
PHA 6638 - Medication Therapy Management: A Neurologic Focus

Spring 2015 - 3 Semester Credit Hours

Course Purpose:

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

Joshua Caballero, PharmD, BCPP

Email: Joshua.caballero@gmail.com

Phone: (352) 234-3103

Office Hours

The Course Coordinator is available Monday to Friday between 8 am and 9 pm by appointment only. 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 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 BigBlueButton and will meet on Sunday evenings from 8 to 9:30 PM EST, or 10 to 11:30 PM EST, or 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 MS-MTM Program:

This course prepares the MS-MTM student to accomplish the following abilities and the related Student Learning Outcomes (SLOs) upon graduation: Demonstrate comprehensive knowledge related to a specific discipline within the pharmaceutical sciences. This course is one of a series that will prepare the student to demonstrate comprehensive knowledge in the area of medication therapy management.

Course Objectives

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

Course Outline/Activities

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

Textbooks

The required text for this course is Angaran DM, Whalen KL, eds. Medication Therapy Management: A Comprehensive Approach, 1st ed. (ISBN: 978-0-07-184869-5). The suggested reference text is DiPiro JT, Talbert RL, Yee GC, et al, eds. Pharmacotherapy: A Pathophysiological Approach, 9th ed. (ISBN 978-0-07-180053-2) – both are available via AccessPharmacy 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 postings need to be done by Sunday evening prior to BigBlueButton session. 50% of the grade will be deducted for late submissions.
- Weekly live online learning sessions (6)
- Case studies- comprehensive medication review (1)
- SOAPE note (1)

Student Evaluation & Grading

Evaluation Methods

Assignments 25%

- Assignment 1 – Business card and 1 page flyer promoting MTM services - 5%
- Assignment 2 –Mini SOAPE note Informatics session - 10%
- Comprehensive Medication Review- 10%

Quizzes 10%

- Quiz 1 - 5%
- Quiz 2 - 5%

Class participation 15%

- Discussion board - 3%
- BigBlueButton 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 BigBlueButton sessions is mandatory and participation in the group discussion is required. Because there are 3 opportunities to attend the BigBlueButton sessions, students who know that they will miss an BigBlueButton session should contact the facilitator as soon as possible and arrange to attend another BigBlueButton session. Upon approval of the facilitator only, 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 BigBlueButton 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/>

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.

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 Dean for Curricular Affairs and Accreditation. 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.

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.

Instructors

Paul Doering, MS

doering@cop.ufl.edu

Doering received his Bachelor of Science in Pharmacy from the University of Florida in 1972 and continued his training at the same institution, earning the Master of Science in Clinical Pharmacy in 1975. Upon graduation, Doering accepted a position in the University's Department of Medicine as a research assistant where he designed, implemented and evaluated a program of adverse drug reaction monitoring in the obstetric patient. Current teaching responsibilities include: coordinating a Non-prescription Products course for undergraduate pharmacy students, a senior-level course in Pharmacotherapy, and an elective course in Drug Abuse. He also guest lectures in a variety of team taught courses in the College of Pharmacy and other Health Center colleges. Doering has strong ties with the practice of pharmacy, having been a practicing pharmacist both in the hospital and community setting. A member of many local, state, and national pharmaceutical societies, he is a past-president of his local pharmacy association. Doering has been recognized four times as Teacher of the Year. In March, 1990, he was awarded Fellowship status in the APhA's Academy of Pharmacy Practice and Management. In 1993, he received one of two Teaching Incentive Awards given to UF College of Pharmacy faculty. In 1995, Doering was promoted to Distinguished Service Professor, the university's highest honor awarded to a faculty member, he was the first professor in the College of Pharmacy to be recognized in this way.

Clayton English, PharmD, BCPP

clayton.english@acphs.edu

Dr. English is currently an Assistant Professor of Pharmacy Practice at Albany College of Pharmacy & Health Sciences and a board certified psychiatric pharmacist at Fletcher Allen Health Care (FAHC) in Burlington, Vermont. Dr. English's work at FAHC involves providing clinical pharmacy services for patients on FAHC's two adult inpatient psychiatric units. Clinical services provided include, but are not limited to: psychopharmacology consultations, medication counseling, medication management and reconciliation, and therapeutic drug monitoring. In addition to providing clinical pharmacy services at FAHC, Dr. English is an Adjunct Assistant Professor in the Department of Psychiatry at the University of Vermont Medical School. He currently serves as a preceptor for psychiatry residents on their inpatient psychiatry rotation. He also serves as a preceptor for an elective rotation in psychopharmacology and as a preceptor in the outpatient psychopharmacology clinic. In conjunction with his clinical pharmacy services and teaching he provides at the hospital, Dr. English coordinates and teaches a variety of courses and lectures in the area of psychiatric therapeutics and substance abuse at Albany College of Pharmacy & Health Sciences. He is also a primary preceptor for 4th year pharmacy students on clerkship in inpatient psychiatry.

Heidi Eukel, PharmDHeidi.Eukel@ndsu.edu

Dr. Heidi Eukel is an assistant professor in the Department of Pharmacy Practice in the College of Pharmacy, Nursing, and Allied Sciences at North Dakota State University. She is an instructor in a four semester series of pharmacy skills laboratory. She provides medication therapy management and disease state management services for diabetic and chronic pain patients across the state of North Dakota. Heidi is certified in medication therapy management through the American Pharmacists Association's national MTM program.

Megan Murphy-Menezes, PharmDmmenezes@cop.ufl.edu

Dr. Murphy-Menezes received a Pharm.D. degree from Campbell University School of Pharmacy, where she also earned a Master of Science in Clinical Research through Campbell's Pharm.D/MS dual degree program. She then completed a post-doctoral fellowship in women's health, with a focus on osteoporosis, at Procter & Gamble in Mason, OH. She remained with Procter & Gamble as a Health Systems Consultant and Project Specialist, working in the area of Women's Health and gastrointestinal health. In this position, she was responsible for implementing educational (CME and non-CME) activities and ensuring compliance with ACCME and ACPE guidelines for continuing education initiatives. She also acted as a liaison between the company and several professional organizations (AMCP, AMDA, ASCP, ACCP, NADONA). She subsequently joined Amgen as a senior regional medical liaison in North Florida, specializing in the area of osteoporosis. As Assistant Director of Continuing Pharmacy Education, Megan's interests are related to development of a new initiative related to Continuing Professional Development (CPD) for pharmacists. CPD is a lifelong learning process that actively involves a pharmacist in developing and maintaining continuing competence, enhancing professional practice, and accomplishing career goals. Megan is also interested in developing assessments related to skills acquired through CPE. Her clinical area of interest is osteoporosis and she is working to establish a fracture liaison clinic in collaboration with UF Health bone specialists.

Robin Moorman Li, PharmD, BCACPmoorman@cop.ufl.edu

Robin Moorman Li joined the University of Florida as a Clinical Assistant Professor in 2008. She received her Bachelor's degree from Kansas State University and completed her Doctor of Pharmacy degree at University of Kansas. She completed a primary care residency at University of Mississippi Medical Center in 2001 and became a pharmacy practitioner with Shands Jacksonville from 2001 to 2008. While working at Shands Jacksonville, she created and ran a pharmacist driven pain management clinic in a primary care clinic. Moorman was promoted to supervisor of the Ambulatory Pharmacy in 2007 where she was responsible for aiding in the supervision of daily activities of ten pharmacists and fourteen technicians. She began as a part time clinical assistant professor with the University of Florida, College of Pharmacy in 2003. During this time she facilitated many of the College of Pharmacy courses and mentored students leading to her discovery of her passion for teaching. She also has been a facilitator for the UF WPPD program since 2003. Recently Moorman also has developed a clinical practice site at the River Garden Hebrew Home for the Aged focusing on chronic pain management which has expanded the opportunity for students to gain further experience in managing chronic pain.

Jose Rey, PharmD, BCPPjoserey@nova.edu

Dr. Rey is an Associate Professor of Pharmaceutical Sciences at Nova Southeastern University's College of Pharmacy, and core adjunct faculty at NSU's Center for Psychological Studies and College of Allied Health in Fort Lauderdale, Florida. He is the clinical psychopharmacologist for the South Florida State Hospital. He is also the Director of the Psychopharmacology Residency at NSU. Dr. Rey's research interests include psychopharmacology, co-morbid substance abuse with other psychiatric disorders, pain management with antidepressants and anticonvulsants, and clinical and pharmaco-economic outcomes research with antipsychotics and antidepressants. He has presented his research at national and international meetings; has published original articles, abstracts, and reviews in peer-reviewed journals; and has been an invited speaker at local, state, national, and international meetings. He was selected as the Pharmacist of the Year (2000) by the South Florida Society of Health-System Pharmacists. He is a member of the College of Psychiatric and Neurologic Pharmacists, and the American Association of Geriatric Psychiatry. Dr. Rey received his doctor of pharmacy degree from the University of Florida and completed an ASHP-accredited specialty residency in psychiatric pharmacy practice at the Gainesville VAMC and Shands Hospital in Gainesville, Florida.

Teresa Roane, PharmD, BACCPtroane@cop.ufl.edu

Dr. Roane began her career in pharmacy in 1988 as a pharmacy technician. She graduated from the University of Florida College of Pharmacy with her PharmD degree in 2006 and became Board Certified in Ambulatory Care in 2011. She is currently working as a Clinical Assistant Professor at the University of Florida with her clinical practice site at the UF Medication Therapy Management (MTM) Communication and Care Center. Some of her responsibilities include providing MTM services to Medicare and Medicaid patients, educating students and residents, managing clinical associates and staff, as well as organizing the immunization training for the 4th year student pharmacists. Prior to joining the University of Florida, Dr. Roane worked as a clinical pharmacist at AvMed Health Plans in Gainesville, FL. While at AvMed, she worked as the lead pharmacist for the MTM program, provided direct oversight of the utilization management program, served as resource for internal and external healthcare professionals, and also served as a preceptor for 3rd and 4th year PharmD students. She continues to work occasionally as a relief pharmacist at Hitchcock's Hometown Pharmacy in Alachua and Newberry. In her spare time she enjoys going to the beach and spending time with her family.

Karen Sando, PharmDksando@cop.ufl.edu

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. She is a recent recipient of the AACP Innovations in Teaching Award.

Matthew Sherman, PharmDshermanmr@gmail.com

Matt Sherman, PharmD graduated from the University Of Florida College Of Pharmacy. He completed a first year residency with a focus in hospital practice and electives in pain management and oncology at C.W. Bill Young VA Medical Center in Bay Pines, Florida. Currently, he is the PGY-2 Psychiatric Pharmacy Practice Resident at Nova Southeastern University under Jose Rey, PharmD, BCPP. He primarily lectures in the areas of pain management, opioids, substance abuse, and law enforcement.

Jennifer E. Thomas, PharmD, AAHIVPthomjenn@nova.edu

Dr. Thomas received her PharmD from Nova Southeastern University in 2012. Following graduation, Dr. Thomas worked for one year as a community pharmacist, where she had the opportunity to provide MTM services and health screenings to patients. Dr. Thomas is currently a Neurocognitive Fellow at Nova Southeastern University-College of Pharmacy, where she is involved in neurocognitive research assessing how cognition affects medication adherence in those with chronic conditions (e.g., HIV, type 2 diabetes). She provides lectures to health profession students (e.g., osteopathic medicine, pharmacy) and assists in Patient Care Management lab for the pharmacy students.

Jose Valdes, PharmDjosevald@nova.edu

Dr. Jose Valdes received his PharmD from Nova Southeastern University, College of Pharmacy, and completed the six month Advanced Clinical Pharmacy Experience program at Jackson Memorial Hospital. Following graduation he completed a one-year Pharmacy Practice Residency at Baptist Healthcare in Pensacola, FL. Currently Dr. Valdes is working towards completion of a one-year Psychiatric Pharmacy Practice Residency at Nova Southeastern University, College of Pharmacy under the guidance of Jose Rey, PharmD, BCPP, with practice sites at the South Florida State Hospital, Memorial Hospital, Miami Veterans Affairs, and Jackson Memorial Hospital. Apart from clinical responsibilities, Dr. Valdes also serves to facilitate students in their 3rd and 4th year rotations and works closely with the medical team. He is involved in the College of Pharmacy as well as the College of Psychology, providing lectures to students at the doctoral level on topics such as depression, schizophrenia/psychosis, bipolar disorder, neuropeptides and other neurotransmitters, seizure disorders, Parkinson's disease, migraines, and others. Dr. Valdes has presented at the local, state, and national level and maintains membership in the College of Psychiatric and Neurologic Pharmacists (CPNP) serving as a peer reviewer. He also is the first resident member of the Florida Society of Health-System Pharmacists (FSHP) Residency Conference Committee.

Amy Werremeyer, PharmD, BCPPAmy.werremeyer@ndsu.edu

Dr. Werremeyer is a pharmacist and professor of Pharmacy Practice at North Dakota State University (NDSU). She is board certified in Psychiatric Pharmacy Practice and works with patients with mental health and neurologic conditions to educate them about their medications and encourage appropriate use of those medications. She teaches neurology and psychiatry pharmacotherapeutics to pharmacy, nursing and nurse practitioner students at NDSU and annually travels to Guatemala, serving as formulary and pharmacy director on a medical mission team as well as preceptor to pharmacy students on the team. Dr. Werremeyer's areas of research interest include public and international health in pharmacy education as well as examining the medication experience of mental health patients through the use of Photovoice methodology. Dr. Werremeyer lives in Fargo, ND with her husband and three sons and enjoys running and fitness, reading, and Bible study.

Karen Whalen, PharmD, BCPS, CDEwhalen@cop.ufl.edu

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

Tatiana Yero, PharmD, BCPPtyero@lecom.edu

Dr. Tatiana Yero received her Doctor of Pharmacy degree from Nova Southeastern University College of Pharmacy in Fort Lauderdale, Florida. She went on to complete a Psychiatric Pharmacy Practice residency through Nova Southeastern University and South Florida State Hospital in Pembroke Pines, Florida. Dr. Yero is a Clinical Assistant Professor at the LECOM School of Pharmacy Bradenton campus. Her past clinical experiences involved providing pharmacy services to psychiatric units in several different settings, including hospitals, a state psychiatric facility, emergency rooms, and a Veteran's Affairs community-based outpatient clinic. Her teaching experience includes topics relevant to neuropsychopharmacology and alternative medicine. She is developing a clinical pharmacy service at Manatee Glens Hospital in Bradenton, FL and precepts students at this location during their Psychiatry rotation. Dr. Yero's primary areas of interest include evaluation of the practice of polypharmacy in the treatment of schizophrenia/schizoaffective disorder and assessment of clinical outcomes in this population. Additional interests include alternative medicine, eating disorders, geriatrics, and mental illness in HIV patients.

Appendix B. Schedule of Course Activities/Topics

Week	Module	Lecture Topic	Lecturer
1 3/9-3/15	Introduction to Neuro	1.1 Course Intro/Expectations 1.2 Meet the Experts 1.3 Practice Perspectives 1.4 Assessment of the Neuro Patient	Caballero Whalen Eukel Thomas
2 3/16-3/22	Neurologic Disease in the Geriatric Patient	2.1 Cognitive impairment in chronic illnesses 2.2 Alzheimer's Disease 2.3 Parkinson Disease	Thomas Rey Valdes
3 3/23-3/29	Pain Management	3.1 The Law and Pain Management 3.2 Pain Management – Assessment 3.3 Chronic Pain Management Part 1 3.4 Chronic Pain Management Part 2	Sherman Moorman Li Moorman Li Moorman Li
4 3/30-4/5	Epilepsy	4.1 Epilepsy –Part I 4.2 Epilepsy – Part II 4.3 Epilepsy – MTM Cases	Yero Yero Yero
5 4/6-4/12	Neuro potpourri	5.1 Drug Info/Lit Eval Thread 5.2 Headache 5.3 Neuropathies	Doering Werremeyer Rey
6 4/13-4/19	Neuro potpourri	6.1 Multiple Sclerosis- Part I 6.2 Multiple Sclerosis- Part II 6.2 Fibromyalgia	English English English
7 and 8 4/20-4/27	Rheumatologic Disorders	7.1 Osteoarthritis 7.2 Rheumatoid Arthritis 7.3 Osteoporosis 7.4 Gout/hyperuricemia	Sando Sando Murphy Roane

Assignments and Learning Responsibilities

Week	Reading Assignment	Learning Responsibility
1 (5 hours)*	<ul style="list-style-type: none"> Review course syllabus MTM Core Elements. Version 2.0. on APhA webpage 	View all lectures for week 1 Complete assigned readings Discussion board posting BigBlueButton session 1.5 hours
2 (7 hours)*	<ul style="list-style-type: none"> Neurological disease and examination In: <i>Harrison's Principles of Internal Medicine</i>. 17th ed. McGraw-Hill Companies, Inc.; 2008. Angaran 1st edition: Dementia Related Disorders Medication Therapy Management Data Set DiPiro 9th edition, Chapter 38: Alzheimer's Disease DiPiro 9th edition, Chapter 43: Parkinson's Disease Parkinson's practice parameter: treatment of Parkinson disease with motor fluctuations 	View all lectures for week 2 Complete assigned readings BigBlueButton session 1.5 hours Complete assignments <ul style="list-style-type: none"> Business card/flyer Due: 3/21 @ 11:55pm
3 (7 hours)*	<ul style="list-style-type: none"> Angaran 1st edition, Pain Management- Medication Therapy Management Data Set Rastogi R, et al article Stein C, et al article 	View all lectures for week 3 Complete assigned readings BigBlueButton session 1.5 hours QUIZ 3/27 (6 pm) - 3/29 (6 pm)
4 (7 hours)*	<ul style="list-style-type: none"> DiPiro, 9th edition Chapter 40: Epilepsy French JA, et al. article French HA, et al. article Glauser T, et al. article National Institute for Clinical Excellence. Epilepsy in Adults NICE: Newer Drugs for Epilepsy in Children 	View all lectures for week 4 Complete assigned readings Discussion board posting BigBlueButton session 1.5 hours MIDTERM 4/3 (6 pm) - 4/5 (6 pm)
5 (7 hours)*	<ul style="list-style-type: none"> Silberstein SD, et. al article. American Academy of Neurology/American Headache Society Angaran 1st edition: Headache Medication Therapy Management Data Set; Peripheral Neuropathies Medication Therapy Management Data Set Bendtsen et al. article. Goadsby PJ, et al. article. 	View all lectures for week 5 Complete assigned readings Discussion board posting BigBlueButton session 1.5 hours Complete assignments <ul style="list-style-type: none"> Comprehensive med review Due: 4/11 @11:55pm
6 (6 hours)*	<ul style="list-style-type: none"> DiPiro, 9th edition, Chapter 39: Multiple Sclerosis AJHP article: Pharmacotherapy of Fibromyalgia Psychopharmacology article: Fibromyalgia 	View all lectures for week 6 Complete assigned readings BigBlueButton session 1.5 hours Complete assignments <ul style="list-style-type: none"> Mobile health applications to improve delivery of MTM services Due: 4/18 @11:55pm QUIZ 4/17 (6 pm) - 4/19 (6 pm)
7 and 8 (9 hours)*	<ul style="list-style-type: none"> Angaran 1st edition: Osteoporosis Medication Therapy Management Data Set; RA Medication Therapy Management Data Set; OA Medication Therapy Management Data Set Osteoarthritis guidelines Rheumatoid arthritis study guide Dipiro 9th edition Chapter 74: Gout Terkeltaub NEJM review article 	View all lectures for week 7 and 8 Complete assigned readings FINAL EXAM 4/24 (6 pm)-4/26 (6 pm)

*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.**