CHM 7001 - Independent Project :

1-If possible, it should include concepts from the course and be useful for your research. Discuss in collaboration with J. Greener, D. Boudreau and your supervisor.

2-Choosing a project:

- March 9: submit a draft project proposal (AFTER discussing with your supervisor).
- Meet with either J. Greener or D. Boudreau to focus the proposal.
- March 16: Submit project proposal (1 page). It will include: motivation and a work plan (5%)

3-Project submission includes the following parts:

- Introduction: Rational, background, list of concepts from the course that you used. (5%)
- Setup (10%)
- Results/discussion (15%)
- Bibliography (5%)

4- POSSIBLE PROJECTS:

Use micromanager/imageJ with imaging hardware and possibly other software (matlab) to undertake a complex data acquisition, analysis routine that is useful for your research or is interesting to you. Include as many concepts from the course to maximize your mark:

- Integrate new hardware with MM and use it for a novel measurement (a moving stage, shutter/footswitch, multiple cameras, communication through ports with other equipment, etc.).
- Integrate matlab or another program for in-line signal processing step(s).
- Construct a new plugin or macro for complex processing.
- Use an existing plugin to undertake a specific measurement or analysis routine (projection for frap, multiwavelength acquisition, confocal z-stacks, image stitching…)
- Using a foldascope or other homemade tool for image acquisition.

These are just example some ideas. Do not plan your project too early; for now, just think about how each of the concepts in the lectures applies to your research.