Engineering Calculus I
MAC 2281 – Section 9
Fall 2014

This course is part of the University of South Florida's Foundations of Knowledge and Learning Core Curriculum. It is certified for Mathematics and Quantitative Reasoning and for the following dimensions: Critical Thinking, Inquiry-based learning, Scientific Processes, and Quantitative Literacy. Students enrolled in this course might be asked to participate in the USF General Education assessment effort. This might involve answering questions that measure quantitative reasoning skills (but are not directly related to the course), responding to surveys, or participating in other measurements designed to assess the FKL Core Curriculum learning outcomes.

Instructor: Dr. Dmytro Savchuk **Office:** CMC 310
e-mail: savchuk@usf.edu **Phone:** (813) 974-4989

Class Times: TR 12:30pm-01:45pm **Room:** CMC 130
F 12:20pm-01:10pm

Office Hours: TR 10:50am – 12:20 pm, CMC 310 or by appointment.

Prerequisite(s): C (2.0) or better in MAC 1114 ***and*** C (2.0) or better in MAC 1140, ***or*** C (2.0) or better in MAC 1147, ***or*** SAT Math score of 650 or better, ***or*** ACT Math score of 29 or better, ***or*** College-Level Math CPT score of 90 or better, ***and*** knowledge of trigonometry.

Text: *Essential Calculus, Early Transcendentals*,2nd edition, James Stewart. Note: If you buy your text at the bookstore, you are buying the enhanced edition, which contains an access code to webassign, the online homework system. On webassign, you also have an electronic copy of the textbook, together with other resources. If you did not purchase your book at the bookstore, you will need to separately purchase an online access to webassign. You may also choose to only have an electronic version of the book. More details about how to login to webassign are on the Canvas course site.

Note: Stewart also maintains a website with additional resources, which you may be interested in: http://www.stewartcalculus.com/media/6_home.php

Course description and content: This course features topics that develop some basic mathematical tools that are used to solve problems in mathematics and the sciences. The topics include limits, differentiation, differentials, extrema, and indefinite and definite integrals. Most of Chapters 1, 2, 3, 4, and Chapter 5 (sections 5.1 through 5.4/5.5) of the text will be covered.

Course Objectives: At the end of this course, you should be able to (1) perform computations involving the following mathematical tools: general exponential and logarithm functions, limits, derivatives, and integrals; (2) use mathematical symbols and language correctly; (3) interpret the above mathematical tools in a concrete context; (4) apply the mathematical tools learned to model and solve real world problems.

Course Design and Peer Leading: Several strategies in the learning process will be applied in this course. In particular, you will have both regular lectures and guided inquiry sessions. You will also have access to an online homework system called webassign.

During the peer led guided inquiry sessions, students will work in groups of 3 or 4 on activities and will be supported by two highly qualified undergraduate students. Your peer led session is every Friday, starting the first week of class. Attendance at the peer led sessions is mandatory. There will be a quiz at the

beginning of each peer led session. For details about the quizzes and your peer led session, please consult the peer led session syllabus, which is posted in the Files section of Canvas, in the Peer Leading folder.

Expectations: Calculus is hard and requires a lot of thought. Homework is extremely important; in general, for each hour of class, you should expect to have to do two hours of work outside of class doing the homework and learning the material.

Grading Policy:

- There will be **three in-class tests** and one cumulative two hour **final exam**.
- Every Friday there will be a **quiz during your peer leading** session
- There will be **unannounced quizzed** during regular class time over the assigned homework.
- I will assign weekly **homeworks** in WebAssign that will count towards your final grade. To access these assignments go to http://www.webassign.net/ and use the following class key:
  usf 0019 2809

If your overall percentage of total points falls into the following range, you will receive the corresponding grade:
97-100 (A+), 93-96 (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).

Grading breakdown:
Class Tests: 45%
Final Exam: 20%
Peer Leading: 10 %
Regular class quizzes: 10%
Webassign: 15%

Attendance Policy: Attendance during the whole class time is required. It is your responsibility to know what is going on in class. Class announcements and materials as well as homework assignments will be posted on Canvas, except for the webassign homework which will be posted on the webassign site. No late assignments will be accepted. If you fail to take a quiz or a test, or if you do not hand in an assignment on time, you will receive a grade of 0 for that quiz, test, or assignment. Make up quizzes/tests/homework assignments will only be scheduled at the discretion of the instructor, given a documented emergency, and if the instructor is notified by email within 24 hours of the emergency. Students who must miss an exam due to a major religious observance must notify the instructor of this absence, in writing, by the end of the first week of classes. Employment schedules, family reunions, vacations and athletic training/practice schedules of students do not comprise a valid excuse for absences. If you have more than two unexcused absences, your final class grade will drop one grade for each additional absence (e.g., from A- to B+). Students who anticipate the necessity of being absent due to the observation of a major religious holiday must provide notice of the date in writing to me by the second class meeting.

Tutoring: Free tutoring is available through the STEM Mart program (a drop-in tutoring program), which is located in the SMART lab in the library. You can just drop in during the week or on Sunday, and a student should be there to help you. STEM Mart hours are: M – Th 10 am – 9 pm; F: 10 am – 4 pm; Su: 1– 5 pm. For more information, see the website http://lib.usf.edu/tutoring/. You can also make appointments for more personalized one on one free tutoring at the library.

Students needing special accommodation: Students in need of academic accommodations for a disability may consult with the office of Students with Disabilities Services to arrange appropriate accommodations. Students are required to give reasonable notice prior to requesting an accommodation. Contact SDS at 974-4309 or go to the website at www.sds.usf.edu.

Cell Phones, laptops, calculators: Please **turn your cell phone** and laptop **off** before you come into class and store them **out of sight**. No cellular phones are permitted during examinations. Calculators may or may not be allowed during certain quizzes or exams, but you should feel free to use your calculator on homework assignments. If your cell phone is not turned off and stored out of sight during class, you might be asked to leave the class, and any work that was handed in that day will count as a 0, including homework, tests, or quizzes.

Important Dates (class test dates are tentative):

First Class Test:	Tuesday, September 23
Second Class Test:	Tuesday, October 21
Third Class Test:	Tuesday, November 18
Final Exam:	Thirsday, December 11, 10:00 a.m. - 12:00 p.m., in CMC 130.

Retaining Exams: You should keep all your returned exams and quizzes until you receive your final grade. You will need these exams to demonstrate that a grade was incorrectly recorded, should that happen. Any unclaimed exams and quizzes will be kept until the next exam is given, after which they will be discarded.

Academic Integrity and Disruption of Academic Process: I expect the highest standard of academic integrity from my students. Any cheating will result in a failing grade for the assignment or test in question, and possibly for the course. Cheating may result in a grade of FF for the course and may jeopardize your attendance at the University of South Florida. The university policy on Academic Dishonesty is explained at the website: http://www.ugs.usf.edu/catalogs/0607/adadap.htm.
Students may discuss homework with each other, however, I expect each student to write up his or her own solutions.

Miscellaneous Policies:

- You are encouraged to take notes and may tape the lectures, but neither your notes nor your tapes are to be sold.
- The last day to withdraw from this course and receive a tuition refund is Friday, August 29. Students who have not registered or paid for this course by this date and time must stop attending, unless the instructor has given written permission otherwise.
- The last day to withdraw from this course and receive a grade of "W" is Saturday, November 1.
- A grade of "I" indicates incomplete work and will only be assigned when most of the coursework has already been completed with a passing grade. See the website http://www.ugs.usf.edu/catalogs/0607/gradetc.htm#i for further information.
- In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include but are not limited to: Canvas, Elluminate, Skype, and email messaging and/or an alternate schedule. It's the responsibility of the student to monitor the Canvas site for each class for course specific communication, and the main USF, College, and department websites, emails, and MoBull messages for important general information.