Foundations of Medication Therapy Management I

Fall 2015 - PHA 6631 (3 credits)

Course Purpose
The course will introduce the student to the core elements of medication therapy management (MTM), physical assessment skills, communication techniques, and literature evaluation methods needed for the successful provision of MTM. The student will learn how to conduct various types of patient care interviews. Additionally, the student will develop confidence in communicating with patients and providers, performing physical assessment, and analyzing the medical literature.

Course Faculty and Office Hours

Course Coordinator:
Karen Whalen, Pharm.D. BCPS, CDE, FAPhA
Assistant Dean for Clinical Education
Clinical Professor
Department of Pharmacotherapy & Translational Research
Office: Room 4321 HPNP
Phone: (352) 273-9497
Email: whalen@cop.ufl.edu
Office Hours: 4-5 PM EST on Wednesday and by appointment

Please see Appendix A for a listing of all faculty members involved in this team-taught course.

Place and Time of Class Sessions

Lectures are prerecorded and posted on the course website in the CANVAS eLearning system. Lectures may be viewed at the student’s convenience. The students will have one on-campus session during the fifth week of the course (Monday evening through Thursday evening).

How This Course Relates to the Learning Outcomes You Will Achieve in the MS-MTM Program

This course prepares the MS-MTM student to accomplish the following abilities and the related Student Learning Outcomes (SLOs) upon graduation:

- Knowledge SLO: Demonstrate comprehensive knowledge related to a specific discipline within the pharmaceutical sciences.
- Problem-Solving/Critical Thinking SLO: Demonstrate the ability to evaluate a problem that is related to a discipline within the pharmaceutical sciences.
- Communication SLO: Demonstrate the ability to effectively convey information when talking about a topic that is related to a discipline within the pharmaceutical sciences.
Course Objectives

Upon successful completion of this course, the student will be able to:

1. Establish individual goals for personal practice and identify the MS-MTM program competencies that will enable achievement of these goals.
2. Define the core elements of Medication Therapy Management (MTM).
3. Outline how to provide MTM to an individual patient.
4. Perform and document basic physical assessment of vital signs, vital statistics, and other physical assessment findings necessary for provision of MTM.
5. Utilize appropriate medical terminology when recording physical assessment findings and documenting provision of MTM services.
6. Obtain a thorough medication history from a patient that provides adequate information to conduct a comprehensive medication therapy review.
7. Utilize effective communication techniques when conducting a medication therapy management session.
8. Identify ineffective communication techniques that serve as barriers to the provision of MTM services.
10. Communicate MTM interventions effectively to other healthcare providers.
11. Identify drug information resources necessary for the provision of MTM services
12. Critically evaluate scientific and professional literature for the purpose of making an MTM intervention

Pre-Requisite Knowledge and Skills

The student must have successfully completed a Bachelor of Science in Pharmacy or a Doctor of Pharmacy degree, and must be licensed and in good standing with their respective state Board of Pharmacy. The student must be in good academic standing with the MS-MTM degree program.

Course Structure & Outline

The course is offered in a blended learning format that utilizes a combination of live online classroom instruction, self-directed learning (videos, readings, web-based learning), and hands-on experiential activities. To meet the standards for course credit assignment this three-credit course requires a minimum of 48 hours of classroom instruction or the equivalent. Since the face-to-face classroom instruction is less than 48 hours, a number of alternative instructional activities comprise the remainder of the equivalent content and serve to fulfill the curricular equivalency standard. Using a combination of live classroom instruction and alternative methods of instruction ensures that the requirements for course credit assignment are fulfilled. An outline of the course activities and their respective contribution to course credit assignment can be found in the accompanying course schedule document (Appendix B).

Course Outline/Activities

Refer to Appendix B for the course schedule and outline of activities.
Textbooks


Instructors may require additional readings such as clinical guidelines, review articles, book chapters, or websites. They may also provide additional resources to supplement the lecture material. Required or recommended readings will be listed under assignments and responsibilities on the course schedule. The readings will be available under the resources tab on the course website.

Active Learning Requirements

- Designing a medication history interview guide
- Application of living room language to physical assessment terms
- Writing a SOAP note
- MTM Institute (on-campus experience) – physical assessment, patient interviewing, motivational interviewing

Feedback

Students will be provided written feedback on all assignments via the eLearning system. In general, written feedback can be expected within one week of assignment submission. In addition, students may schedule an appointment with the facilitator and/or instructor if they wish to obtain more detailed verbal feedback. Feedback on exams and quizzes will be available via the eLearning system after 12 noon on the day following the exam or quiz.

Student Evaluation & Grading

Evaluation Methods

Written Assignments 15%
- Medication History Assignment - 5%
- Physical Assessment/Review of Systems Assignment - 3%
- SOAP Note Assignment - 7%

Quizzes 15%
- Week 2 – 7.5%
- Week 3 – 7.5%

MTM Institute 30% (includes active participation in all activities, professionalism, punctuality)

Exams 40%
- Midterm Exam - 15%
- Final Exam - 25%
Grading Scale

Additional information on minus grades is available on the University of Florida website: http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
<th>Grade</th>
<th>Range</th>
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<tbody>
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<td>93-100</td>
<td>A-</td>
<td>90.0-92.9</td>
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<tr>
<td>B+</td>
<td>86.6-89.9</td>
<td>B</td>
<td>83.3-86.5</td>
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<tr>
<td>B-</td>
<td>80.0-83.2</td>
<td>C+</td>
<td>76.6-79.9</td>
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<tr>
<td>C</td>
<td>73.3-76.5</td>
<td>C-</td>
<td>70.0-73.2</td>
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<tr>
<td>D+</td>
<td>66.6-69.9</td>
<td>D</td>
<td>63.3-66.5</td>
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<tr>
<td>D-</td>
<td>60.0-63.2</td>
<td>E</td>
<td>&lt;60</td>
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Class Attendance Policy

Attendance at the MTM Institute is mandatory. Students who do not attend or do not complete the Institute will receive an incomplete in the course until the Institute can be completed.

Quiz/Exam Policy

The midterm exam will be administered via pencil/paper at the MTM Institute. The final examination and quizzes will be administered online. Online examinations may consist of multiple choice, short answer and/or case-based questions. Thus, online examinations necessitate skills in typing and using a computer. If you do not have strong keyboard skills, please do not delay in contacting the course coordinator. With early intervention you can be directed to Staff members who are equipped to review your needs. Please note that it takes time to build these skills and this is not something that can be done at the last minute. To maintain the highest standards of academic integrity, high stakes online examinations may require the use of a proctoring system.

Exam grades will be posted within one week of the exam. Notice will be provided to the students if there will be a delay in posting of exam grades.

Students have one week after posting of the exam grades to challenge any exam question. No appeals will be accepted after one week. Written appeals must include the following: the question number, an evidence-based rationale for why the student feels their response is accurate. The exam will be regraded, in full, by a third party. Note: the score of a fully regraded exam may increase, decrease, or stay the same. The regraded score will be considered final.

Make-up Quiz/Exam Policy

Scheduled exams should only be missed for REAL EMERGENCIES. A student who misses an exam should notify the course coordinator via email within 24 hours. Students with an excused absence may be allowed to take a make-up exam. Make-up exams should be arranged with the course coordinator and administered within two weeks of the original exam date.
**Policy on Old Quizzes and Assignments**

Students will not be provided with old quizzes, exams, or assignments.

**Assignment Deadlines**

Please submit online assignments early to avert last minute issues with technology. Late submission of assignments will result in a point deduction and may result in a zero grade, depending on the assignment. Students who experience technical difficulty when submitting assignments electronically must notify the course coordinator as soon as possible.

**General College of Pharmacy Course Policies**

The College of Pharmacy has a website that lists course policies that are common to all courses. This website covers the following:

1. University Grading Policies
2. Concerns, Appeals, and Complaints
3. Academic Integrity Policy
4. Psychomotor and Learning Expectations
5. How to request learning accommodations
6. Faculty and course evaluations
7. Computer and other technology requirements
8. Student expectations in class
9. Communications
10. Religious holidays
11. Counseling and Wellness Center
12. How to access services for student success

Please see the following URL for this information:

Appendix A: Directions for Contacting Faculty & Course Faculty List

Directions for Contacting Course Faculty
All questions pertaining to course logistics should be posted on the course logistics discussion board. Questions for individual lecturers should be posted on the discussion under the relevant topic, so that classmates may benefit from the discussion. Please do not email the lecturers directly unless directed to do so by the course coordinator, or if the question is of a personal nature, i.e., not related to clarification of course content.

Instructors

Instructors

Paul Doering, M.S.
Paul Doering is a Distinguished Service Professor, Emeritus in the Department of Pharmacotherapy and Translational Research at the University of Florida's College of Pharmacy. For 28 years he was the Director or Co-Director of the statewide Drug Information and Pharmacy Resource Center at the Health Sciences Center, University of Florida. Over the years, Professor Doering has received numerous honors and awards. He was awarded Teacher of the Year five separate times and in 2007 he was named a member of the University of Florida’s Academy of Distinguished Teaching Scholars. Paul is now enjoying his “retirement” years and is continuing his work with students and pharmacists through lectures, seminars, and other such things.

Justin De Leo, M.Ed.
Justin De Leo is the Instructional Designer for the College of Pharmacy and member of CoP IT. His background is in academic instruction, curriculum development, pedagogical design, technical writing, and information technology. His research interests include social development theory, experiential learning theory, active learning events via mobile technology, the effect of social networking tools to enhance synchronous learning experiences, and redesigning assessment to measure teaching & learning; cognitively & affectively. Justin is committed to education and to supporting those who teach and learn. He is excited for the opportunity to coordinate instructional design for the MTM program, and he looks forward to working with you and helping make your experience here the best it can be.

Anna Hall, Pharm.D., BCACP
Dr. Anna Hall is the Assistant Director for the UF College of Pharmacy MTM Communication and Care Center. She has served as a UF faculty member at the UF MTM Center since 2010. She is a board certified ambulatory care pharmacist. She has completed the Bruce Berger comMIt (Comprehensive Motivational Interviewing Training) and train the trainer program. She and her colleagues at the UF MTM center have designed MTM service offerings that employ the use of motivational interviewing and worked with a team to train over 50 pharmacy technicians and pharmacists in motivational interviewing.

Heather Hardin, Pharm.D., BCACP
Dr. Hardin is a Clinical Assistant Professor and Operations Manager at the Medication Therapy Management (MTM) Communication and Care Center at the University of Florida College of Pharmacy, where she provides comprehensive medication reviews to patients, precepts students, and mentors Pharmacy Residents. The center is a Geriatric and MTM APPE site for fourth-year student pharmacists. Dr. Hardin is a Board Certified Ambulatory Care Specialist.
She is also active in local and national pharmacy organizations, and is the current President of the Alachua County Association of Pharmacists.

**Lisa Vandervoort, Pharm.D.**
Dr. Vandervoort received her Doctor of Pharmacy degree from the University of Florida College of Pharmacy in 1995 and completed a Pharmacy Practice Residency at Shands Hospital at the University of Florida in 1996. She spent 10 years as the Clinical Specialist in Infectious Disease/Internal Medicine at Orlando Regional Medical Center. For the past 5 years Dr. Vandervoort has been a Clinical Assistant Professor at the University of Florida both at the Orlando Campus and with the WPPD program. Her primary interests include pharmacokinetics, infectious disease and internal medicine.

**Katherine Vogel Anderson**
Katherine Vogel Anderson, Pharm.D., BCACP earned her Bachelor of Science degree in biochemistry, with a minor in math, from the Florida State University in 1999. In 2003, Dr. Vogel Anderson graduated with her doctorate of pharmacy degree from the University Of Florida College Of Pharmacy. Following this, Dr. Vogel Anderson completed a primary care pharmacy residency at the Malcom Randall Veterans Affairs Medical Center in Gainesville. After her residency, Dr. Vogel Anderson accepted a clinical pharmacy specialist position at the same VA in the pharmacotherapy clinic, where she specialized in anticoagulation management. She held this position for five years, before transferring to the VA geriatric primary care clinic, where she managed anticoagulation, hypertension, and diabetes, among other disease states, as part of a multi-disciplinary health care team. Dr. Vogel Anderson joined the Gainesville UF faculty in April, 2010. In addition to her teaching responsibilities, Dr. Vogel Anderson practices at the UF Health Internal Medicine Outpatient Clinic, where she manages an anticoagulation/pharmacotherapy service and mentors her PGY-1 pharmacy resident.

**Karen Whalen, Pharm.D., BCPS, CDE**
Dr. Whalen is Assistant Dean for Clinical Education and a Clinical Professor in the Department of Pharmacotherapy and Translational Research at the University of Florida College of Pharmacy. She received her Doctor of Pharmacy degree with highest honors from the University of Florida. She completed a Pharmacy Practice Residency at the Moses Cone Health System followed by a Primary Care Residency at the James A. Haley Veterans’ Hospital. Following residency training, Dr. Whalen was a faculty member in the Department of Pharmacy Practice at Nova Southeastern University (NSU) for 12 years. While at NSU College of Pharmacy, she was an eight-time recipient of the Golden Apple Award for Teaching Excellence. In 2008, Dr. Whalen joined the faculty of the University of Florida College of Pharmacy as assistant director of the St. Petersburg Campus. In 2010, she transitioned to the main campus in Gainesville. She now serves as Director of the Master of Science in Pharmacy with concentration in Medication Therapy Management degree program. Her excellence in teaching was recognized with the Faculty Recognition Award in 2011 and 2012, and the Teacher of the Year Award in 2013. Dr. Whalen is a Board Certified Pharmacotherapy Specialist and a Certified Diabetes Educator. She has practiced ambulatory care pharmacy in a variety of settings including an academic family medicine center, community pharmacy practice, and a Veterans’ Affairs Healthcare System. Dr. Whalen is active in local, state and national pharmacy organizations, and is a past president of the Florida Pharmacy Association.
## Lecture schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Module</th>
<th>Lecture Topic</th>
<th>Lecturer</th>
</tr>
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</table>
| 1    | Course Introduction | 1.1 Course Overview  
1.2 MTM Institute/SEEs (Modules 1, 2, 3)  
1.3 Student Affairs  
1.4 Library Resources | Whalen  
Whalen/De Leo  
De Leo  
Wilson  
Jesano |
| 2    | Communicating with Patients | 2.1 Effective Communication  
2.2 Medication History  
2.3 Motivational Interviewing | Hardin  
Whalen  
Hall |
| 3    | Introduction to Physical Assessment | 3.1 Medical History  
3.2 Medical Interview  
3.3 Overview of the Physical Exam | Whalen  
Whalen  
Whalen |
| 4 & 5 | MTM Institute (9/21-9/24) | 5.1 Live lectures on campus | Whalen  
De Leo  
Jesano  
Martinez |
| 6    | Introduction to MTM | 6.1 Intro to MTM  
6.2 SOAP notes  
6.3 Communicating with Providers | Whalen  
Vandervoort  
Vogel Anderson |
| 7    | Drug Info Resources and Literature Evaluation | 7.1 Drug Information I  
7.2 Drug Information II  
7.3 Literature Evaluation I  
7.4 Literature Evaluation II  
7.5 Literature Evaluation III | Doering |

## Exam Schedule

- **Exam 1:** September 23, 2015
- **Final Exam:** October 10, 2015
### Assignments and Learning Responsibilities:

<table>
<thead>
<tr>
<th>Week</th>
<th>Reading Assignment</th>
<th>Learning Responsibility</th>
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| 1    | 08/24 – 08/30 (6 hours)* | Review course syllabus  
Fundamental values of academic integrity  
Program academic standards  
|     |                    | View all lectures for week 1  
Complete assignments  
• SSE 1: Professional Email  
• SSE 1: Write to Respond  
• SSE 2: Academic Integrity  
• SSE 2: Academic Dishonesty  
• SSE 3: Academic Planning  
• Time mgmt discussion board posting  
• Student Affairs documents  
  My Directory Profile  
  HIPAA training/Privacy  
  Academic stds agreement  
  Library PubMed tutorial |
| 2    | 08/31 - 09/06 (5 hours)* | Changing Behavior with MI  
What is MI?  
MI Principles  
Interaction Techniques  
MI Strategies  
|     |                    | View all lectures for week 2  
Complete readings  
Complete assignments  
• Medication history guide  
• Discussion board – medication hx experience  
  QUIZ |
| 3    | 09/07 - 09/13 (5 hours)* | Jones, Chapter 1  
Jones, Chapter 3  
Jones, Chapter 4  
|     |                    | View all lectures for week 3  
Complete assignments  
• Abbreviation guide  
• ROS activity  
• Sample medical history  
  QUIZ |
| 4-5  | 09/14 – 09/27 (22 hours)* | Jones, Chapter 5  
Jones, Chapter 8  
Jones, Chapter 13  
Jones, Chapter 18  
Jones, Chapter 19  
|     |                    | Participate in all MTM Institute activities  
  EXAM 1 |
| 6    | 09/28 – 10/04 (5 hours)* | Core Elements of MTM  
Communication with Prescribers  
Clinical Documentation for Patient Care  
|     |                    | View all lectures for week 6  
Complete assigned readings  
Complete assignments  
SOAP note activity |
| 7    | 10/05 – 10/09 (5 hours)* | Medpage Guide to Biostatistics  
Literature Eval Template  
|     |                    | View all lectures for week 7  
  FINAL EXAM |

*Contribution to course credit assignment

All assignments will be released on CANVAS at least two weeks prior to due date. Reading assignments not contained in the required text will be posted in the Resource folder designated for that week of class. **All assignments should be completed on an individual basis unless otherwise specified.**