1. The Plan
We’ll first cover a few chapters in Do Carmo’s book “Riemannian Geometry”. The tentative plan is Chapters 10 and 11, and possibly also Chapters 12 and 13. Then we’ll introduce Hodge theory about differential forms. Additional topics will be covered if time allows.

2. Required Work The following work is required:
1) Nicely organized and presented lecture notes.
2) Homework.
3) The final exam.

Homework problems will be assigned during the lectures. Homework and lecture notes will be collected at the end of the quarter.

3. Grading policy Lecture notes 30%, homework 30 %, and final exam 40