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## **PHA 6636 01D1 - Medication Therapy Management: A Gastrointestinal Focus Fall 2014 - 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](mailto:Lvandervoort@cop.ufl.edu)  
Phone: 407 702 8322 (cell)

#### **Office Hours**

Preferred contact method: email

#### Course Facilitators:

Pam Roehrl, B.S., M.S., Pharm.D.  
Email: [proehrl@cop.ufl.edu](mailto:proehrl@cop.ufl.edu)

Karen Riley BScPhm, Pharm.D., BCPS,CGP, BCACP,CDE  
Email: [kdriley@ufl.edu](mailto:kdriley@ufl.edu)

#### **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 on Monday evenings from 9 to 10:30 PM EST, depending on the assigned section.

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## **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.

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## 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) **All posting need to be done before 6pm Sunday evening prior to the Adobe Connect Session. 50 points will be deducted for late submissions.**
- Weekly live online learning sessions (6)
- Case studies - comprehensive medication review (1)
- Three Patient History and SOAP Notes on patients with Gastrointestinal Disorders (1)
- Budget Plan for MTM Services (1)

### 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 3 - 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 and participation in the group discussion is required. Because there are 2 opportunities to attend the adobe connect sessions, students who know that they will miss an Adobe Connect session should contact the facilitator as soon as possible and arrange to attend another Adobe Connect Session. Upon approval of the facilitator, students may make up a missed session by completing a brief written assignment for a maximum of 2 out of the 6 sessions. 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.

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## 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 20% point deduction without adequate explanation 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.

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## 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 7 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 student development, pharmacokinetics, infectious disease and internal medicine.

## Instructors

**Stacey Baggett, Pharm.D., BCPS** 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 Regional Coordinator for Experiential Programs for the University of Florida College of Pharmacy and Clinical Assistant Professor at the College's Orlando campus. Her practice experience is primarily as a Clinical Pharmacy Specialist at Holmes Regional Medical Center in Melbourne, Florida, with a focus on Infectious Diseases and Anticoagulation. She has precepted students in Adult Medicine and Ambulatory Care, as well as PGY-1 residents in Internal Medicine and Infectious Diseases, and has lectured for the MTM and WPPD programs. Dr. Baggett is a Board Certified Pharmacotherapy Specialist and her interests include student and preceptor development, infectious diseases, and internal medicine.

**Lindsey Childs-Kean, PharmD, MPH, BCPS** is a Clinical Assistant Professor with the University of Florida College of Pharmacy. Previously, she was the Hepatology Pharmacy Program Manager at the Bay Pines VA Healthcare System where she established a pharmacist-run Hepatitis C clinic that included telehealth modalities. She is a graduate of the University of Florida College of Pharmacy and completed a PGY1 Residency at Tampa General Hospital in Tampa, Florida and a PGY2 Infectious Diseases Pharmacy Residency at the South Texas Veterans Healthcare System in San Antonio, Texas.

**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.

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**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 Florida Hospital Orlando as the Coordinator of Development and Training in 2014. The focus of her position at Florida Hospital is standardizing training and competencies for pharmacists and work with the Medication Safety Coordinator to minimize medication errors. Prior to joining the Florida Hospital team she was faculty at the University of Florida for over 9 years with hospital pharmacy experience. Her patient care focus is Women's Health and she has lectured and facilitated in the Women's Health elective.

**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 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 member of the Florida Pharmacy Association, and is a past president of that organization.

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**Appendix B. Schedule of Course Activities/Topics**

<b>Week</b>	<b>Module</b>	<b>Lecture Topic</b>	<b>Lecturer</b>
<b>1</b> <b>10/20-10/26</b>	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
<b>2</b> <b>10/27-11/2</b>	PUD and GERD	2.1 PUD 2.2 GERD 2.3 PUD/GERD MTM Cases	Whalen Whalen Whalen
<b>3</b> <b>11/3-11/9</b>	General GI Issues	3.1 Constipation 3.2 Diarrhea 3.3 Nausea & Vomiting	Vandervoort Anderson Rose
<b>4</b> <b>11/10-11/16</b>	Nutrition	4.1 Nutrition Assessment 4.2 Enteral Nutrition 4.3 Bariatric Surgery Patients 4.4 Nutrition Cases	Emmel Emmel Motycka Emmel
<b>5</b> <b>11/17-11/23</b>	Liver Disease	5.1 Cirrhosis 5.2 Drug Interactions 5.3 Liver Transplant	Baggett Vandervoort O’Boyle
<b>6</b> <b>11/24-11/30</b>	Hepatitis	6.1 Hepatitis B 6.2 Hepatitis C 6.3 Hepatitis MTM Cases 6.4 Dosing in Hepatic Disease	Childs Childs Childs Vandervoort
<b>7</b> <b>12/1-12/6</b>	IBS and IBD	7.1 Irritable Bowel Syndrome 7.2 Crohn’s Disease 7.3 Ulcerative Colitis 7.4 IBS/IBD MTM Cases	St Onge Snyder Snyder Snyder

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**Exam Schedule**
**Midterm Exam: 11/14-11/16/2014**
**Final Exam: 12/5-12/7/2014**

## Assignments and Learning Responsibilities:

Week	Reading Assignment	Learning Responsibility
1 10/20-10/26 (5 hours)*	Review course syllabus	View all lectures for week 1 Complete assigned readings Discussion board posting Adobe Connect session 1.5 hours <b>DISCUSSION BOARD POST 1</b>
2 10/27-11/2 (7 hours)*	H pylori guidelines NSAID guidelines GERD guidelines AGA position statement	View all lectures for week 2 Complete assigned readings Discussion board posting Adobe Connect session 1.5 hours <b>DISCUSSION BOARD POST 2</b> <b>BUDGET PLAN due 11/1/2014</b>
3 11/3-11/9 (6 hours)*	Chapter 22, 23, 91 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 Adobe Connect session 1.5 hours <b>QUIZ 1 11/7-11/9/2014</b>
4 11/10-11/16 (8 hours)*	Chapter 118 in DiPiro Chapter 120 in DiPiro Drug Absorption in Bariatric Surgery	View all lectures for week 4 Complete assigned readings Adobe Connect session 1.5 hours <b>MIDTERM EXAM 11/14-11/16/2014</b> <b>PT HISTORY and SOAP NOTES due 11/15/2014</b>
5 11/17-11/23 (7 hours)*	Chapter 24 in DiPiro Chapter 70(liver) in DiPiro  Hanstenandhorn.com specific articles	View all lectures for week 5 Complete assigned readings Adobe Connect session 1.5 hours <b>QUIZ 2 11/21-11/23/2014</b>
6 11/24-11/30 (7 hours)*		View all lectures for week 6 Complete assigned readings Discussion board posting Adobe Connect session 1.5 hours <b>DISCUSSION BOARD POST 3</b> <b>COMPREHENSIVE MED REVIEW due 12/2/2014</b>
7 12/1-12/6 (8 hours)*	Chapter 21 in DiPiro Chapter 23 in DiPiro (IBS sections)	<b>FINAL EXAM 12/5-12/7/2014</b>

\*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**