

Oakland University School of Nursing

Pharmacology for Advanced Practice Lifespan

**NRS 6641 (648)
CRN #13944**

Faculty:

**KATIE MYSEN, DNP, RN, FNP-BC
Full Time Adjunct Instructor**

Winter 2018

Fall 2017

COURSE NUMBER: NRS 6441 (648) – CRN #13944

CREDIT & HOUR ALLOCATION:	<u>Credits</u>	<u>Hrs/Wks</u>	<u>Total Hours Semester</u>
	<u>Theory 4</u>	<u>4 x 14</u>	<u>56</u>

COURSE TITLE: Pharmacology for Advanced Nrsng Practice Across the Lifespan

CLASS TIME & LOCATION: CLASS: January 3, 2018 – March 25, 2018
Tuesday, 5:30 pm–8:00 pm, 2086 Human Health Building

FACULTY OF RECORD: Katie Mysen, DNP, RN, FNP-BC
Full Time Adjunct Instructor
Office: 2034 HHB (Human Health Building)
Office Telephone: (248) 364-8761
Office Hours: By Appointment Only
Email: klmysen@oakland.edu

PREREQUISITES and/or CO-REQUISITES

Prerequisite or Corequisites: NRS 6411 (611)

COURSE OVERVIEW

The course builds on previous knowledge of pharmacotherapeutics and places emphasis on synthesizing knowledge of pharmacotherapeutics as a basis to design treatment regimens tailored to individual patients across the human lifespan and diseases. The curriculum is designed to develop clinical problem-solving skills, focusing on evidence in quality and safety. Basic and advanced principles of pharmacokinetics and pharmacodynamics will be reviewed.

COURSE OBJECTIVES

1. Relate pharmacokinetic and pharmacodynamic principles to various drugs, dosages, routes of administration and differences across the lifespan. (I)
2. Demonstrate an understanding of the pharmacology and benefits of drugs as they relate to the pathophysiology of certain disease states. (I)
3. Demonstrate how to dose and monitor drugs in patients with specific disease states. (I)
4. Demonstrate the ability to develop and integrate education plans into the pharmacotherapeutic regimens for patients and families. (I, VIII, IX)

COURSE OBJECTIVES (cont'd.)

5. Demonstrate the ability to critically evaluate evidence for application to practice when developing therapeutic regimens for individuals.(I, VIII, IX)
6. Demonstrate safe pharmacological/nonpharmacological plans based on patient specific conditions, the problem being managed and cost effectiveness. (I, VIII, IX)

ESSENTIAL CONTENT

Principles of pharmacokinetics, pharmacodynamics, genetic influence, prescribing and making treatment decisions.

Special Populations—Geriatrics, Pediatrics, Pregnant & Nursing Women Contraceptives, Hormone Replacement Therapy, & medications for osteoporosis

Health Promotion Immunizations, CAM, Weight Management, Smoking Cessation, Vitamin and Mineral Supplements, and OTC Medications.

Endocrine Agents—glucocorticoids, thyroid medications & diabetes medications;
Renal/genitourinary agents—diuretics, male genitourinary agents, & other renal/GU agents

Respiratory agents—medications for upper respiratory problems, asthma, & COPD
Arthritis/anti-inflammatory medications—acetaminophen, aspirin, NSAIDS, DMARDS, immune modulators & gout medications

GI medications-antacids, H₂ blockers, PPIs, laxatives, antidiarrheals, antiemetics & other GI medications

Antiinfectives I—principles for prescribing antiinfectives, treatment of specific infections and miscellaneous antibiotics, penicillins, cephalosporins, tetracyclines, macrolides, & fluoroquinolones

Antiinfectives II—aminoglycosides, sulfonamides, antitubercular agents, antifungals, antiretrovirals, antivirals and antiprotozoal agents; Dermatologic (topical)agents

Cardiovascular agents—antihypertensive agents, CAD & nitrates, CHF & digoxin, β -blockers, CCBs, ACE inhibitors & ARBs, antiarrhythmic agents, antihyperlipidemic agents, & agents that act on blood

CNS agents—CNS stimulants & cognitive function drugs, analgesics, migraine medications, anticonvulsants, & antiparkinson agents; Psychotropic agents—antidepressants, antianxiety and insomnia agents, antipsychotics & substance abuse

TECHNICAL REQUIREMENTS

All e-Learning courses at Oakland University are delivered using a learning management system called Moodle that allows instructors to design entire courses online or to enhance a classroom-based course. The Moodle software resides on a server allowing students to access it via a web browser, e.g. Mozilla, Firefox. Each course is uniquely designed by the instructor who may include some of the following components in his/her web-based or web enhanced course: course syllabus, course material/content, course assignments, quizzes/tests, hyperlinks to other websites on the Internet and/or other OU web pages, discussion boards, Internal email, and the course grade book.

Logging into Moodle

Students login to Moodle with their NetID (oakland.edu email) account password. Please remember that anytime you change your NetID password, it will be reflected in your Moodle login.

- Open the Moodle Login page: <https://moodle.oakland.edu>
- Log-in using the first part of your NetID username and password, e.g. if your email is jwilson3@oakland.edu then:
 - Username: jwilson3
 - Password: whatever your Oakland University email password is

If you have any problems/issues with Moodle, you need to contact or fill out a help desk request form for e-Learning and Instructional Support.

To view course materials in MOODLE you will need the latest version of Adobe Reader that can be downloaded free of charge at www.adobe.com

Communication

Please contact me using the COURSE EMAIL function in Moodle. You can access course email by logging into Moodle and then clicking on COURSE EMAIL, located on the top of the course home page.

Office hours are available virtually, using WebEx, and in-person by appointment. Please email me to arrange a meeting.

Required Textbook

Edmunds, M.W., & Mayhew, M.S. (2014). *Pharmacology for the primary care provider* (4th ed.). St. Louis, MO: Elsevier. ISBN: 9780323087902

You can order your text directly from the OU bookstore at <http://oakland.bncollege.com/>. Supplemental readings and resources will also be made available online through Moodle.

Recommended References

Fenstermacher, K. & Hudson, BT. (2015). *Practice guidelines for family nurse practitioners* (4th ed.). St. Louis, MO: Elsevier. ISBN: 9780323290807

There are several mobile applications that may be helpful during this course and during your clinical rotations. It is recommended that you utilize one or more of these applications as reference tools during your clinical rotations. (UpToDate is available to students, free of charge, from the OU library)

Epocrates, www.epocrates.com

DynaMed, www.dynamed.com

UpToDate, www.uptodate.com

Course Format

This course is offered in a partially online format, using a “team-based learning” approach. Up to eight face-to-face meetings are required for classroom activities, and interactive discussion. There will be no excused absences from the scheduled face-to face class meetings.

In an online course, you are expected to participate in asynchronous activities, such as online discussions, web assignments, or quizzes. These are activities which don’t require the entire class to “meet” in the traditional sense – instead, you are expected to participate anytime within a specific window of time. For instance, you may be expected to contribute to an online discussion one to 3 times a week.

For information about specific asynchronous activities, please log into Moodle, or refer to the schedule at the end of this syllabus

Rules of Netiquette

The course requires an open exchange of ideas. The expectation is to allow the students to feel free to express him/herselves and have views respected. At no time does this mean that other than professional language is used nor that inflammatory responses be included. Any such entries will be deleted and no points allocated for the entry. Remember email and discussion lack inflection and expression that real conversation communicates so take care to prevent inadvertent misunderstandings. Many sources are available on the web under netiquette. Any postings within the course website considered by the FOR as inclusive of offensive language or insulting comments will be considered as grounds for a failing grade and or dismissal from the course.

Academic Conduct

Students are expected to practice and uphold standards of academic integrity and honesty as outlined in the Oakland University undergraduate and graduate catalogs under the section titled "Academic Conduct". Any circumstance of academic dishonest/misconduct or suspected

academic dishonesty/misconduct will be reported in accordance with the University Academic Conduct Policy. It is the student's responsibility to review this information and act in accordance. It is the expectation that each student will work independently unless a group project is assigned. All quizzes offered in this course are considered individual activities and therefore any communication, sharing ideas, sharing computers, and/or sharing working space that may compromise individual contribution during allotted quiz times will be considered academic dishonesty/misconduct, will result in a grade of zero (0) for that quiz, and will be reported to the Dean of Students Office. A final grade of Incomplete (I) will be entered if a resolution has not been determined at the time final grade are due. Substantiated allegations of misconduct will result in failure of the course and a grade of 0.0 will be entered as the earned course grade. Any suspected academic dishonesty must be reported to the Dean of Students for consideration by the Academic Conduct Committee of the University Senate and may result in a numerical grade of 0.0 for this course.

Emergency School Closing:

If Oakland University is closed for any reason, we will not have class. Please call the University's Storm Closing Hotline at (248) 370-2000.

Special Considerations

The Office of Disability Support Services (DSS) is the campus office responsible for verifying that students have disability-related needs for academic accommodations and for planning student appropriate accommodations. Students with learning, psychological, or physical disabilities who require academic accommodations should contact DSS at: 103A North Foundation Hall, Phone: 248-370-3266; TTY: 248-370-3268.

Students may request to meet with Linda Sisson, the DSS Director, privately to discuss specific accommodation needs. Please contact DSS at 248-370-3266 to arrange an appointment.

COURSE AND CLASSROOM REQUIREMENTS

Late Assignments & Missing Assignments

You will be marked down by 10% of your grade for everyday that an assignment is late. For example, if you turn in an assignment that is worth 10 points and you get an 8/10, but it is 2 days late, you will receive a 6/10. All assignments more than one week late will not be accepted.

Extra Credit

Extra credit will be offered at the discretion of the faculty.

Classroom Participation

Students are expected to:

- Ensure that their computer is compatible with Moodle.
- Login to Moodle 3-5 times a week; daily login is highly recommended.
- Complete relevant reading and study prior to class on the topic areas identified and be prepared to participate in online/on-campus activities each week.
- Follow the calendar of events and complete all assignments by their deadline
- Respond to emails within 2 days
- Participate in a thoughtful manner
- Respect rules of netiquette
 - Respect your peers and their privacy
 - Use constructive criticism
 - Refrain from engaging in inflammatory comments.

The teacher is expected to:

- Login to the course every day
- Moderate conversations in forums
- Respond to email within 48 hours, Monday thru Friday from 8am until 5pm.
- Grade assignments within 14 days of due date

Computer Access

In order to fully participate in this course, you will need:

- An internet connected computer a web browser installed. *Use of smartphones and tablets is not recommended.*
- In the event that your computer crashes or internet goes down, it is recommended to have a backup plan to be able to log in from another computer or another location as needed.

Technical Skills

Students enrolled this course are expected to have a moderate level of computer proficiency. You should be comfortable doing all of the following:

- Using your chosen computer operating system and a web browser
- Following online directions for using a new program
- Typing at least 20 words a minute
- Troubleshooting basic computer problems
- Working through problems you can't resolve on your own with remote support technicians

Technical Assistance

If you have general questions about the course (such as due dates, content, etc.), please contact the instructor using any of the contact methods described in the instructor section at the beginning of this document. For technical issues that you cannot resolve on your own, please contact the E-Learning and Instructional Support office:

- Phone : (248) 805-1625
- Submit a help ticket : <http://www2.oakland.edu/elis/help.cfm?lms=2>

If you have any trouble accessing any of the content in this course, please contact the instructor.

Absenteeism and Tardiness during Lecture

In a master's level course a combination of classroom and on-line meetings will be incorporated. Classroom participation is expected. Class attendance is mandatory. Unexcused absence or repeated tardiness may result in failure of the course. Any student that has an unexcused absence must arrange a meeting with FOR.

COURSE EVALUATION

Course Requirements

Students will be graded based on the following assessments.

- Readiness Assessments 20% of final grade
(Individual 60% weight, team 40% weight)
- Midterm Exam 25% of final grade
- Final Exam 25% of final grade
- Assignments 15% of final grade
- Peer Evaluation 15% of final grade

Class Assignment Description

Readiness Assessments

This course will utilize a concept called “team-based learning”. The class will be divided into teams, selected by the faculty of record. When a module opens, each member of the team will be responsible for reading the course materials and preparing for the in-class meeting. At the beginning of the on-campus class, each individual will be given a “Individual Readiness Assessment (iRAT)”. This will be a test over the material that was presented online, no resources will be allowed during this test. Once the iRAT is complete, the class will divide into their assigned teams. The teams will be given a “Team Readiness Assessment (tRAT)”. This will be the same test as the iRAT and the groups will be allowed to use resources to complete this exercise. The individual and team readiness assessments will be weighted at 60% and 40%, respectively. For example, if an individual received 15/20 on the individual test and the group receives 19/20 on the group test, the individual’s score for the test will be 17.4% ($15 \times .4$) + ($19 \times .6$).

Absence from class will result in a score of 0 for the Readiness Assessment. There will be NO make-up assignments given.

Appeals Process

A team may appeal a question on the tRAT, if they feel that their answer is correct. This can be done by submitting a one page written appeal that includes rationale and evidence via course email. The appeal must be submitted within 48 hours of the readiness assessment. The instructor will read the appeal and make a determination by the following on-campus session.

Exams

There will be two exams this semester. The midterm exam will cover the content from the first half of the semester. The final will be covering the content from the week after the midterm to the end of the semester.

These exams will both be offered online at a time/date to be determined by the instructor. Failing to complete the exam on the day of an exam will result in forfeiting that portion of your grade. There are no make-up exams given. If you feel that you have some serious and irresolvable conflict with an exam or quiz date, you must notify me **in advance** to discuss whether there are possible alternatives. A medical emergency that occurs on the very morning of an exam (such that advance notification is impossible) must be formally documented in order for alternate arrangements to be considered.

Assignments

There will be several assignments throughout the semester. These assignments may include, but are not limited to clinical notes, discussion forums, journal entries and case discussions.

Specific assignment information will be posted in Moodle.

Each student must complete all assignments according to the guidelines. The course site should be checked **daily** for new information or communication from faculty or other students. The faculty allocates all final points for assignments. Since computer access is available worldwide, it is expected that students will be frequently able to access the course site. If for some reason a student must be unavailable for a period of time you must let the faculty know in advance.

Feedback and grading will be submitted by the instructor via Moodle. The turn-around time for feedback and grades is approximately two weeks after the due date of all assignments for that module.

Peer Evaluation

At the end of the term, it is necessary for all members of this class to assess the contributions that each member of the team made to the work of the team. This contribution should presumably reflect your judgment of such things as:

Preparation - Were they prepared when they came to class?

Contribution - Did they contribute productively to group discussion and work?

Respect of others' ideas - did they encourage others to contribute their ideas?

Flexibility - Were they flexible when disagreements occurred?

It is important that you raise the evaluation of people who truly worked hard for the good of the group and lower the evaluation of those you perceived not to be working as hard on group tasks. Those who contributed should receive the full worth of the group's grades; those who did not contribute fully should only receive partial credit. Your assessment will be used mathematically to determine the proportion of the group's points that each member receives.

Evaluate the contributions of each person in your group except yourself, by distributing 100 points among them. **Include comments for each person.**

Scores from each member will be averaged and then calculated to determine the total participation score for each group member. Total scores over 100 will receive a 25/25 for the group participation grade. If the total score for a member is less than 100, the participation grade will be calculated as follows:

$$(\text{Total points} \times 25) / 100 = \text{Participation Grade}$$

For example:

	Group Member A	Group Member B	Group Member C	Group Member D	Group Member E	Group Member F	Total Points	Participation Grade
Group Member A	X	20	20	25	20	30	115	25/25
Group Member B	15	X	10	15	15	10	65	16.25/25

COURSE SCHEDULE

Module	Topic	Activities
1 01/09/18- 01/22/18	Review of Pharmacologic Principals Health Promotion	Introduction Forum: See Moodle for Due Date
On Campus 01/23/18 iRAT and tRAT Covering Module 1		
2 01/23/18- 02/05/18	Cardiovascular Agents Renal/Genitourinary Agents	Group Assignment: Due 02/05/18
On Campus 02/06/18 iRat and tRat Covering Module 2		
3 02/06/18- 02/16/18	Reproductive Agents Gastrointestinal Agents	Discussion Forum: See Moodle for Due Dates
Winter Break 02/17/18 – 02/26/18		
Midterm Exam (Online) 02/27/18 5:30pm-8:00pm		
4 02/27/18- 03/12/18	Respiratory Agents Anti-Infective Agents	Group Assignment: Due 03/12/18
On Campus 03/13/18 iRAT and tRAT Covering Module 4		
5 03/13/18- 03/26/18	Central Nervous System Agents Psychotropic Agents	Opioid Paper: Due 03/26/18 Opioid Module: Due 03/26/18
On Campus 03/27/18 iRAT and tRAT Covering Module 5		
6 03/27/18- 04/09/18	Endocrine Agents	Group Assignment
On Campus 04/10/18 iRAT and tRAT Covering Module 6		
7 04/10/18- 04/17/18	Dermatologic Agents Musculoskeletal Agents	No activities due this week
Final Examination (Online) 04/24/18 5:30pm and 8:50pm		

Oakland University—School of Nursing

GRADE CONVERSION

Oakland University – School of Nursing				
GRADUATE GRADE CONVERSION				
PERCENTAGE	GPA		PERCENTAGE	GPA
99.00 - 100	4.0		80.00 - 80.99	3.0
97.00 - 98.99	3.9		78.00 – 79.99	2.9
95.00 - 96.99	3.8		76.00 – 77.99	2.8
93.00 - 94.99	3.7		74.00 – 75.99	2.7
91.00 - 92.99	3.6		72.00 – 73.99	2.6
89.00 - 90.99	3.5		70.00 - 71.99	2.5
87.00 - 88.99	3.4		68.00 – 69.99	2.4
85.00 - 86.99	3.3		66.00 – 67.99	2.3
83.00 - 84.99	3.2		64.00 – 65.99	2.2
81.00 - 82.99	3.1		62.00 – 63.99	2.1
			60.00 – 61.99	2.0