Phar 6782: Colloquium II: Research Paper & Presentation
Course Syllabus
1.0 Credit

Syllabus subject to revision as circumstance warrants. Students will be apprised of such revisions.

Meeting Times & Locations

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Duluth Room</th>
<th>Twin Cities Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Class will NOT meet all weeks.)</td>
<td>TBD</td>
<td>Library 410</td>
<td>WDH 7-135</td>
</tr>
</tbody>
</table>

Course Web Site:  https://moodle.umn.edu/

Course Instructional Team

Course Coordinator: Works in conjunction with course faculty, department staff, and teaching assistants for successful implementation of course.
Name: PD3 Course Coordinator

Course Team
Course Co-Directors:

Ling Li, DVM, PhD
Professor and VFW Endowed Chair
Department of Experimental and Clinical Pharmacology
Office location: 4-208 McGuire Translational Research Facility, UMTC
Phone: 612-626-2359
Email: lli@umn.edu
Preferred method of contact: [email, phone, other.]
Office Hours: By appointment [For online/blended courses, consider possibility of virtual/online office hours.]

Derek Jennings, MEd, PhD
Assistant Professor
Department of Pharmacy Practice and Pharmaceutical Sciences
Office location: 109 Life Science, UMD
Phone: 218-726-6063
Email: drj@umn.edu
Preferred method of contact: [email, phone, other.]
Office Hours: By appointment
Instructors
Shannon L. Reidt, Pharm.D., MPH, BCPS
Assistant Professor
Department of Pharmaceutical Care & Health Systems
Office location: 7-103 WDH, **At HCMC Tues, Wed, Thurs**
Phone: 612-220-4799; Fax: 612-625-9931
Email: reid0113@umn.edu
Preferred method of contact: [email, phone, other.]
Office Hours: By appointment.

Tim Stratton, Ph.D., BCPS, FAPhA
Professor of Pharmacy Practice
Department of Pharmacy Practice and Pharmaceutical Sciences
Office location: 209 Life Science, UMD
Phone: 218-726-6018
Email: tstratto@d.umn.edu
Preferred method of contact: email
Office Hours: When the office door is open or by appointment

Administrative Support
Amanda Behnke
Email: ambehnke@umn.edu

Teaching Assistants:
Malek Okour
Email: okour001@umn.edu

Overview of the course

Course content:
This is a 1 credit (52.5-hour) course (face-to-face and online) in which third-year Pharm.D. students practice skills necessary to research, prepare a research paper and present a scholarly seminar. This course builds on the Biostatistics & Drug Literature Evaluation material from PHAR 6700-Becoming a Pharmacist, PHAR 6704- Foundations of Social & Administrative Pharmacy (SAPh), PHAR 6706-Foundations of Pharmaceutical Care and PHAR 6742-Colloquium I: Scholarly Presentation Skills. The course depends primarily on individual student work, and the bulk of the student time commitment for this course occurs between the end of the PD2 Fall semester and the middle of the PD3 Spring semester.
<table>
<thead>
<tr>
<th>PD 2 Fall</th>
<th>PD2 Spring</th>
<th>PD3 Fall</th>
<th>PD3 Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Colloquium I: Scholars Presentation Skills</strong>&lt;br&gt;PHAR 6742</td>
<td>Student meets with Faculty Advisor; presents work-in-progress “walking poster” at Research Day</td>
<td>Student posts draft paper, receives feedback from Faculty Advisor</td>
<td><strong>Colloquium II: Research Paper &amp; Presentation</strong>&lt;br&gt;PHAR 6782</td>
</tr>
<tr>
<td>&gt; Students identify areas of interest</td>
<td>&gt; Student meets with Faculty Advisor prior to Spring Break for face-to-face discussion of the student’s work-in-progress “walking poster” session that the student will present during Research Day</td>
<td>&gt; Student meets with Faculty Advisor prior to February 6 for face-to-face discussion of the student’s work-in-progress “walking poster” session that the student will present during Research Day</td>
<td>&gt; Student completes research paper, citing references, using tables and scientific writing style</td>
</tr>
<tr>
<td>&gt; Students investigate areas of interest to determine research possibilities</td>
<td>&gt; Each student develops their research question</td>
<td>&gt; Each student develops a research topic to be investigated, posts the proposal to Moodle and presents proposal to teammates</td>
<td>&gt; Student submits completed paper to Moodle site for review and written comment from teammates and Faculty Advisor prior to 11:55 PM on the first Sunday in March</td>
</tr>
<tr>
<td>&gt; Each student develops their research question</td>
<td>&gt; Students begin literature search on their research question</td>
<td>&gt; Each student presents refined research topic to teammates for peer review</td>
<td>&gt; Each student submits a draft of their research paper on the Colloquium II Moodle course site for review by 11:55 PM on the Sunday following Pharmacy Fall Break. Faculty Advisor reviews draft and discusses with student by 5:00 PM on the first Friday in December.</td>
</tr>
<tr>
<td>&gt; Students begin literature search on their research question</td>
<td>&gt; Students present refined research topic to teammates for peer review</td>
<td>&gt; Each student meets with their faculty advisor prior to Week 6</td>
<td>&gt; Student reviews and submits written comments on completed papers of at least two groupmates prior to 11:55 PM on Friday, December 4, 2015.</td>
</tr>
<tr>
<td>&gt; Each student meets with their faculty advisor prior to Week 6</td>
<td>&gt; Each student meets with their faculty advisor prior to Spring Break for face-to-face discussion of the student’s work-in-progress “walking poster” session that the student will present during Research Day</td>
<td>&gt; Each student completes a research proposal on their topic to be investigated, posts the proposal to Moodle and presents proposal to teammates</td>
<td>&gt; Student develops a 15-minute presentation based their research paper prior to Spring Break. Presentation and accompanying Abstract are posted to Moodle site by 11:55 PM on the FRIDAY before Spring Break</td>
</tr>
<tr>
<td>&gt; Each student completes a research proposal on their topic to be investigated, posts the proposal to Moodle and presents proposal to teammates</td>
<td>&gt; Student submits draft paper, receives feedback from Faculty Advisor</td>
<td>&gt; Student completes research proposal on their topic to be investigated, posts the proposal to Moodle site for review and written comment from teammates and Faculty Advisor prior to 11:55 PM on the first Sunday in March</td>
<td>&gt; Student reviews presentations and accompanying Abstract of at least two groupmates and provides feedback</td>
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<tr>
<td></td>
<td></td>
<td>&gt; Student meets with Faculty Advisor during Professional Development &amp; Assessment Days (PDAD-4) in August to provide progress report on project from over the summer</td>
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</table>
Assessment Days
(Research Day). Faculty Advisor attends to provide written feedback regarding presentation

Course format
Colloquium II is the second of a two-semester, two-course sequence. During the intervening period between Colloquium I (PD2 Fall) and Colloquium II (PD3 Spring), each student will research, write and present a scholarly paper on a topic of their own choosing. During Colloquium II, students will orally present their scholarly projects to classmates and faculty as part of Research Day or during other Professional Development & Assessment Days during the Spring PD3 semester.

Out-of-Class Component of Colloquium II: Much of the work for this course will occur outside of class, and prior to the Spring PD3 semester. Between the end of the Fall PD2 semester and roughly midterm of the PD3 Spring semester, students will have periodic meetings to discuss their projects with their assigned Faculty Advisor. Deadlines for these meetings are clearly listed in the Assignments table and in the Detailed Course Outline.

Advising Component of Colloquium II: Students will meet at least three times with their Faculty Advisor for up to one hour each to discuss the student’s progress on their projects. These meetings may occur face-to-face, or via phone/video conference. Students may also meet with their Content Advisor (if applicable) as often as deemed necessary by the Content Advisor, although such meetings do not count toward total student effort in calculating the credit load for this course. Finally, students will spend a minimum of 4 hours attending presentations by classmates.

Online Component: You will see several items listed on the Moodle course site for the online component of this course, e.g. a forum (online discussion) and icons to upload assignments. Resources, such as tutorials and presentations, will be posted on Moodle to help students write their paper and prepare their presentation. These resources may include citation practices and appropriate use of tables and charts.

“Out of Class” weeks: The student is expected to adhere to necessary deadlines for posting projects and assignments. For the online forums, students will post their assignment, along with substantive responses to posts from two other students (followup questions, comments, additional information, etc.) The initial post of their assignments will be by the due date, which will give other students ample time to respond. Students will not be able to see groupmates’ responses until the student posts their initial response. This will allow everyone to formulate their own thoughts without influence from the group.

Communication and the Effective Pharmacist: Pharmacists must communicate clearly, accurately and persuasively with various audiences using a variety of methods and media. Communication is of utmost importance in providing optimal patient care, and plays a pivotal role in intercultural interactions. An explicit goal of this course is to provide the student with opportunities to enhance their written and oral communications skills. Faculty want students to become practitioners who write effectively and concisely, and who present ideas eloquently and professionally. In this course, students will complete a formal writing assignment and present a research paper before a live audience of classmates and faculty.
Definition and Roles of Faculty Advisors and Content Advisors

**Administrative Faculty Advisors and Content Advisors:** An Administrative Faculty Advisor is defined as a faculty member who is formally assigned by the College of Pharmacy, and who is responsible for assigning a grade to the student’s work. A Content Advisor may be an expert in the area of the student’s paper topic, but does not need to be a College of Pharmacy faculty member. Each student will have at least one Faculty Advisor to advise them on their Colloquium II research project and/or research paper. Each 6 student is randomly assigned an Administrative Faculty Advisor, regardless of which campus the student and faculty member are on. The Administrative Faculty Advisor may also recommend, or the student may also desire, a Content Advisor. A student who is already working with, or who is planning to work with a faculty member on the faculty member’s research may request that faculty member as an Administrative Faculty Advisor. Such requests will be accommodated to the greatest extent possible; however, under no circumstance will a faculty member be formally assigned to advise more than 3 students in the same class. It is the student’s responsibility to notify the Course Co-Directors and staff support person of any changes regarding Faculty Advisor and Content Advisor(s). The following describes the roles and responsibilities of each.

**Administrative Faculty Advisor**
Administrative Faculty Advisors are College of Pharmacy faculty and are randomly assigned to students. The Administrative Faculty Advisor is responsible for helping the student identify a topic or topic area and providing guidance in the selection of a Content Advisor, if applicable. Additionally, the Administrative Faculty Advisor is responsible for guiding the student through completing their project, writing their paper, and preparing their presentation. The Administrative Faculty Advisor must participate in both the paper and seminar evaluation process and submit grades for both. As noted above, a student may request a specific Administrative Faculty Advisor by arrangement with that faculty member; however, no faculty member be formally assigned to advise more than 3 students in the same class. This stipulation is in place to help ensure that faculty will have adequate time to devote to all of their student advisees. Faculty already advising 3 students may still serve as Content Advisor for additional students at the faculty member’s discretion. It is recommended that those faculty who will be serving as Content Advisors and providing substantial support to students in their project assume responsibility as Administrative Faculty Advisor.

**Responsibilities of Administrative Faculty Advisors**
- Assist student in identifying a Content Advisor who may act as the content expert for the paper, where applicable.
- Monitor student progress to insure timely completion of paper. Monitor due dates and return comments on drafts within 2 weeks.
- Take a principal role in evaluating the paper per standard evaluation form and determining acceptance of work.
- Evaluate and submit final paper grade. Final paper is due to Faculty Advisor on March 1 of the student’s PD3 year.
- Participate in evaluation of Pharm.D. Seminar and submit a grade.
- Communicate with Course Directors and Administrative staff regarding student progress.

**Content Advisors**
Each student may select a Content Advisor for the paper/seminar. The Content Advisor is someone who serves as the “content expert” for the paper and gives specific guidance in the paper/seminar process. The Content Advisor may be a full-time College of Pharmacy faculty member, a part-time faculty member, a clinical adjunct faculty member, a health care professional or another suitable advisor. Family members cannot be
Content Advisors. In the event that there is a need to change your Content Advisor you must notify your Administrative Faculty Advisor and course staff support person of the change.

A Content Advisor may be recommended by the Administrative Faculty Advisor or identified by the student. The Content Advisor is encouraged to participate in both the paper and seminar evaluation (whereas, the Administrative Faculty Advisor must participate in both the paper and seminar evaluation process).

If the student chooses a Content Advisor who is on the Administrative Faculty Advisor list, the Administrative Faculty Advisor should become the *de facto* Administrative Faculty Advisor for that student. The student must notify the assigned Administrative Faculty Advisor, the Course Co-Directors and the course staff support person of the change in Administrative Faculty Advisor. If the student chooses a Content Advisor who is not on the Administrative Faculty Advisor list, the student will have two advisors: an Administrative Faculty Advisor and a Content Advisor.

PLEASE NOTE: This policy is in no way designed to limit the selection options of a student; the policy is designed to insure uniformity in the evaluation and administrative processes. Students should feel free to select any appropriate practitioner/faculty as a content expert.

*Responsibilities of Content Advisors from Outside the College of Pharmacy*
- Serve as content expert for Colloquium project.
- Connect (via email, phone, in person, videoconference) regularly with student to ensure progress.
- Return comments on draft papers within 2 weeks.
- Take active role in evaluating the paper per standard evaluation form.
- Final paper is due to Content Advisor on March 1 of the student’s PD3 year.
- Participate in evaluation of the student’s performance in the Pharm.D Seminar.

*Responsibilities of Student*
- Submit assignments by deadlines.
- Remind advisor(s) of draft deadlines and final deadline you must meet.
- Provide advisor(s) with evaluation forms for draft and final paper.
- If you have any questions or problems contact the Course Co-Directors.

*Prerequisites*

Students in Colloquium II will apply the evidence based medicine skills, and the research design skills they learned and developed in the following courses:
- PHAR 6700: Becoming a Pharmacist
- PHAR 6704: Foundations of Social & Administrative Pharmacy (SAPh)
- PHAR 6706: Foundations of Pharmaceutical Care
- PHAR 6742: Colloquium I

Depending upon the nature of the scholarly project ultimately selected by the student, the student may apply the statistics skills they developed in PHAR 6704, and/or the drug or patient care-related knowledge they obtained in their pharmacy courses prior to this course. Finally, students will apply writing skills including punctuation and grammar that they learned in their pre-pharmacy and earlier pharmacy courses, and apply the skills they learned in these earlier courses to organize a scholarly or scientific paper.
Computer/Technology Requirements
The University of Minnesota computer requirements are listed here:
- http://www1.umn.edu/moodle/start/technical.html
- Students are required to bring laptop computers or electronic tablets to class each day to conduct Internet searches of course-related topics as required during class.
- Each day, students are required to bring a device to class that is capable of interacting with the classroom’s audience response system.

Course Goals & Objectives

<table>
<thead>
<tr>
<th>Learning Goal</th>
<th>Applicable domain &amp; competency</th>
<th>Scientific Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demonstrate research skills that can help pharmacists improve patient care.</td>
<td>1.1, 1.4, 1.8, 2.0-2.3, 2.5, 2.7, 2.8, 3.0, 3.3, 3.5, 3.7, 3.8, 4.5, 4.6, 5.3-5.6, 6.1-6.4</td>
<td>1-6</td>
</tr>
<tr>
<td>2. Identify a problem in clinical or scientific practice, formulate a research question based on the problem, develop a process to investigate that question, use appropriate resources to research the question, write a scholarly paper describing the resulting project, and present your findings in a 15-minute scholarly presentation</td>
<td>2.1, 2.7, 3.2, 3.3, 3.5, 3.6, 3.9, 4.0, 4.3, 4.6, 5.3, 5.5, 6.0-6.4</td>
<td>1-6, 5.8.7, 5.8.9-5.8.12, 5.9, 5.10, 6, 6.6.4</td>
</tr>
<tr>
<td>3. Demonstrate effective scholarly writing knowledge and skill.</td>
<td>CAPE 3.6</td>
<td>5.8.12</td>
</tr>
<tr>
<td>4. Demonstrate an ability to effectively present and/or convey information to a group of people (i.e. public speaking skills).</td>
<td>CAPE 3.6</td>
<td>5.8.8, 5.8.12</td>
</tr>
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</table>

Domains below provided for reference*

**Competency Domains**

**Domain 1: Patient-Centered Care**
As a provider of care, the pharmacist is ethical, benevolent, empathetic, competent, open-minded, prudent in making judgments, and devoted to serving others. The pharmacist applies knowledge, experience, and skills to protect the welfare of humanity. The pharmacist willingly and respectfully cares for patients to assure optimal therapeutic outcomes.

**Domain 2: Population Health & Vulnerable Communities**
As a promoter of public health, the pharmacist uses his/her expertise to partner with others to improve care for vulnerable communities or at risk populations. The pharmacist recognizes the differences between populations of individuals and seeks to alleviate disparities that exist.

**Domain 3: Health Systems Management**
As a manager of health system resources, the pharmacist examines critical issues, assumptions, and limitations to produce and validate ways to deliver medications safely, effectively, and in a timely manner. The pharmacist demonstrates imagination, inventiveness, and courage by undertaking new endeavors to produce improved quality, productivity, efficiency, effectiveness, and innovation.

**Domain 4: Leadership & Engagement**
In leading, the pharmacist demonstrates integrity and is habitually resolute, focused on excellence, knowledgeable about the “big picture,” strategic, focused, persuasive, open to feedback, decisive, visionary, empowering, and service-oriented.
Domain 5: Professional & Interprofessional Development
When collaborating, the pharmacist demonstrates critical thinking, excellent communication and leadership, and is goal-oriented, cooperative, assertive, respectful, enthusiastic, and reliable. The pharmacist consistently and consciously demonstrates high ethical and moral standards by considering how and when to act, acting in a manner that is clearly consistent with those standards and exercising accountability for those actions.

Domain 6: Knowledge, Scientific Inquiry, and Scholarly Thinking
In making use of scientific knowledge, the pharmacist explains with thoroughly researched, evidence based accounts of facts and data, and provides interpretations based on analysis of the importance, meaning, and significance. The pharmacist applies knowledge fluently, flexibly, and efficiently in diverse contexts.

* refer to College of Pharmacy Competency Domains for Section descriptions.  [Link to full competency domain document.]

**Attendance Policy**
Students are expected to meet with their Administrative Faculty Advisors before each published deadline, either in person, by videoconference, or by telephone (or by email where expressly allowed in the syllabus or with written permission of the Course Co-Directors). On Research Day, student attendance is required for the full day. Each student will be expected to attend the session at which they are presenting plus one additional session, i.e., four hours of student presentations. Students will be required to complete a reflection log of classmates’ presentations as proof of the student’s attendance (See Addendum E). Reasonable issues such as illness (with written excuse from a healthcare provider), natural disasters, or acts of Nature are sufficient to warrant an excused absence; however, students who miss their scheduled presentation time (whether an excused absence or not) will be required to arrange an alternate presentation time to be completed before the end of the PD3 Spring semester. Students who have not completed their presentation by the end of the PD3 Spring semester will be prohibited from starting APPE rotations unless prior arrangements have been made with the Colloquium II Course Co-Directors prior to Final Exam Week of the PD3 Spring semester.

**Course Materials**

**Required**
*The Grammar Guy’s Helpful High School Writing Hints* by Tim Stratton (revised Summer, 2014). Handout posted in the Resource section of the course Moodle site to aid students and faculty in assessing the quality of student writing “by the numbers.”

Internet access: To successfully post materials to the Moodle course site and review teammate’s postings.

**Optional – Provided in the Resource section of the course Moodle site**

**Optional – Provided by students at their own expense**

This course employs “green practices.” Course readings and assignments can be found on our course site in Moodle (https://ay13.moodle.umn.edu).

### Assessments and Grading

<table>
<thead>
<tr>
<th>What</th>
<th>When</th>
<th>Where</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring Semester, 2015</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting with Faculty Advisor to share/discuss electronic “walking poster” before presenting “poster” at Research Day</td>
<td>Friday, March 13, 2015, 11:55 PM</td>
<td>In person, by videoconference or telephone call</td>
<td>25</td>
</tr>
<tr>
<td>Present Work-in-Progress “Walking Poster” (from Colloquium I)</td>
<td>Thursday, March 26, 2015</td>
<td>Research Day</td>
<td>25</td>
</tr>
<tr>
<td><strong>Fall Semester, 2015</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting with Faculty Advisor</td>
<td>By end of PDAD-4 (Aug., 2015), 5:00 PM</td>
<td>In person, by videoconference or telephone call</td>
<td>25</td>
</tr>
<tr>
<td>Research paper-draft version</td>
<td>Sunday, October 18, 2015, 11:55 PM</td>
<td>Moodle site</td>
<td>75</td>
</tr>
<tr>
<td>Faculty Advisor provides feedback on student’s draft paper</td>
<td>Friday, December 4, 2015, 11:55 PM</td>
<td>Faculty returns draft to student as mark-up copy using MS Word’s Track Changes feature or equivalent</td>
<td></td>
</tr>
<tr>
<td>Review papers of at least two groupmates and post comments</td>
<td>Friday December 4, 2015 11:55 PM</td>
<td>Moodle site</td>
<td>50</td>
</tr>
<tr>
<td><strong>Spring Semester, 2016</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research paper - final version</td>
<td>March 1, 2016, 11:55PM</td>
<td>Moodle site</td>
<td>75</td>
</tr>
<tr>
<td>Abstract of Research Paper and draft Research Presentation</td>
<td>Friday before Spring Break, 2016, 11:55 PM</td>
<td>Moodle site</td>
<td>75</td>
</tr>
<tr>
<td>Review abstracts and slide sets of same groupmates whose papers you reviewed</td>
<td>Friday after Spring Break, 2016, 11:55 PM</td>
<td>Moodle site</td>
<td>25</td>
</tr>
<tr>
<td>Meeting with Faculty Advisor to prepare for</td>
<td>Prior to Research Day, 2016</td>
<td>In person, by videoconference or</td>
<td>25</td>
</tr>
<tr>
<td>#</td>
<td>Due Date</td>
<td>Title Brief description</td>
<td>Assessment Goal (required to link to domain)</td>
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<td>---------------------------------------------</td>
</tr>
</tbody>
</table>
| 1 | Friday, Mar 13, 2015, 11:55 PM | Student meets with Faculty Advisor in person, by videoconference or by telephone to share/discuss electronic “walking poster” before presenting “poster” at Research Day. | 1. Demonstrate research skills that can help pharmacists improve patient care.  
2. Identify a problem in clinical or scientific practice, formulate a research question based on the problem, develop a process to investigate that question, use appropriate resources to research the question, write a scholarly paper describing the resulting project. | 25 | 5% |
| 2 | Thursday, March 26, 2015 Research Day | Present Work-in-Progress “walking poster” from Colloquium I at Research Day. Students have their PowerPoint presentations on their tablet devices and use these presentations to engage passers-by about their research paper proposals for Colloquium II. | As above, plus  
4. Demonstrate an ability to effectively present and/or convey information to a group of people (i.e. public speaking skills). | 25 | 5% |
| 3 | PDAD-4 (Aug, 2015), 5:00 PM | Student meets with Faculty Advisor in person, by videoconference or by telephone call to provide update on research project and/or paper. | 1 - 2 above | 25 | 5% |
| 4 | Sunday, Oct 18, 2015, 11:55 PM | Post draft of research paper to course Moodle site for peer review by groupmates. And email draft of research paper to Faculty Advisor (and Content Advisor if appropriate) for review. | 1 -2 above, plus  
3. Demonstrate effective scholarly writing knowledge and skill. | 75 | 15% |
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Activity</th>
<th>Grading Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Friday, Dec 4, 2015, 11:55 PM</td>
<td>Review draft papers from at least two groupmates and post comments on course Moodle site.</td>
<td>1. Demonstrate research skills that can help pharmacists improve patient care. 50 10%</td>
</tr>
<tr>
<td>6</td>
<td>Tuesday, Mar 1, 2016, 11:55 PM</td>
<td>Post final version of research paper to course Moodle site for review by groupmates, and email final paper to Faculty Advisor.</td>
<td>As above. 75 (students who pass automatically receive all 75 points) 15%</td>
</tr>
<tr>
<td>7</td>
<td>Friday prior to Spring Break, 2016, 11:55 PM</td>
<td>Post abstract of paper and draft Research Presentation to course Moodle site for peer review.</td>
<td>1. Demonstrate research skills that can help pharmacists improve patient care. 75 15%</td>
</tr>
<tr>
<td></td>
<td>(Green highlighter flags deadline prior to Spring Break)</td>
<td>2. Identify a problem in clinical or scientific practice, formulate a research question based on the problem, develop a process to investigate that question, use appropriate resources to research the question, write a scholarly paper describing the resulting project.</td>
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<tr>
<td>8</td>
<td>Friday after Spring Break, 2016</td>
<td>Review teammates’ abstracts and slide sets (same students whose papers you reviewed) and post comments on course Moodle site.</td>
<td>1. Demonstrate research skills that can help pharmacists improve patient care. 25 5%</td>
</tr>
<tr>
<td>9</td>
<td>Prior to Research Day, Spring, 2016</td>
<td>Student meets with Faculty Advisor in person, by videoconference or by telephone call to discuss upcoming presentation, and tips on fielding questions during the presentation</td>
<td>1. Demonstrate research skills that can help pharmacists improve patient care. 25 5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Identify a problem in clinical or scientific practice, formulate a research question based on the problem, develop a process to investigate that question, use appropriate resources to research the question, write a scholarly paper describing the resulting project.</td>
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Assignments

Paper Topic

NOTE: Student may have already selected a topic in PHAR 6742 Colloquium I Scholarly Presentation Skills.

The Colloquium II research paper will be the written component of a single topic chosen by the student in conjunction with his/her Administrative Faculty Advisor and/or Content Advisor. A wide range of topics would be appropriate for the paper/seminar:

- Clinical or laboratory research of a drug-related problem;
- Review of a drug class with treatment options and recommendations;
- An extensive report to a Pharmacy & Therapeutics Committee on a drug or drug class;
- A comprehensive review of a particular drug;
- A critical literature review and analysis;
- Etc.

The paper is intended to be hypothesis-driven (a scientific question needs to be formed) and to be written in a publishable form (suitable for peer review). The Faculty Advisor and/or Content Advisor will guide the student in the preparation process of the paper so that these goals may be attained. The paper will be reviewed and graded by the Faculty, Advisor whether the Faculty Advisor also serves as Content Advisor or not. It is in the student’s best interest to communicate with advisors periodically throughout development of the paper, and in fact students are required to meet with their Faculty Advisor several times per the schedule above. For students who utilize a Content Advisor in addition to a Faculty Advisor, meetings with the Content Advisor do not apply towards a student’s grade in this course. However, a close relationship with that advisor should be a natural occurrence since students working with a Content Advisor will need the guidance of that advisor to develop their paper.

How to Choose a Topic: Administrative Faculty Advisors will aid the student in this process if a student has trouble choosing a paper topic and/or identifying a Content Advisor, where applicable.

Use of Human Subjects: Some topics may require the use of human subjects. Such projects must be reviewed by the University of Minnesota Institutional Review Board (IRB) before a student begins any data collection. The University of Minnesota IRB requires that the Administrative Faculty Advisor (or a Content

<table>
<thead>
<tr>
<th>10</th>
<th>Research Day, 2016</th>
<th>Student presents research paper (15 min presentation + 5 min Q&amp;A) to classmates, Faculty Advisor and Content Advisor (if applicable) during Professional Development &amp; Assessment Days (Research Day).</th>
<th>As above.</th>
<th>Pass/Fail (100 points for Pass)</th>
<th>20%</th>
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<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
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<td>500 100%</td>
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</table>
Advisor who is a University of Minnesota employee) agree to supervise the student’s research project involving human subjects. For further information refer to the IRB website and links at http://www.research.umn.edu/irb/ 

- Applying to the IRB
- IRB Forms (including forms for requesting Exemption from IRB review)
- Guidance for Research
- IRB Process and Reporting
- Consent Process and Forms
- Training and Education

Paper Format:
Title Page: Include student’s name, course number, advisor name(s), date and copyright permission.

Table of Contents
Table of Figures & Tables: List all Figures together, and all Tables together. The order in which the two lists appear in the Table of Figures & Tables is dependent upon whether the student has more Tables or more Figures the list with the greatest number of exhibits is listed first. Where equal numbers of Figures and Tables appear in the paper, then whether the list of Tables or the list of Figures appears first does not matter.

Abstract: Maximum 1 page. Margins one (1) inch all sides and a 12 point font, preferably Times New Roman. An example Abstract is posted on the course Moodle site as Resources.

Acknowledgments

Introduction: Statement of problem including its significance to pharmacy.

Methodology: Study design, description of database or population, exclusion/exclusion criteria, study site, instrumentation, analytical methods utilized.

Results
Discussion: Description of how findings confirm/depart from those of others, strengths and weaknesses of study

References
Figures/Tables
Legends
Appendices

Meet with Faculty Advisor: (Completion dates per schedule listed above.) Per the schedule listed above, the student is required to meet with the Faculty Advisor several times while working through their research project. Students are responsible for arranging these meetings with their Faculty Advisor to discuss the student’s progress on their research project, to answer questions the student might have regarding the project, and to discuss next steps on the project.

University Makeup Assignment Policy
As a rule, late assignments will not be accepted for full credit. However, late assignments may be excuse under the following conditions: illness (verified by note from a physician); a family emergency (verified by note from a professional in attendance); a University sponsored event (verified by a University official or a note from the leader of the sponsoring organization); and military duties (verified by a note from a commander).

Incomplete (I) Grade
A grade of “Incomplete (I)” will be awarded only in those instances where students make arrangements with their Faculty Advisor and Colloquium II Course Director(s) to receive such a grade prior to the deadline for posting the Final Paper. Students who request a grade of Incomplete must work with their Faculty Advisor to develop a written plan for completion and presentation of the paper which outlines the reason for the request
and includes a clear and specific timeline for completion and presentation of the paper. This written request/completion plan must be submitted to the Colloquium II Course Directors for their written approval. Students failing to follow these steps will receive an F grade for the course, will not be allowed to start APPE rotations, and will need to repeat the Colloquium II course. The Course Directors may consider exemptions to these requirements only in the event of a medical emergency that temporarily requires the student to suspend participation in all of their courses, the emergency being documented in writing by the student’s medical provider.

Course deficiencies resulting in a grade of Incomplete must be resolved by the end of the following semester, else a grade of F will replace the I and the student will need to repeat the Colloquium II course. Students receiving an “I-to-F” grade in Colloquium II will be prevented from participating in further Advanced Pharmacy Practice Experiences (APPEs) until the student successfully passes Colloquium II.

Unexcused Late Assignments
Technology-related problems encountered when submitting assignments will not count as an acceptable excuse for late submission of assignments. Students are encouraged to submit assignments before the published deadline in case technology problems do arise which prevent a student from successfully submitting an assignment. With the exception of the final paper, unexcused late assignments will be penalized 10% (ten percent) for each 24 hours past the published deadline, starting from the time of the published deadline. Failure to post the final paper by the published deadline will result in loss of all points for that assignment because a delinquent posting delays other members of the student’s group from conducting their reviews of the paper. Please remember, technology-related problems encountered when submitting the final paper will not count as an acceptable excuse for late submission of this assignment.

Completion of All Assignments Required
Students must complete all required assignments to pass the course, even if zero points are awarded due to late submission. Students failing to complete all assignments will receive an F grade for the course and will be prevented from participating in Advanced Pharmacy Practice Experiences (APPEs) until the student successfully passes Colloquium II.

Exam Policy
See the Central Syllabus.

Grading Information
http://www.policy.umn.edu/Policies/Education/Education/GRADINGTRANSCRIPTS.html

Course Letter Grades
This course is graded on an A, B, C, F system.

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<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>F</th>
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<tr>
<td>%</td>
<td>100-93</td>
<td>92-90</td>
<td>89-87</td>
<td>86-83</td>
<td>82-80</td>
<td>79-77</td>
<td>76-70</td>
<td>69-0</td>
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Statement on Extra Credit
Extra credit is not available in this course.

Minimum Passing Level
Because this course assesses a student across a number of the Core Competency Areas of the Pharm.D. curriculum, a C grade (“average among Pharm.D. students”) is the lowest acceptable grade a student can earn to pass this course.

### Detailed Course Outline & Schedule*

<table>
<thead>
<tr>
<th>Class</th>
<th>Agenda/Topics</th>
<th>Competency/ Learning Objective</th>
<th>Activities / Assignments / Assessments</th>
<th>Integration notes</th>
<th>Total estimated hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 15 in PHAR 6742-Colloquium I (Dec 8, 2014)</td>
<td>IN CLASS PHAR 6782 Overview of Colloquium II - Scholarly Paper &amp; Presentation [Colloquium II Course Directors]</td>
<td>(PHAR 6742-Colloquium I Objective #6, PHAR 6782-Colloquium II Objectives 1-4) Demonstrate an ability to effectively present and/or convey information to a group of people (i.e. public speaking skills).</td>
<td>Activity: Review next steps and milestones due between PHAR 6742-Colloquium I and PHAR 6782-Colloquium II</td>
<td>Time for student effort accounted for in PHAR 6742-Colloquium I</td>
<td>0 in/0 out for 6782</td>
</tr>
</tbody>
</table>
| **Friday, Mar 13, 2015, 11:55 PM** | Student meets with Faculty Advisor to share/discuss electronic Work-in-Progress “walking poster” before presenting “poster” at Research Day. | 1. Demonstrate research skills that can help pharmacists improve patient care.  
2. Identify a problem in clinical or scientific practice, formulate a research question based on the problem, develop a process to investigate that question, use appropriate resources to research the question, write a scholarly paper describing the resulting project. | Activity: Complete meeting with Faculty Advisor in person, by videoconference or by telephone by this date (graded). | Dependently upon topic selected. | 0 in/0.75 out |
| **Thursday, March 26, 2015 Research Day** | Present Work-in-Progress “walking poster” from Colloquium I. Have one or more PowerPoint slides on your tablet device, and use these to present/discuss your paper proposal with passers-by. | 1. Demonstrate research skills that can help pharmacists improve patient care.  
2. Identify a problem in clinical or scientific practice, formulate a research question based on the problem, develop a process to investigate that question, use appropriate resources to research the | Conducted during Research Day, graded as per Colloquium II syllabus. | Dependently upon topic selected. Research Day. | 0 in/5.0 out (4 to finalize presentation, 1 to present) |
<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Hours account for time spent on paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday, Oct 18, 2015, 11:55 PM</td>
<td>Post draft of Research Paper</td>
<td>0 in/16 out</td>
</tr>
<tr>
<td>Friday, December 4, 2015, 11:55 PM</td>
<td>Peer review papers of at least two groupmates’ papers and post comments to Moodle site.</td>
<td>0 in/6 out</td>
</tr>
<tr>
<td>Dec 4, 2015, 11:55 PM</td>
<td>Faculty Advisor (and Content Advisor, if applicable) provides feedback on student’s draft paper.</td>
<td>0 in/10 out</td>
</tr>
<tr>
<td>Tuesday, Mar 1 2016, 11:55 PM</td>
<td>Post final version of research paper for peer review.</td>
<td>As above.</td>
</tr>
</tbody>
</table>
| Prior to Spring Break, 2016, 11:55 PM | Post abstract of Research Paper and draft Research Presentation to course Moodle site for peer review. | 1. Demonstrate research skills that can help pharmacists improve patient care.  
2. Identify a problem in clinical or scientific practice, formulate a research question based on the problem, develop a process to investigate that question, use appropriate resources to research the question, write a scholarly paper describing the resulting project. | Activity: Post Research Paper Abstract and draft Research Presentation to course Moodle site for peer review (graded). | Depend upon topic selected. | 0 in/6 out |
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</thead>
<tbody>
<tr>
<td>Friday following Spring Break, 2016, 11:55 PM</td>
<td>Peer review abstracts and slide sets of same groupmates' whose papers you reviewed and post comments on course Moodle site.</td>
<td>1. Demonstrate research skills that can help pharmacists improve patient care.</td>
<td>Activity: Review abstracts and slide sets of same groupmates' whose papers you reviewed and post comments on course Moodle site (graded).</td>
<td>0 in/3 out</td>
<td></td>
</tr>
</tbody>
</table>
| Prior to Research Day, Spring, 2016 | Meet with Faculty Advisor in person, by videoconference or by telephone | 1. Demonstrate research skills that can help pharmacists improve patient care.  
2. Identify a problem in clinical or scientific practice, formulate a research question based on the problem, develop a process to investigate that question, use appropriate resources to research the question, write a scholarly paper describing the resulting project.  
4. Demonstrate an ability to effectively present and/or convey information to a group of people (i.e. public speaking skills). | Activity: Student meets with Faculty Advisor prior to Research Day to discuss upcoming presentation, and tips on fielding questions during the presentation (graded). | Depend upon topic selected. | 0 in/0.75 out |
| Research Day, 2016 | Student presents research paper to classmates, Faculty | As above. | Activity: Student presents research paper (15 min presentation + 5 min Q&A) | 4 in/0 out |
| Advisor and Content Advisor (if applicable) | to classmates, Faculty Advisor and Content Advisor (if applicable) during Professional Development & Assessment Days (Research Day). (Graded) Students need to attend the entire session at which they are presenting and 1 other session (4 hrs total). The balance of hours would be devoted to attending other Research Day activities. Students would complete an Attendance Form (appended below), which students would then transcribe and submit to the Colloquium II Moodle site to receive participation credit. Balance of Colloquium hours could be distributed above for time spent writing paper and reviewing teammates’ papers. | selected., PDAD-5 There will be no PDAD-5 |

| TOTAL HOURS | 52.5 (4 in/ 48.5 out) |

* Subject to change at course instructor’s discretion.

**University of Minnesota and College of Pharmacy Policy Reference** *(Centralized Syllabus)*
This page includes all required UMN and CoP policies, e.g., Academic Freedom; Copyright; Course Evaluations; Disability Accommodations; FERPA, etc.
Appendix A: Responsibilities of Administrative Faculty Advisors

Administrative Faculty Advisors
(Estimated minimum faculty effort: 10 hours for literature review; 20 hours for original research)

Each student will be assigned an Administrative Faculty Advisor to advise the student on the student’s Colloquium project and presentation. A student who is already working with a faculty member on a faculty research project may request that faculty member as an advisor for Colloquium I and II; however, in no instance will a faculty member advise more than three (3) students from the same class. It is the student’s responsibility to notify the Course Director and the course staff support person of any changes regarding Administrative Faculty Advisor. The following describes the roles and responsibilities of Administrative Faculty Advisors.

Assignment to Students
All College of Pharmacy faculty holding more than an adjunct faculty appointment in the College will serve as Administrative Faculty Advisors in Colloquium I and II. Generally, Administrative Faculty Advisors are randomly assigned to students, and are required to mentor that student during Colloquium I (Fall term of the PD2 year) and Colloquium II (Spring term of the PD3 year) and during the months between these two courses while a student pursues their project. The advisor is responsible for helping the student identify a topic or topic area and providing guidance in directing students to other people who might serve as appropriate content-specific resources. The Administrative Faculty Advisor must participate in both Colloquium I (evaluating the project proposal) and Colloquium II (evaluating the student’s paper and the student’s seminar based on the paper) and submit grades for both.

Responsibilities of Administrative Faculty Advisors:

- Assist student in identifying people who might who might act as content resources for the paper.
- Guide student in paper preparation (between Colloquium I and Colloquium II).
- Monitor student progress to insure timely completion of paper. Monitor due dates and return the drafts within 2 weeks (between Colloquium I and Colloquium II).
- Evaluate the student’s paper per standard evaluation form and determine the acceptability of the student’s work (between Colloquium I and Colloquium II).
- Submit a grade for the final paper. Final paper is due to advisor on March 1 during the Colloquium II course in the PD3 spring semester.
- Participate in Colloquium II (the Pharm.D. Seminar), and provide written feedback and submit a presentation grade for the assigned student mentee.

Responsibilities of Student:

- Remind advisor of draft deadlines and final deadline you must meet.
- Provide advisor with evaluation forms for draft and final paper.
- If you have any questions or problems contact the Course Co-Directors.
Appendix B: Advisor Evaluation Form for Colloquium II Paper

### Advisor Evaluation Form for Draft and Final Paper/Grade Submission

**PHAR 6782 Research Paper and Presentation**  
**Spring 2016**  
**Class of 2017**

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**Students/Advisor(s)**

- **October 18, 2015, 11:55 PM** - First complete draft of Pharm.D. Paper due along with this form to your advisor(s).
- **March 1, 2016, 11:55 PM** - Final submission of paper and abstract to advisor via method of their choice.
- **Research Day, 2016** - Final grade due via this form to ambehnke@umn.edu 612-626-4838 fax.

**Advisor(s):** Each section of this evaluation form contains general guidelines to use when evaluating the corresponding section of the student paper. If changes are required specify what needs to be completed. The advisor should email the completed form to the student in order for them to make the corresponding changes to their first draft. For the final submission, indicate any deficiencies or that the paper is ready for a final grade. Notify Amanda (ambehnke@umn.edu) if there are any concerns or you have not received drafts from your student(s). For the final submission each section must have a Pass and a grade submitted in order for the paper to be considered a Pass, and the student allowed to present their seminar.

Student Name

Administrative Faculty Advisor Name

Content Advisor Name (if applicable)

Comments or Revisions Required

<table>
<thead>
<tr>
<th>Section</th>
<th>Required Elements</th>
<th>Pass/Revise</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Title Page</td>
<td>Title, author, course number, advisor names, date of submission, copyright permission (if necessary)</td>
<td>Pass or Revise</td>
</tr>
<tr>
<td>2. Table of Contents</td>
<td>All sections listed, same capitalization and punctuation used as in text, beginning page number for each section.</td>
<td>Pass or Revise</td>
</tr>
<tr>
<td>3. Abstract</td>
<td>One paragraph, ≤ 250 words, statement of principal objectives, no references.</td>
<td>Pass or Revise</td>
</tr>
<tr>
<td>4. Introduction</td>
<td>Review of literature, purpose of study, definition of terms, study rationale.</td>
<td>Pass or Revise</td>
</tr>
</tbody>
</table>
| 5. Methodology | For a research study — a complete, detailed description of the methods used to collect and analyze the data. This would include as appropriate: generic names, reagents used, IRB approval & consent, demographics of subjects, sample size, etc.  
For a literature review — method of citation selection, search terms used, evaluation of depth and breadth of citations/research available in the topic area. In the case of a topic area with numerous citations, the methodology section should include the procedure employed for selecting the citations used for the review. | Pass or Revise |
<table>
<thead>
<tr>
<th>Section</th>
<th>Requirements</th>
<th>Pass</th>
<th>Or Revise</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Results</td>
<td>The Results section should include the following elements: Proper presentation of the data in a clear, logical and organized manner, including appropriate reference to tables/figures, and the proper use of values and units.</td>
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<td>7. Discussion</td>
<td>The Discussion section should include the following elements: Concise summary of data/results, focus on significant findings, a research-based data-driven conclusion, mention of the limitations of the research and opportunities for further research.</td>
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<td>8. Reference</td>
<td>The Reference section should follow an appropriate format depending on the preference of the advisors and student. Index Medicus (example shown below) is an example of one appropriate format; other styles may be used. Reference style must be consistent throughout the paper.</td>
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Examples of Index Medicus reference style

**Journal article**

**Entire book**

**A chapter of a book**

**Dissertation**

**Note:** For other type of reference materials, see National Library of Medicine Recommended Formats for Bibliographic Citation (REF.WZ345 P314 n 1991) in the Biomedical Library.

9. Points to consider when evaluating Figures/Tables: Only one figure/table per page, tables and figures are sufficient size, all values have appropriate units, figure/table labels are appropriate, figures/tables are computer-generated if possible (i.e. not hand-drawn), the legend for each figure or table appears on the same page as the figure or table.

10. Miscellaneous Format Specifications
Times 12 point font, double-spaced, superscripts and subscripts used appropriately, pages numbered consecutively, page numbers centered on the bottom of each page, no spelling or punctuation errors, abbreviations appropriately defined.

**GENERAL COMMENTS:**

**FINAL GRADE:**
Satisfactory – S
Not Satisfactory - N

**GRADE HERE:**
<table>
<thead>
<tr>
<th>Presentation Title</th>
<th>Presenter Name</th>
<th>What one thing did I learn from this presentation?</th>
</tr>
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<tbody>
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