Week of	Tuesday	Thursday
Aug 18	No class – MR travel	1. Preliminaries/Intro (Ch. 1)
Aug 25 *PS #1: 1.9, 1.10, 1.20*	2. Intro (Ch. 1)/Stress (Ch. 2)	3. Stress (Ch. 2 & 3)
Sep 1 *PS #2: 2.3, 2.8*	4. Isostasy / Stress (Ch. 2)	5. Isostasy / Stress (Ch. 2)
Sep 8 *PS #3: 2.27, 2.33*	6. Stress (Ch. 2/3) *(Hw 1)*	7. Strain (Ch. 2)
Sep 15 *PS #4: 3.1, 3.3, 3.6*	8. Strain/Elasticity (Ch 3)	9. Strain/Elasticity (Ch 3)
Sep 22	No class – MR travel	No class – MR travel
Sep 29	10. Elasticity / flexure (Ch 3)	11. Elasticity / flexure (Ch 3)
Oct 6 *PS #5: 4.6, 4.12*	12. Elasticity / flexure (Ch 3)	13. Heat transfer (Ch 4)
Oct 13 *PS #6: Matlab code*	14. Heat transfer (Ch 4)	15. Heat transfer (Ch 4)
Oct 20	16. Heat transfer	17. Heat transfer (Ch 4) *(HW 2)*
Oct 27	18. Gravity (Ch. 5)	19. Gravity (Ch. 5)
Nov 3	20. Fluid Mechanics (Ch. 6)	21. Fluid Mechanics (Ch. 6)
Nov 10	22. Fluid Mechanics (Ch. 6)	23. Fluid Mechanics (Ch. 6)
Nov 17 *PS #7: 6.5, 6.7, 6.9*	24. Rock Rheology (Ch. 7) *(Hw 3)*	22. Rock Rheology (Ch. 7)
Nov 24	23. Rock Rheology (Ch. 7)	24. Faulting and friction (Ch. 8)
Dec 1	25. Faulting and friction (Ch. 8)	26. Faulting and friction (Ch. 8)*(HW 4)*
Dec 8	**Finals Week and Fall AGU Meeting**	

Dates for a given topic are subject to change.

Instructor: Mousumi Roy; PandA 1146; 277-4521; mroy@unm.edu

Office hours: Fridays 9-11 am and by appointment
I can guarantee that if you do not see me in office hours with questions, you will have a very hard time with HW's and the weekly problems. Please remember this as you budget time for the homeworks and other work for this class.

Text: Geodynamics, 3rd ed., by D. Turcotte and G. Schubert, Cambridge Univ. Press. The bookstore should have copies. We will follow the textbook fairly closely in this class – homeworks and lectures will be tied to specific sections of the book.

Format: Each topic will be covered as a mixture of lecture and problems. I encourage lots of questions and really want you to participate in class, especially in problem solving. Longer homework sets will be given roughly every 2-3 weeks, and will be based on lecture material and the reading in the text. Homework will involve computation/calculation using the Matlab programming environment. This is a quantitative class and I want to give you lots of experience applying the concepts and mathematics we learn to geologic problems. You will be required to learn programming in Matlab (if you do not know it), and will be given guidelines as needed in handouts and in office hours. You will also be asked to complete shorter weekly problem sets (2-3 problems) out of Turcotte and Schubert. DO NOT USE THE MATLAB CODES provided in the book – write your own, but you can use the codes later to check your work.

Grading: Your grade will be based on:

-   60% = the homework (6 major HW sets through the semester)
-   40% = ~weekly problems (PS #s on schedule).

I encourage you to talk and discuss the work with each other and with me, but write up your solutions individually after all discussion. There is no final exam for the class.

The grades will be assigned on a curve. Roughly, the scheme is as follows:
-   the top 30% of the class will get A's
-   everyone else will get somewhere from B- to B+, depending on performance
-   you'd have to get less than 50% average on the homeworks/weekly problems to get less than a B in this class.

Qualified students with disabilities needing appropriate academic adjustments should contact me as soon as possible to ensure your needs are met in a timely manner.