

PHA5922 Thinking Skills

Spring 2023

2 Credit Hours – [A-E Grading]

In this course, students will develop an awareness through practice of how to think critically and creatively and to apply these skills both personally and professionally in pharmacy practice.

Teaching Partnership Leaders

Michael Schwartz, PhD

- Email: mike@cop.ufl.edu
- Office: Gainesville Campus
- Phone: 352-273-6241

Office Hours: Please see the Canvas course site for posted office hours
See Appendix A. for Course Directory of Faculty and Staff Contact Information.

Entrustable Professional Activities

This course will prepare you to perform the following activities which the public entrusts a pharmacist to perform:

1. Collaborate as a member of an interprofessional team
2. Educate patients and professional colleagues regarding the appropriate use of medications

Course-Level Objectives

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

1. Evaluate reasoning, logic, and claims made by others in professional writings.
2. Use critical thinking and problem-solving skills to interact with patients, health-care providers, and other stakeholders.
3. Recognize awareness of one's own biases and conditioned methods of thinking and how to change these to better serve patients and the profession of Pharmacy.
4. Apply reflective thinking skills in order to assess actions and appropriately respond during discussions.
5. Communicate with groups about professional issues while considering that others think differently.

Course Pre-requisites

Completion of all Year 1 Pharm.D. program coursework including milestones.

Course Co-requisites

1. N/A

Course Outline

See Appendix. Please routinely check your campus calendar and the Canvas course site for any messages about changes in the schedule including meeting dates/times, deadlines, and room changes.

Required Textbooks/Readings

1. No text is required for purchase.
2. Required readings will be available in Canvas.

Use [UF VPN to access UF Libraries Resources](#) when off-campus.

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/>

Suggested Textbooks/Readings

Suggested readings will be posted on Canvas.

Other Required Learning Resources

N/A

Materials & Supplies Fees

N/A

Student Evaluation & Grading

Evaluation Methods and How Grades are calculated.

Contract Grading will be used during this course. A grade will be earned according to the following criteria:

Table 1.1 Grading Criteria

To earn a "C"*	The student must attend all class sessions, complete and hand in all Assignments on time, and be prepared for and participate fully in all class exercises. Note attendance and participation requirements*
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To earn a "B"*	In addition to criteria for a "C": The student must turn in a satisfactory Journal of reflective thinking on the assigned topic each day except the first. A satisfactory journal indicates that the student is thinking about his/her own thinking and how it relates to the topic at hand. See Reflection Rubric in Appendix – a grade of at least 70% (competency level) must be achieved
To earn an "A"*	In addition to criteria for a "B": The student must develop a satisfactory Term Project which embraces critical and creative thinking and demonstrates the students' knowledge of the material covered in the course. The term Project may be done alone, with a partner or with a group of 3 or 4 and a detailed outline must be approved by the Instructor prior to the end of the first week of class. A Video is available on CANVAS showing examples of prior satisfactory Term Projects. Note attendance and participation requirements*
*Consideration of Attendance/Participation	*ONE LETTER GRADE will be deducted for lack of attendance or participation or unsatisfactory performance in other items.

Table 1.2 grading scale

Percentage	Letter Grade
92.50-100%	A
89.50-92.49%	A-
86.50-89.49%	B+
82.50-86.49%	B
79.50-82.49%	B-
76.50-79.49%	C+
72.50-76.49%	C
69.50-72.49%	C-
66.50-69.49%	D+
62.50-66.49%	D
59.50-62.49%	D-
< 59.50%	E

Rounding of grades:

Final grades in Canvas will be rounded to the 2nd decimal place. If the decimal is X.495 or higher, Canvas will round the grade to X.50. The above scale depicts this policy and grades are determined accordingly. Grade assignment is made using this policy and NO EXCEPTIONS will be made in situations where a student's grade is "close."

Educational Technology Use

The following technology below will be used during the course and the student must have the appropriate technology and software.

1. Canvas™ Learning Management System

For technical support, navigate to [Educational Technology and IT Support Contact Information](http://curriculum.pharmacy.ufl.edu/current-students/technical-help/) at this URL: <http://curriculum.pharmacy.ufl.edu/current-students/technical-help/>

Pharm.D. Course Policies

The Policies in the following link apply to this course. Review the General [Pharm.D. Course Policies](http://curriculum.pharmacy.ufl.edu/current-students/course-policies/) carefully, at this URL: <http://curriculum.pharmacy.ufl.edu/current-students/course-policies/>

Makeup Assignments

Makeup assignments may be required for excused absences from all Active Learning Sessions. Students will be required to complete the makeup assignment within one week of the missed session.

Late Assignments

Late assignments will receive a ¼ point deduction from the total class grade for the first tardy submission. Further assignments submitted past the due date will receive a ½ grade deduction (e.g. A to A minus)

Respect for Diversity

The University of Florida College of Pharmacy strives to stimulate a culture that promotes diversity and inclusion within an exceptional community of students, faculty, and staff. It is our intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength, and benefit.

We intend to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let us know ways to improve the course's effectiveness for you personally or for other students or student groups.

If any of our class meetings conflict with any of your religious events, an excused absence will be provided when requested using the standard UF COP process as detailed in the [UF COP Course policies](#).

If you feel that you have experienced or witnessed any bias/treatment that falls short of these expectations, you may submit a report through the UF [COP Student Mistreatment Report](#).

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.bluer.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Appendix A. Course Directory

Teaching Partnership Leader/Course Director(s):

Michael Schwartz, PhD

- Email: mike@cop.ufl.edu
- Office: GNV Campus
- Phone: 352-273-6241
- Office Hours: See Canvas

Questions to Ask:

- Concerns about performance
- Guidance when there are performance problems (failing grades)
- General questions about content

Other Teaching Partnership Faculty Members:

Lindsey Childs-Kean, Pharm.D., MPH, BCPS

- Email: lchilds-kean@cop.ufl.edu
- Office: Gainesville
- Phone: 352-273-5715

Casey Rowe, Pharm.D.

- Email: casey.rowe@cop.ufl.edu
- Office: Orlando
- Phone: 407-313-7024

Instructional Designer:

Skylar Johnson

Email: skylarjohnson@cop.ufl.edu

Phone: 352-273-5719

Academic Coordinator:

Hanna Stallard

Email: hstallard@ufl.edu

Phone: 352-273-6312

Office: HPNP 4309

[Absence Ticket 2PD](#)

[Absence Ticket 3PD](#)

Educational Coordinators

Katie Orben

- Email: korben06@ufl.edu
- Office: Jacksonville Campus
- Phone: 904-244-9590

Andrea M Arredondo

- Email: aarredondo1@cop.ufl.edu
- Office: Orlando Campus
- Phone: 407-313-4087

Questions to Ask:

- Issues related to course policies (absences, make up exams, missed attendance)
- Absence/tardy requests (Only the Academic Coordinator handles absence requests)
- Questions about dates, deadlines, meeting place
- Availability of handouts and other course materials
- Assignment directions
- Questions about grade entries in gradebook (missing grades, incorrect grade)
- Assistance with ExamSoft® (Distance campus students may contact the Educational Coordinator for use of Exemplify and assistance during exams. The Academic Coordinator is the contact person for issues related to grading and posting of ExamSoft grades.)

Appendix B: Course Outline

Date / Time [Recommended for Independent Study]	Mod#	Activity	Activity Title	Contact Time (hr)	Responsible
	0	Module	Course Intro		Casey Rowe, Lindsey Marie Childs-Kean, Michael Schwartz
04/26/23		Lecture Video	Introductory Video		
4/26/23 @ 1pm- 2pm		Active Learning Session	Introduction to the Course	1	
	1	Module	Introduction to the Course		Casey Rowe, Lindsey Marie Childs-Kean, Michael Schwartz
04/27/23		Reading	Reading "Basics of Critical Thinking No. 1" - Note that it is important to study this material!!	0.6	
4/28/23 - 1 hr before class		Assignment (Graded)	Basics of Critical Thinking: Exercises 1A and 1B		
4/28/23 - 1 hr before class		Assignment (Graded)	Complete the Puzzlers:and submit your best answers on CANVAS Abracadabra 3 Lights		
04/27/23	1.1	Lecture Video	Video on Journal Writing	0.1	
04/27/23		Reading	Reading "Characteristics of a Critical Thinker"	0.6	
4/28/23 - 1 hr before class		Assignment (Graded)	Assignment: Journal Day 3 - Reflect on how you rate relative to the characteristics of a Critical Thinker. In doing this ask yourself: am I really aware of my beliefs and biases and how they might affect my thinking?		
04/27/23	1.2	Lecture Video	Video on the KWIC Method	0.1	
4/28/23 - 1 hr before class		Assignment (Graded)	Select a topic from the list on Canvas (or one that you think is important and prepare a brief (2 minute) talk using the KWIC method.		
04/27/23		Reading	Mind Map Materials	0.6	
4/28/23 - 1 hr before class		Assignment (Graded)	Create a Mind map of the Profession of Pharmacy. Note that Pharmacy has many aspects to consider such as practice sites, education, professional organizations, and others that you will put in.		
04/27/23		Reading	Bloom's Taxonomy Articles Focus attention mostly on the top 3 levels.	0.6	

Date / Time [Recommended for Independent Study]	Mod#	Activity	Activity Title	Contact Time (hr)	Responsible
04/27/23		Video Other	YouTube Video on Critical Thinking	0.1	
04/27/23	1.3	Lecture Video	View the Video on 6-Hats.	0.15	
04/27/23		Reading	Reading: Summaries of the 6-Hats Thinking Method. This is very important - which hat most closely correlates with YOUR thinking? You will find out in class. Also see the 6-Hats Mind map at http://www.mindmapinspiration.com/six-thinking-hats-mind-map-paul-foreman/	0.6	
04/28/23; GNV: 1pm-4pm; ORL: 9am-12pm		Active Learning Session	Active Learning Session 1	3	
04/28/23		Reading	Which One Are You (Open after each class starts)		
04/28/23		Reading	Six Thinking Hats List (WORD Document)		
	2	Module	Principles of Critical Thinking		Casey Rowe, Lindsey Marie Childs-Kean, Michael Schwartz
5/1/23 - 1hr before class		Assignment (Graded)	Journal Day 4 - Reflect on your first 1 or 2 years in the College of Pharmacy. How have they influenced your views on the profession and your potential future in practice?		
04/28/23		Reading	Reading "Basics of Critical Thinking No. 2. Again, study this material!!	0.5	
5/1/23 - 1hr before class		Assignment (Graded)	Exercises 2A and 2B		
5/1/23 - 1hr before class		Assignment (Graded)	Complete the Puzzlers and submit your best answers on CANVAS Who owns the mule Cards on the Table		
04/28/23	2.1	Lecture Video	Before reading the material on Focused Conversation view the brief Focused Conversation Video.	0.2	
04/28/23		Reading	Reading "Art of Focused Conversation" In preparing to lead a Focused Conversation write at least 2-3 questions in each of the four areas (O,R,I,D) that you would use.	0.5	
04/28/23	2.2	Lecture Video	Before reading the material on Socratic Questioning view the brief Socratic Questioning Video.	0.2	
04/28/23		Reading	Articles on Socratic Questioning	0.5	
04/28/23		Reading	List of Discussion topics on Socratic Questioning	0.5	

Date / Time [Recommended for Independent Study]	Mod#	Activity	Activity Title	Contact Time (hr)	Responsible
04/28/23	2.3	Lecture Video	Video on Term Project Examples	0.1	
04/28/23		Video Other	YouTube Video on Fallacies This one is helpful. You can find more on You Tube.	0.15	
04/28/23		Reading	Common Fallacies in Reasoning	0.5	
04/28/23		Reading	List of Fallacies to be used in the Fallacy Game	0.5	
04/28/23	2.4	Lecture Video	Before reading the material on DOIT view the brief DOIT Video.	0.5	
04/28/23		Reading	Reading on DOIT	0.5	
04/28/23		Assignment Ungraded	We will be holding debates in a later session. At this session we will solicit topics. Think about possible topics related to Pharmacy		
05/1/23; GNV: 1pm- 4pm; ORL: 9am- 12pm		Active Learning Session	Active Learning Session 2	3	
	3	Module	Creative Problem Solving in Pharmacy		Casey Rowe, Lindsey Marie Childs-Kean, Michael Schwartz
5/2/23 @ 12pm noon		Assignment (Graded)	Journal Day 5 First read the article On Dunning-Kruger Effect "Cognitive Bias" Reflect on the Quote "We do not describe the world we see; we see the world we describe". What does this mean to you? How might it apply to you? How might it influence you in the future		
5/3/23 - 1hr before class		Assignment (Graded)	Journal Day 6 Reflect on how you can use 6-hats in your work and life.		
05/02/23		Lecture Video	Video "Business of Paradigms" Note that this is an older video, but it is here because the principles are what is important.	0.75	
5/3/23 - 1hr before class		Assignment (Graded)	Write Focused Conversation Questions that you would use to prepare for the discussion on "Business of Paradigms"		
5/2/23 @ 12pm noon		Assignment (Graded)	Complete the Puzzlers: and submit your best answers on CANVAS Day 5: Nine Horses and Who Lives Where		
5/3/23 - 1hr before class		Assignment (Graded)	Complete the Puzzlers: and submit your best answers on CANVAS Day 6: Letter Multiplication and Murder in the Family		

Date / Time [Recommended for Independent Study]	Mod#	Activity	Activity Title	Contact Time (hr)	Responsible
5/3/23 - 1hr before class		Assignment (Graded)	List of Problems for DOIT Exercise		
5/3/23 - 1hr before class		Assignment (Graded)	Apply the DOIT method to create a plan for solving the problem you selected		
05/02/23		Reading	Discussion topics for Socratic Questioning Exercise	0.25	
5/3/23 - 1hr before class		Assignment (Graded)	Select a topic for the Socratic Questioning Exercise to use if you are the leader.		
5/3/23 - 1hr before class		Assignment (Graded)	Term Project Detailed Outline (Must be approved by instructor)		
5/3/22; GNV: 12pm-2pm; ORL: 10am-12pm		Active Learning Session	Active Learning Session 3	3	
	4	Module	Deductive and Inductive Logic		Casey Rowe, Lindsey Marie Childs-Kean, Michael Schwartz
5/4/23 @ 12pm noon		Assignment (Graded)	Journal Day 7: Reflect on making judgments on people (e.g., why we make judgments, on what are they based, importance of first impressions, and how you feel about what you do). Describe a time when something good or bad happened as a result of your first impression.		
5/5/23 - 1hr before class		Assignment (Graded)	Journal Day 8: Reflect on: What are your paradigms and how do they affect your life? What can you do about them?		
05/04/23		Reading	Articles on Debating	0.25	
05/04/23		Lecture Video	Video on Debating. We will be holding debates on the selected topics. Be prepared to debate either the Pro or Con on each. Read the debate scoring form which the Judges will be using.	0.1	
05/04/23		Reading	Debate Scoring Form Note that this will be used by the judges. It helps you to understand what is important in debating	0.25	
5/5/23 - 1hr before class		Assignment (Graded)	Analyze Argument Problems... You will get the correct answers and explanations as soon as you put in your response. These can be discussed in class.		
5/4/23 @ 12pm noon		Assignment (Graded)	Complete the Puzzlers for two days Day 7: Sticks and Squares and Nowhere, Nebraska		

Date / Time [Recommended for Independent Study]	Mod#	Activity	Activity Title	Contact Time (hr)	Responsible
5/5/23 - 1hr before class		Assignment (Graded)	Complete the Puzzlers for two days Day 8: What is Truth and BODY to SOUL		
5/5/22; GNV: 12pm-2pm; ORL: 10am-12pm		Active Learning Session	Active Learning Session 4	3	
	5	Module	Application of Thinking Skills - Part 1		Casey Rowe, Lindsey Marie Childs-Kean, Michael Schwartz
5/8/23 - 1hr before class		Assignment (Graded)	Journal Day 9 Imagine it is now 2040. Reflect on YOUR vision of how YOU would like Pharmacy being practiced. Use DOIT method to help you create your 2040 Vision. The intent here for you is NOT to predict what Pharmacy will be like in 2040, but for you to design what YOU think it should be in order to best serve health care. Using DOIT can help you create YOUR vision of Pharmacy's future.		
05/05/23		Lecture Video	Video on Triple A Approach	0.1	
5/8/23 - 1hr before class		Assignment (Graded)	Letter to the Dean: Write a letter to Dean Peter Swann on how Pharmacy Education can be improved. Use the Triple A Approach in making a good case for your argument.		
05/05/23		Lecture Video	Video on Logic	0.25	
5/8/23 - 1hr before class		Assignment (Graded)	Logic Problems: Do the Logic Problems Exercise in CANVAS. You will get the correct answers and explanations as soon as you put in your response.		
5/8/23 - 1hr before class		Assignment (Graded)	Write a brief paragraph explaining the importance of critical thinking in the practice of Pharmacy. Submit this to CANVAS and be prepared to discuss in class		
5/8/23 - 1hr before class		Assignment (Graded)	Complete the Puzzlers and submit your best answers on CANVAS Choices Black and White Hats		
5/8/23; GNV: 12pm-2pm; ORL: 10am-12pm		Active Learning Session	Active Learning Session 5	3	
	6	Module	Application of Thinking Skills - Part 2		Casey Rowe, Lindsey Marie Childs-Kean, Michael Schwartz

Date / Time [Recommended for Independent Study]	Mod#	Activity	Activity Title	Contact Time (hr)	Responsible
5/9/23 at 12pm		Assignment (Graded)	Journal Day 10: Reflect on the value of critical thinking in your future life beyond the practice of Pharmacy.		
5/10/23 - 1hr before class		Assignment (Graded)	Journal Day 11: Reflect on how the learning in this class is different from others in the College of Pharmacy and how your thinking skills have developed through this course.		
5/10/23 - 1hr before class		Assignment (Graded)	Three Things		
5/10/23 - 1hr before class		Assignment (Graded)	Term Project		
5/10/23; GNV: 12pm-2pm; ORL: 10am-12pm		Active Learning Session	Active Learning Session 6	3	
			Total Contact Time in Course:	29	