MATH-12 Introductory Calculus for Business and Social Science   Spring 2017

MATH-12.-01   MTWTHF 8:30 – 9:20 am
INSTRUCTOR: Nina Danilova
                E-MAIL: danilovanina@fhda.edu
OFFICE HOURS: MTWTH, 9:30am-10:20am

Prerequisite: Mathematics 11 or Math41 Precalculus or equivalent placement test

Course Description: Introduction to limits, differentiation, and integration of single variable functions. Differentiation of multivariable functions. Applications in business, economics, and social science.
SLO-Student Learning Outcomes
1. Use correct notation and mathematical precision in evaluation and interpretation of derivatives and integrals.
2, Evaluate, solve, interpret and communicate business and social science applications using appropriate differentiation and integration methodologies.
Text: *Applied Calculus*, by Hughes-Hallett,Gleason, Lock, Fath et al, 5th edition, 2014,Wiley

    More than ever in your past mathematics experience, *reading* your textbook will be essential. The exercise sets are written with the intent of forcing the student to approach problems graphically and numerically, as well as using the traditional symbolic (algebraic) approach. There is such variety in the exercise sets, that a few lecture examples often can't illustrate every type of question in the homework. This make the reading a crucial part of the student's day-to-day work. The De Anza College catalog advises students to do at least 2 hours of work outside the classroom for each hour spent in class.

Technology: Students must have a graphing calculator. The instructor will use a Texas Instruments TI-84 plus in lectures. Consequently, the TI-84 plus (or TI-84, TI-83+, TI-83) is recommended for the students, but any graphing calculator that has a "table" feature is acceptable. (The old TI-81 and TI-85 models do *not* have a table feature!). *Any calculators that can do symbolic mathematics such as TI-89 or HP-49 are not allowed on exams and quizzes.*

Quizzes: There will be frequent quizzes usually not announced beforehand. **No make up quizzes!**
Tests: There will be four (4) tests worth 80 points each. Unless otherwise indicated, the graphics calculator will be required for tests. Material from any lecture, homework assignment or quiz can appear as a test question.

    The tentative schedule (subject to revision) of tests and the material covered is the following:
Test 1: Apr 27, Ch 1
Test 2: May 10, Ch 2
 Test 3: June1, Ch 3 and 4
Test 4: June 20, Ch 5, 6, and 7

Makeup Tests: There are no make –up tests, *under any circumstances.* If a test is missed, the percentage on the final exam will replace the score of the missing exam. If a second exam is missed, the grade will be a zero.
The lowest score of 4 regular tests will be replaced by a percentage on the final exam, provided the latter is higher.

Final Exam: There will be a mandatory comprehensive two-hour final exam worth 200 points, and this exam *must* be taken during the scheduled exam time on **Wednesday, June 28, 7:00—9:00am. No early exams will be given for any reason.**

Homework (HW): Assignments will be given each class period and will be collected on the scheduled basis. **Please staple all homework paper before turning them in.** Homework is due at the beginning of class on the date day. It is *strongly* recommended that you do complete the homework assignments since you will find them (or similar ones) in the quizzes and exams. You may find some of the problems quite hard because they are about concepts rather than calculations. For this reason it may be very helpful to work on these assignments in small groups. It is your responsibility as a college student to check that your answers and solutions are correct, and to correct any mistakes or misunderstandings. Also, you are encouraged to seek help regarding your homework assignments during my office hours.
Worksheets (WS): Regularly students will work on worksheets during the class, which must be finished and turned in for grading at the beginning of the next class.

Projects: From time to time you may have mini-projects. Points earned for mini-projects will apply to your total grade. These are bonus points!

Attendance: Attendance will be taken at each session. **You are expected to attend all classes on time.** If you miss 5 class meetings, you may be dropped from the class. However this is your responsibility to drop the course officially if you decide not to attend any longer.
The students are responsible for any material covered and any announcements made in their absence.

Final Grade: Your final grade will be determined based on the following:

Grading Scale:

HW, WS (40+60)	40 pts		
Quizzes	60 pts		
Test 1	80 pts	X>=558 (90% and more)A	X>=421 (68%)=C
Test 2	80 pts		X>=359 (58%)=D
Test 3	80 pts	X>=496 (80%)=B	
			X< 358 (58%)=F
Test 4	80 pts		
Final Exam	200 pts		
Total Points	X=620 pts		

Missing one of the major tests is made up through added weight on the comprehensive final exam. Missing additional tests results in a score of zero.

<div align="center">*** **NO OTHER MAKE-UPS WILL BE GIVEN***</div>

A grade of "I" (incomplete) will be given at the instructor's discretion, if:
- i) A student has successfully completed at least 75% of the course work, and
- ii) has shown acceptable evidence which justifies his/her incomplete work.

Important Dates:

Monday, April 10-Spring quarter classes begin
Saturday, Apr 23-Last day to drop for a refund for out-of-state or foreign students
Saturday, Apr **23**-Last day to add/drop for a refund or credit for residents
Saturday, Apr 23-Last day to drop a class with no record of grade (Drop date is   enforced)
Friday, May5-Last day to request P/NP grade
Saturday-Monday, May 27 – 29, Memorial Day Weekend
Friday, June2-Last day to drop with a "W" (withdraw date is enforced)

Friday   , June 23—Last day of classes
Tuesday, June 28-Final exam 7:00-9:00am

*** (N.B.: It is the student's responsibility to complete the withdrawal process. Student who stop attending class are NOT automatically dropped. A student who stops attending class and does not complete the withdrawal process receives the grade of "F")

Academic Misconduct: Academic dishonesty will not be tolerated. If a student is found cheating on an exam, plagiarizing on writing assignments, or violating other codes of academic integrity, he or she will receive a failing grade for the course and may be reported to the college for an appropriate action. See section on Academic integrity in your current schedule of classes catalog.

If you are student with a disability: For information or questions about eligibility, support services or accommodations to disability (physical or learning disability) see contacts below:

Disability Support Service (DSS): Student Services Building (408) 864-8753;TTY 408) 864-8753

Educational Diagnostic Center (EDC): Learning Center West 110; (408) 864-8839Special Education Division: 864-8407; www.deanza.edu/specialed

MATH-12.01   DE ANZA COLLEGE   SPRING QUARTER 2017

TENTATIVE CALENDAR

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
APR	10 classes start Sec. 1.1	11 Sec. 1.2	12 Sec. 1.3	13 Sec. 1.4	14 HW1 due Sec. 1.4 *Quiz 1*
APR	17 Sec. 1.5	18 Sec. 1.6	19 Sec. 1.7	20 HW 2 due Sec. 1.8	21 Sec. 1.9 (Last day to add,.23 (Last day to drop with no record *and* for a refund or credit Apr 23
APR	24 Sec. 1.9/1.10	25 Sec. 1.10	26 HW 3 is due *Quiz 2*	27 Review for Test 1	28 Test 1(Ch 1)
MAY	1 Sec. 2.1	2 Sec. 2.2	3 Sec. 2.3	4 Sec.2.4	5 Sec. 2.5 Last day to request pass/no pass
MAY	8 HW 4 due *Quiz 2*	9 More Practice	10 Test 2 Review	11 Test 2	12 Sec. 3.1
MAY	15 Sec. 3.2	16 HW 5 due *Quiz 3* Sec. 3.3	17 Sec. 3.3	18 Sec. 3.4	19 Sec. 3.5
MAY /	22 HW 6 due Sec 4.1	23 Sec. 4.2	24 Sec. 4.3	25 HW 7 due Sec. 4.4	26 Sec. 4.5
JUNE	29 Memorial day	30 Sec. 4.7	31 HW 8 due *Quiz 4*	1 Review for Test 3	2 Last day to drop w/"W" Test 3
JUN	5	6 Sec. 5.1	7 Sec. 5.2	8 Sec. 5.3	9 HW 9 due Sec. 5.4, 5.5
JUN	12 *Quiz 5* Sec. 6.1	13 Sec. 6.2	14 Sec. 6.3	15 HW 10 due Sec. 7.1	16 Sec. 7.2
JUN	19 Sec. 7.3 Review Test 4	20 HW 11 due Test 4	21 Sec. 9.1	22 Sec. 9.2	23 Sec. 9.3
JUN	26	27	28 FINAL 7:00-9:00am	29	30

MATH-12   Homework (TENTATIVE)   **SPRING 2011**

Assignment 1   **FUNCTIONS AND CHANGE**
                        Sec.1.1##4,6,8,10,11,14, 9,21,25,28
                        Sec.1.2##1-9,11,12,17,18, 21,26,14,16,23
                        Sec. 1.3##1-4,6,7,9,10,11-14,17,22,24,26,38,41,44
Due F, Apr 14   Sec. 1.4##1,3,4,7,914,21,24, 29,33,36,37

Assignment 2   Sec. 1.5##1,3,4,9,17,18,19,21,24,36
                        Sec. 1.6##1,3,5,8,10,12,13,15,23,26,27,32,34,40
Due Th, Apr 14   Sec. 1.7##2,3,16,29

Assignment 3   Sec. 1.8##1,2,8,11,14,19-21,38,39
                        Sec. 1.9##1-11(odd),13-16(all),18,23,30,31
Due W, Apr 26   Sec. 1.10##1,5-7,10,13,14,19,2127,32

Assignment 4   **RATE OF CHANGE: THE DERIVATIVE**
                        Sec. 2.1##2,3,4,6,7,13,16,18,20
                        Sec. 2.2##3,4,6,9,15,17,21-24,26,29
                        Sec. 2.3##3,4,6,9,16,24,30,42
                        Sec. 2.4##2,7,11,17,23,26
Due F, May5   2.5##1,5,7,8,10,11,12,15

Assignment 5   **SHORTCUTS TO DIFFERENTIATION**
                        Sec. 3.1##1,7,27,31,45,51,57,58,61
Due T, May16   Sec. 3.2##3,16,21,26,29,30,35,37,43

Assignment 6   Sec. 3.3##1,5,6,10,19,25,26,42,45,48,49
                        Sec. 3.4##3,4,5,18,25,35,39,42,44
Due M, May 22   Sec. 3.5##1,2,8,14,21,23,25,28

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Assignment 7	**USING THE DERIVATIVE**
	Sec. 4.1##3,5,8,9,13,16,20,23,27,31
	Sec. 4.2##3,4,5,8,13,18,25,26,27,32
Due Th, May 25	Sec.4.3##3,4,5,10,15,20,23,26,32,36

Assignment 8	Sec. 4.4##1,3,5,7,19,21,24
	Sec. 4.5##2,3,4,6,7,10,14
	Sec. 4.6##1,2,5,10,11,13,15,19
Due W, May 31	Sec. 4.7##1,3,5,9,11,16

Assignment 9	**ACCUMULATED CHANGE:**
	THE DEFINITE INTEGRAL
	Sec. 5.1##1,4,7,9,12,14
Due F, June 9	Sec. 5.2##5,7,10,14,16,19,22

Assignment 10	**USING THE DEFINITE INTEGRAL**
	Sec. 6.1##1,4,5,11,19,21
	Sec. 6.2##1,3,5,12
Due Th, June 15	Sec. 6.3##3,5,13,15

Assignment 11	**ANTIDERIVATIVES**
	Sec. 7.1##4,9,16,17,23,24,32,37,43,56,59,65
	Sec. 7.2##1-40(multiples of 5),41,43
Due T, June 20	Sec. 7.3##1-19(multiples of 3),23,28,32,34,37,43