

CHEMICAL ENGINEERING 4Y04 A/B – SENIOR INDEPENDENT PROJECT

Course Outline

Course coordinator: Dr. Todd Hoare (hoaretr@mcmaster.ca, JHE A409)

Course structure: This course will consist of a research-focused project to be conducted independently by the student under the direction of a Faculty member. The project may involve a combination of computational work, laboratory work, discussions, or individual study, as per approval of the Faculty supervisor. A minimum GPA of 9.5 as well as agreement of a Faculty supervisor are required to enroll in the course. Please complete the Supervisory Agreement on the next page in collaboration with your Faculty supervisor; when complete, please e-mail it to Dr. Hoare (hoaretr@mcmaster.ca) and Michelle Whalen (whalenm@mcmaster.ca) for approval to enroll in the course. If you are in the Accelerated Master's stream, please also copy the Associate Chair, Graduate, Dr. Li Xi (xili@mcmaster.ca) when sending in your Supervisory Agreement form.

Course expectations:

1. The course will run over terms 1 and 2 of the academic year and will be evaluated by at minimum one written deliverable and one presentation deliverable (see the Supervisory Agreement on the next page for some options – the Other line can be used to add another type of deliverable as is appropriate for the scope of the project to be completed). The scope of each deliverable agreed upon (i.e. the length of each written document, the scope of topics to be covered) as well as the deadlines for each deliverable (to be specified directly on the Evaluation Rubric on the next page) should be discussed between the Faculty supervisor and the student so that expectations are clear at the outset of the course.
2. The project agreed upon between the student and the Faculty supervisor should be achievable in an average of 3-5 hours per week over the course of the project period. The actual work schedule (including hours per week as well as the distribution of work over the two terms of the course) should be discussed between the student and the Faculty supervisor.
3. Should the Faculty supervisor be unavailable for more than 2 weeks during this time, adequate supervision by a colleague, postdoctoral fellow or senior graduate student must be arranged and communicated in advance to the student.
4. The Faculty supervisor will ensure that the student has completed any necessary Health and Safety Training prior to beginning work in any laboratory if such work is relevant to the project.
5. The student and Faculty supervisor should meet on a regular basis during the duration of the course. The frequency of such meetings can be decided in consultation with the Faculty supervisor.
6. It is the responsibility of the student to ensure the project is kept up-to-date and on progress. Any problems and necessary changes should be communicated with the Faculty supervisor.
7. Faculty supervisors are expected to communicate grades for any deliverable in a timely manner. The student should consult with the course coordinator if a mark for any component has not been received within one week of the mark submission date for that deliverable. A final mark for the course must be received to the course coordinator no later than the final day of the winter term examination period.
8. Any modifications of the mark breakdown for the course must be discussed and approved by the supervisor and the student. Any exceptions to the expectation that at least one written and one presentation deliverable comprise the student's output in the course must be approved by the course coordinator.
9. All standard McMaster policies on accommodation, missed work, and academic integrity will be followed.

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Supervisory Agreement

Student Name:

Student number:

Proposed Supervisor's Name:

Proposed Project Topic:

Brief Description of Proposed Project (200 words or less):

Evaluation Rubric: Please discuss with your Faculty supervisor which deliverables would be most appropriate for your project. At least **one written deliverable** and **one presentation deliverable** must be selected unless alternate arrangements are agreed upon with the course coordinator. Please enter the due date(s) of the written deliverable(s) directly in the table below where indicated.

Component	Weighting
Written project progress report (template provided) (Due date:)	
Written project proposal (Due date:)	
Written literature review (Due date:)	
Written final report (Due date:)	
Oral presentation at the 4Y04 Symposium (to be scheduled within 1 week of end of winter term classes, 15 minute presentation + 5 minutes of questions)	
Poster presentation at McMaster University Chemical Engineering Conference (MUCEC) (typically held during winter exam period)	
Performance (i.e. work done to collect/analyze data)	
Other (<i>please specify</i>):	
TOTAL	100%

Signatures: I acknowledge that I have read, understood, and accept the project requirements as detailed in the course outline & supervisory agreement.

Student Signature:

Date:

Supervisor Signature:

Date: