

UNIVERSITY OF CALGARY  
FACULTY OF SCIENCE  
DEPARTMENT OF CHEMISTRY  
COURSE OUTLINE  
FALL 2020 & WINTER 2021

**Course:** CHEM 601/603

| 601/603 Coordinator  |  | Analytical / Environmental | Inorganic  | Organic             | Phy  |
|----------------------|--|----------------------------|------------|---------------------|------|
| V. Thangadurai       |  | S. Kimura Hara             | R. Roesler | J. Van Humbeck      | B. H |
| ES656E               |  | SB333                      | SB330      | SB 229A             | SB 4 |
| vthangad@ucalgary.ca |  | s.kimurahara               | roesler@   | jeffrey.vanhumbec1@ | bjm  |

**Outline:**

- (i) Students will attend seminars by their peers and faculty on a weekly basis. These will be Departmental seminars or a speaker from their specific sub-section above when scheduled.

**Objectives:**

- (i) Students will be exposed to topical chemistry research.
- (ii) Students will gain experience at giving professional presentations, including brief instruction in best practices.
- (iii) Students will increase their proficiency at responding to questions, at being an active audience member, and at participating in group discussion.

**Regulations:**

- (i) A title and brief abstract of your talk must be given to the grad office and section coordinator, **at the absolute latest**, two weeks prior to your presentation. Failure to meet this deadline will result in the cancelation of your seminar.
- (ii) Attendance at the seminars is **mandatory**. You must let your Section Coordinator know if you will be absent or attending another section. You will not receive credit if you repeatedly fail to attend.
- (iii) One talk and a final research presentation are required for the M.Sc. program. Two talks and a Departmental research seminar for the Ph.D. program.
- (iv) One time during your graduate program, ideally before your first presentation, you must participate in a short workshop that covers communication best practices, basic proficiency with presentation software, and an exercise where you evaluate a mock talk based on the same criteria you will be evaluated on.
- (v) The content of the general research seminar (i.e. not the Final M.Sc. or Ph.D. departmental talk) will be decided in consultation with your supervisory committee. Topics should be relevant and useful to your project and scientific development, but not directly related to your research project. The aim is to learn something new that will help your development, rather than to present something you already know. The topic must also be approved by your section coordinator to avoid repetition of topics.

- (vi) The speaker will be expected to answer audience questions about the details of the presented work and its context and implications. The section coordinator will also facilitate a broader audience discussion on the topic.
- (vii) Your performance will be evaluated using the attached rubric. The final evaluation will be by the section coordinator, who will consult with the faculty in attendance. Supervisory committee members are encouraged to attend. Scores of below basic in more than one category, or an overall score below 20 / 40 will require repeating.
- (viii) As a courtesy to the speaker, electronic devices (phones, computers, tablets) **are banned** from the audience for 601/603, including for faculty.

**Format:**

- (i) Talks are to be formal. Use PowerPoint. It is solely your responsibility to ensure the room and projector are ready.
- (ii) The talk should be 30 mins followed by a 10-15 min discussion period.
- (iii) The first 10-12 min should focus on introduction, history, and context. The remaining time should be split between one or more recent (last 4-5 years) case studies from the literature. Generally, this should be two case studies, but in certain circumstances, a single case study or more than two case studies may be appropriate. This should be discussed and approved by your supervisory committee. You should not focus only on the methods and results. Put the research in context. Why should your audience care about this work? How does it advance chemistry?

**Department Approval:**

**Date:**