## MATH 1D-61 Calculus

Instructor: Paul Du, PhD
Class: MTWTh 5:30 PM - 7:45 PM, Room S46
E-mail: dupaul@fhda.edu
Office Hours: By appointment
Class Communication Tool: My Courses/Course Studio at MyPortal.fhda.edu
Prerequisite: Mathematics 1C with a grade of C or better, or equivalent.
Textbook: Calculus: Early Transcendentals by James Stewart, 7th Edition, Brooks/Cole.
Calculator: A graphing calculator (e.g. TI-83/TI-84) is recommended. Calculators with symbolic manipulation capabilities (e.g. TI-89/TI-92) will not be allowed on exams or quizzes. Cell phone calculators will not be allowed on exams or quizzes.

Course Description: Partial derivatives, double and triple integrals, and vector calculus.
Student Learning Outcomes: Upon completion of the course, the student will be able to

1. Graphically and analytically synthesize and apply multivariable and vector-valued functions and their derivatives, using correct notation and mathematical precision.
2. Use double, triple, and line integrals in applications, including Green's, Stokes's, and Gauss's theorems.
3. Synthesize the key concepts of differential, integral, and multivariate calculus.

Homework: Homework will be assigned for each covered section of the textbook and will be collected on each exam date. Students are responsible for solving all the problems assigned, showing all work in a neat and orderly manner. Late homework will be accepted but will receive a maximum of half credit.

Homework Format: Each homework assignment must be completed on loose-leaf paper (no frayed edges), stapled together, and written in pencil or black/blue pen. Each problem should be clearly labeled and numbered on the left side of the page, and each solution should begin with the original problem statement (except for a word problem).

Classwork: There will be occasional in-class assignments which may involve group work. The dates for classwork will be unannounced. There will be no make-up classwork.

Quizzes: There will be three (3) quizzes given during the summer session. Quiz problems will be similar to (or taken directly from) homework problems. The lowest quiz score will be dropped at the end of the summer session. There will be no make-up quizzes.

Midterm Exams: There will be two (2) midterm exams given during the summer session. You may bring one single-sided $8.5^{\prime \prime} \times 11^{\prime \prime}$ sheet of handwritten notes to each midterm exam. The lowest midterm exam score will be replaced by the final exam score, if the latter is higher. There will be no make-up midterm exams.

Final Exam: A mandatory comprehensive final exam will be given at the end of the summer session. You may bring one double-sided $8.5^{\prime \prime} \times 11^{\prime \prime}$ sheet of handwritten notes to the final exam. Any student who misses the final exam will receive a grade of $F$ for the course.

## Grading Criteria:

Classwork/Homework ...... 10\%
Quizzes ........................ 15\%
Midterm Exams ............. $40 \%$
Final Exam ................... $35 \%$

$$
\begin{aligned}
90-100 \% & =\mathrm{A} \\
80-89 \% & =\mathrm{B} \\
70-79 \% & =\mathrm{C} \\
60-69 \% & =\mathrm{D}
\end{aligned}
$$

Attendance Policy: Students are expected to attend all classes, to be on time and to stay for the entire class period. Any student who misses more than three (3) classes may be dropped by the instructor. However, it is the student's responsibility to officially drop or withdraw from the course if the student decides not to attend any longer. Failure to do so may result in a grade of $F$ for the course.

Academic Honesty: Students are responsible for keeping themselves informed of the College policy on academic integrity (www. deanza.edu/studenthandbook/). Cheating will not be tolerated and can result in receiving a zero on the quiz/exam or an $F$ for the course and being reported to the Dean of Students for possible disciplinary action.

Extra Help: The Math and Science Tutorial Center (S43) offers free individual and group tutoring. Please take advantage of these free services. Tutorial assistance often means the difference between students earning a passing or failing grade. Dot not hesitate to come to my office hours to discuss a homework problem or any aspect of the course.

Accommodations for Disabilities: Disability Support Services (DSS) provides support services for students with disabilities. For more information or to make an appointment to request services, contact DSS at 408-864-8753.

Tentative Course Schedule
(MATH 1D-61 - Summer 2015)

| MONDAY | TUESDAY | Wednesday | THURSDAY |
| :---: | :---: | :---: | :---: |
| $\begin{array}{\|l\|} \hline \text { June 29th } \\ \hline \S 12.6, \S 14.1 \\ \hline \end{array}$ | $\begin{aligned} & \hline \text { 30th } \\ & \text { §14.2, §14.3 } \end{aligned}$ | July 1st  <br> $\S 14.4$ 3 | 2nd <br> §14.5, Quiz 1 |
| 6th 5 <br> §14.6  | 7 th 6 <br> §14.7  | 8th 7 <br> §14.8, Review  | 9th 8 <br> Exam 1  |
| 13th $\mathbf{9}$ <br> §15.1, §15.2  | 14th $\mathbf{1 0}$ <br> §15.3  | 15th 11 <br> §15.4, §15.5  | 16th 12 <br> §15.6, Quiz 2  |
| 20th 13 <br> §15.7, §15.8  | 21st $\mathbf{1 4}$ <br> $\S 15.9$  | 22nd 15 $\S 15.10$, Review | 23rd  <br> Exam 2 16 |
| 27th $\mathbf{1 7}$ <br> §16.1, §16.2  | 28th $\mathbf{1 8}$ <br> $\S 16.3$  | 29th $\mathbf{1 9}$ <br> §16.4, §16.5  | 30th $\mathbf{2 0}$ <br> §16.6, Quiz 3  |
| Aug 3rd $\mathbf{2 1}$ <br> $\$ 16.7$  | 4th $\mathbf{2 2}$ <br> §16.8  | 5th §16.9, Review | 6th 24 <br> Final Exam  |

Homework Assignments (Tentative)
(MATH 1D-61 - Summer 2015)

| Section | Minimum Required Problems |
| :---: | :---: |
| 12.6 | $3,7,17,23,33$ |
| 14.1 | $15,19,21,25,27,31,33,51$ |
| 14.2 | $9,13,17,19,31,33,35,37$ |
| 14.3 | $21,27,35,41,51,55,67,77$ |
| 14.4 | $3,5,13,25,29,31,33,35$ |
| 14.5 | $3,5,9,11,23,27,33,39,49$ |
| 14.6 | $9,15,19,23,33,45,55,63$ |
| 14.7 | $5,7,13,31,35,41,51$ |
| 14.8 | $3,11,15,21,35,37,41,43$ |
| 15.1 | $1,7,18$ |
| 15.2 | $9,15,17,21,27,35$ |
| 15.3 | $13,17,21,27,31,47,49$ |
| 15.4 | $7,11,13,19,25,29$ |
| 15.5 | $5,13,21,23,27$ |
| 15.6 | $3,9,11$ |
| 15.7 | $9,13,19,21,35,41,45$ |
| 15.8 | $17,19,21,23,25$ |
| 15.9 | $21,23,25,33,35$ |
| 15.10 | $5,13,17,19,27$ |
| 16.1 | $5,23,35$ |
| 16.2 | $3,7,11,13,21,33,39$ |
| 16.3 | $5,9,15,19,25,33$ |
| 16.4 | $3,9,13,17,29$ |
| 16.5 | $1,5,9,13,19,25$ |
| 16.6 | $19,23,33,45,49,61$ |
| 16.7 | $7,11,23,27,39,43$ |
| 16.8 | $3,5,7,15,17$ |
| 16.9 | $1,13,19,25,27$ |

