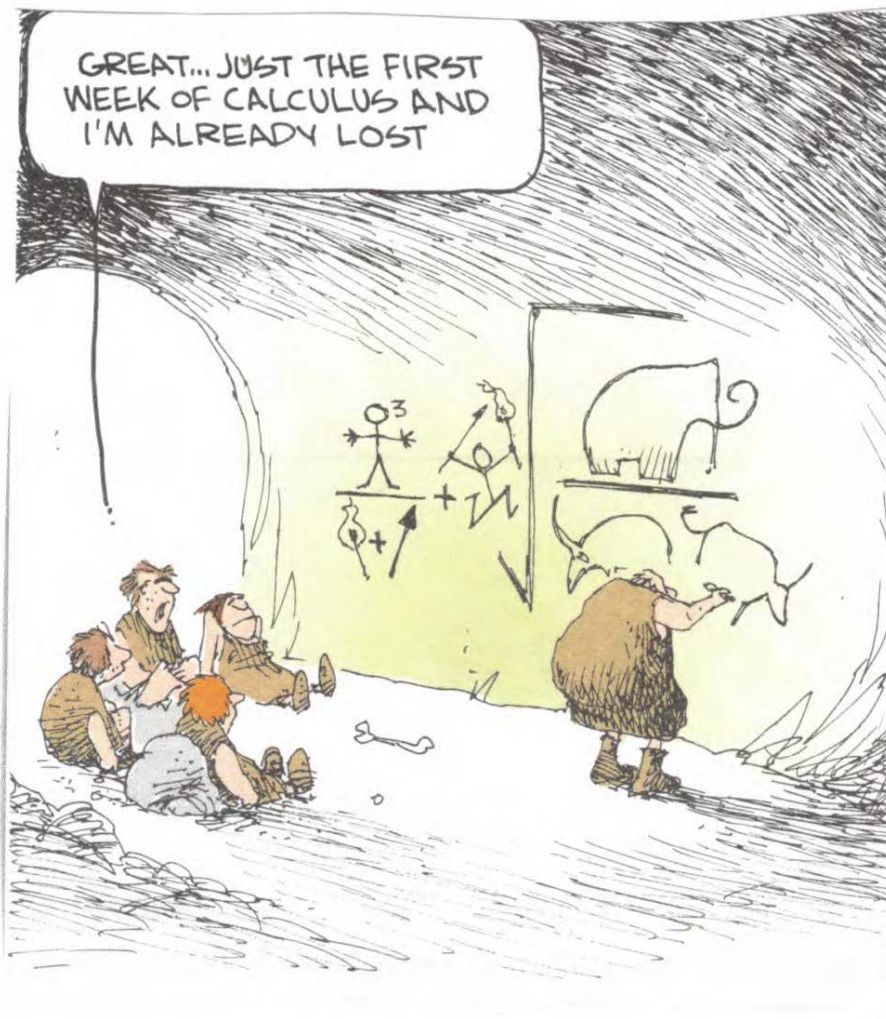


Syllabus for MAT 125 Fall 2023 – Calculus A



The Course Coordinator is Professor David Kahn. His email is david.kahn@stonybrook.edu

Office hours for Professor Kahn: TuTh 10 - 11 am (by Zoom). Advising Hour: Wed 11 – Noon (by Zoom). The zoom link can be found at: [Zoom Personal Meeting](#)

Professor Kahn's lectures will be by zoom. The link can be found in Brightspace under the zoom meeting tab. His lectures will be recorded and can be accessed later through a folder posted in Brightspace.

About the Course

The goal of this course is to ensure that you have a proper background to take Calculus B at Stony Brook. This means that we will need to accomplish several things:

- Develop your understanding of the concepts of Differential Calculus and your ability to apply it to problems both within and outside of Mathematics.
- Deepen your understanding of functions whether viewed as graphs, tables, or formulae.
- Develop fluency in the language of mathematics, which is essential for success in the sciences or engineering.

The text is called *Single Variable Calculus* and is available as a free PDF through your Webassign account.

Course Prerequisites: In order to take MAT125, you must have either

- Passed [MAT 123](#) with a grade of C or better, or
- Received a score of level 4 or better on the [math placement exam](#).

Brightspace

Throughout this course, we will communicate with the course by making announcements in Brightspace. You will receive an email containing the announcement. The announcement will also remain in Brightspace throughout the course for you to refer to. You are expected to read each announcement carefully and it is your responsibility to know what has been announced.

We suggest that you check Brightspace announcements before you email your TA or professor.

There are two sections of Brightspace. One will be the main section of Brightspace and will contain information that applies to the entire course. The other section will be specific to your recitation and will contain information that applies only to your recitation.

Your homework, final exam grades, and final course grades will be posted in the Grade Center in the main section in Brightspace. You can find the grades for all of your Webassign work in the GradeBook in Webassign.

Webassign

You will access Webassign through its website (www.webassign.net) .

We will post instructions in the Announcements in Brightspace.

You can find the grades for all of your Webassign work in the GradeBook in Webassign.

Medical Excuses

If you are going to claim a medical excuse to ask for an extension for WebAssign, your medical excuse must include a note from a medical professional stating that, *in that person's professional opinion, you were so ill that you were unable to complete the homework in a timely fashion or even to email your professor or TA about your issue.*

Homeworks and WebAssign assignments

You will have six homework assignments and six WebAssign assignments that will approximately alternate weeks (see schedule below). In the weeks when you have a WebAssign assignment, you are to go to the Testing Center in Frey Hall, room 104 during your recitation time. You will take your WebAssign assignment there. In the weeks when you have a homework assignment, you will turn the homework during your recitation.

You are expected to attend every recitation.

We will drop the lowest score of each of your WebAssign and homework assignments.

Exams

There are no midterms in this course, only a final exam

Final Tuesday, December 12, 2:15 pm – 5:00 pm.

The final exam will be on paper and *in person*.

If you are eligible for extra time or other special conditions, please make sure that you contact SASC to set that up.

In order to preserve academic integrity, students will NOT be able to view their quizzes or final exams after they have taken them.

Week of	28-Aug	
Week of	4-Sep	<i>Labor Day</i>
Week of	11-Sep	Quiz in the Testing Center
Week of	18-Sep	Homework in recitation
Week of	25-Sep	Quiz in the Testing Center
Week of	2-Oct	Homework in recitation
Week of	9-Oct	<i>Fall break</i>
Week of	16-Oct	Quiz in the Testing Center
Week of	23-Oct	Homework in recitation
Week of	30-Oct	Quiz in the Testing Center
Week of	6-Nov	Homework in recitation
Week of	13-Nov	Quiz in the Testing Center
Week of	20-Nov	Homework in recitation
Week of	27-Nov	Quiz in the Testing Center
Week of	4-Dec	Homework in recitation
Week of	11-Dec	

Important Dates:

The last day of classes is Monday, December 11.

You may drop without any tuition liability until Sunday, September 3.

You may withdraw without a “W”, or add/swap classes, until Monday, September 11 at **4:00 pm**.

You may move down in MAT/MAP courses until Friday, October 13 at **4:00 pm**.

You may withdraw with a “W” until Friday, October 27, at **4:00 pm**.

You may change the course to Grade/Pass/No Credit until Friday, October 27, at **4:00 pm**.

Fall Break is Monday, October 9 and Tuesday, October 10.

Thanksgiving Break is Wednesday, November 22 until Sunday, November 26.
Friday, December 15 is Reading Day.

How your grade will be calculated

Webassign Quizzes – 30%

Homeworks (paper and WebAssign) – 40%

Final – 30%

Relationship between course overall numerical and letter grade: **90.00 or above is an A or A-, 80.00-89.99 is a B+, B, or B-, 70.00-79.99 is a C+, C, or C-, 60.00-69.99 is a D, below 60 is an F.**

NOTE: These letter grades are threshold scores only. Actual final scores needed to earn a certain letter grade may be lowered if warranted based on the difficulty of the exams. In other words, if your final total points in the course equal a 90%, you will not earn less than an A; however, the threshold for an A may be lower

Course Schedule (subject to changes made by the coordinator)

Date	Topic
28-Aug	Administrative material
30-Aug	Precalculus Review
4-Sep	Tangent and Velocity Problems, Limit of a function
6-Sep	The Limit Laws
11-Sep	Limits at Infinity and Asymptotes
13-Sep	More Limits
18-Sep	Continuity, the Intermediate Value Theorem
20-Sep	Derivatives of polynomials and exponential functions
25-Sep	The Product and the Quotient Rules

27-Sep	Derivatives of Trigonometric Functions; The Chain Rule
2-Oct	The Chain Rule
4-Oct	Implicit Differentiation
11-Oct	Implicit Differentiation
16-Oct	Derivatives of Inverse Trigonometric, Logarithmic, and Exponential Functions
18-Oct	Derivative Rules Review and Practice
23-Oct	Linear Approximations and Differentials,
25-Oct	L'Hopital's Rule
30-Oct	Related Rates
1-Nov	Related Rates
6-Nov	Curve Sketching
8-Nov	Curve Sketching
13-Nov	Curve Sketching
15-Nov	Mean Value Theorem, Rolle's Theorem
20-Nov	What does the derivative of f tell us about f ?
27-Nov	Optimization Problems
29-Nov	Optimization Problems
4-Dec	Review for Final Exam
6-Dec	Review for Final Exam

Americans with Disabilities Act:

If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact the Student Accessibility Support Center, Stony Brook Union Suite 107, (631) 632-6748, or at sasc@stonybrook.edu. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and the Student Accessibility Support Center. For procedures and information go to the following website:

<https://ehs.stonybrook.edu/programs/fire-safety/emergency-evacuation/evacuation-guide-disabilities> and search Fire Safety and Evacuation and Disabilities.

Academic Integrity:

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty is required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Professions, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-

specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty please refer to the academic judiciary website at http://www.stonybrook.edu/commcms/academic_integrity/index.html

Critical Incident Management:

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Student Conduct and Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.

Conduct

Stony Brook University expects students to maintain standards of personal integrity that are in harmony with the educational goals of the institution; to observe national, state, and local laws and University regulations; and to respect the rights, privileges, and property of other people. Faculty are *required* to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.

Student Absences Statement

Students are expected to attend every class, report for examinations and submit major graded coursework as scheduled. If a student is unable to attend lecture(s), report for any exams or complete major graded coursework as scheduled due to extenuating circumstances, the student must contact the instructor as soon as possible. Students may be requested to provide documentation to support their absence and/or may be referred to the Student Support Team for assistance. Students will be provided reasonable accommodations for missed exams, assignments or projects due to significant illness, tragedy or other personal emergencies. Please note, all students must follow Stony Brook, local, state and Centers for Disease Control and Prevention (CDC) guidelines to reduce the risk of transmission of COVID.