

SYLLABUS

Instructor: Yun Yoo

Course Number: Math 271 **CRN:** 14038 **Section:** 001

Class Time: Tuesday and Thursday between 6:45 pm and 8:35 pm

Classroom: BR-43

E-mail: yyoo@ccp.edu (The best way contact me)

Office: B1-9D

Phone: 215-751-8317

Webpage: <http://faculty.ccp.edu/faculty/yyoo/>

Office Hours: Tuesdays: 2:40-5:10 pm, 8:45pm-9:15pm and

Wednesdays: 2:20-4:00 pm and

Thursdays: 2:40-3:30 pm, 8:45 pm-9:15 pm or an appointment

Text: **Calculus: Early Transcendentals, Math 271, Community College of Philadelphia, 6/E by James Stewart**

Course Description: Calculus of vector-valued functions and multivariate functions; vectors in multi-dimensional space; cylindrical, spherical and other coordinate systems; partial derivatives; multiple integrals; Green's Theorem; the Divergence Theorem; Stokes Theorem.

Calculator: Not required.

Prerequisites: MATH 172 with a grade of "C" or better and MATH 270 with a grade of "C" or better.

Homework: It is especially important that you keep up with the homework. We will discuss some of these problems in class, and I will be glad to help you outside class as well, but it is your responsibility to do the work. **Homework will be assigned, but it will not be collected.** **DO NOT ALLOW YOURSELF TO FALL BEHIND, AND SEEK HELP IF YOU ARE HAVING DIFFICULTY.**

Attendance: **Attendance will be taken at each class by means of an "Attendance Quiz" These are for practice and fun. I will give you solutions of each AQ at the end of class so that you shouldn't ask me solutions before taking exam.** There is a college policy allowing at most 6 absences during the semester. In the event that you do not meet this policy, you may be dropped from the class. Regular attendance is necessary in order to master the material. It is your responsibility to find out what you have missed due to absence. It is important that you try to do the work you have missed.

Test: There will be 3 tests and a comprehensive final exam.

Makeup Policy: Make-ups are the discretion of the instructor and require prior approval and a written, acceptable medical excuse.
Everyone must take the Comprehensive Final Exam.
If not, you will get "F". No test grade will be dropped.

Help There are several resources for students with questions. First and foremost, you should participate and ask questions in class. If you still have unanswered questions, please feel free to stop by my office during the office hours. More importantly, **CCP provides free tutoring and workshops in Room B2-36 (South Learning Lab) for daytime and Room B1-28 (Central Learning Lab) for evening time.** Many students find it helpful to form study groups for doing homework and studying for tests. It is a great way to learn materials.

Grading: The course average will be computed using **the average of the three tests (75%) and the final (25%)**. Your written final grade will be determined as follow:

90-100 %	A
80-89 %	B
70-79 %	C
60-69 %	D
0-59 %	F

Inclement weather: In the event of inclement weather there are several ways of determining whether CCP is open. You may listen for CCP's school closing number 238 (for day classes) and 2238 (for evening classes) on KYW radio at 1060 on the AM dial or check KYW's school closing web page at <http://www2.kyw1060.com/schools/> or for a price you may call KYW's school closing phone number at 1-900-737-1060.

Spring Semester 2010:

Final day to drop course for spring 2010 without penalty of 'F' grade: **Monday, April 12.**

Professional Development Day-No class: Tuesday, February 16

Spring Vacation-No class: Monday-Saturday, March 8-13

Last Day to class: Thursday, April 29 for T/Th classes

Final Exam Week: Saturday, May 1- Friday, May 7, 2010

Final Remarks:

- **Avoid any behavior that can be disturbing to the class.**
- **Turn off pagers, mobile phones, and iPod**
- **Be respectful to me and to your classmates.**
- **No food or gum during class.**
- **If you need to leave the classroom early, do it as quietly as possible.**

Lecture Schedules

Text: Calculus: Early Transcendentals, Math 271, Community College of Philadelphia, 6/E by James Stewart

Week #1 (Jan 19-21)	T	12.1 Three-Dimensional Coordinate Systems 12.2 Vectors
	Th	12.3 The Dot Product 12.4 The Cross Product
Week #2 (Jan 26-28)	T	12.5 Equations of Lines and Planes
	Th	12. 6 Cylinder and Quadric Surfaces
Week #3 (Feb 2-4)	T	13.1 Vector Functions and Space Curves
	Th	13.2 Derivates and Integrals of Vector Functions
Week #4 (Feb 9-11)	T	13.3 Arc Length and Curvature
	Th	Test 1
Week #5 (Feb 16-18)	T	Professional Development Day-No Class
	Th	14.1 Functions of Several Variables
Week #6 (Feb 23-25)	T	14.2 Limits and Continuity 14.3 Partial Derivatives
	Th	14.4 Tangent Planes and Linear Approximations
Week #7 (March 3-5)	T	14.5 The Chain Rule
	Th	14.6 Directional Derivatives and the Gradient Vector
Spring Break: College Closed, March 8-13		
Week #8 (March 16-18)	T	14.7 Maximum and Minimum Values 14.8 Lagrange Multipliers
	Th	15.1 Double Integrals over Rectangles
Week #9 (March 23-25)	T	15.2 Iterated Integrals
	Th	Test 2
Week #10	T	15.3 Double Integrals over General Regions

(March 30-April 1)	Th	15.4 Double Integral in Polar Coordinates
Week #11 (April 6-8)	T	15.6 Triple Integrals 15.7 Triple Integrals in Cylindrical Coordinates
	Th	15.8 Triple Integrals in Spherical Coordinates 15.9 Change of Variables in Multiple Integrals
Week #12 (April 13-15)	T	16.1 Vector Fields
	Th	16.2 Line Integrals 16.3 The Fundamental Theorem for Line Integrals
Week #13 (April 20-22)	T	16.4 Green's Theorem 16.5 Curl and Divergence
	Th	Test 3
Week #14 (April 27-29)	T	16.6 Parametric Surfaces and Their Areas
	Th	16.7 Surface Integrals 16.8 Stokes' Theorem
Week #15 (May 1-7)	Comprehensive Final Exam	