Course Credit: 2 hours.

Class Time and Location: To be determined.

Course Coordinator:
Rick Foley, PharmD, CPh, CGP, FASCP, BCPP
Phone: (352) 406-2697
Email: 
Office Hours: By appointment.

Course Teaching Assistant:
To be determined

Course Description:
Over 7 weeks, students will review the pharmaceutical care of select common chronic diseases in the older patient. This course is aimed to students interested in learning more about the practice of clinical geriatric pharmacy or thinking about pursuing a career in a long-term care pharmacy practice such as consultant pharmacy. The goal of this course is to have the students develop patient-focused approach to address chronic diseases in the elderly.

Course Textbook:
A course textbook has not been defined. It is expected that the students will use the most recent guidelines available from the medical literature. A portion of the introductory lecture will be taken from the text:


The book is available electronically (e-book) through the Health Science Center Library’s Electronic Book Collection webpage: [http://library.health.ufl.edu/resources/eBooks1.html](http://library.health.ufl.edu/resources/eBooks1.html). The e-book can be located by typing the title in the search portal of the webpage.

Course Website:
An e-learning site will be available for the course. Course material, syllabus, grades, discussion boards, and possibly other information will be available in e-learning. E-learning is accessible at [http://lss.at.ufl.edu/](http://lss.at.ufl.edu/) or through [http://my.ufl.edu/](http://my.ufl.edu/). The student must have a valid Gatorlink ID and password to access e-learning and be registered for the course to access the course material. For assistance, call the UF Help Desk at 392-HELP.

Course Learning Objectives:
At the end of the course, the students will be able to:

- Assess a patient/chart and recommend treatment for chronic diseases common in patients over 65 years old, and be able to discuss treatment goals for each.
- Describe specific metabolic differences in the older patient, including:
  i. Renal function.
  ii. Hepatic function.
  iii. Absorption differences.
  iv. Drug administration challenges.
- Discuss realistic outcome expectations of the complex geriatric patient, including specific issues such as:
  i. Hospice status.
  ii. Multiple co-morbidities.
  iii. Other terminal diagnoses.
- Perform the following tasks for the clinical conditions below: *(probable faculty expert)*
  i. Inappropriate Drugs / Consultant Pharmacist Primer *(Dr. Kesgen)*
    - Apply the Beers’ criteria to a drug regimen
    - Apply the principals of the aging patient to a specific case keeping in mind expected clinical glide paths and reasonable outcomes
    - Recognize polypharmacy and be able to reduce the risk of side effects through medication regimen consolidation
    - Describe the anticholinergic burden – be familiar with highly anticholinergic drugs
    - Discuss the concept of “new side effect” versus “new disease” and how the pharmacist plays a role in reducing polypharmacy
  ii. Chronic Kidney Disease (CKD) Anemia: *(Dr. Williams)*
    - Differentiate between the major causes of anemia.
    - List the diagnostic criteria for the five stages of CKD.
    - List the benefits to existing co-morbidities when treating CKD anemia.
    - Give the starting doses for each of the commercially available erythropoietin stimulating agents (ESA).
    - List the monitoring parameters and treatment goals for patients with CKD anemia.
    - Describe in detail the different options for iron repletion therapy, noting the benefits and risks of each.
    - Explain the black box warning associated with the ESA products.
  iii. Diabetes *(Dr. Obringer)*
    - Describe the progression of diabetes in the geriatric patient.
    - Assess medication risks in the geriatric diabetic
    - Plan a treatment regimen appropriate for a geriatric patient including contingencies and treatment goals
    - Elucidate how treatment goals may change depending on social aspects of aging
    - Educate a care-giver on the disease process and the drugs used to treat
  iv. Anticoagulation: *(Dr. Anderson)*
    - Determine appropriate indications for anticoagulation therapy
    - Evaluate risk versus benefit of anticoagulation therapy in an elderly patient
Consider advantages and disadvantages of each of the following therapies:
- Aspirin, dabigatran, rivaroxaban, warfarin
- Using available evidence and guidelines develop an anticoagulation management plan for an elderly patient

v. Alzheimer’s Disease/Dementia: (Dr. Foley)
- List and differentiate the various types of dementia.
- Define ataxia, apraxia, aphasia, and agnosia.
- Explain the acetylcholine theory of Alzheimer’s disease and discuss anticholinergic burden.
- Be able to administer and briefly interpret a clock drawing test, a Folstein test, and a cognitive performance scale.
- List the commercially available Alzheimer’s disease/dementia treatments, including the starting/target doses and the risks and benefits of each treatment.
- Evaluate a drug regimen and monitoring parameters to decrease anticholinergic burden.

vi. Congestive Heart Failure (Dr. Anderson)
- Understand the etiology of chronic heart failure (CHF).
- Discuss guidelines for the management of CHF.
- Apply evidence-based medicine to CHF treatment decisions.
- Highlight drugs of particular concern in a geriatric patient population (i.e. digoxin, ACE-inhibitors, diuretics).
- Stress the importance of decreasing hospitalizations.
- Discuss options for end-of-life-care.

• Explain the opportunities available in the practice of consultant pharmacy and the opportunities for improving pharmaceutical care in geriatric patients.

Course Overview:

- It is assumed that the student taking this course has thorough grounding in pharmacotherapy and physiology.
- Students will be randomly grouped/paired at the beginning of the class for the purpose of case presentations.
- Students will research, discuss, and develop a strategy to manage the pharmaceutical care of a patient provided to them.
  - The presentations should be based on current guidelines and standards of practice.
  - It is understood that the presentation should encompass all aspects of the pharmaceutical care plan for the patient.
- There will be six patient cases. Students will be divided into teams for each case based on the enrollment of each campus.
- There will be a quiz at the beginning of every class based on the material to be presented that day.
- There will be a cumulative final examination consisting of all of the course material covered.
- Suggested reading material may provided for each case. Students are strongly encouraged to meet between scheduled classes to discuss the disease process.

Class Meeting Schedule:

<table>
<thead>
<tr>
<th>Week 1</th>
<th>- Syllabus review</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Group formation</td>
</tr>
<tr>
<td></td>
<td>- Orlando Campus only – Live lecture “Primer of Geriatric Pharmacy”</td>
</tr>
</tbody>
</table>
| Week 2 | - Case #1 Quiz  
- Case Presentation #1 |
|--------|-----------------------------|
| Week 3 | - Case #2 Quiz  
- Case Presentation #2 |
| Week 4 | - Case #3 Quiz  
- Case Presentation #3 |
| Week 5 | - Case #4 Quiz  
- Case Presentation #4 |
| Week 6 | - Case #5 Quiz  
- Case Presentation #5 |
| Week 7 | - Case #6 Quiz  
- Case Presentation #6  
- Course Wrap-Up |

**Student’s Responsibilities:**

- Attend, be on time, and **be ready to discuss the cases being presented** for every class whether you are presenting or not.
- Interact with the presenter(s) and facilitator regarding the case.
- Develop a 30-45 minute presentation in collaboration with your case partner(s)
- Evaluate case presentations

**Facilitator’s Responsibilities:**

- Meet with students each class.
- Administer quizzes.
- Moderate the discussion before and after presentations.
- Ask pertinent questions to each presenter.
- Evaluate the presentations based on a provided rubric.

**Performance Evaluation and Grading:**

<table>
<thead>
<tr>
<th>Grade Composition</th>
<th>Quizzes (5% each)</th>
<th>30%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Presentation</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>Class Participation</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>Presentation Evaluations</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Grading Scale:**

The grading scale for this course consists of the standard scale, below:

- 93% - 100% = A
- 90% - 92% = A-
- 87% - 89% = B+
- 83% - 86% = B
- 80% - 82% = B-
- 77% - 79% = C+
- 73% - 76% = C
- 70% - 72% = C-
- 67% - 69% = D+
- 63% - 66% = D
- Below 60% = E

For more detail on university policy on letter grades, see the Registrar’s Grade Policy regulations at [http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html](http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html).

**Quizzes:**
Quizzes will consist of ten multiple choice questions, and will be given at the start of every class. Background information and/or source readings will be provided. Up to five questions on the quiz may come from material previously covered. These questions will be broad in nature.

**Examinations:**
- There is no final exam for this course.

**Student Presentation Evaluations:**
A select number of students (based on class census) will be notified at the start of presentations that they will be evaluating the presenting group. The evaluators should be prepared to discuss the case and provide constructive criticism and questions to the presenting students. This will require that the evaluating students be very familiar with the case! Students will evaluate at least two cases during the semester (maybe more..) Please note that you should be ready to critique each presentation regardless of whether or not you are chosen to evaluate. Student evaluations, although not counted in the grade of the presenting group, will be given back to the group as part of the review process. Treat the evaluations with respect and judge how you would like to be judged.

An evaluation form will be provided. Evaluating students will be graded on their professionalism and their line of questioning.

**Professionalism:**
The student is expected to attend every class and **be on time**. Class participation is absolutely mandatory. The student will get out of this class what she/he put in to it. Deductions for unprofessional behavior are subject to the facilitator with the following standards:

- Late less than five minutes = 1% point deducted from participation grade.
- Late more than five minutes = forfeiture of quiz for that day.
- Unexcused absence = forfeiture of quiz for that day **AND** 3% deduction from participation grade.
- Other, including lack of preparedness, rude/disruptive behavior towards the presenter or the facilitator = 1-5% points deducted from participation grade.

Excused absence arranged **in advance** can be made up by contacting course coordinator or course teaching assistant.

**Presentations:**
- A 30-minute presentation should have no more than 30 slides using MS PowerPoint. A good rule of thumb is 2-3 minutes per slide.
- **Do not read to the audience.**
- Proof-read your slides, practice your talk, and know your slides. Please make sure that you spell drug names correctly – if anyone on Earth should be spelling drug names correctly, it us.
- Wikipedia is not to be referenced in your presentation…ever. Use primary literature.
- Do not overload your slides—busy slides detract from your presentation.
- Reference all work that is not your own on each slide.
- Be ready to discuss your topic thoroughly. You are the expert!

**Presentation Evaluation:**
- Your presentation is due by noon **the day before you present it**. We will use online submissions thought the course website on e-learning. Presentations should be in standard MS PowerPoint format.
- You are required to bring a handout of the slides (3 slides per page) for your course facilitator.
- Course facilitators will use a grading rubric to guide them.
• Presentation grades will be posted on the course website before the next class. Your facilitator will give you a copy of your evaluation by the end of the next class.
• If you wish to petition your results, please do so in writing, to the facilitator.

蜗 Presentation Topics:

The following clinical conditions will be addressed in the presentations (presiding faculty). Note: This is NOT necessarily the order of the cases. Case order is subject to change during the semester.

1. Inappropriate Drugs / Consultant Pharmacy
2. Chronic Kidney Disease Anemia
3. Alzheimer’s Disease / Dementia
4. Diabetes
5. Anticoagulation
6. Congestive Heart Failure

蜗 Presentation Content:

• Guidance for the focus of each presentation will be provided.
• Each presentation should include substantial background information about the disease process. I want you to think about the disease before you think about the treatment. You need to build a case, selling to the audience why treatment is even warranted before you give your opinion on which therapy, if any, is most appropriate. Sometimes the best treatment is none at all. Be ready to sell your decisions.
• Keep the focus on the disease process in question. You may discuss other concerns if you have time. If you present the information however, it is fair game for discussion.
• Address any regulatory/ethical concerns based on the status of the patient (e.g. Hospice, long-term care, assisted living, etc.)
• Make specific recommendations and thorough monitoring parameters for the patient. Develop “what-if” scenarios. This is important. You have been through rotations and know real-world medicine is full of contingencies – we need to see yours for the case. This cannot be stressed enough – a presentation without substantial recommendations and contingencies is an incomplete presentation.
• The presentation should be long enough to sufficiently cover the case. If more than one student is presenting, there should be considerably more depth to the presentation.

蜗 OPTIONAL EVENT

On March 28th, 2014 (specific day to be announced) from 1pm- 5pm the Medicaid Florida P&T committee will meet in Tampa, FL at the Tampa Airport Marriott. It is a public hearing so anyone may attend. It is an interesting insight into the politics of medicine. I am the vice-chair and a voting member of the committee and would like anyone interesting in attending please consider doing so. Students interested should email me directly. A reservation is not required but I will try and make them save a few seats for you. Some of my rotation students have attended and they have enjoyed the meeting.

A link to the information:  http://www.fdhc.state.fl.us/medicaid/prescribed_drug/meetings.shtml

蜗 Academic Honesty:

The conduct of all students is expected to conform to the standards of academic integrity as described in the University of Florida Honor Code. In adopting this Honor Code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values for of the University community. Students who enroll at the University commit to holding themselves and their peers to the high standard of honor required by the Honor Code. Any individual who becomes aware of a violation of the Honor Code is bound by honor to take corrective action. Student and faculty support are crucial to the success of the Honor
The quality of a University of Florida education is dependent upon the community acceptance and enforcement of the Honor Code.

The University of Florida Honor Code

“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:

“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

Students should be aware that any use of resources other than those explicitly allowed on an assignment will be considered as academic dishonesty. Plagiarism, which occurs when another person’s work is used or copied without attribution, will also, be considered academic dishonesty. All incidents of demonstrated or suspected academic dishonesty will be reported to the Associate Dean for Professional Affairs, and procedures regarding academic dishonesty will be enforced. Students who fail to apply a high level of academic integrity to all conduct related to this course risk receiving a failing grade.

For more information about academic honesty and the University of Florida’s Honor Code, go to the Dean of Students Office and Student Conduct and Conflict Resolution at: http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php.

Accommodation for Students with Disabilities:

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the course coordinator when requesting accommodation. Request for accommodation should be made at the beginning of the semester for exams for other assignments due during the semester.

Evaluation of Course and Instructors:

Course and instructor evaluations are requirements for the successful completion of this course. Course and instructor evaluations must be completed, just as examinations, papers, and assignments must be completed for you to receive credit for this course and all other courses in the College of Pharmacy. If you do not complete all required course and instructor evaluations by the last day of classes, you will receive an “I” or an incomplete grade for the semester because you have not completed all of the course requirements. See the College of Pharmacy Student/Faculty Handbook at: http://www.cop.ufl.edu/studaff/SFbook.pdf.