# Chem 282 -- Undergraduate Seminar

## Spring 2015 -- Prof. Willem Leenstra

#### Introduction

The ability to communicate science in a clear and easily understandable way is a critical skill. Over the past few years you have had ample opportunity to practice the art of writing scientific reports. While clear writing is a prerequisite for a successful career in science, the ability to deliver a high quality oral presentation is just as important. The purpose of the seminar course is to help you develop good oral presentation skills.

First and foremost, the goal of a seminar should be to teach the audience something. This is an important point since many students mistakenly vjkpm vjcv hcewnv{ õcntgcf{ mpqy kv cmö cpf vjwu inquu qxgt ko rqtvcpv background material. Keep in mind that you will be presenting to not only faculty (who, by the way, do not know it all ó although generally well versed in our disciplines, we know little to nothing about many other fields of chemistry), but also fellow graduate students and undergraduates. As such, your presentation should be well balanced and you should not assume too much prior knowledge from the audience.

### **Choosing a Topic**

Most importantly, the topic you choose needs to be relevant to CHEMISTRY! Remember, chemists consider things on the atomic and molecular level. Avoid seminars that finclude the followin

g:

- (1) Your topic should be of interest, and relevant, to chemistry primarily.
- (2) It must not overlap with the undergraduate research you may be involved with.
- (3) It must lend itself to a non-superficial, in-depth treatment.
- (4) But at the same time the topic must be broad enough to put it in perspective with related areas.
- (5) The seminar should predominantly be taken from the current periodical literature, it should not be an account from a review paper or from text books (nor the internet).
- (6) Your topic shoul

#### Written Paper

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## Length of the Seminar

Because we have a large number of undergraduate seminars this year (10), cpf vjg hcewnv{øu rtghgtgpeg to not have more than 4 Chem 282 sessions, we will have 2-3 presentations per meeting. There is a class at 1:00 in B-112, so we must be out a minute or so before. With these constraints, then, we are limited to a talk of exactly 25 minutes! We will allot 5 minutes for questions, m

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### 2015 Schedule

Tuesday, January 20: First meeting as a group to go over the syllabus. Between now and the next meeting, continue looking for topics to base a seminar on. Keep me informed re topic choice.

Tuesday, February 3: Two weeks later. The second meeting as a group. Weøm review your initial choice(s) of a topic (be thinking of a backup), and ygøm discuss whether you might have an appropriate topic.

Remainder of February: Give me an update after you have chosen your final topic. Also, you must meet with a faculty member closest to the area you have selected, and that person must sign off on your choice as well. Copy me on the email you send that faculty person, thanking him/her for the assistance.

You will do more extensive, focused reading of the literature on your subject. You should stop by informally to give me updates as you make progress: a final outline, sources identified, etc.

- Monday, February 23: Three weeks later. <u>Deadline</u>: I want a final, thorough outline of your talk, with ideas for slides to accompany the ideas, turned in to me. The next four weeks is when you should work very hard, putting the talk together. Go through several drafts.
- Monday, March 23: Four weeks later. <u>Deadline</u>: by now you should have the penultimate draft of your paper done and some of your slides created. Turn your draft and slides in to me.
- Monday, April 13: Three weeks later. <u>Deadline</u>: Final draft of your paper in to me. Submit next draft of slides to me for review.
- Friday, April 17: <u>Deadline</u>: Papers are due into faculty e-mailboxes, and final set of slides shared with me.
- Thursday, April 23: First two seminar presentations
- Tuesday, April 28: Next two seminar presentations
- Thursday, April 30: Next three seminar presentations
- Wednesday, May 6: Last three seminar presentations

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