Applied Calculus I
AMS 151. Section 2
Spring 24

Instructor: Dr. Kazem Mahdavi, Professor of Mathematics
Office: Academic Building A 511
Office Hours: TTh 5:00 – 6:30pm, Th 2:00-3:00 pm or
         by appointment
Telephone Number: 032-626-1384
Email: kazem.mahdavi@sunykorea.ac.kr
Class Meeting Time: TTh 3:30 – 4:50 pm
Room: C107
TA: Eunsol Jung (eunsol.jung@stonybrook.edu)
     Deok Kyun Han (han.deokkyun@stonybrook.edu)
TA office hours: Eunsol Jung, Wed 3:30 – 5:30pm
                 Deok Kyun Han, T 2:00- 3:00pm
                         Th 11:00 – 12:00noon

Notice: We will use Brightspace to provide information and communicate with students. Submit your homework on Brightspace in PDF format. Notice that
     Submission of homework by email
     is not allowed. Also, late submission and submission in person is not accepted

Required Texts: Calculus (Single Variable), by Hughes-Hallett, Gleason, McCallum, et.al., 6th Edition (International Student Version)

Course Description:
This is a 3 credit hours course. In this course we review functions and their applications; analytic methods of differentiation; interpretations and applications of differentiation; introduction to integration. This course is for CEAS majors.

Prerequisite: B or higher in MAT 123, or level 5 on the mathematics placement examination.
Notice: not for credit in addition to MAT 125, 126, 131, or 141.

Evaluation Methods

homework	50 points
Test 1	100 points
Final	150 points

Notice: to get a passing grade for the course your final exam score should be at least 105 (70%).

HOMEWORK
In order to learn you must practice by doing the homework. Therefore, homework will be assigned weekly. Tests will be similar to your homework, materials that covered in the class, and reading assignments. No late homework will be accepted.

Test Dates (Tentative):
Test 1, will be around mid April
Final: Monday June 10, 6:30- 9:00pm

Group Work: I strongly encourage students to form a study group to do their homework, get prepared for tests.

Grades

93%-100%	A
90%-92%	A-
87%-89%	B+
83%-86%	B
80%-82%	B-
77%-79%	C+
73%-76%	C
70%-72%	C-
67%-69%	D+
63%-66%	D
60%-62%	D-
0%- 59%	F

Learning Outcomes
1.) Demonstrate how to use mathematical functions in real-world.
* linear functions;
* exponential functions;
* logarithmic functions;
* trigonometric functions.

2.) Demonstrate a conceptual and technical understanding of the derivative,
* mathematical and applied settings where the derivative is a rate of change;
* the technical definition of the derivative and using of it.

3.) Demonstrate proficiency with the rules for differentiation of.
* power function and polynomials;
* exponential and logarithmic functions;
* trigonometric functions and inverse tangent;
* products and quotients of functions;
* compositions of functions using the chain rule.

4.) Demonstrate facility in applying differentiation to problems in:
* physics and engineering;
* economics and business;
* biomedical sciences.

5.) Build mathematical models for optimization problems and solve them.
* maximization problems, with and without side constraints
* minimization problems, with and without side constraints.

6.) Demonstrate a conceptual understanding of integration, including
* integration as the inverse operation to differentiation;
* integration as the area under the graph of a function;
* the definite and infinite integral.

Cell phones, IPODs and other electronic devices use are not allowed. Please, set your cell phones and pagers to silent mode, and turn off all your electronic devices during the class time. If you are expecting an emergency call, please notify the professor in advance, sit near the door, and answer the phone outside. You will not be allowed to wear an IPOD or other electronic devices during an exam.

Photography and recording is prohibited during the class.

Policies and Expectations
Please refer to the following link in terms of Policies and Expectations of the students.
http://admissions.sunykorea.ac.kr/academics/29

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. 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/

Americans With Disabilities Act
If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Academic Affairs. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

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.

Course Evaluations
Stony Brook University values student feedback in maintaining the high quality education it provides and is committed to the course evaluation process, which includes a mid-semester assessment as well as an end-of the-semester assessment, giving students a chance to provide information and feedback to an instructor which allows for development and improvement of courses. Please click the the following link to access the course evaluation system: http://stonybrook.campuslabs.com/courseeval/

Attendance Policy of SUNY Korea
(1) All students of SUNY Korea are required to attend every class.
(2) Unexcused absences will affect seriously the student's final grade in the course.
(3) If a student has over 20% unexcused absence, the student's final course grade will be an 'F'.
Example)
   i) If the class is a 150 minute class, and is held once a week, the 4th unexcused absence of a student will lead to an F grade of the course.
   ii) If the class is a 75 minute class, and is held twice a week, the 7th unexcused absence of a student will lead to an F grade of the course.
   iii) If the class is a 50 minute class, and is held three times a week, the 10th unexcused absence of a student will lead to an F grade of the course.
   iv) In Intensive English Course (IEC), if a student misses the class more than 40 hours in a semester, the student will receive an F grade on the course.
(4) Students should report the reason of absence to the instructor in advance, or immediately after the absence.
(5) When a student excuses his/her absence, the student must provide documentation of the reason for the absence to the instructor.

(6) The instructor of the course reserves the right to excuse absences.
(7) The course instructor may excuse the absence if the submitted documentation fulfills the conditions below.

   i) Extreme emergencies (e.g. death in the family)

   ii) Severe medical reasons with doctor's note (Not a slight illness)

   iii) Very important events (e.g. national conference, official school event)
(8) At the end of semester, the course instructor should submit a copy of the attendance sheet to the Academic Affairs Office.

I have shared the link. FYI, retake policy is now changed (http://sb.cc.stonybrook.edu/bulletin/current/policiesandregulations/records_registration/multiple_registrations.php).

Incomplete (I)
If circumstances beyond the student's control inhibit the student's ability to complete the work for a course on time, the student is responsible for informing the instructor of the circumstances immediately. At the discretion of the instructor, a temporary report of I (Incomplete) may be assigned, signifying that the student has been granted additional time to complete the requirements for the course. After granting an I, the instructor will set a date for completion of the requirements. That date will be no later than November 1 for courses begun the preceding spring semester or summer session and no later than March 15 for courses begun the preceding fall semester.

Students may not complete coursework for which an Incomplete was assigned by auditing or registering again for a subsequent offering of the course. If the instructor determines that circumstances merit it, the instructor may request an extension of the original Incomplete by written

notification to the Registrar. This extended deadline will be no later than the last day of classes of the semester following the one in which the course was taken. Longer extensions for extraordinary reasons must be approved by petition to the appropriate academic office. If the work is not satisfactorily completed by the applicable or extended deadline, the final grade of I/F, U, or NC, as appropriate, will be assigned. The grade of I/F will be averaged as F when computing the grade point average (g.p.a.) or determining other measures of the student's academic standing.