MA 111-601: Pre-Calculus Summer I 2022 Online

Video Lectures: asynchronius prerecorded; available on the course Moodle page

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Office Hours (Zoom): MW 1:30pm to 3:00pm (or by appointment) Problem/Review Sessions (Zoom): TTh 1:30pm to 2:30pm

Course Description:

(3 credit hours) Study of real numbers, polynomial, rational, exponential, logarithmic, trigonometric functions and all their graphs. The course is designed to prepare the student for MA 141 Calculus for Scientists and Engineers. By the end of this course, students should be able to:

- 1. Recognize and use proper notation, precise definitions and theorems when solving problems and communicating solutions.
- 2. Manipulate functions and equations algebraically into different forms given specific problem contexts.
- 3. Graph functions and equations to a required level of accuracy.
- 4. Solve equations and inequalities algebraically and graphically.
- 5. Write a function to model a given scenario and make predictions based on that model.
- 6. Adapt a general function to model a given scenario and make predictions based on that model.

Textbook:

Openstax Precalculus textbook available for free download:

https://openstax.org/details/books/precalculus

Please download the pdf so you can see the page numbers. The homework in Webassign correlates to the exercises in this textbook.

Course Structure and Rules of Engagement:

All course learning materials and resources are housed in Moodle: http://wolfware.ncsu.edu/. The video lectures are pre-recorded by Dr. Elizabeth Dempster and made available in Moodle, along with PDFs of the course notes. If you find that something is unclear or needs additional explanation, ask for help before it is too late.

I will have office hours via Zoom on Mondays and Wednesdays 1:30pm- 3pm. They are a good place to get your questions answered. If you plan on attending, please join the call with audio and video within the first 30 minutes. If no students have shown up by 2:00p.m., I will end the office hours. Office hours will also be available by appointment via email.

I will also be holding optional, recorded regular problems and review session via Zoom, Tuesday and Thursday 1:30 pm - 2:30 pm. This is meant to help you go through the course materials. If no students have shown up by 2:00 p.m., I will end these sessions.

Course Communication:

Modes of communication in use for this course include email, office hours, recitation, and Moodle discussion forums. Office hours will be held on Mondays and Wednesdays, 1:30pm-3pm.

- I will do my best to respond to weekday e-mails and posts within 24 hours. Email messages or posts left after 4 pm Friday will be responded to by the following Monday.
- If you cannot make it to my posted office hours, please email me to schedule a time that is convenient. Include several time slots that would work for you in your email
- Please be aware that ALL email communications for this course will be sent to your NCSU unity email.
 If you do not regularly use your ncsu.edu account, there are settings within Gmail that allow you to forward your e-mail to another account. For more information, see https://oit.ncsu.edu/my-it/email-calendaring/email-forwarding/.

Homeworks:

The WebAssign homework assignments are obtained, submitted, and graded online. I recommend keeping a written copy of your work and notes. It is very important that you keep up with this work. I highly recommend you print each assignment and work it with pencil and paper before submitting. Extensions may be requested via WebAssign, but there is a small penalty to help motivate you to keep up with the work in timely way.

Each module has two parts to the homework assignment. The **Part 1 assignments** are due regularly. The **Part 2 assignments** are much shorter, but include problems that are harder and similar to the ones you will be working on during the Zoom workday. The **Part 2 assignments** are all due right before the test covering those modules. The due dates are all posted on Webassign.

Testing:

Test 1: Friday, May 27th Test 2: Wednesday, June 8th Test 3: Friday, June 17th

If a test is missed with an excused absence (i.e. for a university-approved reason, with supporting documentation), then a make-up test will be scheduled individually. If a test is missed for an unexcused absence, that test will be given a score of 0. No make-ups will be allowed. Documentation for an excused absence must be provided within 1 week of the missed class. All absences that require a make up test or other special accommodations must go through the NCSU absence verification process; here is the link to that office: https://dasa.ncsu.edu/students/absence-verification-process/

Final Exam:

The final exam will cover all modules 1-22 and we'll follow the NCSU official exam schedule.

Grade Disputes:

Answer keys for all tests will be posted on Moodle after the tests. If a grading error is found after looking at the posted answer key then you should **provide a written explanation of the error to the instructor within 1 week**. Do not alter the original work. The entire test may be re-graded and the test grade is subject to remain the same, increase or decrease at the discretion of the instructor.

Grading Policy:

Your grade will be detremined by the following breakdown:

Homework: 15%

Tests (3): 60% (20 % each)

Final: 25%

A student's numerical average will be converted to a letter grade as follows. The lowest test score will be replaced with the final exam score. (Do not expect any additional rounding or curves):

\mathbf{A} +	98 - 100	\mathbf{A}	92 - 97	A-	90-91
B+	88 - 90	В	82-87	B-	80-81
C+	78-80	\mathbf{C}	72-77	C-	70-71
D+	68-70	D	62-67	D-	60-61
F 0 - 59					

General Class Expectations:

- 1. This class is an online class so you will need to take responsibility for your own learning and set your own pace within our guidelines.
 - (a) Watch the **video lectures** for the week's modules. Before or after the videos, do the **self check quizzes** in Moodle. These should allow you to assess how well you remember a certain topic.
 - (b) Complete the **Part 1 WebAssigns**. Attend zoom classes and or office hours if you have questions.
 - (c) Work on the **Part 2 WebAssigns** after the in-class workday

 The **Part 2 WebAssigns** are not due until right before the test they cover.
- 2. Check your email and Moodle site regularly. Any announcement made by email is saved under announcements on our Moodle page.
- 3. Be **respectful and professional**. Via email, please identify yourself and the class clearly. Treat everyone in class (other students and lecturer) with respect and courtesy. In office hours, be prepared to ask questions and work with others that are in the office hours time too.
- 4. Be accountable for your own education. You are responsible for resolving confusion about assignments, due dates, exam dates, accommodations, etc.
- 5. Do not submit work that is not yours. It is understood that your name or signature on any assignment or attached to any online submission indicates your adherence to the NC State Honor Pledge: "I have neither given nor received unauthorized aid on this test or assignment."
- 6. No graphing calculators or cell phones or other devices that go to the internet are allowed during tests and exams. You may have a simple non-graphing calculator. It is an honor code violation if you use a graphing calculator on an exam. It is also an honor code violation to access the internet in any way (phones, watches, etc) during an exam. Place all cell phones and other devices "off" and in your back pack or not on you during the exams to keep you from accidentally looking at it unintentionally during a test or exam.

Electronically-hosted Components:

Please see the relevant technology requirements (Zoom, WebAssign) provided in Moodle. Please be advised that students may disclose personally identifiable information to other students in the course, via electronic tools like email or web-postings. Examples include online discussions of class topics and posting of student coursework. All students are expected to respect the privacy of others by not sharing or using such information outside the course.

Disability Services:

Reasonable accommodations will be made for students with verifiable disabilities. To receive accommodations, students must register with Disability Services for Students at 1900 Student Health Center, Campus Box 7509, 919-515-7653.

Please see the Academic Accommodations for Students with Disabilities Regulations (REG02.20.1). You must discuss accommodations with the instructor *prior* to a test date. https://dro.dasa.ncsu.edu

Getting Help:

There is free drop in tutoring available during the week days in the Math Mutlimedia Center in Sas 2105 https://math.sciences.ncsu.edu/undergraduate/courses-faq/math-multimedia-center

There are also wonderful resources for help at the Academic Success Center on the 2nd floor of the D.H.Hill Jr. Library

https://asc.dasa.ncsu.edu

NC State Rules of Regulations:

Students are responsible for reviewing the NC State University Policies, Rules, and Regulations (PRRs) which pertain to their course rights and responsibilities:

- Equal Opportunity and Non-Discriminatory Policy Statement (https://policies.ncsu.edu/policy/pol-04-25-05/) with additional references at https://oied.ncsu.edu/equity/policies/
- Code of Student Conduct (https://policies.ncsu.edu/policy/pol-11-35-01/)