 113 is a 3-credit course designed primarily as preparation for calculus: Math 130, or Math 220. Students should be aware that credit can be granted for only one of: Math 113, 110 or 115, although it may be appropriate for some students to take some of these combinations of courses. Math 113 is a prerequisite for Math 130 or Math 220.
CALCULATORS: NO calculators will be allowed on tests in this course. A scientific calculator (with log, exponential and trig functions) will be needed for some homework and classwork.
COURSE WEBPAGE: www.math.umd.edu/~jfstone Go to this link for this Course Syllabus with all textbook assignments, the signon link to the WebAssign online homework, tutoring schedules, links to the testbank (where you can access many past tests) and to LAS (Learning Assistance Services), and information about the Honor Code.
WEBASSIGN ONLINE HOMEWORK: You will $\log$ on to Webassign at: www.webassign.net/umd/login.html. Use the same login as for Testudo. It's easiest to use the link on the course webpage (see above). You will need to purchase Webassign access, which you can do online. You can use Webassign without purchasing it for 2 weeks. It is best to pay after your schedule is finalized. You will be able to save your work as you go, and will usually have 4 opportunities to try each answer before submitting it. Do the practice problems from the textbook first (see assignments below) and on the syllabus on the Course Webpage, to get a feel for the material, before working on the Webassign questions.
TEXTBOOK HOMEWORK: These exercises are on the syllabus below. You are expected to do assignments and check answers with the text (Answers to all odd-numbered problems are in the back of the text). Some of these assignments may be collected. You are expected to spend an average at least 2 hours on homework per hour of class time (this includes reviewing, doing problems, checking and correcting them and reading the new material for the next class).
TESTS AND QUIZZES: Tests and quizzes are based on ALL homework: Webassign AND the additional textbook problems on the syllabus. An average of one quiz per week will be given. Three hourly exams will be given (see dates below).
ABSENCES: Excused absences will be given only with documentation and only for valid medical reasons, university business, or appearances in court. Excused quizzes will not be used in computing the final grade. Make-up quizzes will not be given. Any unexcused quizzes or exams will be counted as a " 0 ", including the final exam. Any student with a valid reason to be excused from an exam must contact the instructor prior to the exam and present documentation in the next class session attended. Messages may be left for most instructors via email, voice mail, or by calling the mailroom @ 301-405-5047.
HONOR CODE:The University has a nationally recognized Honor Code, administered by the Student Honor Council. The pledge, approved by the University Senate, reads: "I pledge on my honor that I have not given or received any unauthorized assistance on this assignment/examination." The Pledge should be handwritten and signed on all tests in this course. In conjunction with the University's Code of Academic Integrity, allegations of academic dishonesty will be reported to the Honor Council. As a student you are responsible for upholding these standards. Be aware of consequences of cheating and facilitation. More information can be found at http://www.shc.umd.edu.
HELPFUL WEBSITES: 1) www.math.umd.edu/~jfstone , the course webpage (see description above), 2) The Webassign login: http://www.webassign.net/umd/login.html . You'll use this to sign on to the webassign homework system, using the same login as for Testudo, as mentioned above. 3) www.math.umd.edu/undergraduate/resources for links to the testbank of past tests and information on tutoring. This link can also be accessed using the course webpage.
IN CASE OF EMERGENCY CLOSINGS: Check your email and check Canvas/Elms for information. **Be sure you have your current email registered with Testudo so that you will receive important information through Coursemail.
HINTS FOR SUCCESS: Students are encouraged to make use of the many resources that are available. A schedule for drop-in tutoring in room 0301, math building, will be available a week or so after the start of classes. MATH SUCCESS tutoring is available in Oakland Hall, usually Sun - Thurs., 6-9pm, see: www.resnet.umd.edu/programs/math_success (X4-MATH). See the course webpage (above) for links to tutoring. You'll have a big advantage if you attend class regularly, do homework (check and correct it), and seek help when necessary (from textbook, instructor, friends, tutoring, Student Solutions Manual, tests in the testbank, etc.). Learning Assistant Services in the Shoemaker building can provide math counseling and workshops. Make use of all that is available to you. COURSE EVALUATION: Students are encouraged to go to www.courseEvalUM.umd.edu to complete course evaluations toward the end of the semester.
IMPORTANT DATES (No calculators allowed on tests): Test 1: Fri., Feb. 20; Test 2: Wed., April 1; Test 3: Fri., May 1.
Final Exam: Thursday, May 14, 1:30-3:30, scheduled with the COMMON FINAL EXAMS. Rooms TBA (It will NOT be in your regular classroom).
GRADING: homework $10 \%$ Course Grade: A: 90-100\%
quizzes $\quad 15 \%$

B: $80-89 \%$
hour exams $3 @ 15 \%$. each
C: 70-79\%
final exam 30\%
D: 60-69\%

Your instructor may collect some of the following text assignments in addition to your graded WebAssign homework. The "checkpoint" exercises throughout the text are recommended. Answers to all check-point exercises are in the text. These assignments will prepare you for WebAssign problems, tests and quizzes. Check your work with the text and/or the Solutions Manual.

|  | SECTION | TEXTBOOK ASSIGNMENT DUE NEXT CLASS |
| :---: | :---: | :---: |
| DATE: | COVERED in class: | *Unless otherwise specified, do only the ODD-NUMBERED problems) |
| $\mathrm{Jan} 26^{\text {P.2, P. } 3 \text { exponents }}$ p. 31: 3,5, 11-63,109; p.46: 1-19, 23-43, 55-73, 83-99,113, 119 |  |  |
|  | Note: Students are also responsible for material in other sections of chap. P. Read/review sections P.1,P.4 and P.5. |  |
| Jan 28 | P. 6 rational expressionsp. 82: $3,5,15,19,23,33,43,53,61,65$ |  |
| Jan 30 | 1.2 linear eqns. | p. 112: 13, 21, 29, 37,41-45, 51,55,57, 93. *Watch out for extraneous solutions! |
| Feb 2 | 1.3 modeling | p. 126: $21,41,45,47,57,65,71,73$. Read 1.5 , know the quadratic formula. |
| Feb 4 | 1.5 quadratic eqns. | p. 152: $3,9,11,15,23,25,33,69,73,89,93,105,107,109,111,121$. |
| Feb 6 | 1.5 | p. 153: $131,142,147,151,177$, Appendix B-11 |
|  | 1.6 more eqns. | p. 168: $13,33,37$ Due Wed., 2/11: Appendix B9 |
| Feb 9 | 1.7 inequalities | p. 185: 1,3,9,11,35,39,45,55,57,127, 131. Where indicated, graph AND write in interval notation. Fe |
| Feb 11 | 2.1 functions, graphs | p. 210: 1,3,11-21,27,31,35,39,45,49-63, 65,85,89,93, 101, 105, 106. |
| Feb 13 | 2.2 more func., graphs | p. 223: $3,5,7,13,17,19,23-49,57,59,71,73,83,85$ |
| Feb 16 | 2.3 eqns of lines | p. 239: 1-9,13,15,17,18,27-37,41,45-61,67,69,71,79,87 (For a summary, see Appendix B17,18) |
|  | 2.4 parallel, perpen. lines p. 250:Review See Appendix B1-3; B25-27. Review h.w., quizzes, and see past tests in the Testbank (see |  |
| Feb 18 | Review See Appendix | ix B1-3; B25-27. Review h.w., quizzes, and see past tests in the Testbank (see www.math.umd.edu/~jfstone) |
| Feb 20 | TEST I (P2-2.4) NO CALCULATORS of any type and NO CELL PHONES are allowed |  |
| Feb 23 | $2.5,2.6$ transformations p. 266: 53-77, 81-93, 103,105; p. 279; 1-13, 17,19, 25,27domain |  |
| Feb 25 | 2.6 combinations of func. p. 279 : $33,39,41,43,49,53,59,65,69,71,97$. |  |
| Feb 27 | 2.7 inverse func | p. 290: $1,7,10$ |
|  | 2.8 distance, midpt | p. 300: 5,9,11,15,23,27,37, 41,51,67,69,73. |
| March 2 | 3.1 quadratic func. | p. 324: 1, 7, 11, 15, 17, 21, $27,37,41,57$ |
| March 4 | 3.1 | p. 326: 71, Appendix B-19,20 |
| March 6 | 3.2 polynomial func | p. 338: 1,3,7-19,23. In preparation for Test 2 (no calculators), do Appendix B15,16 (see ans. at end) |
| March 9 | 3.2 | p. 338: $25,47,49,53,59,65,67,69,83,85,87$. |
| March 11 | 3.3 rational func. | p. 357: 5,7, 15-20 all, $21,25,27,29,35$ |
| March 13 | 3.3 | p. 357: $51,53,55,59,89$,Appendix B-21 |
| March 15-22 SPRING BREAK |  |  |
| March 23 | 4.1 exponential func. | p. 376: 3,9-23,27,29,31,35-39,47,65. |
| March 25 | 4.2 log func. | p. 390: 1,3,7-15,19,23-29,35-41, 81-99 |
| March 27 | 4.2 | p. 390: $43-79$ |

March 30 Review: See Appendix B3-5, B-29,30 and the testbank (see the link: www.math.umd.edu/~jfstone)
April 1 TEST II (2.5-4.2) NO CALCULATORS of any type and NO CELL PHONES are allowed
April 34.3 prop. of logs $\quad$ p. 401: 1,5,9,11,15,17,21,23,27,29-33, 41,43,51,53,63,71,73,77,103
April $6 \quad 4.4$ expon., log eqns. p. 412: $5,11,21,27,31,33,37,39,53,55-63,67-73,79,101,109,111$
April $8 \quad 4.5$ expon. growth, decay p. 425: $1,3,5,21,23,25,27,33,35,37$, Appendix B-23,24.
April 108.1 systems of eqns. p. 654: $3,9,17,23,25,31,33,39,47,51,55,57,59,61,73,77,79$, plus a worksheet: Nonlinear Functions.
April 135.1 angles, radians $\quad$ p. 450: $1-5,11,13,17,21,25,31,35,43,45,51-55,59,65,73,87-93,111$
April $15 \quad 5.2 \mathrm{rt}$. triangle trig p. 465: $1,7,9-13,19,23$
April 17 5.2 p. 466: 41, 45,53-61, 75,79
April 205.3 trig func. of angles p. 481: 7,11,12,14,16, 17,19,21,25,27,31,33
April 22 5.3 p. 481: 35,39,43,45,51, 63-69,75,77
April 245.5 graphs, sin, cos $\quad$ p. 510: 3, 9,11,15,19,33, 37,45,55,85
April 27 5.6 Graph of tan p. 523: 1,3,7 (plus webassign!)
April 29 Review See B5-7, B31-34 (omit \#24,25) and the testbank (see the link: www.math.umd.edu/~ffstone )
May 1 TEST III (4.3-5.6) NO CALCULATORS of any type and NO CELL PHONES are allowed
May $4 \quad 5.8$ applications p. 551: 1, 3, 7, 13-16all, 29, 33, 41, 45, 47, 49, 51-55all, 57
May $6 \quad 6.5$ trig eqns. p. 612: $1,5,11,15$ (plus webassign!)
May 8 7.1 law of sines p. 627: 3,7,11,47,49,59
May 11 Review : See Appendix B 25-34 and the testbank (see the link: www.math.umd.edu/~jfstone )
***Uniform Final Exam: Thursday, May 14, 1:30-3:30. See schedule for COMMON FINAL EXAMS. Rooms TBA (It will NOT be in your regular classroom). NO CALCULATORS of any type and NO CELL PHONES are allowed.

