The University Of Toledo

New Graduate Course Proposal

* denotes required fields				
1. 0	College*: College Pharmacy, Pharm Sciences	▼		
	Department*: Pharmacy Practice	▼		
		hone: 383-1567 (xxx - xx)	xx) Email:	
r	nariann.churchwell@utoledo.edu			
3. A	Alpha/Numeric Code (Subject area - number)*:	PHM	- 6010	
4. P	Proposed title*: Cardiology II			
Р	Proposed effective term*: 202040	(e.g. 201140 for 201	l Fall)	
5. j	s the course cross-listed with another academic	e unit?	• Yes • No	
A	Approval of other academic unit (signature and	title)		
I	s the course offered at more than one level?		Yes No	
n	f yes, an undergraduate course proposal form n lew, complete the <u>New Undergraduate Course I</u> n <u>Undergraduate Course Modification Proposa</u>	Proposal; if the undergradua		
6. (Credit hours*: Fixed: 3	or	Variable:	
	to			
_				
7.	Delivery Mode: Primary*	Secondary	Tertiary	
	a. Activity Type * Lecture •	SelectType	SelectType	
	b. Minimum Credit 3 Hours *			
	Marine Cralit			
	Maximum Credit 3 Hours *			
	c. Weekly Contact 3			
	Hours *			
8.	Terms offered: 🖉 Fall 🔲 Spring 💭 Summ	mer		
	Years offered: • Every • Alternat	e		

5/4/2017

Year Years

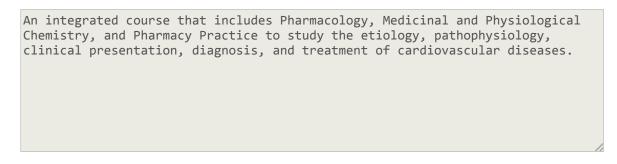
⁹ . Are students permitted to register for more than one section during a term?	No Yes
May the courses be repeated for credit? • No • Yes • Maximum Hours	
10. Grading System*: • Normal Grading (A-F, S/U, WP/WF, PR, I)	
System : Satisfactory/Unsatisfactory (A-C, less than C)	
Grade Only (A-F, WP/WF, PR, I)	
Audit Only	
No Grade	

11. Prerequisites (must be taken **before**): i.e. C or higher in (BIOE 4500 or BIOE 5500) and C or higher in MATH 4200

NONE	
PIN (Permisson From Instructor)	PDP (Permission From Department)
Co-requisites (must be taken together):	
PHPR 6450	

12.

Catalog Description* (75 words Maximum)



13. Attach a syllabus - a syllabus template is available from the University Teaching Center. Click <u>here</u> for the Center's template.

File Type	View File
Syllabus	View

14. Comments/Notes:

New PharmD curriculum

15. Rationale:

New PharmD Program was developed to meet new accreditation standards set out by the Accreditation Council for Pharmacy Education.

Course Approval:

Department Curriculum Authority:	Mariann D Churchwell	Date 2017/02/15
Department Chairperson:	Diane Cappelletty	Date 2017/02/15
College Curriculum Authority or Chair:	Frederick E. Williams	Date 2017/02/17
College Dean:	Laurie S. Mauro	Date 2017/02/20
Graduate Council:	Constance schall, GC mtg 4/18/17	Date 2017/04/19
Dean of Graduate Studies:	Amanda C. Bryant-Friedrich	Date 2017/05/01
Office of the Provost :		Date

print

Curriculum Tracking

Administrative Use Only

Effective Date:	(YYYY/MM/DD)
CIP Code:	
Subsidy Taxonomy:	
Program Code:	
Instructional Level:	

Registrar's Office Use Only

Processed in Banner on: Processed in Banner by: Banner Subject Code: Banner Course Number: Banner Term Code: Banner Course Title:

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Cardiology II Module The University of Toledo College of Pharmacy and Pharmaceutical Sciences Doctor of Pharmacy Program PHM 6010

COURSE/CATALOG DESCRIPTION

An integrated course that includes Pharmacology, Medicinal and Physiological Chemistry, and Pharmacy Practice to study the etiology, pathophysiology, clinical presentation, diagnosis, and treatment of cardiovascular diseases.

Coordinator: Email: Office Hours:	TBD TBD TBD	Class Location: Class Day/Time:	
Office Location	n: TBD	Lab Location:	N/A
Office Phone:	TBD	Lab Day/Time:	N/A
Term:	Fall 20XX	Credit Hours:	3

Additional Instructors:

Instructor:	TBD
Email:	xxxx@utnet.utoledo.edu
Office Hours:	To be given later
Office Location:	HEB xxxx
Office Phone:	419/383-xxxxx

Instructor:	ххххх
Email:	xxxxx@utnet.utoledo.edu
Office Hours:	To be given later
Office Location:	HEB xxxx
Office Phone:	419/383-xxxx

Instructor:	SSSSS
Email:	xxxx@utoledo.edu
Office Hours:	To be given later
Office Location:	HEB ssss
Office Phone:	419/383-sssss

Instructor:	ххххх
Email:	mxxxx@utoledo.edu
Office Hours:	To be given later
Office Location:	HEB xxxx
Office Phone:	419/383-xxxxx

COMMUNICATIONS TO STUDENTS

If necessary, the instructor will send messages to students either by posting messages on *Blackboard* (<u>www.dl.utoledo.edu</u>) or using UT-assigned email addresses. If a student elects to have emails sent to his/her UT address forwarded to a secondary email address, it is his/her responsibility to assure that such emails are properly forwarded.

COURSE GOAL

To enhance students' understanding of the medicinal and biological chemistry and pharmacological perspectives of cardiovascular medication as well as the pathophysiology, clinical presentation, etiologic causes, laboratory findings, diagnosis, and pharmacotherapy of cardiovascular diseases.

UTCP DOCTOR OF PHARMACY ABILITY BASED OUTCOMES - achieved in this course

Domain 1 – Foundational Knowledge

1.1. Learner (Learner) - Develop, integrate, and apply knowledge from foundational sciences (i.e. *pharmaceutical, social/behavioral/administrative, basic biomedical sciences* and *clinical sciences*) to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and *patient centered care*.

Domain 2 – Essentials for Practice and Care

2.1. Patient-centered care (Caregiver) - Provide *patient-centered care* as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities).

Domain 3 - Approach to Practice and Care

3.1. Problem Solving (Problem Solver) – Identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution.

STUDENT LEARNING OUTCOMES (SLOs)

Upon completion of this course, the student will be able to:

- 1. Evaluate the causes, pathophysiology, clinical presentation, and diagnosis of cardiovascular disorders. [UT CPPS Ability Based Outcome (ABO) 1.1]
- 2. Explain the mechanisms of action, therapeutic effects, adverse effects, and pharmacokinetic properties of cardiovascular medications [ABOs 1.1, 3.1]
- 3. Identify key pharmacophores and chemical structure of select cardiovascular medications and predict the effect that structural changes around pharmacophores and/or chemical structure will have on the pharmacology of these medications [ABOs 1.1, 3.1]
- 4. Design, implement, monitor, evaluate, and adjust patient-specific, evidence-based pharmacotherapy for cardiovascular disorders. [ABOs 1.1, 2.1, & 3.1]
- 5. Recommend non-pharmacologic or non-prescription therapies for patients with cardiovascular disorders. [ABOs 1.1, 2.1, & 3.1]
- 6. Analyze, prevent, correct, and treat drug-drug interactions and adverse drug reactions due to cardiovascular medications. [ABOs 1.1, 2.1, & 3.1]

PREREQUISITES AND COREQUISITES

Prerequisite: None Corequisite: PHPR 6450

REQUIRED TEXTS AND ANCILLARY MATERIALS

- Goodman and Gilman's The Pharmacological Basis of Therapeutics, 12th ed. (2011), by Brunton, et al; published by McGraw-Hill, ISBN-13: 978-0071624428
- Foye's Principles of Medicinal Chemistry, 6th ed. (2007), by Lemke, et al; published by Lippincott/W&W; ISBN-13: 978-0781768795
- Pathophysiology of Heart Disease, 6th ed. (2011), by Lilly; published by Lippincott/W&W; ISBN-13: 9781451192759
- Pharmacotherapy: A Pathophysiological Approach, 9th ed. (2014), by DiPiro, et al; published by McGraw-Hill; ISBN-13: 978-0-07-1800532
- Rapid Interpretation of EKG's, 6th ed. (2000), by Dubin; published by Cover; ISBN-13: 9780912912066

TECHNOLOGY REQUIREMENTS

- Laptop computer or tablet device that allows a student to take online exams that utilize ExamSoft
- Students will need to have access to *Blackboard* "online" to obtain course notes, readings, and information relative to the course
- A Turning Technologies ResponseCard ("clicker") will be needed on certain days of the course

GRADING

Examinations (4 exams, each accounting for a fourth of your grade)

		SLO Assignments
Examination 1 (Date xxxx) [*]	25%	All
Examination 2 (xxxx)	25%	All
Examination 3 (xxxxx)	25%	All
Examination 4 (xxxx) Comprehensive	25%	All

*dates are subject to change

Please note: Students earning less than a C on exams 1, 2, or 3 *must* go to the Academic Enrichment Center located in Mulford Library (room 506/507) for additional support and academic coaching.

Midterm Grade

Your midterm grading status can be determined by averaging the numeric score of your first two exams and viewing what grade corresponds to this average score using the "Grading Scale Used to Determine Your Final Grade" chart below. Those scoring less than a 70% after two exams will be referred to the Academic Enrichment Center located in Mulford Library (room 506/507) for additional support and academic coaching.

Students missing a grade in one of the first two exams without an excuse will be considered "not attending class." Please note that if you are considered "not attending class," it could impact your financial aid (scholarships, grants, loans, or Federal Work Study). If you decide you are not going to attend this class (or any other class you have registered for), you must formally withdraw (drop) from the course. You can do this by logging onto the <u>myUT</u> portal, clicking on the "Student" tab, and then under My Toolkit clicking on Register/Drop/Withdraw. For more information about add/drop dates please visit the Registrar's Office online at: <u>http://www.utoledo.edu/offices/registrar/registration_dates.html</u>.

GRADING SCALE USED TO DETERMINE YOUR FINAL GRADE

A course average of 90% assures an A A course average of 80% assures a B A course average of 70% assures a C A course average of 60% assures a D

SUGGESTIONS MADE TO HELP STUDENTS BE SUCCESSFUL

Based on feedback from students that have preceded you in taking cardiology-related courses have indicated the following helped them get a good start in understanding the CV material:

- 1) Reviewing anatomy and physiology notes pertaining to the CV system prior to starting this class
- 2) Reviewing pharmacology, medicinal chemistry, and pharmacotherapy notes pertaining to the CV system that appeared in other modules prior to class starting
- 3) Reviewing notes each day and using the required and supplemental readings (as well as on-line resources) to aid in their understanding of an aspect within their notes that they do not understand at a location they can concentrate (and preferably have access to on-line resources)
- 4) If #3 fails, contacting the instructor about an aspect within their notes that they do not understand (*preferably* sometime *before*, not after, the examination pertaining to this material).

ACADEMIC SUPPORT SERVICES AND ACADEMIC HELPFUL HINTS

The University of Toledo is committed to your academic success and offers a wide array of programs and services to ensure success, a few examples of resources available to you are:

Tutoring Services

Tutoring support for all UT students is available through the <u>Learning Enhancement Center</u> located in the Carlson Library. Tutoring Services are offered in an array of subjects, including Writing, Math (Calculus, Statistics, and Accounting) Biology, Chemistry, and Anatomy and Physiology.

The Counseling Center

Transitioning to college and/or maintaining a healthy well being while attending college can be difficult, if you or a friend ever feel overwhelmed adjusting to college or in need of crisis intervention or mental health services please contact the <u>Counseling Center</u>.

Success Coach

As of Fall 2013, all new students were assigned a Success Coach to help students navigate their college experience by serving as a single point of contact. Your Success Coach can help you build and develop skills, refer you to support services, and aid in your overall success at The University so be sure to stay connected to him/her throughout your academic journey! If you need assistance connecting with your Success Coach send an email to success Coach.

UNIVERSITY POLICIES

Policy Statement on Non-Discrimination on the basis of Disability (ADA)

The University is an equal opportunity educational institution. Please read "The University's Policy Statement on Nondiscrimination on the Basis of Disability-Americans with Disability Act compliance (Policy Number: 3364-50-03)" available at:

http://www.utoledo.edu/policies/administration/diversity/pdfs/3364_50_03_Nondiscrimination_o.pdf .

Academic Accommodations

With respect to academic accommodations, The University of Toledo is committed to providing equal access to education for all students. If you have a documented disability or you believe you have a disability and would like information regarding academic accommodations/adjustments in this course, please contact the <u>Student Disability Services Office</u> located at Rocket Hall 1820 (phone: 419/530-4981; email: <u>uofficeofaccessibility@utoledo.edu</u>) as soon as possible for more information and/or to initiate the process for accessing academic accommodations. Students with disabilities receiving accommodations through the Student Disability Services Office are encouraged to discuss these with the faculty so that we may be better informed on how to assist you during the semester.

Students need to notify the course coordinator and pertinent course faculty that they would like to take an exam with accommodations due to a disability at least three full working/business days before the exam day to allow faculty time to make arrangements to meet the accommodation needs of students.

Ex. #1: If the exam is on a Wednesday, the faculty member needs to be notified by the end of the business day of the preceding Thursday (assuming none of the weekdays is a holiday) to allow him/her three full business days to meet accommodations.

Ex. #2: If the exam is on a Wednesday and the preceding Monday is a holiday, the faculty member needs to be notified by the end of the business day of the preceding Wednesday to allow him/her three full business days to meet accommodations.

ACADEMIC POLICIES

Missed Class Policy

This course follows the University of Toledo Missed Class Policy. This policy provides for basic protections and reasonable accommodations for students who miss class with excused absences. Students are expected to attend every class meeting of courses in which they are registered. Only in specific, unavoidable situations does the University excuse absences from class: 1) personal emergencies, including, but not limited to, illness of the student or of a dependent of the student [as defined by the Board of Trustees' Policy on Family and Medical Leave], or death in the family; 2) religious observances that prevent the student from attending class; 3) participation in University-sponsored activities, approved by the appropriate University authority, such as intercollegiate athletic competitions, activities approved by academic units, including artistic performances, R.O.T.C. functions, academic field trips, and special events connected with coursework; 4) government-required activities, such as military assignments, jury duty, or court appearances; and 5) any other absence that the professor approves.

Students are responsible for complying with the missed class policies of their instructors. Students bear the responsibility of notifying the instructor of a planned absence by one of the methods provided by the instructor. In the event of an emergency or an unavoidably short notice of absence, the student must present the instructor with an approved written excuse upon the student's return to class. Approved written excuses will be at the instructor's discretion, including, but not limited to, doctor's notice, funeral programs, etc. It is *strongly recommended* that the student use two of the three aforementioned methods (email, writing, or voicemail) to insure that the instructor is properly notified of the planned absence.

Students are responsible for all material covered in classes they miss, even when their absences are excused as defined above. Students must make arrangements with instructors to complete missed assignments, labs,

examinations or other course requirements. In turn, instructors are not to penalize students with excused absences.

Drop/Withdrawal Information

Students who decide not to attend or stop attending any or all classes for which they have registered must drop or withdrawal from the course(s). Drops and withdrawals can be processed online through the myUT portal (provided there are no holds), and can also be processed in the Office of the Registrar, Mulford Library 114 or at Rocket Solution Central (RSC) located in Rocket Hall, Room 1200. Failure to drop or withdrawal from a course for which a student has stopped attending may result in a grade of "F". Specific drop and withdrawal dates for a term are listed on the University's academic calendar available at:

http://www.utoledo.edu/offices/provost/calendar/index.html .

Warning:

Withdrawing from a course(s) will result in a grade of "W", which will appear on your official transcripts. Once a withdrawal is processed, it cannot be rescinded. Based on the date of withdrawal, fees may or may not be adjusted. Since withdrawn courses reduce your enrolled hours, withdrawing from courses may have an adverse effect on financial aid benefits, scholarships, loan deferments, athletic eligibility, health insurance, veteran's benefits, degree requirements, or other areas. If you are uncertain what effect withdrawing from the course(s) would have, it is recommended that you contact the appropriate department for guidance.

CLASS POLICIES

- 1. Classes are scheduled to start promptly.
- 2. All required readings are either out of *required* textbooks or from articles or textbooks that will be made available at University libraries, student resource room files, or on-line. If a student chooses the "photocopying route" of acquiring required readings, the photocopying will be the responsibility of the student.
- Telephones, pagers, or any other device that makes sound are to be turned off during lecture (or at least be programmed into the "vibrating" mode) AND are NOT to be on or be set to a "vibrating" mode or be used in any capacity during an examination.
- 4. No pets or children are to be brought to the classroom.
- 5. Playing of musical instruments is not permitted in the classroom.
- 6. Students may audiotape lectures; otherwise, no A/V equipment, "smart" phones, "smart" watches, or use of other telephotoing or televideoing devices are to be used during class.
- 7. For issues pertaining to lecture content, contact the lecturer of the topic. For issues pertaining to grades, tests, lecture schedule, reading assignments, missing a class or test, etc., contact Dr. V. Mauro. Issues pertaining to grading should be brought to the instructor's attention by the end of the second "workday" following the day exams were passed back.
- 8. Other than the *Examination* dates listed above, class attendance on lecture days, although expected, is not a requirement for the course. If a student is absent from a lecture day, it is his/her responsibility to obtain the material discussed in class on that day as well as obtaining any

handouts, information, or announcements presented to the class that day. On examination days, the course abides by The University of Toledo Missed Class Policy.

- 9. When arriving tardy or leaving early from class, the student should do so in a manner that is not disruptive to the class. If disruptive, the student is placing him/herself at risk of being removed from class on that day and/or barred from class for one or more days in the future.
- 10. Students are to conduct themselves in a mature, professional manner and obey the principles of the Professional Pledge between students and faculty.
- 11. During class, only **one** individual is to be talking at any given time.
- 12. During class, students are to behave in a manner that will not distract others.
- 13. During class, students are not to be smoking (including using E-cigarettes) or using or expectorating chewing tobacco.
- 14. Students should refrain from "surfing" the internet because studies have proven that a "surfing" student not only distracts from his/her own learning but that of innocently distracted classmates.

EXAMINATION REGULATIONS

- A. <u>Promptness</u> Students are to be in the assigned examination room and their seat at the start of the class period. No extra time will be permitted for students who arrive late for an examination. Students who do arrive late, provided no previously arriving student has finished his/her examination and left the room, will be subject to losing 1 point for each minute he/she is late. However, if a student arrives late, but after a previously arriving student has finished his/her examination and left the room, the tardy student will be considered to have been absent from taking the examination and will be treated as described below in MAKEUP EXAMINATIONS.
- B. <u>Articles in Examination Room</u> Generally, unless otherwise **noted**, only a few #2 pencils will be permitted at your desk. Purses, backpacks, book bags, pencil pouches, notebooks, papers, books, telephones, electronic devices, erasers (other than the end of a pencil), or anything *not needed* for you to take a test **should not be brought to the classroom due to limited space in the classroom and definitely are to be away from your desk while taking the examination.** Additionally, coats, hats, or any other clothing should be placed **away from your examination desk.** Faculty for this course will provide tissues for those with "sniffles." The use of pagers, telephones, PDAs, "smart" watches, or other electronic equipment is not permitted to be used in any capacity during an examination and **are not to be used in the classroom and should be turned off**. No "bands" or watches are to be worn. Students should bring a few #2 pencils since portions of exams may be computer graded.
- C. Calculators can be used on examinations only when permitted. When permitted, the only calculator permitted is the TI-30X IIS (without its cover). No other calculator will be permitted even if you were allowed to use the calculator in a different course. Each student is to have his/her own calculator. Students are NOT to use "smart" eyeglasses, watches, or any other such device during examinations.
- D. <u>Violation of the Student Academic Code, Course testing policies, & Academic Testing Center Policies</u> Violation of the student academic code, course testing policies, or academic testing center policies WILL NOT BE TOLERATED on any examination. Individuals accused of a violation will be prosecuted according to the policies and procedures of the College and University and subject themselves to receiving a grade of "0" on the examination or a grade of "F" for the course.
- E. <u>Seating</u> Instructors reserve the right to seat students during examinations as they see necessary.
- F. <u>Format of Examinations</u> The final format of each examination is determined by the instructor(s) responsible for that section of lecture material. Multiple choice, true/false, and mark all that apply

will be utilized most often; however, essay, short answer, fill-in, matching, and place in order questions may also be used. Make up exams can a greater portion of essay and short answer questions.

- G. <u>Asking Questions</u> Technical questions (misspellings, missing a page, wrong numbering or lettering, etc.) will happily be answered during examinations. Any questions arising regarding interpretation of an exam question are encouraged to be written out on the back of the front page of the test and be brought to the attention of the instructor when handing in the test. When doing so, "check" the box on the front page of the exam and indicate the question you have an inquiry on.
- H. The use of dictionaries of any sort during examinations is prohibited.
- I. Consumption of food or beverages, the use or expectoration of chewing tobacco, smoking (including the use of E-cigarettes), or listening/viewing to audio/video equipment, is not permitted during examinations. No drinking or items to be ingested, chewed, or snorted are to be at your seat.
- J. Conversing with anyone other than instructors is not permitted once answer sheets and/or tests are being passed out. One may resume conversation once they have left the testing room. When speaking outside the classroom following an exam, voices should be at a level that will not disrupt those still in the classroom taking the exam.
- K. Items in one's possession during an examination (such as watches, pencils, etc.) are subject to inspection.
- L. Students are responsible for assuring answer sheets to examinations are marked properly and that they have not overlooked answering any questions on the test before handing in the examination.
- M. Students shall treat their answer sheets and test booklets in a manner that does not allow or tempt other students to look at them.
- N. Students who request the use of the lavatory during an exam are subject to a 5-point deduction of their examination score.
- O. If a class period, during which an exam quiz was to be given, is canceled or interrupted, assume the exam or quiz will be given during the next scheduled class period if it is not completed on the assigned day.
- P. Grades will only be passed out directly to the student or mailed (via U.S. mail) directly to the student. Grades will not be given over the phone, to a friend, or through email.
- Q. ExamSoft may be used to for exams on select occasions. Read the "ExamSoft Procedures and Information" pages at the end of this document for details on its use.

MAKEUP EXAMINATIONS

- A. An unexcused absence resulting in a student absent from taking a particular exam will result the student receiving a grade of **zero** for that particular exam.
- B. Makeup exams will only be administered for *excused* absences from an exam. The course will follow The University of Toledo Missed Class Policy to determine if an absence is excused. *Prior approval* for an absence from an examination can only be obtained from acknowledged **direct person-to-person contact** with Dr. V. Mauro. Post-exam approval for an excused absence from an examination must be sought out *immediately* once the student is capable via email using the University email system followed by acknowledged **direct person-to-person contact** with **Dr. V. Mauro** immediately upon the student's arrival back to school. Detailed, well-documented proof explaining the reason for the absence will be required for an absence to become excused.
- C. Makeup examinations (the format of which may be multiple choice, essay, short answer, true/false, fill-in, matching, or any combination of these) will be given during Finals Week.
- D. Exceptions may be rarely possible with emergencies upon the discretion of the Course Coordinator.

Current CV Module Schedule

- Week 1 Introductory concepts to cardiology (anatomy, physiology, physical exam, & EKG) Arrhythmias
- Week 2 Arrhythmias
- Week 3 Exam 1

Atherosclerosis

Ischemic heart disease

- Week 4 Ischemic heart disease
- Week 5 Exam 2 Heart failure
- Week 6 Heart failure

Syncope/Shock

Exam 3

Week 7 Pulmonary hypertension

Stroke

Hypertensive emergencies

Final Exam 4