
PHA 6636 - Medication Therapy Management: A Gastrointestinal Focus

Summer 2013 - 3 Semester Credit Hours

Course Purpose:

The course is intended to familiarize students with the provision of MTM in patients with gastrointestinal disorders that range from common to complex. The student will gain hands-on practice in the core elements of MTM for patients with gastrointestinal disorders, including conducting a comprehensive medication therapy review, generating a personalized medication record, designing a medication-related action plan, making pharmacotherapy interventions, and documenting the MTM service. The curricular threads of advanced pharmacotherapy knowledge, communication skills, and essential MTM business principles will be emphasized.

Course Faculty and Office Hours

Course Coordinator:

Lisa Vandervoort, Pharm D
Clinical Adjunct Professor
University of Florida, College of Pharmacy
Email: Lvandervoort@cop.ufl.edu
Phone: 407 702 8322

Office Hours

Preferred contact method: email

Course Faculty:

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

Place and Time of Class Sessions

Lectures are prerecorded and posted on the course website in the Sakai eLearning system. Lectures may be viewed at the student's convenience. The course has one 1.5-hour live online learning session each week. Live sessions are conducted via Adobe Connect and will meet on Sunday evenings from 8 to 9:30 PM EST, or 10 to 11:30 PM EST, or on Monday evenings from 9 to 10:30 PM EST, depending on the assigned section.

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.

This course is one of a series that will develop problem-solving and critical thinking skills and prepare the student to demonstrate comprehensive knowledge in the area of medication therapy management.

Course Objectives

Upon successful completion of this course, the student will be able to demonstrate the ability to perform the following with respect to gastrointestinal disorders:

1. Recognize areas of pharmacotherapy knowledge essential to the provision of MTM services.
2. Identify clinical practice guidelines and current scientific literature pertaining to the provision of MTM services.
3. Evaluate scientific literature for use in providing up-to-date, evidence-based, and cost-effective MTM services.
4. Communicate effectively with patients when providing MTM services.
5. Identify barriers to patient communication and design strategies to overcome those barriers.
6. Conduct a targeted or comprehensive medication therapy review (MTR).
7. Identify drug-related problems and recommend rational solutions based on a mastery of pharmacotherapy.
8. Create a personalized medication record for an individual patient receiving MTM services.
9. Design a medication-related action plan, taking into account patient abilities and preferences.
10. Educate patients regarding techniques to improve adherence, decrease the risk of adverse drug reactions, and maximize appropriate and safe medication use.
11. Communicate interventions effectively to physicians and other healthcare colleagues.
12. Document MTM services in a manner sufficient for following patient progress, monitoring patient outcomes, and completing billing statements.
13. Utilize sound business principles in the provision of MTM services

Pre-Requisite Knowledge and Skills

The student must have successfully completed Foundations of MTM I and II.

Course Structure & Outline

Course Structure

The course is offered in a blended learning format that utilizes a combination of face-to-face classroom instruction, on-line 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.

Course Outline/Activities

Refer to Appendix B and C. The course schedule will also be posted separately on Sakai.

Textbooks

There is no required text for this course. The suggested reference text is Dipiro JT, Talbert RL, Yee GC, et al, eds. Pharmacotherapy: A Pathophysiological Approach, 8th ed. (ISBN 978-0-07-170354-3) – available via Access Pharmacy in the HSC database.

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

- Discussion board posting (3)
- Weekly live online learning sessions (5)
- Case studies - comprehensive medication review (1)
- Three Patient History and SOAP Notes on patients with Gastrointestinal Disorders
- Budget Plan for MTM Services

Feedback to Students

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 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

Course Evaluation Methods

Written Assignments 25%

- Patient History and Soap Note Exercise - 6%
- Comprehensive Medication Review - 10%
- Budget Planning Exercise - 9%

Quizzes 10%

- Week 2 - 5%
- Week 5 - 5%

Class participation 15%

- Discussion board - 3%
- Adobe Connect sessions - 12%

Exams 50%

- Midterm exam - 25%
- 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>.

A	93-100	A-	90.0-92.9
B+	86.6-89.9	B	83.3-86.5
B-	80.0-83.2	C+	76.6-79.9
C	73.3-76.5	C-	70.0-73.2
D+	66.6-69.9	D	63.3-66.5
D-	60.0-63.2	E	<60

Class Attendance Policy

Attendance at the weekly Adobe Connect sessions is mandatory. Students who miss an Adobe Connect session should contact the facilitator as soon as possible. Upon approval of the facilitator, students may make up a missed session by completing a brief written assignment. **Failure to get approval for the missed session prior to the session will result in a mark of zero for the adobe session. Written documentation of the session content must be submitted to the facilitator no later than 1 week past the missed session.**

Quiz/Exam Policy

Online Examinations

The quizzes, midterm, and final examination 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. More information on the proctoring system may be found at: <http://www.proctoru.com/>

Missing Exams and Make-Up 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.

Posting of Exam Grades

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.

Exam Rebuttals

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.

Policy on Old Quizzes and Assignments

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

Assignment Deadlines

Late Assignments

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. Academic Integrity Policy
3. How to request learning accommodations
4. Faculty and course evaluations
5. Student expectations in class
6. Discussion board policy
7. Email communications
8. Religious holidays
9. Counseling & student health
10. How to access services for student success

Please see the following URL for this information:

<http://www.cop.ufl.edu/wp-content/uploads/dept/studaff/policies/General%20COP%20Course%20Policies.pdf>

Complaints

Should you have any complaints with your experience in this course please contact your course coordinator. If unresolved, contact the COP Senior Associate Dean-Professional Affairs. For unresolved issues, see: <http://www.distancelearning.ufl.edu/student-complaints> to submit a complaint.



University of Florida College of Pharmacy is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. This course is accredited for 10 hours (1.0 CEUs). ACPE Accreditation number is posted on the course website. To receive credit for this course, you must receive a passing grade and complete the evaluation form.

Other Course Information

Appendix A: Directions for Contacting Faculty & Course Faculty List

Appendix B. Schedule of Course Activities/Topics

Appendix C. Assignments and Learning Responsibilities

Appendix A: Directions for Contacting Faculty & Course Faculty List

Directions for Contacting Course Faculty

All questions on lecture material and course communication will occur through the discussion board on the course website. Discussion boards will be organized by lecture topic and questions should be posted in the appropriate location. The discussion board will be reviewed and questions answered within 3 business days after the posting. If you do not receive a response within 3 business days after posting, please email the course coordinator who will then contact lecture faculty directly. Please see "Course Communication" Section for additional information about communicating with faculty.

Course Coordinator

Lisa Vandervoort, Pharm.D 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 Adjunct Professor at the University of Florida both at the Orlando Campus and with the WPPD program. Recently she was hired as Regional Coordinator for the Office of Experiential Programs assisting in the evaluations of rotation sites, preceptors and students. Her primary interests include pharmacokinetics, infectious disease and internal medicine.

Instructors

Stacey Baggett, Pharm.D. received her Doctor of Pharmacy degree in 2007 from Midwestern University – College of Pharmacy in Glendale, Arizona, as well as a Bachelor of Science degree in Biochemistry from Purdue University in 2004. Dr. Baggett is currently a Clinical Assistant Professor and Regional Coordinator of Experiential Programs for the University of Florida College of Pharmacy. She practices as a Clinical Pharmacist at Holmes Regional Medical Center in Melbourne, Florida, in both the acute care and ambulatory care settings. Her clinical teaching experience includes precepting students in Adult Medicine and Ambulatory Care, as well as PGY-1 residents in Internal Medicine and Infectious Disease. Dr. Baggett is a Board Certified Pharmacotherapy Specialist and her interests include student development, infectious disease, and anticoagulation.

Lindsey Childs, Pharm.D., MPH, BCPS is currently the Hepatology Clinical Pharmacy Specialist at the Bay Pines VA Healthcare System. She is a graduate of the University of Florida College of Pharmacy, and completed a PGY1 Pharmacy Residency at Tampa General Hospital in Tampa, FL, as well as a PGY2 Infectious Diseases Pharmacy Residency at the South Texas Veterans Healthcare System in San Antonio, TX.

Paul Doering, M.S. 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.

Aaron Emmel, Pharm.D., BCPS, BCNS received his Doctor of Pharmacy degree from the University of Florida College of Pharmacy in 2007. He practiced community pharmacy at Walgreens pharmacy prior to practicing as a clinical specialist at Flagler Hospital in St. Augustine Florida. Recently, he founded SmarterMeds, PLLC., a small business dedicated to providing Medication Therapy Management services. Additionally, he is actively involved in the community setting, volunteering and speaking for numerous support groups and the Council on Aging. Dr. Emmel is certified by the Board of Pharmacy Specialties in Pharmacotherapy and Nutrition Support. His primary interests include Medication Therapy Management, critical care medicine, and nutrition support.

Lisa Inge, Pharm.D. is a Clinical Associate Professor and the Assistant Director of the Jacksonville Campus for the University of Florida College of Pharmacy. She received her Doctor of Pharmacy degree from Campbell University and went on to complete an infectious disease residency at the Mayo Clinic in Rochester, Minnesota. This interest in infectious disease was a natural transition from her prior career as a certified medical technologist in the area of clinical microbiology at Duke University Medical Center. After her pharmacy residency, she accepted an ambulatory care position at Shands Jacksonville Medical Center with a practice site at the University of Florida Center for HIV/AIDS Research, Education and Service (UF CARES). In 2004, she accepted her current position after having served as a facilitator for the then new Jacksonville campus, as well as, the UF Working Professional Pharm.D. Program. She continues her HIV clinic practice at the Duval County Health Department and the UFCARES in addition to multiple course coordination activities, campus administration responsibilities and teaching.

Carol Motycka, Pharm.D. became the Director of the Jacksonville Campus in July 2002 to help build the University of Florida College of Pharmacy program in Jacksonville. She was later appointed Assistant Dean of the Campus where she spends her time teaching, caring for patients, counseling, and administrating. Carol graduated from the University of Florida with her Pharm.D. in 1998. She then completed a residency in Ambulatory Care at Florida Hospital in Orlando. Following the residency, Carol was hired as the Pharmaceutical Care Coordinator for Florida Hospital DeLand. At Florida Hospital, she developed an asthma and anticoagulation clinic and an Ambulatory Care Rotation. Carol also served as a faculty member for NOVA Southeastern University College of Pharmacy and Seminole Community College in the College of Allied Health from 1999-2002. As the Assistant Dean for the Jacksonville Campus, Carol is proud to be a part of the innovative program with the University of Florida.

Renee Rose, Pharm.D. joined University of Florida College of Pharmacy faculty in August 2004 as the Assistant Director of the Orlando Campus. She lectures in Pharmacotherapy II and III, coordinates and facilitates in Pharmacotherapy IV and V and enjoys teaching in various other courses on the Orlando campus. Dr. Rose co-coordinates, lectures and facilitates the Women's Health elective. Her focus in Women's Health is on pregnancy and lactation.

Karen Slazinski, Pharm.D., AAHIVE received her Doctor of Pharmacy from the University of Florida. She then completed a geriatric residency at the VA Medical Center in Gainesville, Florida. Dr. Slazinski works with an Infectious Disease physician, at the Orlando VAMC, co-managing 650 HIV patients and 350 Hepatitis C patients as a midlevel provider.

Peter Thomson, Pharm.D. is the Clinical Resource Pharmacist for the Medicine and the Women's Health Programs, Winnipeg Regional Health Authority in Winnipeg Manitoba. He is a Clinical Assistant Professor with the Faculty of Pharmacy and a guest lecturer in gastroenterology and hematology for the Faculty of Medicine at the University of Manitoba. He lectures in gastroenterology for the Doctor of Pharmacy Program, University of Toronto and is an Examiner for the Doctor of Pharmacy Program, Rhodes University, Grahamstown, South Africa. Dr Thomson is a Editorial Review Panel member for the Canadian Pharmacists Association.

Katherine Vogel Anderson, Pharm.D. 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 Shands Internal Medicine Outpatient Clinic, where she manages an anticoagulation/pharmacotherapy service. Dr. Vogel Anderson also received the College of Pharmacy Faculty Recognition Award for 2013.

Karen Whalen, Pharm.D., BCPS, CDE received her Doctor of Pharmacy degree from the University of Florida. She then completed a Pharmacy Practice Residency at the Moses Cone Health System in Greensboro, North Carolina. Subsequently, she completed a Primary Care Residency at the James A. Haley Veterans' Hospital in Tampa, Florida. Dr. Whalen joined the faculty of the University of Florida College of Pharmacy in 2008 as Assistant Director of the St. Petersburg Campus. Currently, she is a Clinical Associate Professor in the Department of Pharmacotherapy and Translational Research and Director of the MS-MTM Program. Prior to joining the faculty at University of Florida, Dr. Whalen was an Associate Professor of Pharmacy Practice at Nova Southeastern University for twelve years. Dr. Whalen is a Board Certified Pharmacotherapy Specialist and a Certified Diabetes Educator. She is an active in local, state, and national pharmacy associations, and is a past president of the Florida Pharmacy

Appendix B. Schedule of Course Activities/Topics

Week	Module	Lecture Topic	Lecturer
1 06/24-06/30	Introduction to GI	1.1 Course Intro/Expectations 1.2 Meet the Experts 1.3 Practice Perspectives 1.4 Literature Thread – DI resources	Vandervoort Clark/O'Boyle Childs Doering
2 07/01-07/07	PUD and GERD	2.1 PUD 2.2 GERD 2.3 PUD/GERD MTM Cases 2.4 Drug Interactions	Whalen Whalen Whalen Vandervoort
3 07/08-07/14	General GI Issues	3.1 Constipation 3.2 Diarrhea 3.3 Nausea & Vomiting 3.4 Cirrhosis	Vandervoort Anderson Rose Baggett
4 07/15-07/21	Nutrition	4.1 Nutrition Assessment 4.2 Enteral Nutrition 4.3 Bariatric Surgery Patients 4.4 Nutrition Cases	Emmel Emmel Motycka Emmel
5 07/22-07/28	Hepatitis	5.1 Dosing in Hepatic Disease 5.2 Hepatitis B 5.3 Hepatitis C 5.4 Hepatitis MTM Cases 5.5 Liver Transplant	Vandervoort Inge Slazinski Slazinski O'Boyle
6 07/29-08/02	IBS and IBD	6.1 Irritable Bowel Syndrome 6.2 Crohn's Disease 6.3 Ulcerative Colitis 6.4 IBS/IBD MTM Cases	Thomson Thomson Thomson Thomson

Exam Schedule

Midterm Exam: July 13, 2013

Final Exam: August 3, 2013

Appendix C. Assignments and Learning Responsibilities

Week	Reading Assignment	Learning Responsibility
1 06/24-06/30 (6 hours)*	Review course syllabus	View all lectures for week 1 Complete assigned readings Discussion board posting Elluminate session 1.5 hours DISCUSSION BOARD POST 1
2 07/01-07/07 (8 hours)*	H pylori guidelines NSAID guidelines GERD guidelines AGA position statement Hanstenandhorn.com specific articles	View all lectures for week 2 Complete assigned readings Discussion board posting Elluminate session 1.5 hours DISCUSSION BOARD POST 2 QUIZ 7/5-7/7/2013
3 07/08-07/14 (8 hours)*	Chapter 43, 44, 122 in DiPiro N&V in pregnancy Practical Selections of Antiemetics N/V pregnancy Practical mgmt n/v Pharm Management of Constipation	View all lectures for week 3 Complete assigned readings Elluminate session 1.5 hours Complete assignments • SOAP notes for 3 Cases MIDTERM EXAM 7/13/2013 BUDGET PLAN (due 7/13/2013)
4 07/15-07/21 (8 hours)*	Chapter 149 in DiPiro Chapter 152 in DiPiro Drug Absorption in Bariatric Surgery	View all lectures for week 4 Complete assigned readings Elluminate session 1.5 hours THREE SOAP CASES (due 7/20/2013)
5 07/22-07/28 (8 hours)*	Chapter 48 in DiPiro www.aasld.org TBA	View all lectures for week 5 Complete assigned readings Elluminate session 1.5 hours Complete assignments CMR (due 7/27/2013) QUIZ 7/26-7/28/2013
6 07/29-08/02 (7 hours)*	Chapter 41 in DiPiro Chapter 43 in DiPiro	View all lectures for week 6 Complete assigned readings Discussion board posting Elluminate session 1.5 hours DISCUSSION BOARD POST 3 FINAL EXAM 8/3/2013

*Contribution to course credit assignment

All assignments will be released on Sakai 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.**