## Math 147A - Introduction to differential geometry

**Instructor:** Shoo Seto

Office: South Hall, Office 6705 E-mail: shoseto@math.ucsb.edu

Office Hours: TR 5:00 PM-6:00 PM, also available by appointment.

**Lectures:** TR 3:30 PM-4:45 PM

Classroom: NH 1111

**Textbook:** "Elementary Differential Geometry" by Andrew Pressley, second edition

**Prerequisite:** Mathematics 5B or 5BI or 6A or 6AI; and, Mathematics 108A or 117.

Course Catalog Description: Curves and surfaces in three-dimensional Euclidean space, first and second fundamental forms, Gaussian and mean curvature, geodesics, Gauss-Bonnet theorem, and non-Euclidean geometry.

**Attendance:** Students are expected to attend every lecture meeting and are responsible for the material presented in each lecture with no exceptions made for missed classes.

Closed Notes: Notes and books are not permitted on the midterm or the final exam.

GauchoSpace: There is a GauchoSpace page that will update regularly with information, assignments, lecture notes, etc. pertaining to the course. It is your responsibility to check GauchoSpace for updates on a daily basis.

**Homework Assignments:** Weekly homework will be assigned and should be submitted at the beginning of class on the due date. Select homework problems will be graded and overall completeness of the assignment will be accounted for.

Missed Homework Policy: No late homework will be accepted. At the end of the term, I will drop your lowest homework score.

**Laptop/Tablet Policy:** You may use laptops and or tablets to take notes in class provided that what you are doing on your device is not distracting other students.

**Tentative Midterm Date:** There is one 75-minute in-class midterm on Thursday, April 28th at 3:30 PM- 4:45 PM in NH 1111. The midterm can only be rescheduled if the student has an excuse from the university and if the arrangements are made during the first week of class.

I reserve the right to move the midterm date.

**Final Examination Date:** There is an cumulative final on Thursday, June 9th, at 4:00 PM-7:00 PM in NH 1111. The final exam is mandatory and make-ups are only permitted with permission from the university.

Grades: All grades will be assigned by the standard 10-point scale.

Letter Grade	_		+
A	90-91	92-97	98-100
В	80-81	82-87	88-89
$\mathbf{C}$	70-71	72-77	78-79
D	60-61	62-67	68-69
$\mathbf{F}$	< 60		I

The breakdown of your final grade in the course will be as follows:

 $\begin{array}{ll} Homework & 30\% \\ Midterm & 30\% \\ Final Exam & 40\% \end{array}$