## Final Project-Theory of Plasticity (MECH 942)

For the final project of the Theory of Plasticity, each one of you are to simulate and present three problems. The final project should be written as a report (title, author, date, chapters, sections, references, appendix, etc.), with each problem being one chapter described by

- 1. A summary introduction
- 2. A detailed description
- 3. A description of the simulation you developed
- 4. A verification of the program, including plots of the simulation and analytical results
- 5. Additional simulations to elaborate the capability of the program
- 6. No more than five pages per chapter

For each problem, describe the section assigned and develop an infinitesimal elasticity simulator and use this simulator to study the response. Provide plots of the response and include the material, geometric and loading parameters you used.

You can attach the program files, or put the code in the appendix, but do not include code in the body of the report. On the other hand, include plots of your simulations for the different problems. Verify that the simulator works, etc. Follow the general instructions of project 1 (i.e., summarize, don't repeat, don't narrate your efforts, just provide the results and discuss them, give all that is needed to repeat your work).

The assigned problems are:

Problem	1	2	3
	Sections		
Mubarak Abu Zouriq	8.2	8.5 and 8.6	8.9/8.9.1
Qusai Alomari	8.3	8.7	8.8/8.8.3
Sina Changizian	8.4	8.8/8.8.3	8.9/8.9.1
Rola El-Nimri	8.2	8.7	8.8/8.8.4
Zunayed Habib	8.3	8.5 and 8.6	8.8/8.8.4
Andrew Loken	8.4	8.7	8.9/8.9.1
Glenn Richardson	8.2	8.8/8.8.3	8.9/8.9.1
Bowen Yang	8.3	8.5 and 8.6	8.8/8.8.3

Feel free to talk and discuss your work with the other students, but the final work you present should be your own work and only your own work.