

MATH 43-01 Precalculus III

Instructor: Paul Du, PhD

Class: MTWTh 7:30 AM – 9:45 AM, Room MLC 112

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Office Hours: By appointment

Class Communication Tool: *My Courses / Course Studio* at MyPortal.fhda.edu

Prerequisite: Mathematics 41 and 42 (both with a grade of C or better); or a satisfactory score on Calculus Readiness test within the last calendar year.

Textbook: *Precalculus with Limits*, Ron Larson, Second 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: Conic sections, parametric equations, systems of equations and inequalities, vectors, lines and planes, sequences and series, polar coordinates, mathematical induction, and the binomial theorem.

Student Learning Outcomes: Upon completion of the course, the student will be able to

1. Analyze, investigate, and evaluate linear systems, vectors, and matrices related to two or three-dimensional geometric objects.
2. Graph and analyze regions/curves represented by inequalities or trigonometric, polar, and parametric equations, including conic sections.
3. Analyze, develop, and evaluate formulas for sequences and series; justify those formulas by mathematical induction.

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. Homework will be graded on neatness and completeness. 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" × 11" 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" × 11" 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:

| | | | |
|--------------------------|-----|---------------|-------------|
| Homework/Classwork | 10% | 90 – 100% = A | 0 – 59% = F |
| Quizzes | 15% | 80 – 89% = B | |
| Midterm Exams | 40% | 70 – 79% = C | |
| Final Exam | 35% | 60 – 69% = D | |

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. Do 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 43-01 – Summer 2015)

| MONDAY | | TUESDAY | | WEDNESDAY | | THURSDAY | |
|------------------------|-----------|--------------------|-----------|-----------------------|-----------|--------------------------|-----------|
| June 29th §7.1, 7.2 | 1 | 30th §7.3, 8.1 | 2 | July 1st §7.4, 7.5 | 3 | 2nd §7.6, Quiz 1 | 4 |
| 6th §8.2, 8.3 | 5 | 7th §8.4 | 6 | 8th 8.5, Review | 7 | 9th Exam 1 | 8 |
| 13th §9.1, §9.2 | 9 | 14th 9.3 | 10 | 15th §9.4, 9.5 | 11 | 16th §10.1, Quiz 2 | 12 |
| 20th §10.2, 10.3 | 13 | 21st §10.4 | 14 | 22nd §10.5, Review | 15 | 23rd Exam 2 | 16 |
| 27th §10.6, §10.7 | 17 | 28th 10.8 | 18 | 29th §10.9, 6.3 | 19 | 30th §6.4, Quiz 3 | 20 |
| Aug 3rd §11.1, 11.2 | 21 | 4th §11.3, 11.4 | 22 | 5th Review | 23 | 6th Final Exam | 24 |

Tentative Homework Assignments
(MATH 43-01 – Summer 2015)

| Section | Minimum Required Problems |
|----------------|--|
| 7.1 | 27, 33, 39, 61, 63 |
| 7.2 | 29, 33, 35, 51, 71 |
| 7.3 | 19, 27, 29, 39, 51, 61, 73 |
| 8.1 | 31, 33, 39, 41, 43, 57, 71, 73, 79, 81 |
| 7.4 | 9, 11, 15, 17, 21, 27, 33, 47 |
| 7.5 | 9, 11, 15, 17, 41, 43, 45, 51 |
| 7.6 | 13, 15, 39 |
| 8.2 | 11, 16, 29, 33, 35, 37, 49, 51, 63, 73 |
| 8.3 | 5, 17, 19, 45, 59 |
| 8.4 | 9, 29, 43, 51, 75 |
| 8.5 | 7, 15, 27, 35, 45 |
| 9.1 | 19, 31, 51, 55, 59, 67, 75, 81, 83, 87, 91, 103, 109 |
| 9.2 | 9, 13, 25, 29, 43, 47, 63, 65, 69, 73, 91, 101 |
| 9.3 | 9, 13, 25, 29, 41, 49, 53, 81, 89, 95, 105, 109, 133 |
| 9.4 | 7, 15, 19, 23, 27, 37, 59, 61, 67 |
| 9.5 | 9, 13, 27, 47, 57, 65 |
| 10.1 | 7, 21, 29, 43, 53 |
| 10.2 | 23, 25, 31, 39, 45, 55, 59, 75 |
| 10.3 | 13, 15, 17, 21, 23, 25, 39, 47, 61 |
| 10.4 | 11, 15, 19, 29, 31, 33, 37, 43, 57, 59, 63 |
| 10.5 | 13, 19, 45 |
| 10.6 | 5, 7, 11, 17, 27, 31, 45 |
| 10.7 | 5, 11, 19, 23, 39, 45, 71, 73, 79, 85, 89, 93, 105 |
| 10.8 | 13, 15, 21, 27, 29, 39 |
| 10.9 | 15, 19, 23, 39, 41, 43, 47, 49, 53 |
| 6.3 | 11, 21, 31, 35, 41, 45, 49, 55, 63, 65, 71, 91 |
| 6.4 | 9, 13, 17, 23, 31, 39, 49, 53, 55, 59, 61, 79 |
| 11.1 | 9, 11, 21, 25, 35, 37, 49, 57, 59, 63, 69, 71 |
| 11.2 | 7, 9, 15, 23, 27, 29, 31, 33, 35, 39, 43, 51 |
| 11.3 | 7, 11, 29, 35, 39, 43, 47, 53, 57 |
| 11.4 | 5, 9, 15, 21, 25, 27, 31, 35, 37, 47, 59 |