

MA 108: Section 001 -Spring 2022

TEXT: Textbook Precalculus, Jay Abramson. This text is a free pdf download from openstax (<https://openstax.org/details/books/precalculus>).

INSTRUCTOR: R. FULP, OFFICE SAS 4232

I check my e-mail Monday-Friday shortly before 8:00 AM. I will be available in my office almost any time between 8:00AM and 3:45 Pm on Tuesdays and Thursdays. Simply e-mail me to arrange a time to meet. I will try to respond to questions then and at other times. I will also check my e-mail from time to time throughout the day E-MAIL: fulp@math.ncsu.edu

Chapters and topics to be covered

Chapter 5 Trigonometric Functions (roughly weeks 1-3)

5.1 Angles

5.2 Unit Circle: Sine and Cosine Functions

5.3 The Other Trigonometric Functions

5.4 Right Triangle Trigonometry

Test 1 (around week 4)

Chapter 6 Periodic Functions (roughly weeks 5-7)

6.1 Graphs of the Sine and Cosine Functions

6.2 Graphs of the Other Trigonometric Functions

6.3 Inverse Trigonometric Functions

Test 2 (around week 8)

Chapter 7 Trigonometric Identities and Equations (roughly weeks 9-12)

7.1 Solving Trigonometric Equations with Identities

7.2 Sum and Difference Identities

7.3 Double-Angle, Half-Angle, and Reduction Formulas

7.4 Sum-to-Product and Product-to-Sum Formulas

7.5 Solving Trigonometric Equations

7.6 Modeling with Trigonometric Equations

Test 3 (around week 13)

I will choose optional topics from Chapter 8 if we finish in time.

Chapter 8 Further Applications of Trigonometry (weeks 14-15)

8.1 Non-right Triangles: Law of Sines

8.2 Non-right Triangles: Law of Cosines

8.3 Polar Coordinates

8.4 Polar Coordinates: Graphs

8.5 Polar Form of Complex Numbers 8.6 Parametric Equations

8.7 Parametric Equations: Graphs

8.8 Vectors

GRADING

There will be 3 tests and a final exam given in person in the classroom. Homework will be assigned almost daily and will be done via teams of 3 per team. These will be submitted via Moodle once or twice a week and graded on Moodle.

HOMEWORK WILL COUNT 20 %

EACH TEST WILL COUNT 20 %

THE FINAL EXAM WILL COUNT 20 %

Grading scale : Plus and minus grades are given sparingly. The highest A is given an A+ and the lowest A an A-, with a similar distribution for B's, C's, and D's. The scales are: 90-100 gets you an A, 80-89 a B, 65-79 a C, and 55-64 a D. Grades below 55 result in an F.

FINAL EXAM: 5/2/2022 Monday 8:30 AM - 11:00 AM 02235 SAS Hall

Academic Integrity Students are required to comply with the university policy on academic integrity found in the Code of Student Conduct found at <http://policies.ncsu.edu/policy/pol-11-35-01> The NCSU Student Code of

Conduct covers all work done in this course. Any suspected violations will be promptly reported. Academic dishonesty will result in an automatic failing grade for the course.

Course Evaluations A formal evaluation is conducted by the University at the end of the semester and the goal is to achieve 100

Accommodations for Disabilities Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, student must register with the Disability Resources Office (<https://dro.dasa.ncsu.edu/>), 919-515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation at <http://policies.ncsu.edu/regulation/reg-02-20-01>.

Trans-Inclusive Statement In an effort to affirm and respect the identities of transgender students in the classroom and beyond, please contact me if you wish to be referred to using a name and/or pronouns other than what is listed in the student directory.

Health and Well-Being Resources: These are difficult times, and academic and personal stress are natural results. Everyone is encouraged to take care of themselves and their peers. If you need additional support, there are many resources on campus to help you:

Counseling Center (NCSU Counseling Center)

Health Center (Health Services — Student)

NC State CARES Team: As members of the NC State Wolfpack community, we each share a personal responsibility to express concern for one another and to ensure that our campus remains a healthy and safe environment for learning. Occasionally, you may come across a classmate whose personal behavior concerns or worries you, either for your classmates well-being, for your well-being, or for the well-being of others. When this is the case, I would encourage you to report the behavior to the NC State CARES

team: (Share a Concern).

If you or someone you know are experiencing food, housing or financial insecurity, please see the Pack Essentials Program (Pack Essentials).

Additional COVID-19 Information: Due to the Coronavirus pandemic, public health measures have been implemented across campus. Students should stay current with these practices and expectations through the Protect the Pack website (<https://www.ncsu.edu/coronavirus/>.)

We are most concerned about your health and the health of the students, faculty, and staff across campus. If you test positive for COVID-19, or are told by a healthcare provider that you are presumed positive for the virus, please follow university guidelines, including self-reporting (Coronavirus Self Reporting): Self-reporting is not only to help provide support to you, but also to assist in contact tracing for containing the spread of the virus.

Community Standards related to COVID-19: We are all responsible for protecting ourselves and our community. Please see the Community Standards and Rule 04.21.01 regarding Personal Safety Requirements Related to COVID-19 (RUL 04.21.01 Personal Safety Requirements Related to COVID-19 Policies, Regulations and Rules).

Basic Needs Security Any student who faces challenges securing their food or housing or has other severe adverse experiences and believes this may affect their performance in the course is encouraged to notify the professor if you are comfortable in doing so. Alternatively, you can contact the Division of Academic and Student Affairs to learn more about the Pack Essentials program <https://dasa.ncsu.edu/pack-essentials/> Supporting Fellow Students in Distress As members of the NC State Wolfpack community, we each share a personal responsibility to express concern for one another and to ensure that this classroom (as well as the campus as a whole) remains a healthy and safe environment for learning.

Occasionally, you may come across a classmate whose personal behavior concerns or worries you, either for your classmates well-being, for your well-being or for the well-being of others. When this is the case, I would encourage

you to report the behavior on the link located on NC States Students of Concern website (<http://go.ncsu.edu/NCSUcares>).

List of Policies Students are responsible for reviewing the NC State University PRRs (policies, rules and regulations) that pertain to their course rights and responsibilities: Equal Opportunity and Non-Discrimination 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/>

Grades and Grade Point Average <https://policies.ncsu.edu/regulation/reg-02-50-03/> Credit-Only Courses <https://policies.ncsu.edu/regulation/reg-02-20-15/> Audits <https://policies.ncsu.edu/regulation/reg-02-20-04/>