PHAR 6971: Geriatrics
Course Syllabus Spring 2016
2 Credits

This course adheres to the items listed in the College of Pharmacy Central Syllabus:
https://docs.google.com/a/umn.edu/document/d/1artQ5e1rbzxe8lEtWo7BE8k8snZAEgMMZ_QcW8yJ-II/edit?pli=1

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>Tuesday</td>
<td>8:00 - 9:55</td>
<td>LSci 160</td>
<td>MT 1-450</td>
</tr>
</tbody>
</table>

Course Website: http://moodle.umn.edu

Instructional Team

Technology Help, Duluth: 218-726-8847  itsshelp@d.umn.edu
Technology Help, Twin Cities: 612-301-4357  help@umn.edu

Teaching Assistants

Duluth
Jennifer Van Vliet
Email: vanv0100@umn.edu
Office Hours: By appointment

Twin Cities
Youssef Roman Pharm.D., PhD Candidate
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Office Hours: By appointment

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Office Hours: By appointment

Course Directors

Duluth:
Mike Swanoski, Pharm.D., CGP, FASCP
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Office Hours: By appointment

Twin Cities:
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7-189 WDH, University of Minnesota
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Clinical Pharmacist
Sholom West Transitional Care Unit
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Course Instructors

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Preferred method of contact: email
Office Hours: By appointment

Course Lecturers:
Karen Bastianelli, Pharm.D.
Assistant Professor
College of Pharmacy

Andrew Behm, Pharm.D.
Vice President
Express Script- Clinical Evaluation & Policy

Cassie Furr, Pharm.D.
MTM Pharmacist
Essentia Health Duluth

Matt Just, Pharm D
Thifty White
Long Term Care Consultant

Sean Kempke, MD
Family Practice Physician
Essentia Health Duluth

Jennifer Olson, MD
Geriatrician
Park Nicollet Health Services

Youssef Roman, Pharm.D., PhD Candidate
Clinical Toxicologist
College of Pharmacy

Stephen Shuman, DDS
Associate Professor
Dir Oral Health for Older Adults
School of Dentistry
Course Description

Course content:
This course is designed to prepare future generalist pharmacists to be knowledgeable about diseases/conditions primarily seen in geriatric patients and the appropriate use of medication in older adults. Students will gain knowledge in setting appropriate goals of therapy in patients with multiple comorbidities and to incorporate functional, cognitive, and health related quality of life aspects into pharmacotherapy care plans. The course will focus on the pharmacotherapy used to treat diseases and conditions in older adults with an emphasis on physiologic changes of aging and how these changes impact pharmacokinetics and pharmacodynamics aspects of medication use in the elderly. At the conclusion of the course students will be expected to apply knowledge learned in the course to design and monitor patient-specific pharmacotherapy plans for older adults and to educate patients on appropriate medication use as it relates to the unique aspects of aging.

Course format:
This course will meet for 2 hours 1 day per week. Class time will be used for lectures, large and small group case discussions, and exams. Students will be assigned required readings to enhance student knowledge in the unique aspects of geriatric pharmacy practice and to augment lecture content.

Prerequisites

- Students must have completed all required Year 2 and Year 3 fall PharmD courses successfully before beginning this course.
- This course will build on material learned previously in the PharmD curriculum. Students will be expected to apply knowledge of pharmacokinetics, biopharmaceutics, pharmacotherapy, and evidence based medicine.

Requirements

Course Materials

Articles as assigned

- Students are strongly urged to review the assigned readings prior to class to help with the understanding of lecture material. Materials from lectures, handouts, case presentations, and required readings will be included in course examinations.
- Supplemental readings will be made available to interested students by arrangements with course directors. Such readings may be valuable for future reference.

Suggested Textbook (optional)


Computer / Technology Requirements

- The University of Minnesota computer requirements are listed here: [http://www1.umn.edu/moodle/start/technical.html](http://www1.umn.edu/moodle/start/technical.html)
- Moodle: This course will use Moodle to distribute resources and host course activities (exams, resources). See Moodle setup requirements at [http://www1.umn.edu/moodle/start/technical.html](http://www1.umn.edu/moodle/start/technical.html)
• E-Mail: Course instructors will communicate through Moodle announcements via email about course administrative issues. We suggest that you check your U of M email daily. Student questions and concerns should be emailed to TAs on respective campuses. Students may email course directors as necessary.

Attendance Policy
Students are expected to attend every class for which they are registered. Lectures will not be recorded when there are guest lecturers. Exams will include materials delivered by all lecturers.

Goals & Objectives

Learning Objectives

1. Explain the basic pathophysiology associated with common conditions seen in geriatric patients
   
   Domain Competencies: 2.0; 6.3.1; 6.3.2; 6.3.3  
   Scientific Foundations: 1.1.1; 1.2

2. Compare and contrast available pharmacotherapeutic options to manage conditions commonly seen in geriatric patients, with particular focus on potentially inappropriate medications for geriatric patients
   
   Domain Competencies: 1.1; 1.2; 2.0; 2.1; 2.2; 2.3; 2.4; 6.0; 6.1; 6.3.1; 6.3.2; 6.3.3; 6.4.2; 6.4.5; 6.4.6  
   Scientific Foundations: 3.2.2; 3.2.4; 6.1.10; 6.4

3. Evaluate, monitor and modify pharmacotherapeutic plans for managing patients with conditions commonly seen in geriatric patients with comorbidities and taking multiple medications
   
   Domain Competencies: 1.1; 1.2; 2.0; 2.1; 2.2; 2.3; 2.4; 6.0; 6.1; 6.3.1; 6.3.2; 6.3.3; 6.4.2; 6.4.5; 6.4.6  
   Scientific Foundations: 6.4; 6.5

4. Identify, resolve and/or prevent drug therapy problems, and develop pharmacotherapeutic goals for patients with conditions commonly seen in geriatric patients.
   
   Domain Competencies: 1.1; 1.2; 1.5; 1.8; 2.0; 2.1; 2.2; 2.3; 2.4; 4.2; 6.0; 6.1; 6.3.1; 6.3.2; 6.3.3; 6.4.2; 6.4.5; 6.4.6  
   Scientific Foundations: 6.4; 6.7.3

5. List barriers to effective communication of drug and adherence information in older adults and identify strategies to handle them.

   Domain Competencies: 1.4; 2.0; 2.1; 2.2; 4.2  
   Scientific Foundations: 5.8.3

6. Describe the interrelationship between social and economic issues of aging and incorporate these when formulating a medication assessment and plan for an older adult

   Domain Competencies: 1.4; 4.2  
   Scientific Foundations: 5.1.5; 5.7.1; 5.7.6; 5.8.3
Assessments and Grading

Assignments and learning activities

- Two Case write ups will be submitted via Moodle one week prior to Class Presentations. Students will subsequently be assigned to small groups for class case presentations. Students will be expected to meet with their groups prior to each class presentation to coordinate and plan for the final presentation. Each group will have approximately 15 mins to present on a specific aspect of the case as requested by the instructor. Both Student attendance and write up will be required for total credit.

- Three Case write ups for Small group Discussions will be collected on the day of discussions. Student attendance and write up required for total credit.

- Exams will be held in-class on Moodle and will consist of multiple choice questions and case based scenarios.

Graded Assessments

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<tr>
<th>Assessment</th>
<th>% of Grade</th>
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<tbody>
<tr>
<td>Class Presentation (Case 1)</td>
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<tr>
<td>Class Presentation (Case 4)</td>
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<tr>
<td>Small Groups Discussion (Case 2)</td>
<td>3</td>
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<tr>
<td>Small Groups Discussion (Case 3)</td>
<td>3</td>
</tr>
<tr>
<td>Small Groups Discussion (Case 5)</td>
<td>3</td>
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<tr>
<td>Exam 1</td>
<td>25</td>
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<tr>
<td>Exam 2</td>
<td>25</td>
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<tr>
<td>Exam 3 (Cumulative)</td>
<td>35</td>
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<td>Total</td>
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Course Letter Grades

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<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D</th>
<th>F</th>
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<td>%</td>
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<td>90-92.9</td>
<td>87-89.9</td>
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<td>70-72.9</td>
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Late work/Regrade Policy

- Late work will not be accepted (except for absences in accordance to the University Make-Up Policy). A student missing a case discussion will be required to notify the course directors in advance. If the student is ill during a case discussion, the student will contact and submit a written case discussion within 72 hours of the case discussion. After this time frame, the student will not be able to make up for the points missed on the case discussion.

- Questions regarding exam should be sent to course directors within one week after exam is administered.

Absence from Exam
Dr. Swanoski or Dr. Scheiner must be notified in advance if a student is unable to attend a scheduled exam. A make-up exam will be scheduled only under one of the following circumstances: Illness, family emergency, University-sponsored event.

Any student with a documented disability who needs accommodations must contact Dr. Swanoski or Dr. Scheiner and Disability Services 612-626-1333 in TC or 218-726-6130 in Duluth at the beginning of the semester. All discussions will remain confidential.

Minimum Passing Level
60%

Schedule

| Week 1 | Jan 19 | Review of Aging  
Swanoski |
|-------|--------|----------------|
|       |        | Adverse Drug Reactions  
Scheiner |
| Week 2 | Jan 26 | Falls/Osteoporosis  
Scheiner |
|       |        | Stroke/Antithrombotics  
Swanoski |
| Week 3 | Feb 2 | Heart Failure  
Roman |
|       |        | Glaucoma/Macular Degeneration  
Bastianelli |
| Week 4 | Feb 9 | Class Presentation Case 1 (Both hours)  
Scheiner/Swanoski |
| Week 5 | Feb 16 | Exam 1 (In class- Moodle) |
|        |        | Anemia  
Swanoski |
| Week 6 | Feb 23 | Dental Issues  
Schuman |
|        |        | Small Groups Case 2  
Various |
| Week 7 | Mar 1 | Delirium  
Scheiner |
<table>
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<tr>
<th>Week</th>
<th>Topic</th>
<th>Instructor(s)</th>
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<tbody>
<tr>
<td>8</td>
<td>Depression</td>
<td>Swanoski</td>
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<td>9</td>
<td>Behavioral Disturbances</td>
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<td></td>
<td>Pain</td>
<td>Behm</td>
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<td>Spring Break</td>
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<tr>
<td>11</td>
<td>Pharmacist’s Role in Hospice</td>
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<td>End of Life</td>
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<td>12</td>
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<td>Diabetes</td>
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<td>14</td>
<td>Class Presentations Case 4</td>
<td>Scheiner/Swanoski</td>
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<td>Clinical Practice Guidelines</td>
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<td>Small Groups Case 5</td>
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<td>Immunology/Antibiotics</td>
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<td>Consultant Pharmacy</td>
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<td>Final Exam-Cumulative (Both hours-in class-Moodle)</td>
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