

GENERAL REMARKS

The course text is *Elementary Differential Geometry* (Second Edition), by B. O'Neill (Academic Press, 1997, ISBN: 0-125-26745-2). This course will essentially cover the first five chapters with a few omissions and additions at various points. Online lecture notes give a more accurate description of the course contents (see below for more information on these).

Contact information. My office is Surge 221, and it is around the corner from the Department's administrative front desk (Surge 202). Normally I am available in my office between 10:30 and 11:30 on Fridays, and at other times by appointment. My telephone number is 951-827-6459 (as usual, suppress the area code from inside the 951 region, and also replace the 827 by a 2 if calling from an extension at UCR). Another highly recommended option is electronic mail; my full address is schultz@math.ucr.edu. Use of electronic mail is often easier than trying to play telephone tag. **IMPORTANT:** The default filters for electronic mail on the Department network are not very restrictive and sometimes there is an enormous amount of garbage in my electronic mailbox. Therefore I **strongly recommend** that you include something like Math 138A in the subject heading so that your message does not get inadvertently deleted without being read. Also, since the authors of junk messages often use only capital letters in their subject headings, this should be avoided as well.

Grading policy: There will be an in-class midterm examinations, which will count 27 per cent of the course grade, a final examination that will count for 45 per cent, a take-home examination which will count for 10 per cent and three quizzes in the discussion sections which will each count for 6 per cent.

Tentatively the midterm examinations is scheduled for Wednesday, February 3, and the final examination is scheduled for Tuesday, March 16. The due date for the take-home assignment is scheduled for Friday, February 26; the exam will be posted between one and two weeks before the due date. and part in-class (with a later starting time!). Quizzes are scheduled for January 16, February 16 and March 3 (all Tuesdays).

No books, notes or calculators are allowed for examinations or quizzes. You should always bring your UCR identification card to examinations and quizzes (there might be identification checks). Most questions will be problems from the assignment sheets, examples from the text or lectures or discussion classes, or straightforward modifications of these (usually slightly different numbers or functions).

Course handouts and notes: All printed handouts for the course will be available on the World Wide Web from the following site:

<http://www.math.ucr.edu/~res/math138A>

The contents of this directory include a copy of this handout ([aabInformation.pdf](#)), the course outline, the homework assignments, and various files containing supplementary material. All files except a few ordinary text files are available as pdf files. These can be opened, downloaded, read or printed with the free Acrobat readers that are currently available or easily downloadable for most PC's (including both Macintosh and Unix based systems — there are also such readers for some smart cell phones, Blackberries and similar pocket-sized devices, but I do not have complete information on availability).

There are also directories containing background material from some fairly closely related courses in the directory

<http://math.ucr.edu/~res>

Specifically, the subdirectories `math10A`, `math10B` and `math132` contain background material which is particularly relevant to this course.

IMPORTANT. (1) *Please contact me immediately if you have problems viewing or printing out any of these files.*

(2) *These files are only intended for classroom purposes and are not meant for widespread public circulation.* In some cases further distribution may be a violation of copyright laws or the terms of use for material in the files.

Discussion sessions: In addition to the three meetings with the primary instructor each week, there is a discussion sections which is scheduled for one hour each week; the instructor is Mr. E. Burkard. Further information will be made available at discussion section meetings.

General expectations. Students are expected to attend all classes, both lectures and discussions, but this will not be enforced except in the case of examination dates. However, missing class can seriously affect one's course grade. It is important to keep up with the course and finish homework assignments in a timely manner. Preparing for the lectures by reading the book before class is strongly encouraged, as are taking notes and asking questions during class if you do not understand something or if something in the class seems incorrect – even if everyone else seems to understand what is going on (if there is not time to answer some questions during class, arrangements can be made to do so afterwards). It is essential to attempt the homework problems before going to discussion. Solving many problems is the best way to solidify your understanding of mathematics and to prepare for examinations. **If you find you can't do something ask for help.**

Students are responsible for understanding how to do all the exercises listed in the course homework file; for the most difficult ones, only a passive understanding of the solutions is necessary, but for exercises that are easy or just moderately difficult the ability to explain the solutions clearly, or to do this for a slight variation of the problem, is something that is certain to be appear on exams. Some solutions (or sketches) and hints will be posted.

Student questions during primary class sessions are encouraged. Please do not hesitate to ask questions, especially if you do not understand something or if something in the lecture seems wrong — even if everyone else seems to understand. Questions on homework or review are generally best answered at the beginning of class and should be asked at that time. In general such questions are encouraged, but in some cases it might be necessary to limit such question periods or to post the answers online after class.

The primary instructor and teaching assistant will attempt to answer electronic messages regarding the course in a reasonably timely manner, especially during regular working hours, and in some instances one or the other may respond outside of such hours. Complete answers to more complicated questions may require additional time.

Disability issues: Students who have been certified as eligible for academic adjustments under existing laws should contact the primary instructor within the next week with the necessary supporting materials. Further information on campus services for students with disabilities is available at the following sites:

<http://www.specialservices.ucr.edu/swd/default.html>

<http://www.specialservices.ucr.edu/swd/aboutus.html>