Course Description: Students are required to (1) attend presentations by others (both faculty and students) participating in the course and (2) make an oral presentation related to their own research or an assigned topic. For students in the pharmacology program, participation in pharmacology journal club is a requirement of this course. Pharmacology students must also participate in seminar during the spring semester as a requirement for PHARM 702.

Credit Hours: 1 semester hour

Course Prerequisites: There are no course prerequisites, although students in the pharmacology program are expected to be enrolled in, or to have already completed, basic courses in biochemistry, physiology and pharmacology. Students in other programs should have background in one of these disciplines. Prior approval by the course director (see below) as well as the Graduate Director of the program in which the student is enrolled or the student’s faculty advisor are required.

Course Dates: Fall Semester

Course Times: 12:00 noon, Mondays (11 a.m. every third Monday)

Course Location: 6A

Director:
Mallikarjuna R. Pabbidi, Ph.D.
Office: N433
Phone: 601-984-1611
e-mail: mpabbidi@umc.edu

Required Text and Other Learning Resources:
None required.

Course Overview: This is a discussion-based class, with discussions being led by various seminar speakers. Speakers may discuss any topic relevant to contemporary pharmacology and toxicology. Student participation will be reflected by attendance and a formal oral presentation. When in attendance, students are encouraged to ask questions relevant to the basic content as well as the experimental aspects of the presentation. In addition, students are expected to evaluate and be able to constructively critique the general format, style and other technical aspects of the presentation. For 1st and 2nd year graduate students, the formal presentation required for this course will typically be a brief report related to a laboratory rotation. For more senior students, the presentation will consist of a research proposal or progress report of dissertation research. Student performance during an oral presentation will be evaluated by all attendees following criteria enumerated in Evaluation of a Student Research Presentation.

Active participation in discussion is also expected of all students required. Expectations of the
students in relation to the quality of their presentation as well as the extent of their active participation will increase with tenure in the program.

**Course Objectives:** Upon completion of this course, students will be able to:

1. speak confidently before an audience of scientific peers.
2. communicate complex scientific concepts in an organized fashion.
3. respond effectively and directly to questions about their own research or seminar topic.
4. critique the technical components of a peer’s seminar presentation.

**Grading Policy and Rubric.** Grading is pass/fail based on satisfaction of the attendance requirement and satisfactory evaluation of the presentation by attending faculty.

**Course Policies:**
Attendance at graduate student seminars and visiting speaker seminars is expected for all students registered in either PHARM 701. Students must attend every scheduled seminar for satisfactory attendance.

For the student’s attendance at a seminar to count, they must fulfill three requirements:
- Arrive on time.
- Stay until the end of the lecture.
- Sign the attendance sheet personally.

*If you cannot meet all of these requirements, then you must make arrangements with the current Seminar Director prior to the seminar. Failure to attend the required minimum number of seminars can result in a grade of “F” for the course.*

Information related to this course will be relayed verbally, as written documents or electronically through Microsoft Outlook.

**General Guidelines**
First and foremost, seminar will begin **exactly at 12:00 pm (11:00 am on 3rd Mondays)** in **classroom 6A**. Thus, for each presenter it is suggested that you arrive early enough to ensure that you, the computer, and projector are all up and running.

In terms of articles to be presented in journal club, the paper should be of **general interest** to everyone in the department, so that all attendees can take away something new from the presentation. To ensure that each paper meets this standard, all students will need to vet their journal club articles with their advisor. Once you have selected a paper, you can send your selection directly to Ms. Pamela Banks and she will forward them to all participants. The deadline for submitting your selection is Friday morning, **two weeks prior to your scheduled date.** An announcement flyer will be ready for your proofing the following Thursday (one week prior to your presentation).
Papers that are of general interest for all are usually found in high impact journals. These include, but are not limited to: the Nature journals, Science, Cancer, Cell journals, Circulation, Circulation Research, Journal of Clinical Investigation, Journal of the American Society of Nephrology, and Journal of Cell Biology. As a rule, anything with an impact factor of 5 or higher is probably a good choice.

**Specific Presentation Guidelines:**

Prepare a **PowerPoint Presentation** that includes:

1) Title of the paper with authors, affiliation and journal reference,
2) Introduction slides, one of which, **must contain the Hypothesis that is being tested**,
3) Figures from the paper,
4) Conclusions or Summary slides, and
5) a “Take Home Message”.

- The Introduction needs to give enough background information so that everyone understands what the study is about, why it was done, and what the relevance and significance is to pharmacology, kidney disease, etc (Please limit to 5 minutes).

- The Figures should be easy to see from the back of the room, and be explained in enough detail that everyone understands what the authors are concluding. You do not have to agree with the authors and can add your own interpretation for discussion. The bulk of time should be allotted for this component (Approximately 30 minutes).

- The Summary or Conclusions should be a brief overview of the main points of the paper, and should tie back to the Introduction with Relevance and Significance. (Please limit to 5 minutes).

Finally, for all Pharmacology and Toxicology Graduate Students, Journal Club is now a component of seminar and attendance will be reflected in that grade. As Journal Club meets but once a month, full participation in the course is required. Thus, any absence must be excused. A sign-up sheet will be available at each Journal Club, so be sure to sign it so that you receive the appropriate credit.

**University Policies:**

Refer to UMMC, School of Graduate Studies, and Medical Pharmacology program policies in regard to academic achievement and professional conduct.
Evaluation of a Student's Seminar or Scientific Paper: Pharmacology

Student Name: _________________________________________________________
Title of the talk: _________________________________________________________

______________________________________________________________________

Please circle one of the following

<table>
<thead>
<tr>
<th></th>
<th>Outstanding</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction (Background)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Knowledge gap, Hypothesis and Aims</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Methods (Rigorous design and reproducibility)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Results</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Conclusions and future directions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Limitations and alternatives</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The length of the seminar</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Critical thinking (Literature evaluation)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Question and answer session</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Overall Presentation (Clear, concise and articulation)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Average grade: _________________________________

Additional Comments:

Evaluator:
Date: