

College Algebra

MAT 115-07 FALL 2017 Syllabus

Time and Place MAT 115-07 is a WEB class and is completely online except for tests and the final.

Instructor Monika Goel

Office PETTY 108

Office Hours 10 – 11:30 am, M, W and by appointment

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Prerequisites None

For Whom Planned This course is part of GEC mathematics requirement. It is a prerequisite course for MAT 120. You must receive a grade of at least a C (i.e. a 73 or better) in this class to be able to move on to MAT 120. Students may not receive credit for both MAT 115 and MAT 150. MAT 115 is not intended for those students who plan to take MAT 191 Calculus I.

Catalog Description Algebraic expressions, exponents, radicals, factoring, solving equations and inequalities, graphing, polynomial and rational functions.

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.*

Student Learning Outcomes MAT 115 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 115 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 have attained the following Student Learning Objectives (SLOs):

- 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,
- *compare* and *contrast* one-to-one functions with non-invertible functions,
- *combine* different methods to find real and complex roots of polynomials,
- *support* and *justify* statements with mathematical arguments.

Teaching Methods and Assignments for Achieving Learning Outcomes The course material will be presented in lecture and online with MyMathLab. Achievement of learning outcomes will be facilitated via the following:

- *MyMathLab homework assignments*: there will be a homework assignment for each section of the textbook covered. You may attempt each homework assignment as many times as you wish until it expires; only the highest score on each problem will count towards your grade.
- *MyMathLab quizzes*: there will be eight quizzes, two quizzes per chapter. You will have two attempts at each quiz; only the highest score of the two will count towards your grade.
- *Sample problems*: we maintain a list of sample problems (test-like questions) for each chapter on Canvas together with worked solutions and list of suggested youtube videos to help you learn how to solve them and learn specific techniques.
- *Tests*: there will be four in class multiple-choice tests with each test covering one chapter. For the test dates see course calendar.
- *Final exam*: the comprehensive final examination will be in multiple-choice format.

Description of WEB course format: WEB courses are completely on-line instruction. These courses are well-suited for independent learners that want more flexibility in their schedule. The online nature of the class allows you the flexibility to study and submit assignments whenever you will be most successful and productive. All online assignments have due dates set to insure that you will cover all of the necessary material by each test date. **There are four PROCTORED tests given during the semester. WEB students will take the final exam during the common final exam time for mathematics courses.** More details regarding the proctored tests and final exam are given below.

Proctored tests: The tests and final given in this class must be proctored. Proctored exams are offered on campus; see the schedule at the end of this document for the dates and times. You may also schedule to take the test(s) at another location through the UNC Online Proctoring Service. You may schedule a proctored exam at <https://online.northcarolina.edu/exams/overview.htm> You must inform me at least one week in advance of your plans to attend the exams at UNCG or to arrange proctoring elsewhere. Please note that some proctoring locations charge a fee. **For each test, you will need to bring your ID, #2 pencils, and your scientific calculator. If you are coming to on Campus exam then you also need to bring your scantron.** There are no online or webcam options for the tests. They must be proctored in person.

If you are taking the exam on campus then you will need to bring your ID or other photo ID such as a driver's license, a scantron likethose sold at the bookstore, #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.

Tutoring If you find yourself with questions you have having trouble answering, get help promptly!

The first person to get help from is me, your instructor. Please come to my office hours. I will answer emails within 48 hours, Monday through Friday. Any changes to office hours will be announced by email as soon as possible. If you have work or class conflicts with my posted office hours, please arrange to meet with me at another time.

Free walk-in tutoring is available in Curry 210. For times, see <http://www.uncg.edu/mat/helpcenter/>

You may also write the math department math_sci@uncg.edu to ask that they forward your email and request for tutoring to their list of tutors for hire.

Expectations of You You are expected to enroll in the course in MyMathLab, immediately. If you are not enrolled by Monday, August 21, 2017 you will be dropped from the course. You don't need money or an access code right away. When you go to enroll, there is a link to click that will give you free access for two weeks. You are expected to use your UNCG email for Canvas and for MyMathLab. You are expected to be aware of and meet every assignment deadline, see the schedule in this syllabus. You are expected to check Canvas, MyMathLab, and your UNCG email regularly for updates and announcements. You are expected to determine for yourself if you need help with the material and contact me or seek tutoring immediately. MyMathLab deadlines will not be extended. Makeup tests will not be given. Exceptions may be made in extreme cases with three days prior notice given and ample documentation.

Evaluation and Grading The following weight distribution is going to be used to determine your final grades:

Homework	20%
Quizzes	10%
Tests	40% (four at 10% each)
Final Exam	30%

The following grading scale will be used to determine your final letter grades:

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

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/>

- **Registering in our course in MyMathLab.com** You must get into MyMathLab and register for our course with course ID **goel45241** If you have not done this by August 21, 2017 you will be dropped from the course. *(Note that the website allows students to register on a free 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. Neither graphing calculators, calculators capable of symbolic computation or cell phone calculators will be permitted in tests or on the final exam.
- **OPTIONAL TEXTBOOK:** Dugopolski, *College Algebra*, 6th ed., Addison Wesley, 2015. The actual printed textbook is optional; you are only required to purchase a MyMathLab access code. The access code gives you access to an online version of the textbook, all online assignments, and various interactive learning aids.

Technical Support: The MyMathLab Technical Support number is **1-844-292-7015**. Also you can reach MyMathLab Tech Support 24/7 from the MyMathLab support page:

<https://support.pearson.com/getsupport/s/>

*****In the event of technical difficulties with MyMathLab, you may attempt to access the site through the following website:** https://www.mathxl.com/login_mml.htm If you have technical difficulties with MyMathLab, such as not being able to log in, not being able to access the course, etc., you must contact **Technical Support**; I cannot fix technical issues with MyMathLab.

Homeworks and Quizzes Each homework assignment and quiz is available from the very first day of classes. You must keep up and get ahead when possible. Read material in eText before attempting the homework: click on **Chapter Contents** in the MyMathLab menu, scroll down and click on the chapter you want, then click on the desired section and click on Multimedia eText. If you do not know how to do a problem you may get help by clicking on *Help Me Solve It* or *Textbook* on the right side of the problem. **You will not be able to access quizzes past their due dates**; all homework assignments are accessible until November 29, 2017, the last day of classes, but there is a **50% penalty for any homework submitted after its due date**. There will be **no make-ups** for missed work, so you should start working on each assignment at least several days before it is due.

Computers are unpredictable. If you decide to work on the day an assignment is due, you are taking a risk!

Tests and Final Examinations For each test and the final, you will need to bring your ID or other photo ID such as a driver's license, #2 pencils, and your scientific calculator. There are no online or webcam options for the tests. They must be proctored in person. If you are taking the exam on campus then you will need to bring your ID or other photo ID such as a driver's license, a scantron like those sold at the bookstore, #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. You will not be allowed to share a calculator with another student during the exam. The dates for our tests are listed on the Schedule of Assignments. **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. There will be a proctored comprehensive final examination on Wednesday, December 6, 8:00AM – 11:00AM.

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: Students are responsible for familiarizing themselves with UNCG's policy on issues such as cheating, plagiarism, misuse of academic resources, falsification, and facilitation of dishonest conduct. Procedures and penalties related to these and other violations of the Academic Integrity Policy are found in the Student Policy Handbook. Each student is required to sign the Academic Integrity Policy on all major work submitted for the course. Refer to (sa.uncg.edu/handbook/academic-integrity-policy/) for additional information.

Academic integrity violations become part of your records. A first violation of the Honor Policy may result in a failure of the course. A second violation while at UNCG results in mandatory suspension or expulsion. Expulsion permanently severs the student from the University, and the student may not attend any of the other University of North Carolina institutions.

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:

August 21 - Last day to withdraw from a course for tuition and fees refund; course withdrawal policy in effect after this date.

October 9 - Last day to withdraw from a course without incurring a WF grade (withdraw failing)

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>

Topical Outline/Calendar Below is a calendar for the course containing sections of the textbook covered and due dates of all online assignments.

Section	Homework Assignments	Quizzes	Tests
P.1	Homework P.1 due 08/18/17		
P.2	Homework P.2 due 08/21/17		
P.3	Homework P.3 due 08/23/17	Quiz 1 due 08/24/17	
P.4	Homework P.4 due 08/25/17		
P.5	Homework P.5 due 08/28/17		
P.6	Homework P.6 due 08/30/17		
P.7	Homework P.7 due 09/01/17	Quiz 2 due 09/05/17	
			Test 1
			Campus: 09/06/17
			Proctored: 09/05/17-09/11/17
			Email me your choice by 08/30/17
1.1	Homework 1.1 due 09/13/17		
1.2	Homework 1.2 due 09/15/17		
1.3	Homework 1.3 due 09/18/17		
1.4	Homework 1.4 due 09/22/17	Quiz 3 due 09/20/17	
1.5	Homework 1.5 due 09/25/17		
1.7	Homework 1.7 due 9/27/17	Quiz 4 due 09/29/17	
			Test 2
			Campus: 10/04/17
			Proctored: 10/01/17-10/07/17
2.1	Homework 2.1 due 10/13/17		
2.2	Homework 2.2 due 10/16/17		
2.3	Homework 2.3 due 10/18/17	Quiz 5 due 10/20/17	
2.4	Homework 2.4 due 10/23/17		
2.5	Homework 2.5 due 10/25/17	Quiz 6 due 10/27/17	
			Test 3
			Campus: 11/01/17
			Proctored: 10/29/17-11/04/17
3.1	Homework 3.1 due 11/08/17		
3.2-3.3	HW 3.2-3.3 due 11/10/17	Quiz 7 due 11/13/17	
3.4	Homework 3.4 due 11/15/17		
3.5	Homework 3.5 due 11/20/17	Quiz 8 due 11/21/17	
			Test 4
			Campus: 11/29/17
			Proctored: 11/27/17-12/02/17
			FINAL
			Campus: 12/06/2017 8AM-11AM
			Proctored: 12/01/2017-12/06/2017
			Email me your choice by 11/27/2017