

Seminar in Medicinal Chemistry (16:663:601,602)

A. General Guidelines

The seminars are designed to promote the development of skills critical to the professional development of graduate students. These skills include: (1) The ability to learn and integrate information from the primary scientific literature; (2) The ability to critically evaluate the primary literature; (3) The ability to formulate hypotheses and design experiments to test these hypotheses; and (4) The ability to deliver accurate, concise, and clear oral presentations. Graduate students are required to attend Medicinal Chemistry seminars each semester. Students in the Ph.D. track are required to present two seminars and students in the M.S. track are required to present one.

Approximately one month prior to the seminar date, the student should select a seminar topic not directly related to his/her research and discuss it with his/her advisor and the seminar coordinator. Once the topic is approved by the seminar coordinator, the student's advisor will instruct the student on the preparation of slides and on proper speaking technique.

Students will be required to prepare an abstract 1-2 weeks in advance of the seminar presentation for posting and for distribution to the audience at the time of presentation. Students may request the required [template and then email](#) it back to the department administrative assistant for posting.

B. Seminar Abstract

A portion of the seminar grade will be based on the abstract. The abstract will be graded according to the adherence to accepted principles of English grammar and according to the adherence to the format described below. The seminar abstract is an important record of the coverage of your topic and provides a valuable source of leading references for students and faculty alike. Accordingly, the abstract must serve as an introduction to your seminar topic. It will include the key hypotheses, the major scientific findings and a brief conclusion. **The abstract will be limited to one page (500 words excluding references).** The abstract will include references to the research articles upon which the seminar is based as well as research articles that have served as key background material. The references should be listed using the *J. Med. Chem.* format that includes all of the authors as well as the title of the articles.

C. Preparation and Presentation of the Seminar

The following points are particularly important and should be taken seriously!

1. **The seminar should not be merely a recital of facts. It should not be overly general, and the scope should be carefully defined and restricted.**
2. **The scientific hypotheses/questions must be clearly articulated**

3. **The research under discussion should not be limited to only one paper; (a minimum of 3 references are required)** the seminar is not a "journal club," but rather is meant to teach you by experience to search and integrate a body of literature. It is entirely permissible that different students can present more than one seminar on different aspects of a research area.
4. **The student should NOT necessarily serve as an advocate for the investigators whose work is being discussed.** The student should feel free to criticize or question conclusions if this is warranted.
5. Background information required to place the hypothesis in appropriate context must be presented.
6. The student should become familiar with novel techniques or reagents through appropriate background readings to the point that the student can answer basic questions on these subjects.
7. Experimental methodology used to test the hypothesis must be described in enough detail so that the audience can understand the techniques.
8. The data used to support or refute the hypothesis must be presented in sufficient detail so that the audience can evaluate the conclusions drawn from the data.
9. The conclusions should be brief, yet bring together the seminar in the context of the original hypotheses. The seminar should conclude with speculation about the directions of future scientific research in this area.
10. The seminar should be approximately 45 minutes in length with 5 minutes left for questions. The following format is suggested: Introduction of hypothesis and background (10-15 minutes); Experimental methods and results (20-25 minutes); Conclusions and future directions (5-10 minutes).
11. Presentations using PowerPoint are required; other visual aids such as overhead transparencies may, however, be used at the student's discretion.

D. Grading of the seminar:

The grade will be assigned by the faculty members present based on the following:

1. Abstract preparation, contents, format.
2. Formal presentation, ease of presentation, contents, familiarity with seminar material.
3. Ability to transmit information to audience, use of slides, use of literature materials, etc.
4. Quality of Power Point slides.
5. Ability to field questions from the audience, during and/or after seminar presentation.
6. Attitude or nervousness during seminar, comfort level, use of notes, use of slides, ease of delivery.
7. Use of literature references.

Evaluation Sheet for Graduate Seminars

Title of Seminar: _____

Student Name: _____

Date: _____

Abstract (10 pts)

- Appropriate information in abstract?
- Does abstract clearly abstract the talk?
- Correctly formatted (*J. Med. Chem.* style) references?

Presentation (60 pts)

Style Clear speech (rate, pronunciation, vocabulary, audibility)? Good eye-contact?

Visual Aids Were text and graphics readable? Was number of slides appropriate?

References Appropriate primary sources correctly cited on-slide?

Q&A Did speaker listen to and answer questions? displayed appropriate respect for questioner?

Other Proofed (grammar, spelling, typos)? Was speaker prepared?

Subject Matter (30 pts)

- Was speaker in control of the subject?
- Did material adequately convey key ideas/concept at the appropriate level?
- Were references appropriate?

Abstract	
Presentation	
Subject	
Total	

Faculty initials _____