

PHA6137 Clinical Pharmacogenomics Implementation

PHA6137 Clinical Pharmacogenomics Implementation (3 Cr Hr.)
Location: Canvas, Asynchronous

The final syllabus posted in the course Canvas site is the most current and supersedes this syllabus.

Course Coordinator:

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Office Hours: on request

Pre-Requisites:

- (GMS 6224) Foundations of Precision Medicine: Medical Molecular Genetics
- (PHA 6935) Foundations of Precision Medicine: Principles of Pharmacogenomics and Genomic Technologies
- (PHA 6935) Foundations of Precision Medicine: Genetic Epidemiology
- (PHA 6120) Foundations of Precision Medicine: Pharmacogenomics

Co-Requisites:

None

Course Objectives

The purpose of the course is to provide an overview of the clinical implementation of pharmacogenomics in diverse practice settings. Upon completion of the course students will have the foundational tools to help implement pharmacogenetics into clinical practice.

1. Identify the key components and steps required for the successful implementation of pharmacogenomics in clinical practice.
2. Describe clinical pharmacogenomics service models.
3. Discuss reimbursement strategies for various care models.
4. Compare and contrast approaches to clinical laboratory testing in pharmacogenomics.
5. Describe the key steps to incorporate pharmacogenomic information into the electronic health record with clinical decision support.
6. Discuss the economic value of pharmacogenomics and current perspectives of payers on preemptive pharmacogenomics.
7. Recognize the necessary components to assess sustainability of a pharmacogenomics program.

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Instructional Method

This course is part of the distance education program at the University of Florida. Instead of a traditional lecture format, the medium for communication between course instructors, teaching assistants and students will be via Canvas, a user-friendly web-based classroom management tool, that utilizes required readings, quizzes (in most courses), completion of written assignments, and participation in a discussion board.

Students will independently complete assigned readings and complete online assignments and/or quizzes/projects to assess understanding of and provide their insight to the reading and coursework material. Throughout these learning activities, the instructor and teaching assistant(s) are available via email to assist with questions. There are not times at which the entire class meets at a specific time or zoom sessions (unless indicated by your instructor). Due to the nature and size of our program, individual zoom sessions or phone calls are not routinely utilized by our teaching staff.

Instructors and TAs are always available via the course messaging system and provide a quick turnaround time for messages.

This is an online asynchronous course. Students will learn from viewing recorded lectures, completing patient cases, and participating in patient-case discussion boards, exams, and completing a final capstone project. The course duration is 12 weeks (see Course Schedule). The course duration is 12 weeks (see Course Schedule). Instructors are available throughout the course to clarify information via discussion board postings.

Materials and Supply Fees

Please review the syllabus specific to this class for any required, recommended, or suggested reading materials.

Use [UF VPN to access UF Libraries Resources](#) when off-campus. **Please note that students enrolled in our partner universities will not have access to the UF library resources and you will need to utilize the library through your home institution.**

The UF HSC library staff can assist you with questions or issues related to accessing online library materials. For assistance contact your College of Pharmacy librarian or visit the [HSC Library Website](#) at this URL: <http://www.library.health.ufl.edu/>

For assistance with Canvas or other course technology, please contact: UF Distance Education Support Services - ahc-dess@ufl.edu

Required Materials: Students must comply with the UF Computer and Software Requirement. Please see the website of your respective program for further information.

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Course Materials and Technology

Required Textbooks and Software

There is no required textbook or software for this course.

Students will have access to handouts and other resources. Journal articles, class notes developed by the instructor, or other required reading/resources will be provided to students through the course website.

College of Pharmacy librarian or visit the [HSC Library Website](http://www.library.health.ufl.edu/) at this URL: <http://www.library.health.ufl.edu/>

For assistance with Canvas or other course technology, please contact: UF Distance Education Support Services - ahc-dess@ufl.edu

Course Schedule

Course Schedule

Date	Activity/Assessment	Contact Hrs
Week 1		
	Lecture	Course Introduction –Dr. Amanda Elchynski
	Lecture	Challenges and Solutions for Implementing Pharmacogenomics in Diverse Practice Settings - Dr. Kelsey Cook
	Readings	<ul style="list-style-type: none">Giri J et al. Concepts Driving Pharmacogenomics Implementation into Everyday Healthcare. <i>Pharmacogenomics and Personalized Medicine</i>. 2019;12 305–318.Arwood M et al. Implementing Pharmacogenomics at Your Institution: Establishment and Overcoming Implementation Challenges. <i>Clin Transl Sci</i> (2016) 9, 233–245
	Assignment	Pharmacogenomics Implementation Readiness Assessment
	Discussion	Discussion Board: Introduction
Week 2		
	Lecture	Practice and Evidence Analysis for Pharmacogenomics Implementation – Dr. Amanda Elchynski
	Readings	<ul style="list-style-type: none">Krebs K, Milani L. Translating pharmacogenomics into clinical decisions: do not let the perfect be the enemy of the

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		<p>good. Hum Genomics. 2019 Aug 27;13(1):39.</p> <ul style="list-style-type: none"> • Caudle KE, Gammal RS, Whirl-Carrillo M, Hoffman JM, Relling MV, Klein TE. Evidence and resources to implement pharmacogenetic knowledge for precision medicine. Am J Health Syst Pharm. 2016 Dec 1;73(23):1977-1985. 	
	Discussion	Discussion Board: Evidence Analysis for Pharmacogenomics Implementation	1.0
	Assignment	Analyzing Clinical Evidence for Pharmacogenomics Implementation	1.5
Week 3			
	Lecture	Ordering and Interpreting Pharmacogenomic Laboratory Tests - Dr. Amanda Elchynski	0.75
	Readings	<ul style="list-style-type: none"> • Haga SB, Kantor A. Horizon Scan Of Clinical Laboratories Offering Pharmacogenetic Testing. Health Aff (Millwood). 2018 May;37(5):717-723. doi: 10.1377/hlthaff.2017.1564. • Vo TT, Bell GC, Owusu Obeng A, Hicks JK, Dunnenberger HM. Pharmacogenomics Implementation: Considerations for Selecting a Reference Laboratory. Pharmacotherapy. 2017 Sep;37(9):1014-1022. 	1.25
	Discussion	Discussion Board: Interpreting Pharmacogenomic Laboratory Test	1.0
Week 4			
	Lecture	PGx Testing Considerations: Panel vs. Single and Preemptive vs Reactive – Dr. Elchynski	0.5
	Readings	<ul style="list-style-type: none"> • van der Wouden CH, Guchelaar HJ, Swen JJ. Precision Medicine Using Pharmacogenomic Panel-Testing: Current Status and Future Perspectives. Clin Lab Med. 2022 Dec;42(4):587-602. doi: 10.1016/j.cll.2022.09.012. PMID: 36368784. 	1.25
	Assignment	Translating Raw Results (include 5-10 minute video tutorial)	1.0
	Assignment	Evaluating and Interpreting Pharmacogenomic Test Results	1.0
Week 5			

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	Lecture	Clinical Decision Support for Pharmacogenomics Implementation –Dr. Khoa Nguyen	0.5
	Readings	<ul style="list-style-type: none"> Wake DT, Smith DM, Kazi S, Dunnenberger HM. Pharmacogenomic Clinical Decision Support: A Review, How-to Guide, and Future Vision. Clin Pharmacol Ther. 2022 Jul;112(1):44-57. 	1.5
	Discussion	Discussion Board: Clinical Decision Support	0.5
	Assignments	Developing and Implementing Clinical Decision Support	1.0
	Exam	Week 1 -5	1.0
Week 6			
	Lecture	Billing and Reimbursement for Pharmacogenomic Testing – Dr. Kristin Wiisanen and Dr. Sara Rogers	1.5
		<ul style="list-style-type: none"> Hefti E, Blanco JG. Documenting Pharmacogenomic Testing with CPT Codes. J AHIMA. 2016 Jan;87(1):56-9. L Rogers S, Keeling NJ, Giri J, Gonzaludo N, Jones JS, Glogowski E, Formea CM. PARC report: a health-systems focus on reimbursement and patient access to pharmacogenomics testing. Pharmacogenomics (Links to an external site.). 2020 Jul;21(11):785-796. doi: 10.2217/pgs-2019-0192. Epub 2020 Aug 4. PMID: 32748688. (PARC Report.pdf) ASHP Issue Brief on PGx Testing LCD. Available at: https://www.ashp.org/advocacy-and-issues/key-issues/other-issues/additional-advocacy-efforts/ashp-issue-brief-cms-releases-a-future-lcd-for-pharmacogenomics-testing 	1.5
	Discussion	Discussion Board: Billing and Reimbursement	0.5
Week 7			
	Lecture	Precision Medicine Education: The Patient's Perspective – Dr. Jamie Wilkey	0.75
	Readings	<ul style="list-style-type: none"> Wynn RM, Adams KT, Kowalski RL, Shivega WG, Ratwani RM, Miller KE. The Patient in Precision Medicine: A Systematic Review Examining Evaluations of Patient-Facing Materials. J Healthc Eng. 2018 Sep 	2.5

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		<p>3;2018:9541621. doi: 10.1155/2018/9541621.</p> <ul style="list-style-type: none"> Haga SB, Mills R, Bosworth H. Striking a balance in communicating pharmacogenetic test results: promoting comprehension and minimizing adverse psychological and behavioral response. Patient Educ Couns 2014;97(1):10-15. https://doi.org/10.1016/j.pec.2014.06.007 	
	Discussion	Discussion Board: Patient Education	0.5
Week 8			
	Lecture	Precision Medicine Education: The Provider's Perspective – Dr. Amanda Elchynski	0.5
	Readings	<ul style="list-style-type: none"> Unertl KM, Jaffa H, Field JR, Price L, Peterson JF. Clinician Perspectives on Using Pharmacogenomics in Clinical Practice. Per Med. 2015;12(4):339-347. doi: 10.2217/pme.15.10. Erratum in: Per Med. 2019 Mar;16(2):185. PMID: 26635887; PMCID: PMC4664195. Wynn J, Lewis K, Amendola LM, Bernhardt BA, Biswas S, Joshi M, McMullen C, Scollon S. Clinical providers' experiences with returning results from genomic sequencing: an interview study. BMC Med Genomics. 2018 May 8;11(1):45. doi: 10.1186/s12920-018-0360-z. 	3
	Assignment	Provider Education Handout	1.0
Week 9			
	Lecture	Program Evaluation and Quality Improvement – Dr. Emily Cicali	0.5
	Lecture	Clinical Pharmacogenomics Implementation Case Study: Arkansas Children's Hospital	0.5
	Readings	<ul style="list-style-type: none"> Empey PE, Stevenson JM, Tuteja S, Weitzel KW, Angiolillo DJ, Beitelshees AL, Coons JC, Duarte JD, Franchi F, Jeng LJB, Johnson JA, Kreutz RP, Limdi NA, Maloney KA, Owusu Obeng A, Peterson JF, Petry N, Pratt VM, Rollini F, Scott SA, Skaar TC, Vesely MR, Stouffer GA, Wilke RA, Cavallari LH, Lee CR; IGNITE Network. Multisite Investigation of Strategies for the Implementation of CYP2C19 Genotype-Guided Antiplatelet 	2.75

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		<p>Therapy. Clin Pharmacol Ther. 2018 Oct;104(4):664-674. doi: 10.1002/cpt.1006. Epub 2018 Jan 30. PMID: 29280137; PMCID: PMC6019555.</p> <ul style="list-style-type: none"> • Cassat S, Massey L, Buckingham S, Kemplay T, Little J. Development of health-system inpatient pharmacy clinical metrics. Am J Health Syst Pharm. 2019 Nov 13;76(23):1958-1964. doi: 10.1093/ajhp/zxz225. PMID: 31687757. • Cicali EJ, Lemke L, Al Alshaykh H, Nguyen K, Cavallari LH, Wiisanen K. How to Implement a Pharmacogenetics Service at your Institution. J Am Coll Clin Pharm. 2022 Nov;5(11):1161-1175. doi: 10.1002/jac5.1699. Epub 2022 Aug 27. PMID: 36589694; PMCID: PMC9799247. 	
	Discussion	Discussion Board: Program Evaluation and Quality Improvement	0.75
Week 10			
	Lecture	Challenges of implementing phenoconversion – Dr. Amanda Elchynski	0.5
	Lecture	Clinical Pharmacogenomics Implementation Case Study: Nemours – Dr. Ben Duong	0.5
	Readings	<ul style="list-style-type: none"> • Cicali EJ, Elchynski AL, Cook KJ, Houder JT, Thomas CD, Smith DM, Elsey A, Johnson JA, Cavallari LH, Wiisanen K. How to Integrate CYP2D6 Phenoconversion Into Clinical Pharmacogenetics: A Tutorial. Clin Pharmacol Ther. 2021 Sep;110(3):677-687. doi: 10.1002/cpt.2354. Epub 2021 Jul 28. PMID: 34231197; PMCID: PMC8404400. • Dunnenberger HM, Biszewski M, Bell GC, Sereika A, May H, Johnson SG, Hulick PJ, Khandekar J. Implementation of a multidisciplinary pharmacogenomics clinic in a community health system. Am J Health Syst Pharm. 2016 Dec 1;73(23):1956-1966. 	2.25
	Discussion	Discussion Board: Phenoconversion	0.75

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Week 11			
	Lecture	Clinical Pharmacogenomics Implementation Case Study: University of Florida GatorCare	1.0
	Readings	Tuteja S, Salloum RG, Elchynski AL, Smith DM, Rowe E, Blake KV, Limdi NA, Aquilante CL, Bates J, Beitelshes AL, Cipriani A, Duong BQ, Empey PE, Formea CM, Hicks JK, Mroz P, Oslin D, Pasternak AL, Petry N, Ramsey LB, Schlichte A, Swain SM, Ward KM, Wiisanen K, Skaar TC, Van Driest SL, Cavallari LH, Bishop JR. Multisite evaluation of institutional processes and implementation determinants for pharmacogenetic testing to guide antidepressant therapy. Clin Transl Sci. 2022 Feb;15(2):371-383. doi: 10.1111/cts.13154.	1.0
	Discussion	<ul style="list-style-type: none"> Discussion Board: What topics are you interested in that were not covered? 	0.25
	Exam	Weeks 6 - 11	1.0
Week 12			
	Lecture	Capstone Project Description	0.25
		Capstone Project Time	
Total Hours			45

Course Assignments

Assignments: Each module includes an assignment with a due date posted on the Course Calendar. While we understand that our students have other work and personal commitments, we expect every effort to be made to meet these deadlines. If for some reason, because of extenuating circumstances beyond your control, you cannot meet an assignment deadline, students should message the professor **PRIOR TO THE DATE THE ASSIGNMENT IS DUE** and explain the situation in advance. If no prior communication occurred, the instructor may deduct points for late submission at their discretion or as stated in the course overview and/or communicated via the discussion board. Being consistently late in submitting assignments disrupts the discussion of topics on the bulletin board and will, therefore, result in a loss of marks for that assignment up to a full letter grade. If you message us, we will work with you around the deadline. If you have outstanding assignments as we near the end of the semester, we will send you a follow up email as a reminder and to determine your plans for completion. If you do not respond to us before the final day of classes, you will be assigned a grade based on the completed assignments.

Any requests for make-ups due to technical issues **MUST** be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You **MUST** e-mail me within 24 hours of the technical difficulty if you wish to request a make-up.

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Amount of time past the deadline	Amount to be deducted for late submissions (in addition to grading point deductions)	Notes
12 am – 8 am (EST)	0.5 points	This deduction will incur if the assignment is past the posted deadline of 11:59 pm EST, regardless of the time zone in which you are located
1 day (from 8 am EST – 11:59 pm)	5% deduction	% deductions are a % of the total number of points for which the assignment is worth (for example, 5% of a 30-point assignment would be 1.5 points deducted).
2 days to 1 week late	10% deduction	
1 week to 2 weeks late	20% deduction	
2 weeks to 3 weeks late	30% deduction	
3 weeks to 4 weeks late	40% deduction	
4 weeks to 5 weeks late	50% deduction***	*** this is the maximum deduction regardless of when it is submitted, from 4 weeks past the due date to the last day for submissions in the semester.

Being consistently late in submitting assignments disrupts the course. If you have outstanding assignments as we near the end of the semester, we will send you a follow up email as a reminder and to determine your plans for completion. If you do not respond to us before the final day of classes, you will be assigned a grade based on the completed assignments.

This course is divided into modules. Each module includes recorded lectures, readings, and if applicable, exams, assignments, and discussion board assignments. The final module consists of a Capstone Assignment. Additional information about these course elements is provided below:

Discussion Board Assignments

Throughout the course, students will be required to complete eight discussion board assignments. Students will be asked to answer a question based on the topics covered in that week's lecture and readings. Students should use primary literature to support their arguments and should interpret the information available to synthesize an opinion prior to posting their answer. **Students must interact with two different students post** and provide thoughtful questions and re-interpretation of their classmates' opinions and analysis. To help facilitate interaction you must post and interact with the other students on at least two separate days. This will allow students to each have time to respond back to each other's questions and re-interpretation of their post. A grading rubric is provided in **Appendix A**.

Assignments

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Students will be required to complete a total of six assignments focused on pharmacogenomic implementation. Submission details and grading criteria for all assignments will be provided on the course website **Appendix B**.

Exams

There are two scheduled Exams to take place at Week 6 and Week 13. Exams are formatted with multiple choice questions and short-response questions. The exams will be available across a multiple-day period for students to complete. Exams are open-book and open-note but must be completed and submitted individually by each student.

Capstone Assignment (Reflection Assignment)

The capstone assignment is the final assignment in the course. Students are encouraged to use the lectures and assignments over the course to help complete the project. **Appendix C**.

Students will receive individual feedback on points lost on the assignments. The comments of the TA or professor can be viewed on the assignment submission page for the corresponding module. Assignments are not able to be resubmitted for a re-grade after receiving feedback; the feedback is given for learning purposes and not so that students can re-do and re-submit assignments.

Students can check their progress in the course by viewing their grade records via the course interface. Internationally registered student grades will be assigned as per the policies and procedures within your university.

Retaining Course Materials

As you go through the semester, keep copies of important emails, discussion bulletins, and assignments you may use for revision as these will be purged from the course at the end of the semester. We recommend you make a copy of the course modules since this will be the only access you will get to these materials. We will not be able to provide you with copies of course content once the course is removed from your account. If this class is a core class for your MS program (one that you will be tested on in the cumulative final exam given in special topics), it is especially important that you keep the notes for later review.

Academic Requirements and Grading

Grading Policy

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Most courses do not have a midterm or final exam, although this course may incorporate one, so be sure to review the specific requirements for this class. Students are evaluated continuously throughout the semester and graded according to their performance in the assignments and quizzes/exams (if quizzes/exams are present). All modules have written assignments, and some classes have timed quizzes that must be completed by the assignment deadline for the corresponding module. **Please review the portion of this syllabus**

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specific to this class (found on the homepage of your class within Canvas) to review the requirements of your class, as it may differ from the above.

All written assignments must be completed in your own words. Cutting and pasting from the internet is not acceptable and may be plagiarism. Failure to complete an assignment in your own words may result in you receiving a score of zero for the written assignment. All assignments should be written in your own words and referenced appropriately. This class may have a Plagiarism module associated with it, and this module must be viewed prior to opening Module 1.

For courses that have timed quizzes: if you lose your internet connection during your quiz and scores are not recorded, simply email us and we can help you.

Assignments should be submitted using the assignment submission tool. If you have difficulty submitting an assignment, message your instructor and teaching assistant - we will work with you to troubleshoot the problem. Assignment feedback will also be provided via the assignment tool, so students should return to the appropriate module to receive feedback and the assignment grade.

Always keep a copy of your course assignments in case you need to resend it. Also, you may want it for revision purposes later.

For Assignment deadlines - see the course calendar.

Critical Dates for the UF Clinical Pharmacogenomics and Precision Medicine program:
<https://onlinepim.pharmacy.ufl.edu/resources/critical-dates/>

For other important dates, consult the [UF Calendar of Critical Dates](#) and <http://www.registrar.ufl.edu> on the assignments. The comments of the TA or professor can be viewed on the assignment submission page for the corresponding module.

Evaluation of Grades

Students will be graded on written assignments and module quizzes (when included in the course). The final grade will be based on the student's cumulative number of points earned divided by the total number of available points. The resulting percentage will be converted to a letter grade based on the grading scale below this section. If a final exam is included for the class, that score will also be incorporated into your final grade.

Below is an example of a class that shows how your final grade would be calculated (this is for all classes where the final grade will be based on the student's cumulative number of points earned divided by the total number of available points):

Activity	Points Per Activity	Total Points Per Activity	Percentage of Final Grade
Assignments (6)	100 points each	600	50%
Discussion Boards (8)	20 points each	160	13%
Exams (2)	100 points each	200	17%

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Capstone Assignment	250 points	250	20%
Total		1210 Points	100%

Students will receive individual feedback on points lost on the assignments. The comments of the TA or professor can be viewed on the assignment submission page for the corresponding module. Assignments cannot be resubmitted for a re-grade after receiving feedback; the feedback is given for learning purposes and not so that students can re-do and re-submit assignments.

Students can check their progress in the course by viewing their grade records via the course interface. Internationally registered student grades will be assigned as per the policies and procedures within your university.

Grades will be assigned as follows:

Percent	Grade	Grade Points
92.5 - 100.0	A	4.00
89.5 - 92.49	A-	3.67
86.5 - 89.49	B+	3.33
82.5 - 86.49	B	3.00
79.5 - 82.49	B-	2.67
76.5 - 79.49	C+	2.33
72.5 - 76.49	C	2.00
69.5 - 72.49	C-	1.67
66.5 - 69.49	D+	1.33
62.5 - 66.49	D	1.00
59.5 - 62.49	D-	0.67
< 59.50	E	0.00

Being consistently late in submitting assignments disrupts the course. If you have outstanding assignments as we near the end of the semester, we will send you a follow up email as a reminder and to determine your plans for completion. If you do not respond to us before the final day of classes, you will be assigned a grade based on the completed assignments.

Additional Policy Specific to This Course: Quiz/assignment Policy

1. Students must finish the quiz within the 4 day window indicated in the syllabus. Students who missed the quiz window will get a zero for that quiz without an excused reason. Students need to contact the course coordinator through email for any emergent situation that prevents the student from taking the quiz and explain the situation immediately when the situation resolved. The student will either take a make-up quiz or choose other options determined by the coordinator.
2. Students are not allowed to refer to course materials or any other resources such as textbook/internet during quiz taking time.

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3. Students are not allowed to share content for quizzes and assignments. Failure to follow the rules may be considered as evidence of academic dishonesty.

Make-up Quiz/Exam Policy

Makeup quizzes are given only under special circumstances. If the student is unable to take a scheduled quiz, the course coordinator must be notified before the quiz. In addition, an email requesting the absence must be sent before the quiz or immediately afterwards. An excused absence is allowable when: 1) the student is hospitalized and/or has been advised by a licensed medical practitioner or hospital not to attend the quiz, or 2) if there is a documented death of an immediate family member as defined by UF policy. All excused absences will be considered on an individual basis by the course coordinator. For unusual situations (e.g., wedding that was planned before admission), the faculty member will communicate with student affairs.

The makeup quiz must be taken **within one-week of the missed quiz**. In extenuating circumstances (e.g., hospitalization, faculty availability), the instructor may arrange an alternate deadline for the quiz. The student may contact the course coordinator to obtain details about why points were deducted.

Grade Changes: Grades will be changed only when a grading error has been made. If you think an error has been made, you should message the instructor or TA as soon as possible. Your entire assignment will then be re-graded if the instructor determines that an error has been made.

Incomplete grades: Under special circumstances, if a student cannot finish a course before the end of the semester, we may be able to assign an incomplete grade. An incomplete grade is a non-punitive grade assigned at the discretion of the course instructor. In this course, an incomplete grade may be assigned if a third or more of the course assignments have been completed and if the student has remained in communication with TA's and instructors throughout the course and has made an effort to request an incomplete grade. If an incomplete grade is assigned, outstanding assignments and quizzes must be completed by the end of the next semester that the course is offered. If the assignments are not completed in the next term that the course runs, you will be assigned a grade based on the completed assignments. If you are scheduled to graduate the term after this semester, you are not eligible for an incomplete. Please email your instructor for more information. Students in our partner universities are not eligible for an incomplete and should contact their home institution to see the options available to them.

Instructional Policies

This course is part of the distance education program at the University of Florida. Instead of the traditional lecture format, the medium for communication between course instructors, teaching assistants, and students will be via Canvas, a user-friendly web-based classroom management tool, by utilizing the course functions. There are no times at which the entire class meets at a specific time or Zoom sessions (unless indicated by your instructor). Due to the nature and size of our program, individual zoom sessions or phone calls are not routinely utilized by our teaching staff. Instructors and TAs are always available via the course messaging system and provide a quick turnaround time for messages.

Policy Related to Required Course Participation

Students are expected to constructively join in discussions, with appropriate preparation; to post interesting and relevant information on the class discussion board when indicated, and to interact professionally and respectfully with their classmates. Please note all faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar's website for additional details:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

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Students who wish to drop from the course must do so by the drop/add deadline established by the Office of the University Registrar. Students must not assume they will be automatically dropped if they fail to participate in the course learning activities.

Student Expectations, Roles, and Reporting Unprofessional Behavior

Attendance: There is no formal process for taking attendance in this online course. This course is 100% asynchronous and there are no live meeting times. Once a topic module is released, students can log in and work on their course assignments, readings, and quizzes as they are required to meet the required assignment and quiz deadlines. However, students are expected to check the discussion boards and messaging system daily to make sure they keep up to date with any course or deadline changes, or instructor/TA direct messages.

Students are responsible for meeting all academic assignment due dates and objectives as defined by the instructor. In general, acceptable reasons for not meeting objectives from the class include illness, serious family emergencies, special curricular requirements, military obligation, severe weather conditions, religious holidays, and participation in official University activities. Excused absences must be consistent with university policies in the [Graduate Catalog](#) and require appropriate documentation. Additional information can be found in [Attendance Policies](#).

Class Participation: Students are expected to constructively join in discussions, with appropriate preparation; to post interesting and relevant information on the class discussion board when indicated, and to interact professionally and respectfully with their classmates.

Performance Expectations: Students are expected to produce quality work that is of a standard comparable to any graduate-level didactic course. Discussion postings and discussions must be legible, constructive, and appropriate. Students will be expected to complete assignments that require applying logic and reasoning skills and appropriate research when the answer may not be found in a book or the course notes. Students should expect to perform research outside of the material presented in the class (utilizing either e-journals or the internet) to assist them with completing assignments. If a text is required for this class, students are expected to have access to it to successfully complete assignments.

Dropping a Course: UF Students who wish to drop from the course must do so by the drop/add deadline established by the Office of the University Registrar (Consult the UF Calendar of Critical Dates at [UF Calendar of Critical Dates](#)). Students must not assume they will be automatically dropped if they fail to participate in the course learning activities. Deleting yourself from the course roster does not officially withdraw you from a course. Please email DESS at ahc-dess@ufl.edu if you wish to withdraw from your class.

Policy on Reporting Unprofessional Behavior

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Objective: The University of Florida College of Pharmacy is committed to fostering an environment where all individuals—students, staff, and faculty—are treated with respect, dignity, and fairness. To uphold these values, this policy provides a clear and confidential process for reporting unprofessional behavior.

Scope: This policy applies to all students, staff, and faculty within the University of Florida College of Pharmacy.

Expected Conduct: All members of the University of Florida College of Pharmacy community are expected to uphold the highest standards of professional behavior, including but not limited to:

- Treating others with respect and courtesy.
- Acting with integrity and honesty.
- Maintaining a positive and welcoming environment.

Reporting Procedure:

- **Eligibility:** Any student, staff, or faculty member can report any other student, staff, or faculty member for alleged unprofessional behavior.
- **Reporting Method:** Reports can be submitted via email to the program director, the director for Lifelong Learning, or the Assistant Dean for Lifelong Learning.
- **Confidentiality:** All reports will be handled with strict confidentiality to protect the identity of the reporter and the accused, to the extent possible.
- **Retaliation Prohibition:** Retaliation against individuals for reporting unprofessional behavior is strictly prohibited and will be subject to disciplinary action.

Investigation Process:

- **Acknowledgment:** Upon receipt of a report, an acknowledgment will be sent to the reporter within 48 hours.
- **Initial Assessment:** The Office Lifelong Learning or UF College of Pharmacy Human Resources Team, as appropriate, will conduct an initial assessment to determine if the report warrants a formal investigation.
- **Mandated Reporting:**
 - **Threat of Harm:** Threat of harm to self or others necessitates reporting to [U Matter We Care](#), the [UF Police Department](#), and/or the [UF Counseling and Wellness Center](#).
 - **Title IX:** Any report made that meets the requirements outlined by the [UF Title IX Compliance](#) office will be reported to that office.
- **Formal Investigation:** If an investigation related to a student is deemed necessary, it will be conducted by the assistant dean for Lifelong Learning or the Student Conduct and Conflict Resolution Office (SCCR) of the University of Florida. The investigating office will depend on the nature of the behavior. If it violates the University of Florida's student code of conduct, for example, it will be handled by the SCCR. Faculty and staff reports will be investigated by the University of Florida College of Pharmacy Human Resources office or their supervisor, as appropriate.
- **Outcome:** Because all students, staff and faculty have the right to confidentiality, the outcome of the investigation will not be reported back to the person who brought the behavior to the attention of college administration.

This policy aims to ensure a safe and respectful community for all. If you have any questions or need further assistance, please contact the Assistant Dean for Lifelong Learning.

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Communication

Communication Guidelines: In all course communications, including emails and threaded discussions, students are expected to follow Netiquette Guidelines. These guidelines promote an environment that encourages everyone to ask questions and learn from each other. Discussion board posts that do not respect other opinions discourage a positive learning environment. The following link provides these guidelines: <https://teach.ufl.edu/wp-content/uploads/2020/04/NetiquetteGuideforOnlineCourses.docx>

Communication is a central part of all our courses. Please use the in-course email messaging system (Inbox) and Discussion board. You should message us with private questions and concerns and assignment questions and information; additionally, be sure to check the discussion board daily for class-wide updates and topic discussions. We want to provide all our students with the best learning opportunities and are always available to answer your questions.

Email

The course Inbox feature (found on the left-hand side of your screen when you log in), not the discussion board, should always be used to contact the faculty or teaching assistant if you have a problem of a personal nature. It is your responsibility to know who the instructor and/or teaching assistant(s) are for your class. **Do not choose the option of sending your email within the class to “all” instructors**, as there are staff members from our administrative team listed who cannot assist you with course questions (and are only listed there for administrative purposes).

If you are having technical problems with the course content (downloads, etc.) or you are unable to access your course interface, please contact us directly via the “Inbox” email, and do not spend hours trying to get something to work as this will only lead to frustration. We do not want any of you to be offline for any length of time. Contact us as soon as you can so we can check it out and help you. If you are having trouble with your access to your course and cannot access the inbox course messaging system, please email your course instructor directly via regular email. In that email, make sure you give your name and the name of your course. External instructor email addresses are listed for each course separately on the homepage of the course.

Please respond to all messages from your instructor or TA. We are usually contacting you because we want to help you.

Discussion Forum

The course Discussion board can be used to post content related questions and assignment materials when requested. Please do not use the discussion forum to ask specific questions about your current course assignments.

It is VERY important that you read all the discussion bulletins that have been posted. We will use this site to post important information relating to content or quiz changes, deadlines etc. Since postings can accumulate

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quickly, please login each day to stay on top of these postings or you may miss important information. Some instructors may also use the announcement feature, so be sure to read all announcements as well.

If, as part of an assignment you are asked to make a discussion posting, you do not need to submit the same assignment via the assignment submission tool.

Academic Integrity

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: **“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”** You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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.”** It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details: <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>, <https://graduateschool.ufl.edu/>. Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Plagiarism: Plagiarism includes any attempt to take credit for another person’s work. This includes quoting directly from a book or web site without crediting the source. Sources should always be referenced or a link to the website added and, where direct quotes have been used, quotation marks must be placed around the quoted material. However, we expect more than simply cutting and pasting in a graduate level course. Students are expected to review, evaluate, and comment on material they research, rather than simply copying relevant material. Your work will be graded accordingly. Extensive quoting of literature, even if references are provided, is not considered your own work, and will hence incur point deductions up to assigning zero points.

Use of Chatbots and Artificial Intelligence (ChatGPT)

Please note that students are not permitted to submit work that has been written using chatbots unless specifically indicated by the course instructor.

“Submission of Academic Work Purchased or Obtained from an Outside Source. A student must not submit as their own work any academic work in any form that the student purchased or otherwise obtained from an outside source, including but not limited to: academic materials in any form prepared by a commercial or individual vendor of academic materials; a collection of research papers, tests, or academic materials maintained by a Student Organization or other entity or person, or any other sources of academic work.” Students who submit work, be it an entire paper or even parts of an assignment using Artificial Intelligence technology to formulate their answers will be considered as an honor code violation unless the course instructor specifically allows such uses. If an instructor determines that you have violated the honor code, an official student conduct report may be filed.

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Online Faculty Course Evaluation Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

In-Class Recording Policy

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or guest lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

SUPPORT SERVICES

Accommodations for Students with Disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. [Click here to get started with the Disability Resource Center](#). It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

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Counseling and Student Health

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).
- University Police Department: [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).
- UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website](#).
- GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the [GatorWell website](#) or call 352-273-4450.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: <https://shcc.ufl.edu/>
- Crisis intervention is always available 24/7 from:
- Alachua County Crisis Center: (352) 264-6789
<http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx>

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:

<http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html>

Academic Resources

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E-learning technical support: Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: [Visit the Student Honor Code and Student Conduct Code webpage for more information](#).

On-Line Students Complaints: [View the Distance Learning Student Complaint Process](#).

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Appendix A. Rubric for Assessing Student Participation in Discussion Board Activities

Grade Determination:

Total Points – 20 points = 100%, 18 points = 90%, 16 points = 80%, 14 points = 70%, 12 points = 60%, 10 points = 50%, 8 points = 40%, 6 points = 30%, 4 points = 20%, 2 point = 10%, 0 points = 0%

Proficiency Level	Below Expectations (0- 13 Points)	Meets Expectations (14-18 Points)	Above Expectations (18-20 Points)
Content	Information is plagiarized or directly copied from reference material, or no reference material is used. No citations are referenced. Reflections are descriptive: a reiteration of what was presented by instructor or in the assigned readings. Serious misinterpretations or not interpretation of the information is evident.	Information is summarized and not a reiteration of information provided by the instructor or in readings. Some references are sometimes made to readings or experiences. Provides less than full citations for works referenced.	Cites multiple readings and prior experiences and explains how these references extend and refine insights. Provides full citations for works referenced.
Interpretation	Presents information without any interpretations. Reflection is shallow and egocentric.	Interpretations of information are clear but lack insight into application or meaning.	Interprets information in accurate and insightful ways.
Organization	Information is disorganized.	Most information is logically presented and well organized.	All information is logically presented and well organized.
Mechanics	Three or more grammatical, spelling or punctuation errors.	1-2 grammatical, spelling or punctuation errors.	No grammatical, spelling or punctuation errors.
Quality of Information	Comments are uninformative, lacking in appropriate terminology. Heavy reliance on opinion and personal taste, e.g., "I love it", "I hate it", "It's bad" etc.	Comments are sometimes constructive, with occasional signs of insight. Student does not use appropriate terminology; comments not always relevant to the discussion.	Comments always insightful and constructive; uses appropriate terminology. Comments balanced between general impressions, opinions and specific, thoughtful criticisms or contributions.
Adherence to direction	Does not post on (2) other student posts or post the discussion and 2 posts on others students on the same day	Post on 2 other students with thoughtful discussion/questions on separate days	Post on 2 other students with thoughtful discussion/questions on separate days

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Appendix B. Rubric for Assessing Student Participation in Assignments

Grade Determination:

Total Points – 100 points = 100%, 90 points = 90%, 80 points = 80%, 70 points = 70%, 60 points = 60%, 50 points = 50%, 40 points = 40%, 30 points = 30%, 20 points = 20%, 10 point = 10%, 0 points = 0%

Proficiency Level	Below Expectations (0-60 Points)	Meets Expectations (61-79 Point)	Above Expectations (80-100 Points)
Quality of Information	Information is plagiarized or directly copied from reference material, or no reference material is used. No citations are referenced. Reflections are descriptive: a reiteration of what was presented by instructor or in pre-readings read. Serious misinterpretations or not interpretation of the information is evident.	Information is summarized and not a reiteration of information provided by the instructor or in readings. Some references are sometimes made to readings or experiences. Provides less than full citations for works referenced.	Cites multiple readings and prior experiences and explains how these references extend and refine insights. Provides full citations for works referenced.
Interpretation	Presents information without any interpretations. Reflection is shallow and egocentric.	Interpretations of information are clear but lack insight into application or meaning.	Interprets information in accurate and insightful ways.
Organization	Information is disorganized.	Most information is logically presented and well organized.	All information is logically presented and well organized.
Mechanics	Three or more grammatical, spelling or punctuation errors.	1-2 grammatical, spelling or punctuation errors.	No grammatical, spelling or punctuation errors.