

UNIVERSITY OF BRITISH COLUMBIA



CHEMISTRY GRADUATE STUDENT SOCIETY

Minutes for December 5, 2014 Graduate Student Forum

Time: 2:30 PM

Location: D300

1. Agenda

- i. Grad courses: somehow change requirements to fulfill course requirements for new graduate students over the first two years of the PhD degree
- ii. Chem 540: keep pass/fail but add some extra topics related to critical evaluation of the literature articles
- iii. TA positions: openly discuss workloads of different TA assignments; some lab courses require weekly lab report marking, others do not. Very uneven for same unit value
- iv. PhD Guidance committees: formally, they meet for the Comprehensive, the 4th year meeting, and some members participate in reading the thesis before submission and sitting on the PhD oral defense exam. We should encourage students to informally approach their guidance committees, individuals, for advice. How to facilitate this?
- v. Comprehensive Exams: how do graduate students feel about how these are done at present? Let's discuss this
- vi. On-line inventory: investigate if Safety Committee has ideas on how to implement this
- vii. Re-start workshops on "how to be an academic": what about a workshop on "What does a PhD in industry do?"
- viii. More communication between the Head and graduate students: when department decisions by faculty affect grad students, when is the best time to inform them? Should they be part of the discussion? This is pretty open ended, but worth discussing
- ix. 5th year tuition: what options are available for students to pay for this doing other work?

2. Discussion

There are 185 graduate students in the Chemistry department, and Mike Fryzuk and Mike Wolf want to hear about any concerns or ideas, and that is the purpose of the forum discussions.

The discussion begins with topic vi, the on-line inventory.

vi.) On-line inventory:

This was meant to be done last spring, and Jane Cua wants to do it. An excel spreadsheet template will be designed to allow the chemical inventory from each group to be merged and put online. It will happen hopefully early in the New Year. Jane, Nancy, and Helen will be meeting and looking for student volunteers to help.

i.) Grad courses:

A survey from 2013 showed discrepancies between what 1st year grad students want, and those in later years would have liked to see. One thing wanted was tests that were different from those given to undergrads.

A Mark MacLachlan course (Inorganic Topics) had an interesting course structure where each student gave a talk every two weeks on a given topic. The course had a high course loads but students learned a lot.

Undergrad course curriculums have been revamped and now work is beginning on the graduate courses. A graduate student, Andrea, has recently joined the curriculum committee.

In terms of course aspects enjoyed by grad students, Mark's course had a final exam where students wrote and answered their own questions, while Electrochem with Dr. Dan Bizzotto has an oral final exam, which is good for comp exam practice. In the bioanalytical course taught by Mike Blades and Robin Turner, students learn to critique published papers and learn what makes a good or bad paper.

There was a question about the need to cover fundamentals as well as advanced material. Being a lecture TA helps to refresh knowledge of the fundamentals, but should the fundamentals also be part of grad courses? Should the material taught be broad, or more specific? First year courses can be sat in on.

Having 2 week long course modules was discussed. Including instrument training as a module was also discussed, where a course would offer training for different instruments, and a passport would be used to track each instrument on which the student had been trained. Educational/training programs with different topics/themes could be used and built on, including topics like project management, economics, or patent law, although these useful skills are not exactly chemistry. The GSS offers such programs, although not directly related to chemistry/science, but we can work with them to target certain areas.

There was some question of what options exist outside of academia, and the forum with people in industry held by the undergraduate society was discussed. The graduate students may be able to get involved with that event. Other events, such as one held by the ACS, exist on campus and can be attended, although some have found it difficult to find out about all of the events that exist on campus as the mountain of e-mails is difficult to sort through. A central calendar would be useful, but difficult.

The idea of taking courses over a span of two years instead of one was discussed. The requirement to take all courses in the first year is not enforced rigorously, and the extent of flexibility is being investigated. It is better to be able to get into the lab in the first year to begin learning there. It is especially difficult for masters students. Previously, 6 courses were required rather than 4, which has obviously since been reduced, and has been helpful. This all ties back to wanting to reduce the average length of a PhD from 5 years to 4.

It was suggested that the courses that will be offered for the year and possibly even the next could be posted online to allow first year students to decide which courses they should select for the year, and which will be available for the next year, to help them to decide how to organize and select useful/necessary courses. It was also suggested that the online blurb about each course could be updated, giving more information to help students to decide whether or not that course will be useful for them. Perhaps the syllabus could also be offered online.

In terms of course testing for grad students, it was agreed that midterms and finals are easy to administer, but perhaps not the most effective tool. Different ideas such as oral exams or skill testing exams were suggested. Grad students would like to be tested differently than undergraduate students, especially in courses taken by both. Graduate students would like to be evaluated in such a way as to reflect the skills that are to be learned in grad school, and such that the information may be better retained. It was suggested that part of the coursework for a grad student could be presenting different topics from the course during class, so as to not waste class time, while being able to practice oral communication skills.

ii.) Chem 540:

Chem 540 is currently run such that the student picks a topic and gives a presentation on it, but it is mostly up to their research group to help them learn and prepare for it. It was suggested that the Chem 540 course time could also be used to teach critical thinking skills perhaps through workshops in class. An example of a presentation could be given, perhaps by a post-doc, and could be followed by a discussion of what was good and bad about the presentation. Another idea was to start with all of the first year students together in one class, and teach basic presentation skills, and then split off into the different areas of chemistry. An idea for a 3 credit course was suggested where skills like critiquing papers and presenting were taught. Another suggestion was to have discussions after LMCs to go over the talk that have been given. Teaching the use of software important in chemistry (like ChemDraw) was suggested, and resources like the library and online tutorials exist for such programs.

iii.) TA positions:

The workload for different TA positions is not always equal, especially in terms of marking. It is important to keep track of your hours throughout the semester. The marking due at the end of 121 can be a lot of work, so it is important to make sure that you make sure that you are not exceeding your hours each day. You can talk to the course instructor, or Dana, and also the union. TAs scheduled for too many hours in a day was discussed in the faculty meeting, and won't happen again. It was suggested that midterms marking schedules and TA assignments could be made earlier, giving more time for re-assignment if necessary.

iv.) PhD Guidance committees:

Students think that it would be more helpful if the profs were more related to their work, but the prof assigned by the department is selected to have some familiarity with the student's work while also having some distance and a different prospective. It would be useful to get to know who these people are prior to the comp exam, especially as they

are to provide guidance, not just to test you at the comp. An introductory meeting may be set up to become more familiar with the committee prior to the comp exam, so that the student's work may be discussed and possible comp questions could be mentioned.

v.) Comprehensive Exams:

Students find them a bit scary, but also useful. The comp exam allows the student to get organized and focus for the coming years. The chem department does a good job, and students feel that their presence in the PhD program has been validated. There was some concern mentioned for students coming from a background outside of chemistry in terms of the difficulties in answering comp questions related to fundamentals, but as the program is in chemistry, fundamental questions in chemistry are expected, and to obtain a PhD in chemistry, students are expected to have a familiarity with the fundamental material.

ix.) 5th year tuition:

The length of the RAship depends on the research prof. The deadline to graduate/be cut off from funding is 5 years, and should be discussed with the supervisor. A plan should be discussed somewhere in the 4th year to determine when the cut off may occur, and how the situation is to be handled, along with how the research should progress.

The idea of having a TA position for 5th year students to teach the proposed course modules was suggested, but the TA budget would not be able to cover the cost, as the budget to pay TAs is set from the government.

Dr. Fryzuk encourages students to suggest ideas on how to reduce the average PhD length from 5 years to 4. He thinks that getting into the lab sooner and having deadlines and goals planned with the research supervisor will help.

vii.) 'How to be an academic' workshops:

Career advice is wanted especially for industry vs. academia. The career center offers workshops and assignments for CVs, cover letters, etc. Having an LMC given by someone from industry was suggested. Sometimes companies send someone to conduct recruiting or informal interviews. Another suggestion was to have previous UBC grads that have found positions in academia and industry talk with current grad students in an informal panel discussion.

viii.) More communication between the Head and graduate students:

It was suggested that at the beginning of subsequent grad student forums, the Mikes give a quick talk/presentation overview of the improvements made by the department over the past year, and give an indication of what they would like to improve/continue to improve, and how they plan to do so. Dr. Fryzuk was ok with providing such a summary. He went on to state that a new faculty position will be interviewed for this year and that grad students are encouraged to be involved in the selection process. He also stated that there will be an external review at the end of his Headship, in which grad students will be able to provide feedback.

Forum adjourned: 4:30 p.m.