

Chemistry 696: Graduate Seminar, Spring 2007

Instructor: David J. Butcher, ST-340C, 227-7646, butcher@email.wcu.edu
Meeting Times: Friday, 1:25-3:25 and other times as necessary.
Office Hours: Monday, Wednesday, 8:00-9:00 a.m., or by appointment.
Course Website: <http://paws.wcu.edu/butcher/Chem696/>

Course Objectives

The primary goals of this course are (1) to improve your oral and written communication skills, (2) discussion of topics which are relevant to the chemical profession but are outside the scope of conventional courses, and (3) to assist you progress towards your master's degree in chemistry. The first goal is addressed by attendance at seminars presented by other graduate students and visiting university faculty; presentation of a seminar; and preparation and presentation of a poster in class. We will discuss a number of topics relevant to the chemical profession, including presenting oral and poster presentations, suggestions on improving your teaching, the chemical literature, sources of funding for chemistry, and professional societies. In order to address the third goal, you will complete degree requirements in order to help keep you on track to the degree.

Grade Evaluation

90-100 %	A
80-89 %	B
70-79 %	C
< 70 %	F

Your grade will be determined by a formula that depends upon your standing in the graduate program.

Accommodations for Students with Disabilities:

Western Carolina University is committed to providing equal educational opportunities for students with documented disabilities. Students who require disability services or reasonable accommodations must identify themselves as having a disability and provide current diagnostic documentation to Disability Services. All information is confidential. Please contact Kimberly Marcus for more information. Phone: (828) 227-7234; E-mail: kmarcus@email.wcu.edu

Academic Honesty

I assume that all students will adhere to the university's policy on academic honesty. Students who violate this policy will receive an F for the course.

Chemistry 696 Syllabus

First Semester Students

Attendance/class participation (Loss of 7 % per unexcused absence)	20 %
Seminar announcement/abstract	10 %
Seminar presentation	20 %
Poster presentation	20 %
Selection of research director/project by March 30	30 %

Attendance

You are expected to attend all class meetings and seminars (please pages 6 and 7). The only legitimate excuses to miss class are (1) a class or teaching conflict when an external seminar is outside of normal class time, (2) participation in a university sanctioned trip (in which case you need to provide written documentation ahead of time) and (3) illness verifiable by a note from a physician. There are no exceptions to this policy!!! You are also expected to complete a student schedule sheet and give it to Prof. Butcher (p. 11).

Seminar (Oral) Presentation

Each student will make a formal 30 minute presentation on a topic of his/her choice, after consultation with me. Your seminar will be closed to the faculty (that is, the class and I will be the audience). You are expected to select your topic by February 9. An abstract must be submitted to Prof. Butcher at least one week before the presentation. The presentation should follow the format of a professional meeting. Failure to give the presentation at the scheduled day/time will result in a reduction of your grade by one letter.

Poster Presentation

On Friday, April 13, you will be required to make a poster presentation (56" by 36") in the department during the graduate seminar class period, 1:25-3:25 on Friday. Two weeks before the presentation in class on March 30, you will need to provide the instructor a Microsoft Powerpoint file with your poster presentation.

Selection of a Research Director/Project

You are expected to select a research director and a research project by March 30. The first step in the procedure for doing this is to listen to the research presentations made by the graduate faculty. I then would recommend individual meetings with faculty members to discuss possible research projects.

After you select a research director and a project, the director and you should choose the members of your thesis research advisory committee (TRAC). The TRAC will consist of at least three members. A chemistry/physics faculty member must be the chair or co-chair of all TRACs. A majority of the TRAC members must be faculty from the department.

Chemistry 696 Syllabus

Second Semester Students

Attendance/class participation (Loss of 7 % per unexcused absence)	20 %
Seminar announcement/abstract	10 %
Seminar on prospectus topic	20 %
Poster presentation	20 %
Weekly graduate research report sheets	10 %
Prospectus completed by March 30	10 %
Meeting with TRAC and report by March 30	10 %

Attendance

You are expected to attend all class meetings and seminars (please pages 6 and 7). The only legitimate excuses to miss class are (1) a class or teaching conflict when an external seminar is outside of normal class time, (2) participation in a university sanctioned trip (in which case you need to provide written documentation ahead of time) and (3) illness verifiable by a note from a physician. There are no exceptions to this policy!!! You are also expected to complete a student schedule sheet and give it to Prof. Butcher (p. 11).

Seminar

Each student will make a formal 30 minute presentation on his/her proposed research topic described in the prospectus. An abstract must be submitted to Prof. Butcher at least one week before the presentation. The presentation should follow the format of a professional meeting. Failure to give the presentation at the scheduled day/time will result in a reduction of your grade by one letter.

Weekly graduate research report sheets

Each week of the semester you are required to complete a Weekly Graduate Report Sheet (p. 9). This report is a summary of your progress on your research for the week, including project planning, experiments performed, and thesis writing. The reports will be handed into Prof. Butcher at the end of the class meeting. He will then turn them into your research director.

Prospectus

You are expected to give me a copy of your approved prospectus (signed by everyone, including the Dean of Research and Graduate Studies) by March 30. The prospectus (thesis proposal) is a written statement of the research you plan to do in order to obtain your Master of Science degree. Generally this is a relatively short (2-5 pages) document which includes a brief introduction of the justification of the project, along with your hypothesis, an experimental section that describes the instrumentation and procedures that will be employed, a discussion section that lists the results you expect to obtain and methods to treat the data, and a brief conclusion. You should think of the prospectus as a contract between you and the thesis research advisory committee (TRAC). When you complete the work described in the prospectus, you have finished your experimental work. You need to begin working on this several weeks before the due date. I would recommend giving the first draft to your director, and after receiving his approval, send it to other members of the TRAC. It then must also be signed by the Chemistry Graduate Program Coordinator, Department Head, and Dean of Research & Graduate Studies.

Poster Presentation

On Friday, April 13, you will be required to make a poster presentation (56" by 36") in the department during the graduate seminar class period, 1:25-3:25 on Friday. Two weeks before the presentation in class on March 30, you will need to provide the instructor a Microsoft Powerpoint file with your poster presentation.

Chemistry 696 Syllabus

TRAC Meetings/Report

The student will serve as the recording secretary of each meeting of the TRAC. The minutes, or report, of each meeting will be submitted to me using the form on page 9 of this syllabus. The report must be signed by the student and the research director. The signed report is due by March 30.

Chemistry 696 Syllabus

Third/Fourth Semester Students

Attendance/class participation (Loss of 7 % per unexcused absence)	20 %
Seminar announcement/abstract	10 %
Seminar on prospectus topic	20 %
Poster presentation	20 %
Weekly graduate research report sheets	20 %
Meeting with TRAC and report by March 30	10 %

Attendance

You are expected to attend all class meetings and seminars (please pages 6 and 7). The only legitimate excuses to miss class are (1) a class or teaching conflict when an external seminar is outside of normal class time, (2) participation in a university sanctioned trip (in which case you need to provide written documentation ahead of time) and (3) illness verifiable by a note from a physician. There are no exceptions to this policy!!! You are also expected to complete a student schedule sheet and give it to Prof. Butcher (p. 11).

Seminar

Each student will make a formal 30 minute presentation on his/her research. At this time, you (hopefully) will have results to discuss. An abstract must be submitted to Prof. Butcher at least one week before the presentation. The presentation should follow the format of a professional meeting. Failure to give the presentation at the scheduled day/time will result in a reduction of your grade by one letter.

Weekly graduate research report sheets

Each week of the semester you are required to complete a Weekly Graduate Report Sheet (p. 10). This report is a summary of your progress on your research for the week, including project planning, experiments performed, and thesis writing. You will then briefly summarize (5 minutes) your report in class. The reports will be handed into Prof. Butcher at the end of the class meeting. He will then turn them into your research director.

Poster Presentation

On Friday, April 13, you will be required to make a poster presentation (56" by 36") in the department during the graduate seminar class period, 1:25-3:25 on Friday. Two weeks before the presentation in class on March 30, you will need to provide the instructor a Microsoft Powerpoint file with your poster presentation.

TRAC Meetings/Report

The student will serve as the recording secretary of each meeting of the TRAC. The minutes, or report, of each meeting will be submitted to me using the form on page 9 of this syllabus. The report must be signed by the student and the research director. The signed report is due by March 30.

WESTERN CAROLINA UNIVERSITY
DEPARTMENT OF CHEMISTRY AND PHYSICS
SPRING 2007 SEMINAR SCHEDULE

<u>Date</u>	<u>Speaker</u>	<u>Institution</u>	<u>General Topic</u>
Jan 19	Rhett C. Smith	Clemson University	Organic Materials
Jan 26	Michael Best	University of Tennessee	Bio-organic Chemistry
Feb 23	Charles Marth	Western Carolina University	Organic Synthesis
Mar 16	T. Brent Gunnoe	North Carolina State University	Inorganic Synthesis
Mar 23	Emily Jellen	Western Carolina University	Mass Spectrometry
Apr 2	Harold Kroto <i>11:00 a.m. in FPAC Performance Hall</i>	Florida State University	Science, Society and Sustainability

Seminars normally begin at 2:00 PM on Friday in Natural Sciences Building Room 308.
Refreshments will be served at 1:30 in Natural Sciences Building Room 223.

WESTERN CAROLINA UNIVERSITY
DEPARTMENT OF CHEMISTRY AND PHYSICS
GRADUATE STUDENT SEMINAR SCHEDULE – SPRING, 2007

DATE	ACTIVITY	SPEAKER
Jan 12	FIRST DAY OF CLASS – TEACHING MEETING	NO SEMINAR
Jan 19	EXTERNAL SPEAKER	RHETT C. SMITH, CLEMSON UNIVERSITY
Jan 26	EXTERNAL SPEAKER	MICHAEL BEST, UNIVERSITY OF TENNESSEE
Feb 2	GRADUATE SEMINAR	Stephen Ballew
Feb 9	GRADUATE SEMINARS REQUIREMENTS	Youngsoo Cho and Lee Ritter Title of Talk for First Semester Students
Feb 16	GRADUATE SEMINAR	Malia Gonzalez
Feb 23	FACULTY SPEAKER	CHARLES MARTH, WCU
Mar 2	GRADUATE SEMINAR	Jesse Walsh
Mar 9	SPRING BREAK	HOLIDAY
Mar 16	EXTERNAL SPEAKER	T. BRENT GUNNOE, NORTH CAROLINA STATE UNIVERSITY
Mar 23	FACULTY SPEAKER	EMILY JELLEN, WCU
Mar 30	GRADUATE SEMINAR REQUIREMENTS	Rajendra Uprety and Mike Young Electronic Copy of Poster, Prospectus, TRAC Meeting Report, Director Selection
Apr 2 (Monday)	EXTERNAL SPEAKER	HAROLD KROTO, FLORIDA STATE UNIVERSITY, 11:00 a.m.
Apr 6	EASTER	HOLIDAY
Apr 13	POSTER SESSION	All
Apr 20	GRADUATE SEMINARS	Ed Gonzalez and Paul Davis
Apr 27	GRADUATE SEMINARS	Kelly Lawrence* and Januka Uprety*

Student seminars are normally at 1:25 PM in NS-308 unless indicated otherwise. Please give an abstract to Dr. Butcher 1 week before your seminar date. Dates may be changed due to external presentations.

*First semester student whose seminar may be closed to the faculty.

CHEMISTRY 696: GRADUATE SEMINAR EVALUATION FORM

Presenter _____ Evaluator _____ Date _____

Rate the seminar on a scale of 0 - 10 with 10 being the highest score and 5 being an average score.

A. SEMINAR ABSTRACT/ANNOUNCEMENT

1. Did the abstract have all of the vital information? _____
2. Did the abstract get you interested in seeing the seminar? _____
3. Did the seminar correspond well with what was in the abstract? _____

B. PRESENTATION

1. Was it organized? _____
2. Did the presenter speak clearly? _____
3. Were the slides and drawings clear and distinguishable? _____
4. Timing; Was the talk too long or too short (goal: 30 minutes)? _____
5. Continuity; Did the talk flow well? _____

C. CONTENT

1. Did the seminar have a good introduction? _____
2. Was there sufficient background material to make the seminar understandable? _____
3. Did the seminar have a good conclusion? _____

D. QUESTIONS

1. Were the questions answered clearly and succinctly? _____
2. Did it appear that the speaker considered potential questions prior to the presentation? _____

E. WHAT POINTS CAN THE SPEAKER IMPROVE? PLEASE BE EXPLICIT IN YOUR COMMENTS AND USE CONSTRUCTIVE CRITICISM.

Report of Thesis Research Advisory Committee Meetings

Meeting Date: _____

Coursework requirements to be met for the degree:

Course/date: _____

Course/date: _____

Course/date: _____

Course/date: _____

Course/date: _____

Course/date: _____

Progress on research:

Completion and anticipated completion dates of major components of research:

Component, date _____

Component, date _____

Component, date _____

Component, date _____

Anticipated completion date of entire research project (experimental):

Anticipated date of thesis defense:

Anticipated date of completion of all degree requirements:

Director's Signature

Student's Signature

Weekly Graduate Research Report Sheet

Name: _____

Director: _____

Project: _____

Week: _____

Research Notebook ID: _____

Notebook Pages: _____

Objectives (may include planning, writing prospectus, doing experiments, writing thesis):

1.

2.

3.

4.

5.

Work performed to achieve objectives(may include planning, writing prospectus, doing experiments, writing thesis):

1.

2.

3.

4.

5.

Graduate Schedule Sheet

Semester/Year: _____

Name: _____ Office No. _____ Telephone: _____ Email: _____

Home Address: _____ Home Telephone: _____

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00					
9:00					
10:00					
11:00					
12:00					
1:00					
2:00					
3:00					
4:00					
5:00					