Online POP Course

PHA6799: Medication Safety and Quality Program Evaluation

3 credit hours

Note: The final syllabus posted on the course Canvas site is the most current and supersedes the syllabus posted online.

Class Meeting Times

Sundays, 6:00-8:00 pm Eastern

*Class on May 28, 2023, will be optional, but a live class will be recorded.

Class Meeting Location

Class meetings are held in Zoom, which can be accessed via the course Canvas site. If you have trouble accessing the course Canvas site, please contact Distance Education Support Services at DESS@ahc.ufl.edu.

Instructor

Randy C. Hatton, BPharm, PharmD, FCCP

Clinical Professor, Department of Pharmaceutical Outcomes and Policy

Director, Online Masters of Pharmaceutical Sciences/Medication Safety & Quality Systems

Email: hatton@ufl.edu
Cell Phone: 352-262-0736
Office Hours: By Appointment
Office Location: Virtual/Zoom

Course Description

Medication Safety and Quality Program Evaluation explores how patient safety and quality improvement studies are designed and executed. Program evaluation includes identifying quality or safety deficits, examining the root causes for these deficits, examining interventions that could address the root causes for the deficits, engaging stakeholders to determine what they value, establishing the appropriate methods to implement and assess the fidelity of the intervention, selecting a feasible study design, determining what data to collect, collecting and analyzing the data, drawing the appropriate conclusions, and then communicating the results to stakeholders.

Course Objectives

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

- 1. Evaluate health services related to patient safety and quality in medication use
- 2. Develop evaluation questions
- 3. Design program evaluations and select the optimal study design
- 4. Explain threats to the validity and reliability of measurement

- 5. State sampling techniques
- 6. Perform sample size determinations
- 7. Identify appropriate data collection methods for program evaluations
- 8. Identify data analysis techniques for program evaluations
- 9. Interpret and determine the proper use of results
- 10. Critique literature regarding program evaluations

Relationship to Program Outcomes

This course pertains to the following program outcomes:

- 1. Identify, interpret, and utilize core knowledge across the spectrum of Pharmaceutical Sciences.
- 2. Analyze and apply material from foundation courses in the curriculum, interpret data, and synthesize a response to a complex problem or case.
- 3. Deliver a presentation on a discipline-specific topic related to Pharmaceutical Sciences for internal academic review. These presentations will be clear in providing information at an appropriate level to the audience, complete in providing the necessary and relevant background from the literature, and will utilize appropriate audiovisual aids that are clearly constructed.

Required Textbooks and/or Software

Grembowski, David. The Practice of Health Program Evaluation, Second Edition. Sage Publications (2015), ISBN 978-1-4833-7637-0.

Recommended Materials

None

Course Pre-Requisites

None. If possible, taking this course near the end of your program is best.

Structure and Organization

This course is organized into weekly modules in UF's e-learning system, Canvas. Each module's assigned work (eg, readings, videos, homework, and other assignments) is clearly detailed in Canvas. In addition, the faculty and students meet synchronously once per week using Zoom. However, students are expected to complete the assigned work for each module before each weekly synchronous class meeting and by the posted deadline. This course is self-paced to accommodate the time constraints of individual students.

Course Schedule

Week	Date	Topics/Content	Assignments
0	Sunday, May 14	Course Introduction Meeting	Syllabus quiz
1	Sunday, May 21	Introduction to Evaluation Ch. 1: Health Program Evaluation: Is it Worth It? Ch. 2: The Evaluation Process as a Three-Act Play Quality Deficits in Healthcare [video] Quality Improvement and Research Goals [video] Root Causes of Safety & Quality Deficits [video]	• Quiz #1 • Homework #1
2	Sunday, May 28 *Optional attendance*	Program Evaluation, Interventions, & Study Designs Ch. 3: Developing Evaluation Questions Ch. 4: Evaluation of Program Impacts Quality Improvement Interventions [video] Quasi-experimental Study Designs [video]	 Quiz #2 Homework #2
3	Sunday, June 4	Evaluation of Program Implementation; Sampling Ch. 6: Evaluation of Program Implementation Ch. 7: Population and Sampling Principles of Causal Inference [video] Descriptive Statistics [video]	 Quiz #3 Homework #3 Final Paper Interim Assignment #1
	June 6—7	MIDTERM EXAM	Midterm Exam
4	Sunday, June 11	Measurement, Data Collection, & Analysis Ch 8: Measurement and Data Collection Ch 9: Data Analysis Measurement of Outcomes [video] Random Error & Common Statistical Tests [video] Applying Statistics [video]	 Quiz #4 Homework #4 Final Paper Interim Assignment #2
5	Sunday, June 18	Decision Making, Cost-Effectiveness, & Case Studies IHI Open School: QI 104; Lesson 1 How to Display Data on a Run Chart IHI Open School: QI 104; Lesson 2 How to Learn from Run Charts and Control Charts Ch 10: Disseminating the Answers to Evaluation Questions Ch 5: Cost-Effectiveness Analysis How to Estimate the Impact of a Quality Improvement Program [video]	• Quiz #5 • Homework #5
6	Sunday, June 25	<u>Final Papers</u>	Final Paper Due Final Presentations



Evaluation Methods

Class participation: Participation in the live online classroom sessions is mandatory. These sessions are an essential part of this course. Students may be permitted to submit a makeup assignment for one <u>excused</u> absence. (See Class Attendance Policy)

Online quizzes: This course will involve mandatory readings, online assignments, and pre-recorded lectures that must be reviewed before each weekly quiz. Weekly quizzes will be available for at least 3 days before each class. Quizzes will include 10 multiple-choice or short-answer questions over 15 minutes. There will be six quizzes [including the syllabus quiz], and the lowest quiz grade will be dropped. The purpose of the quizzes will be to assess readiness for the weekly discussions and understanding of the course materials. The quiz average will contribute 20% towards the final grade in this course (ie, each quiz will contribute 4% towards your final grade).

Final Paper: Each student must complete a **proposal** to evaluate a patient safety or quality intervention. The basic concepts of the papers will be discussed during many of the discussion sessions. The course coordinator must approve the project topic. The proposal for this project should be 7–10 pages and be formatted following the POP Online Graduate Program: Style Guide for Writing Assignments. The instructions that follow divide the proposal content into its different components. Use these headings to structure the proposal. References used to support your proposal should be sequentially numbered, listed as a superscript at the end of a sentence, and listed at the end of the document. Use the original citation number if a reference cited earlier in the paper is used later.

The Final Paper will present the entire proposal. The paper is divided into phases to keep students on schedule and to ensure that students understand the assignment. There will be two interim assignments that must be submitted via Canvas. These will be one-page summaries related to your intended final paper. These papers will be submitted via Canvas and graded based on whether you followed the instructions and summarized the listed information. After the scheduled discussion sessions, you should update this information.

Interim Final Paper Assignment #1:

Submit a summary stating the prevalence/relevance of your topic, a quality deficit associated with this topic, potential causes for this deficit, your evaluation question, the proposed setting for your evaluation, and your proposed program or intervention.

This submission should be supported by the quality deficit identified and the logic of why your intervention should address program issues based on the root causes of the quality gaps. Students should assess the current practice for the chosen topic. Information on deficits should be extracted from literature searches or other relevant resources that publish quality assessments and improvement data. Major deficits (ie, shortfalls in specific healthcare services related to the disease state) should be identified.

Students should then propose a patient safety or quality improvement program (intervention) that has demonstrated effectiveness. The intervention may include more than one evidence-based component. Some published interventions include more than one part. This is because the investigators are committed to improving quality and include more than one improvement element to show an essential change in care. This is good for enhancing quality and safety, but it makes assigning cause and effect to one component challenging. Thus, if studies that use multiple components are used to justify your intervention, you must include all elements.



Justification for selecting the proposed intervention(s) should be based on evidence supporting the intervention's effectiveness. Interventions are typically less rigorously tested than drugs or other medical services. Thus, finding a randomized controlled trial (RCT) supporting the selected intervention(s) is unnecessary. However, students should address what information convinced them that the intervention might work and why. Articles that evaluate the performance of interventions must be critiqued, providing the strengths and weaknesses of the evidence. Innovative and creative ideas will be rewarded, ie, students are encouraged to modify existing interventions or add novel components. An example of an innovative intervention would be something shown to address the root of the problem from nonmedical evidence (eg, behavioral psychology, educational, or marketing research). It is essential that the rationale for selecting the intervention is communicated and appears reasonable.

Interim Final Paper Assignment #2:

Re-submit interim assignment #1 with any revisions and a summary explaining your choice of study design [with a rationale for your choice], your outcome measures, your primary outcome [and explain the endpoint], a process measure to assess the adherence to the intervention(s), your anticipated effect from your intervention, your data analysis methods, and explain your sample selection.

The final paper applies and reinforces study design concepts learned in this class. It would be best to select the most robust, feasible study design. The choice of the study design should be briefly explained and explain how biases may be avoided or addressed. For example, blinding may only work for some interventions. Likewise, randomization may be difficult for some interventions and settings.

You should briefly describe how the strength and consistency of the intervention could be monitored during the study. Like compliance/adherence/persistence measures for the use of a study drug, it is possible to introduce a process measure or measures that reflect the degree of implementation of the intervention during the evaluation period.

Based on the selected intervention, students should choose outcomes or process measures appropriate to evaluate the impact of the intervention. The selection of measurements should be based on various considerations. Data for the measurements should be feasible to collect. The selected process and outcome measures should be reliable and valid (eg, patient self-reporting might work for specific data elements while it may be unreliable for others). The selected measurements should be relevant to clinical outcomes, i.e., their association with these outcomes (morbidity and mortality) should be strong. The chosen measures should be sensitive to detect improvements over time. For example, mortality measures may not be sensitive enough to show an improvement over time because the sample sizes are likely too small to affect mortality dramatically.

Benchmarks should be available for at least the primary measure or data on a similar measure that could function as a benchmark. Selecting an outcome (surrogate or clinical outcome) and a process measure is advisable. While outcome measures make the most persuasive case for the impact on patient health, process measures are more closely related to the intervention. They may strengthen the association between the intervention and the outcome. The selected measures should be operationalized. Students should explain how the collected data will be summarized (eg, the proportion of patients below or above a certain threshold or mean values), how data are collected, and in the case of proportions, the numerator and denominator are stated. If multiple measures are chosen, the primary outcome measure (like the primary endpoint for RCTs) should be highlighted and used for the sample size calculation. If the measurements are derived from established evidence (studies, quality organizations), these sources should be quoted

in the paper to support the selection.

Statistical comparisons for the sample size calculation should be simple (ie, between-group or within-group comparison of proportions or means with the appropriate inferential statistics such as Chi-Square or T-Test). The type of statistical comparison will depend on the type of measure (continuous versus nominal) and the study design. If a control group is used, then between-group comparisons are appropriate. When no control group is used, within-group comparisons (pre-/post) are appropriate. Once the data analysis method(s) is selected, students should provide a sample-size calculation to determine the sample size needed. A sample size (power) calculator should be used. Cite the source of the calculator used. If you think confounders should be considered for multivariate analysis, state this qualitatively with a list of the variables that would be included in this analysis.

The Final Paper

The Final Paper is due on 6/25/2023 at 4:00 pm Eastern Time. This paper will be the complete proposal for evaluating a patient safety or quality improvement program, demonstrating your ability to apply the material in the course.

Each proposal's end is a short paragraph on its anticipated impact. This section aims to "sell" the study to potential supporters (eg, stakeholders, the administration of the health care setting, or funding agencies). It allows one to express why this proposal is essential for the specific healthcare setting. One element that can stress the study's significance is its economic impact. This class will focus on public health impact, ie, the projected impact on the utilization of health care resources, morbidity, quality of life, and mortality. Still, you are encouraged to add an estimate of cost-benefit. Financial analysis may result in extra credit points being awarded. These projections should be based on the selected effect size and its effect on the utilization of health care resources, patient morbidity, and mortality. Forecasts should be reproducible and based on published evidence, which should be referenced appropriately. This section should require up to two pages of your paper.

INTRODUCTION/PROBLEM STATEMENT

- 1. State the Prevalence/Relevance of Your Topic.
- 2. List a Quality Deficit.
- 3. List Potential Causes for the Quality Deficit.
- 4. State Your Evaluation Question.

METHODS

- 5. State the Setting of Your Evaluation.
- 6. State and Explain Your Program or Intervention.
 - a. Provide Literature Support for Your Program or Intervention.
 - b. Link Your Selected Program/Intervention to the Root Cause of Your Selected Quality Deficit.
 - c. Designate and Explain a Process Measure that will Measure Adherence to Your Program or Intervention.
- 7. State and Explain Your Evaluation Design with the Rationale for Your Choice.
 - a. Describe the Comparison Group in Your Study [if applicable].



- 8. Select Your Outcome Measures (Specify Your Primary Outcome).
 - a. Explain Your Outcome Measures (eg, numerator and denominator if the outcome is nominal):
- 9. Estimate and Justify the Effect Your Intervention Should Have on the Primary Outcome.
- 10. Select a Data Analysis Method, Estimate a Sample Size, and Explain the Variables Used in Your Estimate.

IMPACT/SIGNIFICANCE OF THE EVALUATION

11. Estimate the Impact and Significance of Your Intervention (eg, Clinical Impact, Cost-Benefit, and Time/Cost Justification).

REFERENCES

Include all references related to Sections 1-11.

Interim Assignments:

Interim Assignment #1: Answer questions #1-#6

Interim Assignment #2: Revise your answers to questions #1–#6 and answer questions #7–10 Final Paper: Revise answers #1–#10 and answer question #11.

The final paper will determine 20% of your final grade and will be assessed using the following rubric:

	Excellent	Acceptable	Poor
The Relevance of Topic (10)	10	7	4
	The topic is	The topic is	The topic is
	appropriate for the	appropriate for the	inappropriate for the
	course and the	course and student's	course
	student's track and is	track	
	interesting		
Format (10)	10	7	4
# of pages, margins, spacing,	Follows the syllabus	Follows most of the	Follows little of the
etc.	and is easy to read	syllabus directions	syllabus directions
Level of content (25)	25	20	15
	Content shows the	The content shows	Shows some critical
	synthesis of ideas,	critical thinking and	thinking and
	in- depth analysis,	reasoning applied	reasoning, but most
	evidence of original	with original	ideas are
	thought and covers	thoughts on a few	underdeveloped or
	the	ideas	unoriginal
	salient points		

Development of Main Points (25)	25	20	15
Development of Main Comes (25)	Well developed	Little detail and	Lacks detail with
	with quantity and	development.	vague ideas and little
	quality support	Some critical	evidence of critical
		thinking	thinking
Grammar and Mechanics (10)	10	7	4
	Free of distracting	Limited spelling,	Distracting spelling,
	spelling,	punctuation,	punctuation, and
	punctuation,	and	grammatical errors
	and grammatical	grammatical errors	
	errors		
Style (15)	15	12	8
	Outstanding style	Approaches style	Mostly in elementary
	beyond the usual	expected for a	form.
	level	graduate-level	
		paper	
Appropriate References & Format (5)	5	3	1
	Excellent choice of	Adequate	Poor choice of
	reference material	references are cited	reference material
	cited in the correct	in the appropriate	cited in an
	format with	format.	inappropriate format
	appropriate		
	reference		
	format at the end		
	of the paper		
Total Points:	100		

Timeline for instructor feedback:

Grades and feedback from the instructor will be posted within 7 calendar days.

Attendance Policy for this Course

Students are expected to attend synchronous class meetings. Students who miss 30 minutes or more of the synchronous class meeting are considered absent.

Unexcused absences from a class carry a 5-point (1/2 letter grade) penalty taken off the final grade.

Excused absences require a makeup reflection paper on the module topic to be submitted within 2 weeks of the missed class (unless the class is near the end of the semester and a shorter timeline will be required). Absences are considered excused when the student (not a peer) has emailed the instructor before the synchronous class meeting begins and conveys why the student will miss class, such as illness, job conflict, and



other emergencies. Two or more excused absences will be addressed by the instructor and may result in an incomplete final grade for the course.

Attendance Policy for Online POP

Students are expected to formally <u>drop or withdraw</u> from the course if they no longer wish to participate. See the program's <u>Academic Calendar</u> for applicable deadlines. In some cases, the University may automatically drop students for inactivity and/or for failure to pay tuition. It is crucial for students to communicate with the DESS (DESS@ahc.ufl.edu) about their status in the course, and about any tuition deferments or other special conditions related to their tuition payment. Any student who remains enrolled in the course after the drop/add deadline is considered tuition-liable, unless exempted by University petition. The official UF Attendance Policy can be found <u>here</u>.

Makeup Policy:

Each assignment is posted with a clear due date. **Assignments that are not submitted by the due date will be given a zero.** The instructor will consider extenuating circumstances on a case-by-case basis – if he is contacted by the student in advance of the due date. No other makeup assignments are offered. Contact the instructor for any concerns.

Grading Policy

The only passing grades for graduate students are A, A-, B+, B, B-, C+, C, and S. Grades of B-, C+ or C count toward a graduate degree if an equal number of credits in courses numbered 5000 or higher have been earned with grades of B+, A- and A, respectively. Grade points are not given for S and U grades; S and U grades are not used to calculate grade point averages. All letter-graded courses eligible to count toward the graduate degree, except 1000- and 2000-level courses, are used to calculate the cumulative grade-point average. Letter grades of C-, D+, D, D- or E are not considered passing at the graduate level, although the grade points associated with these letter grades are included in grade point average calculations. See the <u>UF graduate</u> academic regulations for more information.

A >92.500%

A- 89.500-92.499%

B+ 86.500-89.499%

B 82.500-86.499%

B-	79.500–82.499%
C+	76.500–79.499%
С	72.500–76.499%
C-	69.500-72.499%
D+	66.500–69.499%
D	62.500-66.499%
D-	59 500–62 499%

Course Technology Support

<59.499%

F

Your instructor is not able to handle technological issues or answer questions related to computer issues.

- Assistance accessing course Canvas page: Contact Distance Education Support Services at DESS@ahc.ufl.edu
- **IT Support:** Contact UF Computing Help Desk at 352-392-HELP (4357) or helpdesk@ufl.edu or submit an online request form. If a technical problem causes you to miss an assignment, you must report the problem to the Help Desk and then email your instructor your Help Desk ticket number to the instructor in order to receive an extension.

Students Requiring Academic Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the <u>Disability Resource Center</u>. 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.

Course technologies meet online learning accessibility standards for sight and hearing-impaired learners. Likewise, course materials are developed in accordance with accessibility standards. Course documents and webpages are formatted for screen-reader accessibility with the use of headings, styles, or alternative text tagging for images. Accessibility design tools in Microsoft Office products and in Canvas are used to evaluate and update accessibility issues detected in the instructional materials. Synchronous class sessions in Zoom are recorded. These recordings are posted to the course site to accommodate students unable to attend.

Canvas Accessibility

Zoom Accessibility

Course Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Click here for guidance on how to give feedback in a professional and respectful manner. 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 ufl.bluera.com/ufl/.

University Honesty Policy and Academic Integrity

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students 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." The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Regarding academic integrity, students in the program are strongly encouraged to be mindful of what constitutes plagiarism. Written assignments that contain the research or other original published work of someone else must be properly quoted, cited, paraphrased, or referenced appropriately. A software (TurnItIn) that is integrated with Canvas Assignments may be utilized to help students determine if a written submission meets the criteria for a properly referenced research paper. Please ask for help, utilize resource materials and take advantage of opportunities like creating a draft of your paper to test, ensuring you have addressed any errors prior to the final submission.

Please watch these short videos about this topic:

- Understanding and Avoiding Plagiarism: Types of Plagiarism
- Avoiding Plagiarism

Software Use and Course Technology

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.



Educational technology in the program is primarily the Canvas Learning Management System (LMS) and Zoom web conferencing software. These tools firmly support learning objectives and course goals. Writing with communication tools, reading articles from digital collections, and viewing video presentations in high-quality, accessible formats are essential to facilitate meaningful learning experiences. These experiences expand knowledge and influence professional work habits and skills such as information-gathering techniques and evidence-based practice. Synchronous class sessions in Zoom provide learners with opportunities to gain confidence and practice how they interact and collaborate in online meetings.

- Canvas Student Guide
- Zoom Resources

A minimum number of other technical skills are required for success in the online courses. These include accessing course webpages to read text and listen to recorded videos, using word processing tools (MS Word, PowerPoint), downloading/uploading content, submitting online assignments and using a variety of communication tools (Canvas Inbox, Discussions, Zoom Conferences).

Course Communication

Canvas (Inbox tool) will be used as the primary communication tool between the instructor and students. Check daily for new announcements or notifications about course updates. UF email will also be used occasionally for mass communication to the class, so please check your email at least once a day as well. All emails sent out to the entire class will also be posted as an Announcement on Canvas. The instructor will generally respond to student messages within 48 hours.

General questions about course content (e.g., assignments or lectures) or policies should be posted to the course discussion board. We expect students to help each other track down answers as best as possible. Read through all the other posts in the discussion board first before posting to make sure your question has not been addressed/answered already. Please include a clear subject title for your topics to make it clear what your post pertains to. The instructor will generally respond to questions posted on the course discussion board within 48 hours.

Emotions can easily be misinterpreted on a discussion board/emails, so make sure your message is clear before sending it since there are no physical gestures or voice inflections that accompany posts/emails. Any posts/emails deemed inappropriate by the faculty will be dealt with on a case-by-case basis with either the faculty directly or they will be sent on to the Associate Dean for Professional Affairs.

For personal issues/questions, please email your instructor. Be sure to include in your subject line the course listing and then a quick subject (e.g., PHAXXXX – Your Name -). This will allow instructors to quickly identify emails related to the course amongst the many emails that are received each day. Emails not correctly addressed may get lost in the shuffle and unintentionally deleted or ignored so be sure to follow the



guidelines exactly.

Student Privacy

There are federal laws protecting your privacy in terms of grades earned in courses and on individual assignments. For more information, please see the Notification to Students of FERPA Rights.

Recordings of weekly class sessions in Zoom are created for the purpose of course teaching and learning, as well as for use as a resource for students who miss a class session.

The use of video (or web camera) feature in Zoom is not a requirement, but rather is voluntary for meeting participants. For both the audio and video features in Zoom, you will have the option to Start or Stop these functions.

Students who participate with their camera engaged or who utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

- Zoom Software Privacy Statement
- Canvas (by Instructure) Privacy Policies

Security

Online activity in Canvas requires an active UF GatorLink account to log in, as well as enrollment in courses. The Zoom Conference meetings for weekly classes are accessed within Canvas. These meetings have a pass code applied as an additional security setting. Students in the class do not need to enter the passcode, however anyone not enrolled in the course cannot join the meeting without it.

Library Resources

For remote access to UF library resources such as e-journals or other digital collections, use the <u>UF VPN or proxy</u> server to connect.

Additional University Resources

• **U Matter, We Care:** If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> or 352 392-1575 so that a team member can reach out to the student.



- Counseling and Wellness Center
- Sexual Assault Recovery Services (SARS): Student Health Care Center, 392-1161.
- University Police Department at 392-1111 (or 9-1-1 for emergencies), or police.ufl.edu
- <u>E-learning technical support</u>: 352-392-4357 (select option 2) or email to Learning-support@ufl.edu.
- Teaching Center: Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.
- Writing Studio: 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.
- Student Complaints