

MATH 241-011  
MWF 9:05–9:55, PRN 235; R 9–9:50, MDH 216

Analytic Geometry and Calculus A  
Spring 1998

Web Page: <http://www.math.udel.edu/~edwards/download/m241/s98home.html>

Newsgroup: [udel.spring98.math241-010](mailto:udel.spring98.math241-010)

Instructor: Prof. D. A. Edwards  
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## Introduction

Welcome to Analytic Geometry and Calculus A! Since most of you are not mathematics majors, the focus of this course will be on the *applications* of calculus, rather than the *theory* behind it (except when explaining the theory will enhance your understanding of the concepts). I will be passing around a sheet today asking each of you what you think your major might be. Then I will try to present examples from those subjects so that you can see how calculus is applied to your area of interest.

The text for this course is *Calculus*, 9th ed., by Thomas and Finney. **The text is required**, since you will be assigned both reading and homework problems from the book. You may also wish to purchase the study guide for the text. In addition, I may also be lecturing from various other sources, so class attendance and participation is necessary for successful mastery of the material.

Though not required, you may find a scientific calculator quite useful. You may use calculators for all homework assignments. Unless expressly told otherwise, standard scientific calculators may be used for quizzes and exams as well, though graphing and programmable calculators may not.

If you have any questions, you may contact me during my office hours or make an appointment. **Extra copies of handouts are available outside 511 Ewing.**

You may bring a tape recorder with you to class, if you wish; however, unattended tape recorders will not be permitted. There will be no makeup classes for snow days.

## Electronic Communication

The Web page for this course is listed above. There you will find copies of handouts available for downloading, as well as any important announcements (corrections to typographical errors, etc.). Also at the URL

<http://www.math.udel.edu/~edwards/download/suggest.html>

you will find an anonymous suggestion box.

Announcements will also be posted to the newsgroup for the course, which is listed above. The newsgroup gives you a chance to collaborate electronically, asking questions of your fellow students, etc. If I find a question being repeatedly asked, I will try to address it in the next class session. Though the group is unmoderated, I will be checking to make sure that answers to homework assignments and other types of inappropriate material aren't being posted. No anonymous posting is allowed. For more information on how to use electronic resources, contact the Help Center (x6000).

## Exams

There will be four exams in the course; the dates are listed on the attached schedule. **NO MAKEUP EXAMS WILL BE GIVEN!** The first three will be 45 minutes long and will take place during a regular lecture hour. The final exam will be two hours long. Please be prepared to show picture identification in order to enter the examination room. Attached to each examination will be a course evaluation form, so that I may receive your suggestions for how the course could be improved. These forms will be seen only by me, so if you have comments that you wish the department to hear, please contact them directly.

When the exams are returned, they will have a numerical score and a letter grade on them. The numerical score is your score for the exam; *the letter grade is your grade for the course to that point, including all quiz and homework scores.*

## Quizzes

Four quizzes will be given during the term; their dates are listed on the attached schedule. No makeup quizzes will be given. They will take fifteen minutes each, and you will need to bring your own paper. They will cover any material presented in lecture up to the week before the quiz. Before computing your quiz average, I will drop your lowest quiz score.

## Assessment

Your grade for the course will be determined in two stages. First your *raw score* will be calculated from your exam scores, with the final counting as the equivalent of two exams. However, if including your homework and/or quiz scores will improve your score, I will let each count for 10% of your grade. Therefore, doing the homework, attending recitation sections, and taking the quizzes *can only help* your grade. (In the past, it has been my experience that the vast majority of students improve their grades significantly by using their homework and quiz scores.) Then each of the raw scores will be scaled to determine final grades.

## Homework

Homework will be distributed on Fridays during lecture (the first assignment is attached to this introduction), and it will be due at the beginning of class the following Thursday. The homework will cover material up through the Monday after it is distributed. **ABSOLUTELY NO LATE HOMEWORK WILL BE ACCEPTED!** If you must miss a due date because of University business, it is your responsibility to make sure the homework gets to me *before* the due date. Since calculus is a subject where the material for one section builds on the section before, it is critical that you keep up to date on the homework: hence the stringent policy. However, to calculate your semester-long homework average, I will drop your two lowest homework scores. Therefore, low scores for assignments where you were pressed for time can be erased as long as you don't have too many of them.

When completing each homework assignment, you should rely only on the material I have presented thus far in the class, even if you have already taken calculus. Though you may not copy directly from another's paper or use someone else's ideas as your own, I encourage you to discuss the homework problems with your classmates. Any scientific endeavor is rarely done in a vacuum; therefore it is to your advantage to learn the benefits of collaborating. Model

homework solutions will be placed on reserve in the library after the assignment is due. Hopefully these will assist you in learning the material.

Homework assignments should be folded like a book with the following information on the “front cover:”

Name  
Math 241-011—Edwards  
Assignment Number  
Date

You will turn in your assignments this way so that I may put your grade on the inside, thus ensuring your privacy. I will make every effort to ensure that your graded homework is returned in a timely manner.

Each homework assignment will consist of ten questions. Of those, some randomly selected problems will *not* be graded. For these questions, you will receive one point if you attempted the problem. For the problems that will be graded, you may receive up to four points, depending on the completeness and accuracy of your solution.

Obviously, I can assign only a select few homework problems to be turned in. Therefore, I choose ones which, if mastered, show adequate understanding of the material. The examinations will largely be based on the material covered in the homework assignments. However, you are encouraged to try other problems in the book for practice.

## Tutoring

Tutoring is available at the Preparatory Mathematics Tutorial Lab in 101C Ewing. The lab also maintains a list of tutors available for individual instruction. Group tutoring through the Academic Services Center is usually arranged a few weeks into the semester.

## Tentative Schedule

**Note:** This is only a tentative schedule; there may be deviations from it.

February 11–13: preview chapter

February 11: Homework 1 distributed

week of February 16: preview chapter, sections 1.1–1.2

**February 19: Quiz 1** (covers the preview chapter)

February 19: Homework 1 due

February 20: Homework 2 distributed

week of February 23: Sections 1.3–1.5

February 26: Homework 2 due

February 27: Homework 3 distributed

March 2–5: Sections 3.5, 1.6

**March 6: Exam I** (covers the preview chapter, sections 1.1–1.5, 3.5)

week of March 9: Sections 2.1–2.3

March 12: Homework 3 due

March 13: Homework 4 distributed

week of March 16: Sections 2.4–2.6

**March 19: Quiz 2** (covers sections 1.6, 2.1–2.4)  
March 19: Homework 4 due  
March 20: Homework 5 distributed  
week of March 23: Sections 2.7–3.2  
March 26: Homework 5 due  
March 27: Homework 6 distributed  
March 30: Section 3.3  
**April 1: Exam II** (covers section 1.6, chapter 2, sections 3.1, 3.2)  
April 2–3: Section 3.4  
**week of April 6: Spring Recess**  
April 13: Sections 3.6, 3.7  
April 16: Homework 6 due  
April 17: Homework 7 distributed  
week of April 20: Sections 4.4–4.6  
**April 23: Quiz 3** (covers sections 3.3, 3.4, 3.6, 3.7, 4.4)  
April 23: Homework 7 due  
April 24: Homework 8 distributed  
week of April 27: Sections 4.1, 4.7, 4.3  
April 30: Homework 8 due  
May 1: Homework 9 distributed  
week of May 4: Sections 4.8, 5.1  
**May 8: Exam III** (covers sections 3.3, 3.4, 3.6, 3.7, 4.1, 4.3–4.8)  
week of May 11: Sections 5.2–5.4  
May 14: Homework 9 due  
May 18: Section 5.5  
**May 18: Quiz 4** (covers sections 5.1–5.3)  
May 21: Review Session, 9–11, Purnell 235 (this is the room normally used on MWF).  
**May 22: Final Exam, 3:30–5:30, Purnell 118** (covers entire class, but especially sections 5.1–5.5)