

## MAT 126: Calculus B, Summer I 2020

Instructor: Samuel Auyeung

Email: [shamuel.ayeung@stonybrook.edu](mailto:shamuel.ayeung@stonybrook.edu)

Office Hours through Zoom: TBA

About the Course:

The goal of this course is to extend your knowledge from Differential Calculus to Integral Calculus. We will cover:

- The Definite Integral (week 1)
- Fundamental Theorem of Calculus (week 1)
- Substitution Rule and Integration by Parts (week 2)
- Trigonometric Integrals (week 2-3)
- Integration by Partial Fractions (week 3)
- Improper Integrals (week 4)
- Computation of Areas and Volumes (week 5)
- Arc Length (week 5)
- Applications of Integration, e.g. Probability and Complex Numbers (week 6)

Texts:

Calculus-Volume 1 and Volume 2 found on OpenStax textbooks. The textbooks are an Open Educational Resource and are free.

Lectures:

Lectures will be delivered synchronously through Zoom. The links will be made available when the time comes.

Homework:

The homework is through Lumen Learning, a free program.

Exams:

There will be one Midterm and one Final. The midterm date will be flexible (depends on the pacing of the class) but the final exam will be on Thursday, 2 July. The exams will be done at home and you will submit them electronically within a given time frame.

Grading:

Homework – 40%

Midterm – 25%

Final – 35%

Since this is an online course, you are responsible for having a reliable computer and Internet connection throughout the term. You may be at a disadvantage if you attempt to complete all coursework on a smart phone or tablet. It may not be possible to submit the files required for your assignments.

#### Americans with Disabilities Act:

If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room 128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential. Students requiring emergency evacuation are encouraged to discuss their needs with their professors and SASC. For procedures and information, go to: <http://www.ehs.sunysb.edu> and look at 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 are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, 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/uaa/academicjudiciary/>

#### 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 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.

#### 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.