Drug Information Retrieval, Literature Evaluation, & Informatics  
PHAR 7219  
Spring Semester 2020

Course Description
This course focuses on the critical evaluation and use of medical literature in pharmacy practice as well as the clinical application of pharmacy informatics.

Additional Course Information
This course focuses on the use of primary, secondary, and tertiary literature in pharmacy practice and strategies used to evaluate literature and information resources. It is designed to build upon drug information, biostatistics, and clinical research concepts learned in previous coursework. During this course, students will develop the skills necessary to critically evaluate medical literature and competently respond to questions related to drug therapy. The course will also include an introduction to the evaluation and application of informatics to pharmacy practice. At the end of this course the student should have an appreciation of the role of timely and rigorously analyzed healthcare literature as an essential component of formulating and implementing optimal drug therapy plans.

Course Credit
2 credit hours

Pre-Requisites
- P2 standing
- Completion of PHAR 7274: Biostatistics & Clinical Research Methods

Class Meeting Days, Time & Location
Fridays, 10:00 AM – 11:50 AM in W.T. Brookshire Hall 136

Course Coordinator
Winter J. Smith, Pharm.D., BCPS  
Email: wsmith@uttyler.edu

Office hours:
- MUST make appointment beforehand: Mondays, Wednesdays, and Fridays, 12:30-1:30 PM (may be in person, via phone, or Zoom)
- Other days/times (via phone or Zoom) by appointment

Preferred method of contact: email

Fisch College of Pharmacy (FCOP) and UT Tyler Policies
This is part 1 of the syllabus. Part 2 contains UT Tyler and the FCOP course policies and procedures. These are available as a PDF at https://www.uttyler.edu/pharmacy/academic-affairs/files/fcop-syllabus-policies.pdf.

Required Materials
Most course required materials are available through the Robert R. Muntz Library. These materials are available either online* (http://library.uttyler.edu/) or on reserve.
2. Other required materials will be posted on the class Canvas site. The site address is: uttyler.edu/canvas.
Course Format
The course may include, but are not limited to, the following activities:
1. Independent study of selected readings
2. Individual readiness assessment tests (iRATs)
3. Individual and team projects
4. Team-based learning, active learning strategies:
   a. Team readiness assessment tests (tRATs)
   b. Team application of content and concepts

Course Learning Outcomes (CLOs)

<table>
<thead>
<tr>
<th>CLOs</th>
<th>PLO(s) Assessed for this CLO (1-15)</th>
<th>EPAs (1.1-6.1)</th>
<th>Assessment Methods</th>
<th>Grading Method</th>
<th>PPCP Skill(s) Assessed (1-5)</th>
<th>ACPE Std. 11 &amp; 12 (1-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Discuss the legal and ethical aspects surrounding the provision of drug information.</td>
<td>7</td>
<td>4.2</td>
<td>4</td>
<td>ES</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>2. Describe the benefits and limitations of primary, secondary, and tertiary drug information sources, including print and electronic.</td>
<td>1, 7</td>
<td>1,2,4,2</td>
<td>4</td>
<td>ES</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>3. Identify appropriate sources for the information needed to address specific drug information questions in an efficient manner.</td>
<td>1, 7</td>
<td>4.2</td>
<td>1,2,3,4</td>
<td>ES,RUB</td>
<td>1</td>
<td>N/A</td>
</tr>
<tr>
<td>4. Evaluate the quality and applicability of drug information within a source.</td>
<td>1, 7</td>
<td>1, 2</td>
<td>1,2,3,4</td>
<td>ES,RUB</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>5. Develop a professional drug information question response.</td>
<td>1, 7</td>
<td>1,2,4,1,4,2</td>
<td>1, 2</td>
<td>ES,RUB</td>
<td>3,4</td>
<td>1</td>
</tr>
<tr>
<td>6. Communicate drug information with clarity and accuracy at a level appropriate for the audience.</td>
<td>7, 11</td>
<td>4,1,4,2</td>
<td>1,2,3</td>
<td>ES,RUB</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>7. Discuss the use of informatics in medication safety, practice assessment, and quality improvement.</td>
<td>3</td>
<td>3.3</td>
<td>4</td>
<td>ES</td>
<td>5</td>
<td>N/A</td>
</tr>
</tbody>
</table>

ES = ExamSoft; RUB = Rubric

Course Summative Assessment Methods

<table>
<thead>
<tr>
<th>Assessment Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Individual Project</td>
<td>Individual drug information question response with peer feedback and revision.</td>
</tr>
<tr>
<td>2 Team Project</td>
<td>Team evaluation of primary literature and journal club presentation development.</td>
</tr>
<tr>
<td>3 Team Oral Presentation</td>
<td>Team presentation of journal club.</td>
</tr>
<tr>
<td>4 Midterm and/or Final Exam</td>
<td>Standard MCQ, select all that apply, fill in the blank, true/false, short answer questions</td>
</tr>
</tbody>
</table>
Grading Policy & Grade Calculation
Grades will be determined based on evaluation of individual and team readiness assessment tests (iRATs, tRATs), individual and team cumulative assessment tests (iCATs, tCATs), midterm examinations, final written examinations, skills assessments, graded application assignments, participation in team-based projects, peer evaluations and other assessment methods that may include, but not limited to, Objective Structured Clinical Examinations (OSCE). Examinations, RATs and CATs may consist of, but not limited to, multiple-choice, true/false, fill in the blank, short-answer, essay, and problem-based questions.

During the time the course is in progress, students whose cumulative course percentage falls below 70.0% may receive an academic alert and be subject to periodic course content review in special sessions with the course instructor(s). The student’s faculty advisor may receive an academic alert to act upon on the student’s behalf.

All examinations, tests, and assignments, including the final examination, may be cumulative. Students are responsible for material presented during the prior courses. The grading scale for all graded material is below. The final course grade will be assigned according to the calculated percentage and the percentages will not be rounded upward or downward. For additional information, see examination/assessment policy below.

PHAR 7219 Grade Calculation*

<table>
<thead>
<tr>
<th>Individual Component</th>
<th>85%</th>
</tr>
</thead>
<tbody>
<tr>
<td>iRATs</td>
<td>15%</td>
</tr>
<tr>
<td>Individual Applications/Projects</td>
<td>25%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Cumulative</strong> Final Written Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Team Component</th>
<th>15%</th>
</tr>
</thead>
<tbody>
<tr>
<td>tRATs</td>
<td>5%</td>
</tr>
<tr>
<td>Team Applications/Projects</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
</tr>
</tbody>
</table>

*The final course letter grade will be determined according to the following grading scheme:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 - 100 %</td>
</tr>
<tr>
<td>B</td>
<td>80 - 89.999 %</td>
</tr>
<tr>
<td>C</td>
<td>70 - 79.999 %</td>
</tr>
<tr>
<td>D</td>
<td>65.0 - 69.999 %</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 65.0 %</td>
</tr>
</tbody>
</table>
# PHAR 7219 Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>DAY</th>
<th>TOPIC</th>
<th>INSTRUCTOR</th>
<th>CLO</th>
<th>Disease States</th>
</tr>
</thead>
</table>
| 1    | F   | 1/17/20* | • Course Overview  
• Drug Information: Ethical and Legal Aspects of Drug Information Practice | Smith  
Parmentier | 1  
$20.01 |
| 2    | F   | 1/24/20* | • Drug Information: Types of Biomedical Resources  
• Drug Information: Electronic Resources | Parmentier | 2,3  
$20.01 |
| 3    | F   | 1/31/20* | • Drug Information: Types of Primary Literature  
• Drug Information: Article Anatomy  
• *Drug Information Question Response Instructions* | Smith | 2,3  
$20.01 |
| 4    | F   | 2/7/20*  | • Drug Information: Systematic Approach to Answering Drug Information Questions  
• Communication: Writing Styles, Referencing, and Plagiarism | Smith | 3,5,6  
$20.01 |
| 5    | F   | 2/14/20* | • Drug Information: Navigating Library Resources, Article Citation Anatomy, and Literature Search Strategies | Abbey  
Smith  
Parmentier | 3  
$20.01 |
| 6    | F   | 2/21/20* | Drug Information: Evaluating Randomized Controlled Trials (RCTs), Part 1 | Smith | 4  
$20.01 |
| 7    | F   | 2/28/20* | • Drug Information: Evaluating RCTs, Part 2  
• Drug Information: Journal Club Purpose and Overview  
• *Journal Club Presentation Instructions* | Smith | 4,6  
$20.01 |
| 8    | F   | 3/6/20*  | Midterm Exam | Smith  
Parmentier | 1-6  
$20.01 |
| 9/20-3/20/20 | SPRING BREAK (NO CLASS) | | | |
| 10   | F   | 3/27/20* | Drug Information: Evaluation of Other Primary Literature Study Designs  
  ***Upload DIQR first draft to Canvas by 8 am*** | Smith | 4,6  
$20.01 |
| 11   | F   | 4/3/20* | • Drug Information: Interpreting Clinical Practice Guidelines  
• Drug Information: Evaluating Direct-to-Consumer (DTC) Advertising, Pharmaceutical Representative Information, and Patient Resources  
  ***Complete DIQR peer review in Canvas by 8 am*** | Smith | 4  
$20.01 |
| 12   | F   | 4/10/20 | NO CLASS  
  ***Upload DIQR final version to Canvas by 8 am***  
  ***Upload Team Journal Club Handout to Canvas by 5 pm*** | Smith | 4,6  
$20.01 |
| 13   | F   | 4/17/20 | Informatics: Overview of Healthcare Data, Information and Knowledge | Parker | 7  
$20.01 |
| 14   | F   | 4/24/20* | • Informatics: Healthcare Analytics and Quality Improvement Strategies  
• Patient Safety: Healthcare Informatics and Medication Safety | Veronin | 7  
$20.01 |
| 15   | W   | 4/29/20 | Cumulative Final Exam | Smith | 1-7  
$20.01 |

Please note that dates, topics, and assignments are subject to change. In the event of a change, you will be given ample notification of the change.  
*RAT and/or Graded App*