Math 130: Precalculus
Summer II, 2023

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Office Hours Meeting Time and Room: TBD

Instructing Assistant: Kaitlyn Hohmeier
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Course Meeting Time and Room: Weekdays 9:45AM – 11:15pm
Phillips 224

Course Information

Prerequisite:

- A score of 520 or higher on the SAT Subject Test, Math, Level 1 or 2
- A score of 27 or higher on the math portion of the ACT
- A score of 2 on the Calculus AP exam (or AB subscore from the BC exam) or
- A passing grade in Math 110.

Text:
Precalculus, Concepts Through Functions, by Sullivan/Sullivan, 5th Ed., Pearson

MyLabMath:
The access code may be purchased online or in the UNC Textbook store. You can also bundle with a physical copy of the textbook (See options below). You must purchase an access code and enroll online in order to view and submit homework assignments.

Textbook Options (In order of least to greatest cost for students):

- MyLabMath with e-book (Purchase online or bookstore)
- Book a la carte + MyLabMath (This is a loose-leaf text option)
- Hardback Textbook + MyLabMath

Course Website:
https://tarheels.live/bruney/math-130-s2-2023/
https://sakai.unc.edu/portal (For grades and announcements)

Course Designed: Primarily for students who will enter the calculus sequence Math 231-233

Course Content:

- Function Properties and Inverses
- Trigonometry
- Conics

- Parametric Equations
- Polar Coordinates

Class Structure:

- Students are expected to prepare for each class by reading the text before the start of class.
- Classes will include both lecturing, cooperative learning and inquiry based methods.

Resources

Accessibility Resources and Service: Any student who utilizes Accessibility services should contact me immediately to make sure you are receiving all of your accommodations and that I have acquired your paper work from the University.

Math Help Center: A free in-person and zoom tutoring option in Phillips Hall Room 237. Hours are Monday-Thursday from 12:30 PM – 2:30 PM. There will be no MHC hours during final exams, or July 4th.

Zoom Information:
https://unc.zoom.us/j/93762029361
Meeting ID: 937 6202 9361

Learning Center: Facilitates study groups, provides one on one peer tutoring, and provides one on one academic coaching with a faculty coach. Contact Jackie Stone at jacsto@email.unc.edu for more information on the services for mathematics or go to http://learningcenter.unc.edu/.

Other:
For more information, including **old final exams**, **old midterms**, and **private tutoring**, visit:
https://math.unc.edu/undergraduate/resources/

Class Expectations

Honor Code Statement: Each student is expected to abide by the Honor Code and the Student Code of Conduct. http://honor.unc.edu

In this class, all exams must be done individually and are closed book and closed notes. It is an instance of cheating to give or receive help on an exam, except from the instructor. On homework assignments, students are encouraged to work together in pairs or small groups, provided that all participants are contributing and the collaboration benefits the learning of all involved. Simply copying or trading answers is an instance of cheating.

Attendance: You are expected to attend class. I will be taking attendance at the start and end of class. If you need to leave early, let me know in advance.

Electronic Devices: Laptop/Tablet for class notes/calculator, Cell Phones put away

Grading

Categories:

Test: There will be four tests given on Mondays. Tests may be given through MyLabMath, or on paper, or as a combination. The tentative test dates are as follows:

- Test 1 July 3
- Test 2 July 10
- Test 3 July 17
- Test 4 July 24

Final: There is a comprehensive final on July 31st!

Homework: MyLabMath Homework, and In-Class assignments (see information below and MyLabMath for Due Dates).

Grading System: 10-point grading scheme

Letter Grade*	-		+
A	90-92%	93-100%	
B	80-82%	83-86%	87-89%
C	70-72%	73-76%	77-79%
D		60-66%	67-69%
F		Below 60%	

*Rounded to the nearest integer.

NOTES:

- You must earn at least a C- in Math 130 to proceed to Math 231.
- There are no opportunities for extra credit in this class.
- There are no opportunities to make-up tests or HW.

Grade Calculation:

Course Category	Percentage
Test 1	12%
Test 2	12%
Test 3	12%
Test 4	12%
Final Exam	35%
MyLabMath Homework	15%
MyLabMath Learning Catalytics In-Class Assignments	2%

GradeScope: Tests will be graded/returned on Gradescope. https://gradescope.com

Authorized Aid: I strongly encourage you to collaborate with your classmates on your HW. Study groups are what got me through college, so I highly suggest you do the same. I discourage

depending on an on online problem-solving service (Wolfram-Alpha or ChatGPT) for homework. If you do anyway it will show when it comes to test time.

Study Suggestions: Some Guidelines to help with success in this course.

- Read the text for the section we will be covering before class and study your notes after class!
- Start the MyLabMath assignments the same day after we begin a section in class and treat each attempt like it is your only attempt. Have your textbook open so that you can match up each MyLabMath question with the question from the text.
- Try to avoid using your calculator unless a question says, "answer to the nearest …".
- Draw pictures when applicable.
- If you are having difficulty with a MyLabMath question, reference your notes and textbook.
- Try not to abuse the Question Help (View an Example, Help me Solve This).
- Seek help when you do not understand a concept.
- Before each test, be sure that you understand and can work all problem types homework list without any assistance.
- Always remember that it is important to ***Communicate Mathematically*** when working problems or writing for a test or the final exam. Write in a mathematical fashion using numbers, variables, symbols, and words to clearly express your solution to a problem. A solution to a problem includes not only the answer(s) clearly indicted, but also the logical progression of steps to achieve the answer(s). When applicable, clearly label all sketches, graphs, and/or charts.
- View all assignment keys. Carefully review all graded materials and rework problems that were not completed correctly as soon as the key is available. This will help you avoid making similar errors in the future.

MyLabMath Information

MyLabMath: https://mlm.pearson.com/enrollment/bruney66482
Course ID: bruney66482
Registration Information: This document is posted on my website
If you have Financial Aid for textbooks: In order to be reimbursed for the purchases, students receiving financial aid must buy MyLabMath and/or textbook through the UNC Student Stores. Others may want to buy MyLabMath access directly from MyLabMath's website.

Syllabus Changes

The instructor reserves the right to make changes to the syllabus. These changes will be announced as early as possible.

MATH 130 Summer 2023 Schedule
*****Tentative*****

Day	DATE	SECTION/TOPIC	MyLabMath DUE DATE
1	6/26	Syllabus/MyLabMath 1.1 Functions 1.2 Graph of a Function	6/27
2	6/27	1.3 Properties of Functions, 1.4 Library of Functions	6/28
3	6/28	1.5 Graphing Techniques: Transformations (Review on Own) 4.2 One-to-One Functions; Inverse Functions	6/29
4	6/29	5.1 Angles and Their Measure 7.1 Right Triangle Trigonometry	7/2
5	6/30	5.2 Trigonometric Functions: Unit Circle Approach Test 1 Review	7/2
6	7/3	**Test 1**	NA
	7/4	NO CLASS: 4th of July	
7	7/5	5.3 Properties of Trigonometric Functions 5.4 Graphs of Sine and Cosine Functions	7/6
8	7/6	5.5 Graphs of the Tangent, Cotangent, Cosecant, and Secant Functions 5.6 Phase Shift	7/9
9	7/7	6.1 Inverse Sine, Cosine, and Tangent Functions 6.2 … (continued) Test 2 Review	7/9
10	7/10	**Test 2**	NA
11	7/11	6.3 Trigonometric Equations 6.4 Trigonometric Identities	7/12
12	7/12	6.5 Sum and Difference Formulas 6.6 Double-angle and Half-angle Formulas 7.1 Right Triangle Trigonometry; Applications	7/13
13	7/13	7.2 Law of Sines 7.3 Law of Cosines	7/16
14	7/14	7.4 Area of Triangles Test 3 Review	7/16
15	7/17	**Test 3**	NA
16	7/18	9.1 Conics 9.2 The Parabola	7/19
17	7/19	9.3 The Ellipse	7/20
18	7/20	9.4 The Hyperbola	7/23
19	7/21	8.1 Polar Coordinates Test 4 Review	7/23
20	7/24	**Test 4**	NA
21	7/25	8.2 Polar Equations and Graphs	7/26
22	7/26	9.7 Plane Curves and Parametric Equations	7/27
23	7/27	Final Review	NA
24	7/28	Reading Day	NA
		Monday, July 31st, 8:00am – 11:00 am	