PHAR 7605 - SEMINAR - Journal Club Syllabus

Course Director: Dr. Srinivas Sriramula
Co-director: Dr. Xian Wu

1. **Pharmacology and Toxicology Seminar – Journal Club (PHAR 7605)**
   Course Description: The Pharm/Tox journal club involves student-run discussion about a timely topic decided by the faculty beforehand. The Spring 2026 topic is "**Innovative Research Frontiers in Pharmacology and Toxicology**". Students should pick research articles from reputed, high impact, peer-reviewed journals published within the last five years that are pertinent to this subject to present. Journal clubs will be held on **Wednesdays from 11:00 AM to 12:00 PM**. Each student is required to present once a year in the course. Students are expected to select articles 1 week prior to their journal club presentation that focus on this theme. These articles are to be emailed to Dr. Sriramula, Dr. Wu, and Mrs. Denise Allen at least 1 week prior to the journal club presentation. This will allow the article to be distributed to the department minimum of 1 week in advance of presentation.

   Criteria: Pick an article with good data and innovative research. It is expected that the following guidelines will be followed by each student when presenting a journal club:

   1) **Brief background** of the basic science underlying the study
   2) **The scientific question addressed** by the authors (e.g. what gaps in the knowledge base within the field are the authors hoping to fill?)
   3) **Hypothesis-** Is the study hypothesis clearly stated?
   4) **Study aims/objectives-** Are the study aims clearly defined, aligned with the manuscript, and grounded in an appropriate theoretical framework?
   5) **Experimental Design and Methods**- Note: not every method needs to be discussed, just the broad concept and unique aspects. For example, you don't need to exhaustively describe commonly employed methods (e.g. immunoblots, qRT-PCR, immunohistochemistry, fluorescent microscopy, etc.).
   6) **Results**- Note: It is often not necessary to show every Table and Figure within the paper, particularly for large articles (e.g., Cell, Nature press, etc.). Show only those data that are most important for overall conclusions.
   7) **Conclusions** - What knowledge was gained from the study? Discuss authors' conclusions and whether the data supports it. Put conclusions in context of future research.
   8) **Limitations** – what are the major limitations of the study?

2. **Objectives:**
   This course is designed to provide doctoral students with a structured venue to develop and refine their skills in presenting, analyzing, and discussing scientific research in a professional seminar format. Through regular participation, students will gain experience in both delivering and evaluating research presentations, thereby enhancing their ability to communicate effectively within the scientific community.

   Upon successful completion of this course, students will be able to:

   1. Prepare and deliver clear, well-organized oral presentations of their own research and that of others, demonstrating mastery of both content and presentation techniques.
   2. Critically assess the research methods, data interpretation, and conclusions presented in scientific seminars and journal articles.
   3. Engage effectively in scholarly discussions by formulating constructive feedback, posing insightful questions, and thoughtfully responding to critiques.
   4. Analyze presentations by peers and experienced researchers to identify and adopt effective strategies for scientific communication.

5. Demonstrate improved confidence, professionalism, and clarity in presenting research at academic conferences, symposia, and professional interviews.

6. **Assessment of performance:**

   Grading:

   Weekly participation and attendance: 25% (Students in the audience should think critically about the manuscript presented and ask thought provoking questions).

   Presentation: 75%

   - In addition to presenting, attendance is mandatory. Absences must be cleared in advance with both the student's advisor and Dr. Sriramula prior to journal club/seminar (Wednesdays). If more than 2 classes are missed due to unexcused absences, the student will be given a 0 for the 25% participation grade.
   - Final grades will be based on the system below:
   - **A**: 89.5-100% **B**: 79.5-89.4% **C**: 79.4-69.5% **F**: $\leq$ 69.4%

7. **Textbook:** None.

8. This course fosters a scholarly environment that promotes intellectual exchange, critical thinking, and the development of advanced communication skills essential for success in research and academic careers.

Spring 2026 Wednesdays 11:00 AM to 12:00 PM, 2E-100 or 2E-92

Date	Room	Time	Speaker
01/28/2026	2E-100	11-00 AM – 12-00 PM	Only for students – discussion about how to prepare for Journal club
02/04/2026	2E-92	2-00 PM – 3-00 PM	Cohort Seminar – Allison Porter
02/11/2026	2E-92	11-00 AM – 12-00 PM	Kathryn Lorbacher
02/18/2026	2E-100	11-00 AM – 12-00 PM	**Dr. Karen Mruk**
02/25/2026	2E-100	11-00 AM – 12-00 PM	**No Seminar**
03/04/2026	2E-100	11-00 AM – 12-00 PM	**No Seminar**
03/11/2026	2E-100	11-00 AM – 12-00 PM	Dylan Marshall
03/18/2026	2E-100	9-00 AM – 10-00 AM	Cate Duncan
03/25/2026	2E-100	11-00 AM – 12-00 PM	Patrick Garrett
04/01/2026	2E-92	11-00 AM – 12-00 PM	**No Seminar**
04/15/2026	2E-100	11-00 AM – 12-00 PM	**Dr. Abdel-Rahman**
04/22/2026	2E-100	2-00 PM – 3-00 PM	Cohort Seminar - Joshua McLaurin
04/29/2026	2E-92	11-00 AM – 12-00 PM	**No Seminar**