## SAN JOSÉ STATE UNIVERSITY DEPARTMENT OF MATHEMATICS

## Spring 2015

## Math 31: Calculus II

Section:	01	Days: MoTuWeTh	<b>Time:</b> 8-8:50 am
Room:	MacQuarrie Hall 424	Instructor: Vartanian	Office: Science Bldg 321A
Email:	michael.vartanian@sjsu.edu	Office Hrs: MoTuWeTh 7-2	8 am, or after class by app't

**Class Website:** www.sjsu.edu/people/michael.vartanian/courses/math31\_S15/ (or google my name)

**Catalog Description:** Definite and indefinite integration with applications. Sequences and series. Graphical, algebraic and numerical methods of solving problems. 4 units.

Prerequisite: Math 30 or 30P (with a grade of C- or better).

Workshop: Highly recommended, but you may opt out if you insist: go to the math office.

**Text:** *Calculus: Early Transcendentals,* Stewart, 7<sup>th</sup> or 8<sup>th</sup> ed.

**Material to be covered:** Text sections 5.1-5.5, 6.1-6.4, 7.1-7.4, 7.7-7.8, 8.1-8.3. You are responsible for thoroughly reading (several times) all material relating to the lectures and assigned homework.

**Course Objectives**: To learn the concepts and techniques of integral calculus and to use them in solving applied problems. To learn the concept of infinite sequences and series. To investigate convergence properties of numerical and power series and their application to representation of functions as power series.

**Grading System:** 700 total possible points. **A-** starts at 630 points (90%), **B-** at 560 points (80%), **C-** at 490 points (70%), **D-** at 420 points (60%).

Homework	100 (%) points	
Test 1 (Mon, Feb 16)	100 points	
Test 2 (Mon, Mar 9):	100 points	
Test 3 (Mon, Apr 6):	100 points	
Test 4 (Mon, Apr 27)	100 points	
Cumulative Final: (Tues, May 19, 7:15 – 9:30 am)	200 points	

The **Math Department** expects students will spend at least two hours studying outside of class for each unit, so that means 8 hours per week for this class. Therefore, a "B" grade should mean "Good, considering you were supposed to work 8 hours a week." At the end of the semester, no curve will be applied or individual preferences given, so please don't ask. In fact, a curve *is* applied, but it will have already been taken into account by how much material we cover, difficulty of the test questions, extra-credit assignments, etc.

Test questions will generally be similar to assigned HW problems, except there will be no multiple choice questions. However, some material discussed only in the lectures may appear on the tests. There will be no retakes, and make-ups will be allowed only with a very good excuse. During the semester, you can estimate your current grade by just averaging your percent scores to date (e.g., an average of 82 would be a B-). A grade of  $\mathbb{C}$ - (420 points) or better in this class is a prerequisite for Math 32 (Calculus III).

Homework (WebAssign): All students must self-enroll at: http://webassign.net/login.html under the same name they registered for the class. Go to "I have a Class Key" and use: sjsu 0862 7814 You should start working on assigned HWs immediately: Webassign gives you a two-week grace period to provide a purchased access code. The access code may come bundled with the text or may be bought separately on-line.

In general, HW will be posted on WebAssign after every lecture and will be **due 1 week after posting**. Occasionally, extra-credit HW may be assigned covering topics not fully discussed in class; thus your HW % score could actually be more than 100. Any exceptions or refinements to this policy will be announced as necessary. HW extensions will only be granted to those who attend regularly.

**Participation/communication.** During the lectures, don't hesitate to interrupt if you have a question or comment. However, since class time is limited, I usually don't discuss HW problems in front of the whole class unless it is of general interest; instead, talk to me individually either after class, during office hours, or by e-mail. You may email me any time. General announcements will be posted on WebAssign, and the class website will be used for posting pdf's.

Attendance. Calculus II is not an easy course and is for serious Spartans only. The lectures have been painstakingly prepared to lay out what exactly you are responsible for on tests, and also to provide an overview and try to explain why we are doing all this. Since mathematics builds on previous discussions, if you miss a class there will be a permanent gap in your learning. HW extensions will only be given to those who attend regularly.

**Class Decorum.** To follow the lectures requires your undivided attention. Therefore, no laptops or phones may be taken out, or heads on desks, etc. If you have to leave before the end of class (except for restrooms), try to let me know in advance. Don't sign the attendance sheet and then sneak out.

**Calculators**. A standard scientific calculator is required. A graphing calculator is sometimes useful but is not required for this course and may not be allowed on tests.

**Tutoring:** SJSU Peer Connections see: <u>http://peerconnections.sjsu.edu/tutoring/index.html</u> Math department tutoring may also be available.

## **University Information:**

(a) Academic integrity statement (from Office of Judicial Affairs): Your own commitment to learning, as evidenced by your enrollment at San Jose State University and the University's Academic Integrity Policy requires you to be honest in all your academic course work. Faculty are required to report all infractions to the Office of Judicial Affairs. The policy on academic integrity can be found at: <u>http://www.sjsu.edu/senate/S07-2.pdf</u>

(b) Campus policy in compliance with the Americans with Disabilities Act: If you need course adaptations or accommodations because of a disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Pres. Directive 97-03 requires that disabled students register with DRC to establish a record of disability.