

COURSE SYLLABUS - Fall 2016

- 1. Course Prefix and Number:** MAT 150-05
- 2. Course Title:** Precalculus I (WLL) and **MyMathLab Course ID Number:** [REDACTED]
- 3. Credits:** 3:3
- 4. Course Prerequisites/Corequisites:** None
- 5. For Whom Planned:** This course is the first of a two-semester Precalculus sequence. Students must earn a C or better in this course to satisfy the prerequisites for MAT 151 (Precalculus II).
- 6. Instructor Information:**

Dr. Tracey H. Howell
Email: thowell@uncg.edu
Tel: 336-334-5836 (main office)
Office: 127 Petty Building
Office Hours: 9:00am-11:00am Tuesday (Petty 127)
10:50am-11:50am Thursday (Graham 313)
Email policy: You may contact me at any time via email. I plan to answer each of your messages within 48 hours (Monday-Friday). Please realize that this might not always be possible, due to the number of students in my classes.
- 7. Bulletin Description:** Review of elementary algebra, equations, inequalities, relations, functions, transformations, graphing, complex numbers, and polynomial and rational functions.
- 8. Department of Mathematics & Statistics Mission Statement:** *The mission of the Department of Mathematics and Statistics at the University of North Carolina at Greensboro is to provide intellectual leadership in the mathematical sciences that is of direct benefit to the State of North Carolina and that commands national and international respect for the quality of its educational programs and for its depth of scholarship. To achieve this mission, the Department has identified goals directed at achieving excellence in all three of the University's major functions - teaching, research and service. In particular, we are committed to offering well-rounded academic programs, which will provide our graduates with competitive job skills, to contribute to the advance of knowledge and techniques in Mathematics and Statistics through an active research program and to advance our role in providing high quality training in mathematics teacher education to supply the anticipated need for well-prepared, competent elementary and secondary school mathematics teachers.*
- 9. Student Learning Outcomes:** MAT 150 provides students an opportunity to appreciate certain concepts in fundamental mathematics, especially functions and graphs with a variety of applications. The emphasis is on abstract reasoning, not routine manipulations. MAT 150 satisfies the mathematics (GMT) requirement of the General Education Program. It is open to and appropriate for all undergraduate students, regardless of major.

The General Education learning goals attached to the GMT marker are

 - LG1: Foundational Skills: Think critically, communicate effectively, and develop fundamental skills in quantitative and information literacies.
 - LG2: The Physical and Natural World: Understand fundamental principles of mathematics and statistics, and recognize their relevance in the world.

At the successful completion of this course, the student will be able to

 - SLO1 Reason in mathematical systems beyond data manipulation. (LG1, LG2)

- SLO2 Formulate and use mathematical models to solve real-world problems. (LG1, LG2)
- SLO3 Communicate mathematical solutions clearly and effectively. (LG1)

Course Objectives:

- Identify functions and their domains, describe their properties, and draw their graphs
- Give examples of piecewise functions
- Compute values of functions, solve algebraic equations and inequalities
- Combine different methods to find real and complex roots of polynomials
- Support and justify statements with mathematical arguments

10. Teaching Methods and Assignments for Achieving Learning Outcomes:

Abstract reasoning (SLO1) and clear, effective communication (SLO3) are a part of every lesson and assignment in this course. The student, through regular and frequent attention to the lessons and assignments, will make progress on each of these learning objectives. The formulation and use of mathematical models (SLO2) are integrated in the application of the fundamental techniques covered in the course. Assignments are designed to reinforce these mathematics learning objectives. The student will demonstrate achievement of learning objectives through satisfactory completion of assignments and tests.

Description of WLL course format: WLL courses are enhanced versions of online courses (WEB). Students enrolled in WLL courses will be required to attend a 1 hour class meeting every week and to spend a minimum of 3 hours per week in a computer lab working on online learning assignments. The goal of the weekly class meeting is to expand the students' understanding of selected course topics through problem solving, group work, and other pedagogical methods. The weekly meetings cannot cover all the material the students need to know, and, as with online courses, each student is in charge of his or her own learning and must accept responsibility for spending time independently working on the course assignments, collaborating with classmates when appropriate, and seeking assistance when needed. In addition to the 1 hour class meeting spent specifically with the course instructor, the 3 hours students are required to spend in the computer lab working on online mathematics assignments will be facilitated by teaching assistants specifically trained to assist students enrolled in WLL courses. Three tests will be given during the scheduled class time and students will take the final exam during the common final exam time for mathematics courses.

Weekly lab attendance: You are responsible for signing in and out of lab each time you enter or leave. If you attend the WLL lab 3 hours or more a week, then you earn 1 point for that week. We will begin counting lab hours on Monday of the second week of the semester. The average of your lab attendance points will count 10% of your overall grade. Note: 3 lab hours = 1 point but ANY AMOUNT LESS THAN 3 LAB HOURS = 0 points. Please understand that lab attendance is an important component of this class and is not optional. You are to spend the time working on the material for this class. Time spent on other activities (i.e. Instagram, email, other non-math-related websites, sleeping, etc.) will not count toward your three hours of lab time. The Teaching Assistants who work in the Emporium Lab will deduct time spent on other "non-mathematical" activities from your total lab hours. They will also monitor your activity and notify me of any issues. Note that falsifying the lab records in any way is a violation of the UNCG Academic Integrity Policy. The Emporium lab schedule is included at the end of this syllabus.

Homework assignments: Homework can be accessed in MyMathLab by clicking on the Assignments & Videos button. Homework assignments do not have a time limit and do not have to be finished in one sitting. While working on these homework assignments, you will have unlimited attempts and will have access to all of the help options that MyMathLab provides. For instance, you can follow the steps in "Help Me Solve This", watch a video, or e-mail me for help. Note that if you choose to use the "Ask My Instructor"

button, you will need to tell me all steps that you have attempted to solve the problem so that I can best assist you. You can also rework problems that you miss. These homework assignments are due by midnight on their due date. You have to have a score of 70% or above on a given section's homework assignment to access the quiz for that section.

You will also see Video Homework Assignments listed with each of your MyMathLab homework assignments. These Video Assignments are links to videos that we have made for you for each section that we cover in this course. While these video assignments are not graded, it is definitely in your best interests to watch each of the videos, preferably before coming to class each week.

Quizzes: Quizzes can be accessed in MyMathLab by clicking on the Assignments & Videos button. Quizzes have a 60 minute time limit and must be finished in one sitting. Each quiz may be attempted 2 times and only the highest score will be used to calculate your overall grade. While working on these assignments, you will NOT have access to the help options. Quizzes are due by midnight on their due date. You have to have a score of 70% or above on a given section's homework assignment to access the quiz for that section.

Written homework assignments: In an effort to help facilitate your ability to transfer mathematical learning between written and online formats, you are expected to keep a detailed homework notebook containing the work corresponding to each problem in the MyMathLab Homework assignments. You will also be expected to turn in written homework assignments each week.

- At the end of each class period, you will be given a handout of problems to be returned at the beginning of the next class period.
- The assignments must be handwritten, legible, and well-organized or they will not be graded. All work is to be done on the given handout.
- You are not required to work alone on these assignments, but what you turn in should be written by you and demonstrate your understanding of the problems. Also, follow all other directions given on the individual assignments.
- If you miss class for any reason, the assignment due that day may be scanned and emailed to me BEFORE the start of class.
- Late assignments will not be accepted.

In-class tests: For each test, you will need to bring your ID, #2 pencils, and your scientific calculator. Note that you will not be allowed to use a graphing calculator, any other calculator capable of symbolic manipulation, or the calculator on your cell phone. The dates for our tests are listed on the Schedule of Assignments (below). If you must miss a test, you should contact me BEFORE the date of the test in order to schedule a makeup test. You must have a valid excuse and written evidence of it to be allowed to take a makeup test.

Final exam: The final exam in this course is scheduled for Wednesday, December 7, 2016 from 8am – 11am. The location will be announced later in the semester. For the exam, you will need to bring your ID, #2 pencils, and your scientific calculator. Note that you will not be allowed to use a graphing calculator, any other calculator capable of symbolic manipulation, or the calculator on your cell phone.

11. Evaluation Methods and Guidelines for Assignments: The primary student products are the tests and final exam. Due to the nature of the course, each test will address all of the SLOs. Specifically, SLO1 will be present in most of the questions. Several questions on each test will be designed to address SLO2 and SLO3. Since the final exam is cumulative, all of the SLOs will be addressed there. The student will demonstrate achievement of learning objectives through satisfactory completion of graded assignments and tests. The

questions on graded assignments and tests are designed to evaluate each of the three learning objectives, and in this way the grade reflects the attainment of the objectives.

The final course grade will be determined by lab attendance, online homework assignments and quizzes, weekly written homework assignments, in-class tests, and in-class comprehensive final exam. The weights of these evaluations on the final grade are as follows:

- Lab Attendance – 10%
- MyMathLab Homework – 5%
- MyMathLab Quizzes – 11%
- Weekly Written Homework Assignments – 5%
- Three In-Class Tests – 39% (Each test – 13%)
- Comprehensive Final Exam – 30%

See **Attendance Policy** below for additional information.

Grade Scale:

A+ 97-100	B 83-86	C- 70-72
A 93-96	B- 80-82	D+ 67-69
A- 90-92	C+ 77-79	D 63-66
B+ 87-89	C 73-76	D- 60-62
		F 59 or less

12. Required Materials:

- **Access to MyMathLab.com** is required for this class. You can purchase the access code through the college bookstore, or through the publisher at <http://www.mymathlab.com/>. Anyone not registered in MyMathLab by 12noon on the first Friday of the semester may be dropped from the course. *(Note that the website allows students to register on a temporary basis for up to 14 days.)*
- **A scientific calculator**, such as TI-30XIIS, is suggested for the tests in this course. If you prefer to use another type of calculator, make certain that it has an exponent key and a square root key. GRAPHING CALCULATORS (AS WELL AS ANY TYPE OF CALCULATOR CAPABLE OF SYMBOLIC COMPUTATION) WILL NOT BE PERMITTED DURING TESTS AND THE FINAL EXAM. Also note that the calculators on cell phones will not be permitted during tests and the final exam.
- **OPTIONAL TEXTBOOK:** Sullivan, *Precalculus*, 10th edition, Prentice Hall, 2016. There is an online version of the text available through MyMathLab that is exactly the same as the hardcover version.

13. Topical Outline/ Schedule of Assignment: This information is provided at the end of this syllabus.

14. Other Information:

Office of Accessibility Resources: You are responsible for contacting OARS in 215 EUC (334-5440, <http://ods.uncg.edu>) and for filling out the necessary forms if you wish to have special accommodations. Without these forms the services provided by OARS will not be available to you. OARS cannot schedule or reschedule tests without consent from the instructor.

Academic Integrity Policy: Each student is required to adhere to the Academic Integrity Policy on all work submitted for the course. You are expected to abide by the UNCG Academic Integrity Policy at all times and any cases of academic dishonesty will not be tolerated. Each student is required to sign the Academic Integrity Policy on all major work submitted for the course.

I have abided by the UNCG Academic Integrity Policy on this assignment.

Signature _____ Date _____

More information can be found at <http://sa.uncg.edu/handbook/academic-integrity-policy/>.

Attendance Policy: You are expected to be at each of our class meetings throughout the semester and to participate in the activities planned. Attendance will be taken each week (starting the second week of class and not including the weeks of our tests). Tardiness is not acceptable and two episodes of arriving more than 5 minutes late for class will be counted as an absence. For every absence after two, your final grade in this course will be reduced by 5 points. Also, please note that the use of cell phones, iPads, laptops, and other technology for purposes other than the mathematics of our lesson is rude, distracting, and will not be permitted. Students who do not abide by this policy will be asked to leave and will be counted as absent for the day.

Extensions: All of your online homework assignments and quizzes are available to you from the date that classes start. Computers are unpredictable. Therefore, you need to complete the assignments well BEFORE the due date. If you decide to work on the day an assignment is due, you are taking a risk. Work ahead of the deadlines and this will not be a problem. Extensions will be granted at the discretion of the instructor and only in the event of extreme circumstances. Please note that computer issues on the evening an assignment is due do not meet this criteria!

MyMathLab Support: The MyMathLab Technical Support number is 1-800-677-6337. Also you can reach MyMathLab Tech Support 24/7 from the recently launched MyMathLab support site: <https://support.pearson.com/getsupport>

“UNCG Cares” Statement: UNCG cares about your success as a student. We recognize students often balance many challenging personal issues and demands. Please take advantage of the University resources designed to help. For assistance accessing these resources contact the Dean of Students Office at 334-5514 or Student Academic Services at 334-5730. The Counseling and Testing Center is available for mental health assistance, 334-5874.

Copyright Policy: Selling or purchasing notes from classes for commercial gain is a violation of the UNCG Copyright Policy. Any student who sells notes taken in class for commercial gain, or who purchases notes taken by another student for commercial gain is in violation of this policy and, by extension, is committing a violation of the Student Code of Conduct. <http://sa.uncg.edu/handbook/student-code-of-conduct/>

Inclement Weather: If the university is closed, class will be cancelled. In case you are unsure, check your e-mail and Canvas or call the UNCG “inclement weather announcement” at 336-334-4400.

Add/Drop Dates Affecting this Course: <https://reg.uncg.edu/calendars/>

Additional Resources:

Free Tutoring: The Department of Mathematics and Statistics provides free walk-in tutoring in the Curry 210. For the details, see <http://www.uncg.edu/math/mathhelpcenter>

Student Success Center: Find more academic support at the Student Success Center. <http://success.uncg.edu/>

Special Support Services: Tutoring may be available from Special Support Services. <http://success.uncg.edu/sss/tutoring.php>

WLL Emporium Lab Schedule:

The lab opens on the first day of classes, closes after Reading Day at the end of the semester, and it follows the normal school holiday schedule.

	Monday	Tuesday	Wednesday	Thursday	Friday
9-10am	MAT 115 class	MAT 150 class	MAT 115 class	MAT 150 class	Open for you to complete your lab hours
10am-11am	MAT 115 class	MAT 150 class	MAT 115 class	MAT 150 class	
11am-12noon	Open for you to complete your lab hours	Open for you to complete your lab hours	Open for you to complete your lab hours	Open for you to complete your lab hours	
12noon-1pm					
1pm-2pm					
2pm-3pm					
3pm-4pm					
4pm-5pm					
5pm-6pm					
6pm-7pm					

Tentative Schedule of Assignments:

	MAT 150 05 & 06	
	Precalculus Thursday WLL	
Monday, August 22, 2016	First Day of Classes	
Tuesday, August 23, 2016		
Wednesday, August 24, 2016		
Thursday, August 25, 2016	Class	
Friday, August 26, 2016	HWK: MyMathLab Orientation	
Monday, August 29, 2016	HWK: A.1, A.2, A.3	
Tuesday, August 30, 2016	QUIZ: A.1, A.2, A.3	
Wednesday, August 31, 2016		
Thursday, September 01, 2016	Class (Written homework due)	
Friday, September 02, 2016		
Monday, September 05, 2016	Holiday	
Tuesday, September 06, 2016	HWK: A.4, A.5, A.6	
Wednesday, September 07, 2016	QUIZ: A.4, A.5, A.6	
Thursday, September 08, 2016	Class (Written homework due)	
Friday, September 09, 2016		
Monday, September 12, 2016	HWK: A.7, A.9, A.10	
Tuesday, September 13, 2016	QUIZ: A.7, A.9, A.10	
Wednesday, September 14, 2016		
Thursday, September 15, 2016	Class (Written homework due)	
Friday, September 16, 2016		
Monday, September 19, 2016	HWK: 1.1, 1.2, 1.3	
Tuesday, September 20, 2016	QUIZ: 1.1, 1.2, 1.3	
Wednesday, September 21, 2016		
Thursday, September 22, 2016	Test #1	
Friday, September 23, 2016		
Monday, September 26, 2016	HWK: 1.4, 2.1	
Tuesday, September 27, 2016	QUIZ: 1.4, 2.1	
Wednesday, September 28, 2016		
Thursday, September 29, 2016	Class (Written homework due)	

Friday, September 30, 2016		
Monday, October 03, 2016	HWK: 2.2, 2.3	
Tuesday, October 04, 2016	QUIZ: 2.2, 2.3	
Wednesday, October 05, 2016		
Thursday, October 06, 2016	Class (Written homework due)	
Friday, October 07, 2016		
Monday, October 10, 2016	HWK: 2.4, 2.5	
Tuesday, October 11, 2016	QUIZ: 2.4, 2.5	
Wednesday, October 12, 2016		
Thursday, October 13, 2016	Class (Written homework due)	
Friday, October 14, 2016	Withdrawal date	
Monday, October 17, 2016	Fall Break	
Tuesday, October 18, 2016	Fall Break	
Wednesday, October 19, 2016	HWK: 3.1, 3.3	
Thursday, October 20, 2016	Class (Wrt. Hwk. Due)/ QUIZ: 3.1, 3.3	
Friday, October 21, 2016		
Monday, October 24, 2016	HWK: 3.4, 3.5	
Tuesday, October 25, 2016	QUIZ: 3.4, 3.5	
Wednesday, October 26, 2016		
Thursday, October 27, 2016	Test #2	
Friday, October 28, 2016		
Monday, October 31, 2016	HWK: 4.1, 4.2	
Tuesday, November 01, 2016	QUIZ: 4.1, 4.2	
Wednesday, November 02, 2016		
Thursday, November 03, 2016	Class (Written homework due)	
Friday, November 04, 2016		
Monday, November 07, 2016	HWK: 4.3, 4.4	
Tuesday, November 08, 2016	QUIZ: 4.3, 4.4	
Wednesday, November 09, 2016		
Thursday, November 10, 2016	Class (Written homework due)	
Friday, November 11, 2016		
Monday, November 14, 2016	HWK: 4.5, 4.6	
Tuesday, November 15, 2016	QUIZ: 4.5, 4.6	
Wednesday, November 16, 2016		
Thursday, November 17, 2016	Class (Written homework due)	
Friday, November 18, 2016		
Monday, November 21, 2016	HWK: 5.1, 5.2	
Tuesday, November 22, 2016	QUIZ: 5.1, 5.2	
Wednesday, November 23, 2016	Thanksgiving Holiday	
Thursday, November 24, 2016	Thanksgiving Holiday	
Friday, November 25, 2016	Thanksgiving Holiday	
Monday, November 28, 2016		
Tuesday, November 29, 2016		
Wednesday, November 30, 2016		
Thursday, December 01, 2016	Test #3	
Friday, December 02, 2016		
Monday, December 05, 2016	HWK: Final Exam Practice	
Tuesday, December 06, 2016	Reading Day	
Wednesday, December 07, 2016	Final Exam	