

Fall 2021 RXRS 493: Senior Honors Seminar I

Faculty Mentors: Terry David Church, DRSc, MA, MS

Assistant Professor, Department of Regulatory and Quality

Sciences

USC School of Pharmacy

tdchurch@usc.edu

Daryl L. Davies, PhD

Professor, Department of Clinical Pharmacy

USC School of Pharmacy

ddavies@usc.edu

Office Hours: By Appointment

Course Weight: 2 Units

Day/Time/Location: TBA

Class Level Restriction: Junior and Senior standing

Major Restriction: Open to Pharmacology and Drug Development majors

Catalogue description: Exciting and challenging opportunity to marshal and deploy research, analysis, interpretation, and writing skills learned in their major.

Introduction

The goal of this seminar is to give students the opportunity to gain additional exposure to experimental, practical, or theoretical pharmacologic research and to develop the ability to communicate scientific ideas effectively. Students enrolled in RXRS-493 are expected to attend at minimum one pharmacy-related research seminar biweekly, choosing from the many available at USC each week, including the seminars listed below. Students are expected to take notes at the seminar, conduct additional background readings on the topic, and present a summary of the research seminar they attended as a presentation to the class. Each student will make two presentations during the semester.

Regulatory Science Research Team
Pharmacy Research Seminar
Auditorium

2pm Friday CHP-G32 [Time / Day] PSC-

Other related seminar meetings can be identified by the student's faculty mentor. Several related seminars are available through departments located on the USC Health Science Campus. Neighboring institutions (UCLA, Caltech, City of Hope) offer a wide selection of research seminars and symposia. All RXRS493 students should have no difficulty in finding and attending at least one seminar of interest to attend each week. It is also permissible to access seminars that have been recorded and archived electronically.

Objectives

Students are expected to gain practical experience in understanding a research seminar, note taking, conducting background literature research, and giving an oral research presentation.

This course is designed to:

- To provide students with the opportunity to apply the knowledge and skills acquired in their courses to research relating to a research area of interest.
- To allow students to extend their academic experience into areas of personal or professional career interests, to include working with new ideas, organizations, or individuals.
- To encourage students to think critically and creatively about academic, professional, and/or social issues and to further develop their analytical and ethical leadership skills.
- To provide students with the opportunity to refine research skills and demonstrate their proficiency in written and/or oral communication skills.

Communication Method

If you have questions or concerns, please contact any of the course coordinators listed on the cover page. Your email will be attended as quickly as possible within a 48-hour window.

Evaluation and Grading

Evaluation will be based on the oral presentation and written report prepared by the

student.

The main requirements are:

- 1. Identification of a topic of interest.
- 2. Attending weekly research seminars and / or symposia.
- 3. Note taking and additional research developed from the research seminars and / or symposia the student has attended in preparation of two reports.
- 4. Development of two written summaries and preparation of two oral report over the course of the semester.
- 5. Presentations two in class research summary reports.
- 6.

Description	Points	Weight
Quizzes (2 @ 10 pts each)	20	10%
Summary 1 (written 20%, oral 20%)	100	40%
Summary 2 (written 20%, oral 20%)	100	40%
Final Exam	30	10%
Total	250	100%

Attendance at all classes is expected. Participation will include asking and answering questions and being actively involved in the discussion. It is expected that the students read the assigned papers prior to the lecture and be prepared to discuss background, current understanding, treatments, and gaps in knowledge for the topic in each lecture.

<u>10% Quizzes</u>: There will be 2 quizzes over the course of the semester to count towards their grade. Each quiz will be worth 5% of the final grade. The quizzes will be based on questions from the lecture and from the textbook and will include multiple choice, T/F and fill-in the blank questions.

40% Summary 1: 20% awarded for the written summary and 20% for a formal 10-15-minute presentation for a total of 40%. Students will prepare a four-page summary paper on a topic they select from attending the research seminars / symposia. Students will research scientific literature available online, through books and journal publications, and other relevant media to prepare their written summary. Students will present their findings to the class during the student presentation days. The presentations should be at least 10 minutes but no more than 15 minutes in length. Students should expect at least 5 minutes but no more than 10 minutes of a question-and-answer period following their presentation.

40% Summary 2: 20% awarded for the written summary and 20% for a formal 10-15-minute presentation for a total of 40%. Students will prepare a four-page summary paper on a topic they select from attending the research seminars / symposia. Students will research scientific literature available online, through books and journal publications, and other relevant media to prepare their written summary. Students will present their findings to the class during the student presentation days. The presentations should be at least 10 minutes but no more than 15 minutes in length. Students should expect at least 5 minutes but no more than 10 minutes of a question-and-answer period following their presentation.

<u>10% Final</u>: The Final Exam will be in the form a take-home examination and will be due during exam week. The final exam will consist of short written answers to demonstrate the students' knowledge regarding topics covered in the course. This will allow students to express their ideas based on facts derived from the course.

Required Text

There is no required text for this course.

Students are required to conduct background reading on the topic of the seminars they will present to the class.

Supplemental Texts and Multimedia

This course will be supplemented with a variety of source materials including online resources, media outlets, and cinema as it pertains to the student's area of interest and their research objectives. The selected materials are intended to provide students with a broader perspective by rounding out the information acquired by the student during their literature review.

Course Outline

This course will be in the format of once-a-week seminars. Students are expected to ask questions and participate in an interactive fashion. Asking questions and participating in class discussions is a crucial component of this course.

Course Schedule

This course will be in the format of a directed seminar/lecture under the guidance of the instructor for the specific session. Students are expected to ask questions and participate in an interactive fashion.

NOTE: RXRS-493 will be run concurrently with RXRS-494; BPSI-493; and BPSI-494.

Week	Date	Subject	Instructor	Readings
Week 1	Mon	Introduction and expectations	Church, Davies	N/A
Week 2	Mon	Reading Research Papers	Church, Davies	
Week 3	Mon	Analyzing data in research papers	Davies	
Week 4	Mon	Communicating results	Church	
Week 5	Mon	Gathering data and interpreting results	Davies	
Week 6	Mon	Asking questions, writing responses	Church	
Week 7	Mon	Hypotheses and results	Davies	
Week 8	Mon	Limitations	Church	
Week 9	Mon	Student Presentations and Class Discussion	N/A	
Week 10	Mon	Student Presentations and Class Discussion	N/A	
Week 11	Mon	Student Presentations and Class Discussion	N/A	
Week 12	Mon	Student Presentations and Class Discussion	N/A	
Week 13	Mon	Student Presentations and Class Discussion	N/A	
Week 14	Mon	Student Presentations and Class Discussion	N/A	
Week 15	Mon	Student Presentation and Class Discussion	N/A	

Final Exam

Statement on Academic Conduct and Support Systems

Academic Conduct:

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, "Behavior Violating University Standards" <u>policy.usc.edu/scampus-part-b</u>. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, <u>policy.usc.edu/scientific-misconduct</u>.

Support Systems:

Counseling and Mental Health - (213) 740-9355 – 24/7 on call studenthealth.usc.edu/counseling

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call suicidepreventionlifeline.org

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention and Services (RSVP) - (213) 740-9355(WELL), press "0" after hours – 24/7 on call studenthealth.usc.edu/sexual-assault

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office of Equity and Diversity (OED)- (213) 740-5086 | Title IX – (213) 821-8298 equity.usc.edu, titleix.usc.edu

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following *protected characteristics*: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations. The university also prohibits sexual assault, non-consensual sexual contact, sexual misconduct, intimate partner violence, stalking, malicious dissuasion, retaliation, and violation of interim measures.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298 usc-advocate.symplicity.com/care_report

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity |Title IX for appropriate investigation, supportive measures, and response.

The Office of Disability Services and Programs - (213) 740-0776 dsp.usc.edu

Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

USC Support and Advocacy - (213) 821-4710

uscsa.usc.edu

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC - (213) 740-2101

diversity.usc.edu

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, *HSC:* (323) 442-1000 – 24/7 on call dps.usc.edu, emergency.usc.edu

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call

dps.usc.edu

Non-emergency assistance or information.

Presentation Pointers

- 1. Take good notes at the seminars / symposia, and as necessary, supplement your information from other works and published papers related to the topic. A recent review article on the topic is often useful.
- 2. Organize your notes and plan according to how you will present the information to the class. Sketch out an agenda or a diagram of how and where you will present your information.
- 3. Plan to give a presentation lasting ~20 minutes, so there will be plenty of time for questions. Start by introducing yourself and giving the name of the seminar / symposia and the subject of their talk.
- 4. Keep your mind on the big picture! Remember to give an overview at the beginning. Give a brief introduction to the topic, including why the question/hypothesis being investigated is interesting and important. This will help to pique the interest of your listeners at the start.
- 5. Aim for a crisp, well-organized, and succinct presentation. You cannot possibly cover all the material that was given in a 1-hr seminar or in a research paper, so you must decide what content is most critical and interesting and focus on that.
- Include the following sections in your presentation:
 Introduction/background/hypothesis. Methods. Results. Conclusions. Any criticisms. Future directions for the research.
- 7. Take your time. Try not to talk into the podium –talk to the audience, engage them with eye contact.
- 8. Frequently, speakers forget that people in the audience do not know much about the topic. Unless you are presenting a talk at a specialized scientific conference, you should remember that you are explaining complicated material to people who do not already know much about it. Put yourself in the listeners' place and try to anticipate what will be confusing to them.
- 9. Ideally you should be so familiar with your notes that you only must glance at them to remind yourself where you are and what to say next, then as you speak, make eye contact and engage with the audience.
- 10. Remember to take a giant step BACK at the end of your presentation and return to the big picture. Ask yourself: what is the main take-home message I want to convey?

- 11. It is a performance! Even if you do not feel particularly energetic and confident, you have to *ACT AS IF YOU ARE*, just for 20 minutes.
- 12. Try not to use filler speech ("um" or "like" or "basically") multiple times during your talk this can be challenging to get used to! If you fall into the habit of repeating such words, it can be a difficult habit to break. It is distracting to the audience to hear multiple repetitions of a single word, especially one that has little or no informational content.

General Grading Rubric for Presentations

- 1. Organization, content, and clarity of the presentation, including supplementing with information from websites and/or publications.
- 2. Introduction/background/hypothesis. Methods. Results. Conclusions. Any criticisms. Future directions for the research.
- 3. Organization and clarity of material in the presentation.
- 4. Engagement of the speaker with the audience and clarity of responses to questions.