

**The University of Florida
College of Pharmacy**

***Medication Therapy Management: An Endocrine Focus*
PHA 6634 (3 credits)**

Course Coordinator:

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Course 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.

David L. Joffe, BPharm, CDE, FACA

Dave Joffe is a graduate of University of Kentucky College of Pharmacy. He has practiced in the Tampa Bay area since 1986 and has been providing diabetes and cardiovascular care in Tampa Bay since 1995 and spent 2 years as an Eckerd Patient Care Pharmacist managing over 100 diabetes patients. Dave currently sees patients in over 30 primary care and endocrinologists offices. He is Past-President of the Florida West Coast Educators Association and Past-President of the Tampa Bay Chapter of the Juvenile Diabetes Research Foundation. He is past-president of the AADE Pump Specialty Practice Group. Dave is a Certified Insulin Pump Trainer for Medtronic, Animas, and Insulet. He is a certified CGMS (continuous glucose monitoring system) trainer, and has delivered CE to over 20,000 medical professionals. In addition to the above mentioned things Dave currently develops diabetes projects for the Sweet Bay Grocery Chain and Pharmacy in the Tampa Bay area, and sees patients in private practice and for insulin pump management. He continues to deliver CE to medical professionals and is Editor In Chief of DiabetesInControl Newsletter/ Ezine and Website, the largest diabetes internet website and newsletter for medical professionals.

Carol Motycka, Pharm.D.

Carol Motycka 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.

DeAnn Mullins, BPharm, CPh, CPT, CDE

DeAnn is an independent pharmacist and a certified diabetes educator who is the owner of Mullins Pharmacy and WeCare Wellness and Medical Supplies. She is also the Director of Clinical Services for the WeCare Diabetes Education Program. Her dedication to helping people with diabetes began at the age of 16 when her 9-year-old brother was diagnosed with Type 1 diabetes. She is a self-proclaimed "Diabetes Geek" with a passion to provide practical diabetes education that focuses on real world solutions to improve care and quality of life. DeAnn has

published numerous articles on diabetes and was a regular diabetes care columnist for Retail Pharmacy Management magazine. Her column reached every retail pharmacy in the United States and then some—totaling more than 60,000 pharmacies—and had an estimated 120,000 readers. The Florida Pharmacy Association in 2003 and the University of Mississippi and NCPA in 2006 recognized Mullins Pharmacy for innovative patient care programs and for making a difference in the lives of people with diabetes. DeAnn currently serves on the Board of Directors for the National Community Pharmacists Association and was appointed by Governor Scott in June of 2011 to serve a 2-year term on the Florida Board of Pharmacy.

James R. Taylor, Pharm. D., CDE

Dr. Taylor is a Clinical Associate Professor in the Department of Pharmacotherapy and Translational Research at The University of Florida. He received his doctor of pharmacy degree from Ohio Northern University. Upon graduation, he completed an ASHP accredited Pharmacy Practice Residency at The Veterans Affairs Medical Center in Huntington, West Virginia. Subsequently, he completed a Family Medicine Residency at The University of Florida. Dr. Taylor joined the faculty at The University of Florida in July 1998. Dr. Taylor maintains several active clinical pharmacy practice sites in ambulatory care, including diabetes and anticoagulation. He also offers an Ambulatory Care residency based out of his clinical practice site. He has given numerous professional presentations on diabetes and other primary care topics.

Karen Sando, Pharm.D., CDE

Dr. Sando joined the UF faculty in September 2010. She earned an Associate of Arts in Pre-Pharmacy at St. Petersburg College in 2004. She went on to the University of Florida and graduated in 2008 with a Doctor of Pharmacy. After completing pharmacy school, she completed a residency specializing in Ambulatory Care through the University of Florida. After her residency, she worked for Shands Jacksonville in the UF Family Medicine clinic conducting pharmacy services in anticoagulation, pain management, and diabetes. Sando currently is the coordinator for clinical pharmacy services for Area Health Education Centers (AHEC). She offers pharmacist-run services in diabetes, anticoagulation, hypertension, hyperlipidemia, and smoking cessation. Sando also currently precepts 4th year pharmacy students and Working Professional PharmD (WPPD) students on ambulatory care rotation. She serves as a director for a UF Ambulatory Care Residency.

Katherine Vogel Anderson, Pharm.D.

Dr. Vogel Anderson 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 Doctor 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, where she specialized in anticoagulation management. After five years she transferred to the VA geriatric primary care clinic, where she managed anticoagulation, hypertension, and diabetes, among other disease states, as part of a multi-disciplinary healthcare team. Dr. Vogel Anderson joined the Gainesville UF faculty in 2010. In addition to her teaching responsibilities, Dr. Vogel Anderson practices at Oak Hammock, a continuing care retirement community, where her focus is in geriatric patient care.

Kristin W. Weitzel, Pharm.D., CDE, FAPhA

Kristin Weitzel received her Doctor of Pharmacy from the University of Florida in 1998 and completed a Community Pharmacy Practice Specialty Residency with the Virginia Commonwealth University/Medical College of Virginia and Ukrop's Pharmacies. Dr. Weitzel is currently Clinical Associate Professor and Director of Experiential Education in the Department of Pharmacotherapy and Translational Research at the University of Florida College of Pharmacy and practices in the ambulatory care setting. Dr. Weitzel's practice and research interests include the treatment of diabetes and depression in ambulatory care patients, and innovation in preceptor development, didactic, and clinical and teaching. Dr. Weitzel is a Certified Diabetes Educator and a Fellow of the American Pharmacists Association.

Karen Whalen, Pharm.D., BCPS, CDE

Dr. Whalen 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 active in local, state, and national pharmacy associations, and is a past president of the Florida Pharmacy Association.

Course Description

The course introduces the student to principles of medication therapy management in patients with endocrine disorders.

Prerequisites

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

Course Credit Assignment

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 Goals

The course is intended to familiarize students with the provision of MTM in patients with endocrine disorders that range from common to complex. The student will gain hands-on practice in the core elements of MTM for patients with endocrine 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 Objectives

Upon successful completion of this course, the student will be able to demonstrate the ability to perform the following with respect to endocrine 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.

Required Text

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 AccessPharmacy in the HSC database.

Required and Recommend Readings/Resources

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.

Course Policies

1. Course Communication

All course communication, except for personal communications, will occur through the discussion board on the course website. Announcements will also be posted on the course website on Sakai as needed. 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. Please follow these guidelines regarding use of the discussion board:

- Look for the appropriate discussion forum for your question from the list of available discussion boards.
- Review previous postings and announcements prior to initiating a posting to avoid duplications.
- Keep all postings professional. Postings will be reviewed for professionalism.
- Personal concerns should be communicated directly to the course coordinator via email (and not posted on the discussion board). Course-related emails that are not of a personal nature will be referred back to the discussion board for posting.
- Do not use the discussion board to broadcast complaints, discuss personal issues, or discuss topics not associated with the course.
- Check for new discussion board postings on a daily basis whenever possible. To do so, click on the Discussion Board tab within the Sakai course website.
- Anonymous postings are not permitted.
- Failure to follow the Discussion Board rules may result in a revocation of privileges of Discussion Board use.

2. 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.

3. Faculty and Course Evaluations

Faculty Evaluations. You will receive an email from the Curricular Affairs Office requesting that you complete the faculty evaluations. If the course is team-taught, you will receive emails during the semester to alert you when to evaluate the faculty members. Please complete your faculty evaluations by the specified date and time by logging in with your GatorLink account at the following site:

<https://evaluations.ufl.edu>

Faculty evaluations are important feedback for your course instructors and the University and receive major consideration in the tenure and promotion process. Your input via evaluations can make a difference in our College's teaching activities, so participate, evaluate and our College will be better for it.

The online faculty evaluation system is completely anonymous. When you submit an evaluation, the system marks that you have submitted an evaluation for the section (so you cannot submit multiple evaluations), but from that point on, there is no connection between you and the evaluation data. Faculty evaluations also provide useful information for students. The results of your evaluation input are made available to all students in future semesters at: <http://www.aa.ufl.edu/aa/evaluations/search/>

Course Evaluations. In the last few weeks of the course, you will receive an email with directions for completing a course evaluation. Note, course evaluations provide feedback that is different from the Faculty evaluations and both are very important to continuous improvement of our program. Course evaluations are used by the College to identify how to improve the how the course is designed and delivered. Therefore, our Courses will be better through your completion of these evaluations. You will complete Course Evaluations via a website that is different from Faculty Evaluations. These evaluations are also anonymous.

4. Academic Honesty

The University considers cheating as giving or taking any information or material of academic work considered in the determination of a course grade. Academic dishonesty includes, but is not limited to: copying graded homework assignments from another student; working together with another individual on a take-home test or homework when specifically not permitted by the instructor; looking or attempting to look at another student's test paper during an examination; sharing information about an examination with another student; and plagiarism.

The University of Florida academic honesty policy will be strictly enforced. Academic dishonesty will not be tolerated. The complete policy and procedures for processing alleged academic dishonesty are provided in the Student-Faculty Handbook for the College of Pharmacy. This handbook is located on the College of Pharmacy web site:

<http://www.cop.ufl.edu>. You are expected to abide by the procedures set forth in this

document. Additional information regarding academic honesty guidelines can be located at: <http://www.dso.ufl.edu/studentguide/studentrights.php>.

5. Accommodating Disabilities

Physically impaired students and students with learning disabilities such as hearing impairment, visual impairment, dyslexia or other specific learning disabilities such as sensory deficit or sensory-motor coordination problems should cooperate with the faculty and staff in addressing these problems in order to meet academic standards. It is the student's responsibility to notify the faculty member IN ADVANCE if they believe that they need special accommodations for testing and/or completion of assignments. Retroactive accommodations cannot be granted if a student notifies the faculty AFTER said exams or assignments have taken place. Students with disabilities are encouraged to register with the Disability Resource Center in the Dean of Students Office. Please visit the following URL for more information: <http://www.dso.ufl.edu/drc>.

Examination Policies

1. Online Examinations

The 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/>

2. Missing Exams

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.

3. 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.

4. 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.

Evaluation Techniques:

Assignments 25%

- Device Education/Presentation - 5%
- Comprehensive Medication Review - 10%
- Endo Collaborative Practice Agreement - 10%

Quizzes 10%

- Week 3 - 5%
- Week 6 - 5%

Class participation 15%

- Discussion board - 3%
- Elluminate sessions - 12%

Exams 50%

- Midterm exam - 25%
- Final exam - 25%

Grading:

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

Student Honor Code

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 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. A student-run Honor Court and faculty support are crucial to the success of the Honor Code. The quality of a University of Florida education is dependent upon the community acceptance and enforcement of the Honor Code.

THE 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.”