Winter 2017 - Math 1D <u>Richard Hansen</u>, De Anza College, Mathematics <u>email</u>: HansenRichard@fhda.edu

Syllabus/Greensheet: Math 1D, Winter 2017

Math 1D-61, Winter 2017 (01240)Richard Hansen; S-52B; (408) 864-8577Calculus (fourth quarter); TTh 6:30-8:45 pm; S-16email: HansenRichard@fhda.eduText: Stewart, Calculus: Early Transcendentals; 7thweb page: http://www.deanza.edu/faculty/hansen

Office Hours: Before class -- TTh 5:30 - 6:30 pm or by appointment

Syllabus: Partial derivatives, multiple integrals, vector calculus. Prerequisite: Mathematics 1C (with a grade of C or better) or equivalent.

Equipment: Graphing calculator (numerical but not symbolic -- see the restriction document on the website).

Week (Monday) Topics (with reference to chapters and sections in Stewart, 7th edition)

- 1 (1/9) Introduction; 12.6 (quadric surfaces); 14: 1-2 (functions of several variables, limits/continuity)
- 2 (1/16) 14: 3-4 (partial derivatives, tangent planes, differentials, differentiability); Quiz #1
- 3 (1/23) 14: 5 (chain rule); 14: 6 (directional derivative/gradient); Quiz #2
- 4 (1/30) 14: 7-8 (extrema, Lagrange Multipliers); *Test #1 (2 February)*
- 5 (2/6) 15: 1-3 (double integrals in rectangular coordinates); Quiz #3
- 6 (2/13) 15: 4-6 (double integrals, applications, surface area); Quiz #4
- 7 (2/20) 15: 7-9 (triple integrals in rectangular, cylindrical, spherical coordinates); *Test #2 (23 February)*

| 8 (2/27) | 16: 1, 5 (vector fields, curl & divergence); 15.10, 16.6 (Jacobian, arc & surface elements); Quiz #5 |
|-----------|------------------------------------------------------------------------------------------------------|
| 9 (3/6) | 16: 2-3 (line integrals); 16: 6-7 (surface integrals); Quiz #6 |
| 10(3/13) | 16: 4, 8, and 9 (Green's, Stokes's, and Gauss's theorems); 16: 10 (review); Quiz #7 |
| 11 (3/20) | *Test #3 (21 March);* Review |
| 12(3/27) | **Final Examination, 30 March, 6:15 to 8:15 pm** |

<u>Course Requirements</u>: The course will consist of a combination of teacher demonstrations with student participation in discussions, individual, and group work.

1. There will be seven Homework **Quizzes** during the quarter based upon the suggested problems. <u>No make-ups will be given</u> unless arranged <u>in advance</u>. Students should work problems in addition to those suggested. [The lowest quiz score will be dropped to compute the course grade.]

2. There will be three in-class **Tests**. Note the dates; <u>no make-ups will be given</u> unless arranged <u>in advance</u>. [One-half of the score on the final exam, if higher, replaces the lowest test to compute the course grade.]

3. There will be a two-hour Final Examination on Thursday, March 30, from 6:15 to 8:15 pm.

Any student missing the final exam will fail the course; no excuses are acceptable.

| Grading: | Quizzes | (6 X possible 25 points each) | 150 | |
|-----------------|------------|-------------------------------|------------|--------|
| | Tests | (3 X possible 50 points each) | 150 | |
| | Final Exam | (1 X possible 100 points) | <u>100</u> | |
| | | | 400 | points |

Course grades will reflect the following percentage range of total scores:

| $A = 90 \le \% \le 100$ | [360-400] | C = | 60≤%<75 | [240-300) | F = below | 50% | (below 200) |
|-------------------------|-----------|-----|---------|-----------|-----------|-----|-------------|
| B = 75≤%<90 | [300-360) | D = | 50≤%<60 | [200-240) | | | |

Grades of B+, B-, and C+ may be used as the distribution of point totals warrants; A- will not be used.

<u>Attendance</u>: Regular attendance is expected. A student who misses <u>any</u> class during the first two weeks of the quarter <u>may</u> be dropped from the course. Inform the instructor, in advance, of any necessary absences; telephone and leave a message or email the instructor if an emergency arises. Note that it is the <u>student's responsibility</u> to formally "drop" or "withdraw" from the course.

Protect your academic record by observing these deadlines:

22 January to drop with no record 3 February for P/NP option 3 March to drop with a "W"