

Term Information

Effective Term Autumn 2016

General Information

Course Bulletin Listing/Subject Area Pharmacy
Fiscal Unit/Academic Org Pharmacy - D1800
College/Academic Group Pharmacy
Level/Career Undergraduate
Course Number/Catalog 2367
Course Title Introduction to Evidence-Based Medicine
Transcript Abbreviation Evidence-Based Med
Course Description This course provides the opportunity for students to explore how to use available evidence in the pharmaceutical sciences. Students will engage in activities to enhance their skills in finding, evaluating, and using information to address scientific and health care problems. Guidance on professional writing and communicating technical information will be an integral part of the course.
Semester Credit Hours/Units Fixed: 3

Offering Information

Length Of Course 14 Week
Flexibly Scheduled Course Never
Does any section of this course have a distance education component? No
Grading Basis Letter Grade
Repeatable No
Course Components Lecture
Grade Roster Component Lecture
Credit Available by Exam No
Admission Condition Course No
Off Campus Never
Campus of Offering Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites English 1110 or equivalent
Exclusions

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 51.2010
Subsidy Level Baccalaureate Course
Intended Rank Freshman, Sophomore, Junior, Senior

Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors
General Education course:
Level 2 (2367)

Course Details

Course goals or learning objectives/outcomes

- Through critical analysis, discussion, and writing, students extend the ability to read carefully and express ideas effectively.
- Students apply written, oral, and visual communication skills and conventions of academic discourse to the challenges of a specific discipline.
- Students access and use information critically and analytically.
- Identify ways to access medical and scientific studies, and differentiate anecdotal evidence, pilot studies, and FDA-approved clinical trials.
- Analyze cases, statistics, news releases, and government policies surrounding drug use in the United States.
- Employ different methods for communicating information to audiences of varying expertise.
- Research the health and environmental effects of a given drug's (i.e., marijuana) use and identify gaps in current knowledge.
- Explain the influence of businesses and economics on a given drug's (i.e., marijuana) use/abuse in the United States.

Content Topic List

- Communications on marijuana in the US: past and present. What is a drug? The history of marijuana in the United States. Evaluating evidence and delivering a message.
- US culture, science, and politics. Roles of the US government and clinical research. Roles of the US government and clinical research.
- Marijuana use in the US: what the data say. Reported US consequences of marijuana use. Post-legalization, the aftermath - Colorado as a case study.

Attachments

- Pharmacy 2367 Course Syllabus Revised.pdf: Revised Syllabus AU16
(Syllabus. Owner: Higginbotham, Mary Christina)
- Pharmacy 2367 GE Rationale.pdf: GE Rationale Document
(Other Supporting Documentation. Owner: Higginbotham, Mary Christina)
- Pharmacy 2367 Writing GE Assessment Plan.pdf: GE assessment plan
(GEC Course Assessment Plan. Owner: Higginbotham, Mary Christina)

Comments

- Please see instructions for submissions of courses for GE Writing and Communication Level II pp. 33-35 of ASC Curriculum and Assessment Operations Manual

https://ascas.osu.edu/files/ASC_CurrAssess_Operations_Manual.pdf

In particular, please provide:

- GE rationale document
- GE assessment plan

Please bear in mind that GE 2nd writing courses need to deal with the American experience (topics and writing related to the US). You might like to look at titles and course descriptions of other courses in that GE category.

P. 15 of the ASC Curriculum and Assessment Operations Manual also outlines elements that need to be in submitted syllabus. For example, please add:

- GE goals and expected learning outcomes followed by statement how the course will satisfy those expected learning outcomes.
- List of required texts and other course materials, and information on where they are available.
- Percentages assigned to various assignments.
- Perhaps more detail on assignments & schedule. *(by Vankeerbergen, Bernadette Chantal on 05/19/2015 11:40 AM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Higginbotham, Mary Christina	05/08/2015 04:54 PM	Submitted for Approval
Approved	Kelley, Katherine Ann	05/11/2015 08:15 AM	Unit Approval
Approved	Kelley, Katherine Ann	05/11/2015 08:16 AM	College Approval
Revision Requested	Vankeerbergen, Bernadette Chantal	05/19/2015 11:42 AM	ASCCAO Approval
Submitted	Higginbotham, Mary Christina	01/20/2016 05:12 PM	Submitted for Approval
Approved	Kelley, Katherine Ann	01/20/2016 08:29 PM	Unit Approval
Approved	Kelley, Katherine Ann	01/20/2016 08:30 PM	College Approval
Pending Approval	Nolen, Dawn Vankeerbergen, Bernadette Chantal Hanlin, Deborah Kay Jenkins, Mary Ellen Bigler Hogle, Danielle Nicole	01/20/2016 08:30 PM	ASCCAO Approval

Drug Use in American Culture (PHR 2367)

3 Credit hours

Fall 2016

Course Description

In this course, we investigate a given drug by assessing its historical use, clinical properties and risks, role in American culture, and other issues surrounding its use/abuse in the United States. Students will engage in activities that will teach them to appropriately analyze various sources of information and effectively communicate key messages using a variety of platforms. In this term, we will focus on marijuana.**

This course and its instructors do not promote the use/abuse of marijuana. This medically and socially relevant topic only serves as context by which to teach writing and communication skills.

*[**Administrative Note: This course is designed so that a different drug may be the focus in any given term. The first offering of the course will focus on marijuana]*

Instructor

TBD

Course Information

TBD

Learning Objectives

General Education: Writing and Communication 2

Goal: Students are skilled in written communication and expression, reading, critical thinking, oral expression and visual expression.

Expected Learning Outcomes

1. Through critical analysis, discussion, and writing, students extend the ability to read carefully and express ideas effectively.
2. Students apply written, oral, and visual communication skills and conventions of academic discourse to the challenges of a specific discipline.
3. Students access and use information critically and analytically.

This course will achieve these outcomes through readings and writing assignments focused on clarity, targeted presentation to intended audience, reasoning and arguing from evidence, weighing different interpretive options and arguing convincingly for the writer's chosen approach. The course also requires one oral presentation that will be assessed on purpose, style, use of communication aids, content organization and supporting evidence. By the end of the semester students will be better able to communicate their ideas concisely while supporting their arguments with relevant evidence and analysis.

Course-Specific Expected Learning Outcomes

1. Identify ways to access medical and scientific studies, and differentiate anecdotal evidence, pilot studies, and FDA-approved clinical trials.
2. Analyze cases, statistics, news releases, and government policies surrounding drug use in the United States.
3. Employ different methods for communicating information to audiences of varying expertise.
4. Research the health and environmental effects of a given drug's (i.e., marijuana) use and identify gaps in current knowledge.
5. Explain the influence of businesses and economics on a given drug's (i.e., marijuana) use/abuse in the United States.

Teaching Method

Lectures, Student Presentations, and Film-viewing; 3 contact hours per week.

Required Texts

Required texts, sites, and videos for required viewing will be accessible through the library or open access online. Links have been provided in the weekly schedule below.

Recommended Texts

None

Assignments

There will be three types of assignments in this class:

1. *Short Response Writing Assignments*

These will include your analysis of the text/film/news reviewed during or in preparation of class. You will submit these assignments throughout the semester. The Response Writings encompass various formats in order to: 1) teach you how to fine tune your responses based on audience type and venue and to, 2) encourage synthesis of information in a concise and articulate manner.

2. *An Oral Presentation*

This assignment is meant to help you formulate succinct messages and communicate them in a clear manner to your peers. You will be graded on your ability to communicate verbally and visually. Each presentation will be three Power Point slides in addition to one title slide and should summarize 3 key takeaways. You will have three minutes to present and two minutes to respond to questions.

3. *A Final Paper* (5-8 double-spaced pages, Arial font size 11). A full description of the paper and a list of paper topics will be posted on Carmen; you have the opportunity to propose your own paper topic or to choose one from Carmen. You will turn in a detailed outline of this paper to the instructor during Week 5, submit a draft for peer review during Week 9, and deliver the final paper during Week 14. The grade for this assignment will be broken down as follows:

- a. *Outline (10%)*: organization of thought is crucial to having a clear point of view and message to your audience
- b. *Peer review (15%)*: acquiring feedback and subsequent revision are essential components of the writing process
- c. *Final paper (45%)*: your reflection on materials covered and independent sourcing will be illuminated in the final paper, which will be focused on one area of the legalization of marijuana in the United States
- d. *Poster presentation (30%)*: the ability to present your final paper in a concise and commonly-used scientific format will enable you to crystallize your points and practice the art of peer-to-peer presentations

All assignments are due at the beginning of class. Papers received later than the time specified will be marked down one grade for every 24 hours late; the clock starts when the paper is due at the beginning of class.

Examination

An in-class written examination in the middle of the semester will cover material found in readings, discussions, and lectures.

Grading

Response Writing Assignments: 25%

Oral Presentation: 20%

Midterm examination: 20%

Formal Paper (4 parts): 25%

Participation: 10%

Total 100%

Your final grade will be calculated as follows:

A 93-100%, A- 90-92%, B+ 87-89%, B 83-86%, B- 80-82%, C+ 77-79%, C 73-76%, C- 70-72%, D+ 67-69%, D 60-66%, E 0-59%

Attendance

Attendance at lectures and discussion sections is mandatory. More than two unexcused absences will result in a percentage point deducted from the final grade for each absence.

Student Disability

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>.

Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct (<http://studentlife.osu.edu/csc/>)

FOR YOUR SAFETY, the OSU Student Safety/Escort Service is available after 7 p.m. by dialing 292-3322.

Course Schedule

(Readings should be completed prior to class meeting)

University calendar: <http://registrar.osu.edu/staff/bigcalsem.asp>

Weekly Readings and Discussions

See Table

Modules	Weeks	Topics	Learning Goals	Required Readings/Viewings	Assignments
Module 1: Communications on Marijuana in the US: Past and Present (Weeks 1-2)	Week 1	<i>What is a drug?</i> <i>The history of marijuana in the United States</i>	1) Explain standards of a medicinal product 2) List known psychoactive compounds in marijuana plants 3) Summarize the historical use of marijuana in the United States and relevant US communications	Reading: http://www.scientificfactsofpot.com/	Response Writing #1: Blog In class 1, write a 100-200 word summary of your initial stance on marijuana as a medicine. At the end of Week 1, write on one interesting finding on the history of marijuana use in the United States (200-300 words).
	Week 2	<i>Evaluating evidence and delivering a message</i>	1) Describe the channels by which topics are communicated in the public sector 2) Identify subjective vs objective approaches to delivering information on health risks and benefits 3) Identify ways to access medical and scientific studies such as PubMed 4) Identify a topic for your Final Paper	Readings: Argument & Clarity: 1) Concise Writing http://knowledge.thinkingstorm.com/ArgumentClarity/ConciseWriting.aspx 2) Using Logic http://knowledge.thinkingstorm.com/ArgumentClarity/UsingLogic.aspx 3) Avoiding Bias http://knowledge.thinkingstorm.com/ArgumentClarity/AvoidingBias.aspx	Choose a topic for Final Paper Possible topics: -US Production of Legalized Marijuana -US Marijuana Profits Post-legalization -Marijuana: Medical Research -Marijuana: Health Risks and Benefits -US Government and Marijuana Criminalization -Restricting Access to Legalized Marijuana

Module 2: US Culture, Science, and Politics (Weeks 3-4)	Week 3	Roles of the US Government and Clinical Research	1) Describe US government authorities, medical societies, and advocacy groups relevant to marijuana use 2) Differentiate anecdotal evidence, pilot studies, and FDA-approved clinical trials 3) Construct an analysis on the learnings	Reading: Answers to Frequently Asked Questions about Marijuana (in the United States). <i>Office of National Drug Control Policy</i> . Available at: https://www.whitehouse.gov/ondcp/frequently-asked-questions-and-facts-about-marijuana#research Accessed October 2015.	<u>Response Writing #2: Analysis</u> Based on the lectures and reading, construct an analysis on the impact of US government authorities on drug policy (1-page, single-spaced, Arial font 11)
	Week 4	Roles of the US Government and Clinical Research <i>(continued)</i>	1) Describe FDA-approved medicines that contain cannabinoids 2) Evaluate strengths and weakness, including any relevant bias, of the films through a written critique	Viewing: Medicinal Cannabis (47 min) http://topdocumentaryfilms.com/medicinal-cannabis/ Accessed October 2015.	<u>Response Writing #3: Critique</u> Write a tabled critique of the documentary (1 table per film). The table should be one-half to 1 page in length (single-spaced, Arial font 11) <i>Rows: each to contain 1 fact expressed in the film (need 3-facts)</i> <i>Columns: each to contain a heading for Strength(s) and Weakness(es) - fill in the strengths and weaknesses of each fact</i>
Module 3: Marijuana Use in the US: What the Data Say (Weeks 5-7)	Week 5	<i>Reported US consequences of marijuana use</i>	1) Analyze US drug cases and statistics 2) Explain the health and environmental dangers of marijuana use	Reading: Teen marijuana use worsens depression. <i>Office of National Drug Control Policy, Executive Office of the President</i> . May 2008 (8 pages). Available online	<u>Turn in outline of Final Paper</u>

				via OSU library at: http://permanent.access.gpo.gov/lps116702/teen-marijuana-depression-report.pdf Accessed October 2015.	
Week 6	<i>Post-legalization, the aftermath - Colorado as a Case Study</i>	<p>1) Compare the positive and negative effects of marijuana legalization as reported in Colorado</p> <p>2) Comprehend how to communicate information to the general audience and to medical professionals</p>	<p>Reading: CDC: 221 sickened by synthetic pot in Colorado. USA Today. December 12, 2013. Available at: http://www.usatoday.com/story/news/nation/2013/12/12/synthetic-pot-colorado/4005257/ Accessed October 2015.</p>	<p><u>Response Writing #4: Knowing Your Audience</u></p> <p>Describe one positive and one negative effect of marijuana legalization in Colorado. You will write 2 versions: 1) To an eighth-grade level audience 2) To a medical professional</p> <p>Together, both summaries will fit on 1 page (single-spaced, Arial font 11).</p>	
Week 7	<i>You're the reporter: class activity</i> <u>MIDTERM</u>	<p>1) Identify one key finding from the Colorado case study presented last week</p> <p>2) Comprehend the essential components of creating a 30-second script</p> <p>3) Articulate the finding in a script and in-class presentation</p>	<p>Reading: 30-second Script Template: http://news.bbc.co.uk/2/shared/bsp/hi/pdfs/30_08_06worksheets3.2.pdf. Accessed January 2016.</p>	<p><u>Response Writing #5: You're the Reporter</u> Write a script that summarizes a select finding from the Colorado Case Study. The script needs to result in a report lasting 20 to 30 seconds when read. You will be reporting in class and will turn in the corresponding script.</p>	

Module 4: The future of marijuana in the United States (Weeks 8-9)	Week 8	<i>The future of marijuana in the United States: current medical and scientific evidence</i>	1) Explain known consequences of marijuana use 2) Identify gaps in current knowledge of marijuana effects on the human body	Reading: The dangers and consequences of marijuana abuse. <i>US Department of Justice, Drug Enforcement Administration. Demand Reduction Section; May 2014.</i>	<u>Turn in topic for Presentation:</u> Consequences of marijuana use
	Week 9	<i>The future of marijuana in the United States: business and economics</i> <i>In-class workshop: peer review</i>	1) Review the influence of US businesses and economics on its legalization in the United States 2) Revise Final Paper draft based on peer review process	Viewing: Marijuana USA, from CNBC 2013 (excerpt on financial aspects, 22:35 to 38:48) https://www.youtube.com/watch?feature=player_detailpage&v=4Ll1BdYrFdY	<u>Peer review of Final Paper Draft #1</u>
Module 5: A Balanced Approach to Communicating Data (Weeks 10-14)	Week 10	<i>Presentation workshops</i>	Outline your topic and the focus of each slide in your PowerPoint (slide-by-slide)	Viewings: Peer presentations	<u>In-class informal presentations of PowerPoint topical outline</u>
	Week 11	<i>Presenting a balanced view</i>	1) Analyze news releases and study findings for strengths and weaknesses 2) Critique PowerPoint slides to ensure the messages are balanced		<u>Turn in final PowerPoint slides</u>

	Week 12	<i>Student Presentations: Positive and negative consequences of marijuana use</i>	1) Assess your peers' presentations skills and delivery of information 2) Convert key information from your Final Paper into a Poster format	Viewings: Peer presentations http://www.writing.engr.psu .edu/posters.html	<u>In-class formal presentations</u>
	Week 13	<i>Student Presentations: Positive and negative consequences of marijuana use</i>	1) Assess your peers' presentation skills and delivery of information 2) Finalize Final Paper/Poster	Viewings: Peer presentations	<u>In-class formal presentations</u> <u>Turn in Final Paper</u> <u>Start Poster for Mini Conference</u> Summarizes the Final Paper, showcasing in a Poster Format
	Week 14	<u>Mini Conference</u> Students and their peers will experience a mock scientific conference by reviewing posters (i.e., summaries in a large Poster format) of their peers' Final Papers	1) Review peers' posters during an in-class activity 2) Showcase Final Paper in a Poster format		<u>Peer Review of Poster</u> <u>Showcase Final Poster at Mini Conference</u>

GE Rationale for PHR2367, Drug Use in American Culture

The rationale below discusses each GE expected learning outcome for a Writing and Communication 2 course is achieved in the context of: (a) the course objectives, (b) the readings, (c) the topics, and (d) the written assignments.

GE Expected Learning Outcome #1: Through critical analysis, discussion, and writing, students demonstrate the ability to read carefully and express ideas effectively.

(a) Students will analyze and discuss a wide variety of materials relevant to drug use and marijuana regulation in the United States. Further, as they attempt to understand and employ various methods of communication to the general public, as well as more specialized medical professionals, they will practice tailoring the expression of their ideas in a way that fits the expertise of the audience.

(b) The readings and course materials will consist of news releases, government reports, scientific studies, and documentary films which require students to critically evaluate the aims and methods of different information channels.

(c) Additional reading materials will cover topics such as argument formation, avoiding bias, and concise writing to help students develop better writing habits. Broadly speaking, the weekly topics themselves have been chosen and arranged in such a way as to encourage careful reading prior to class to facilitate engaged discussion and critical analysis.

(d) The writing assignments throughout the course aim to expand students' ability to use writing as means to enhance learning and to help students develop different ways to express their ideas effectively. Specifically, the short response writing assignments, which include an array of tasks such as the one page analysis on the impact of U.S. government authorities on drug policy, information summaries aimed at different audiences, and a scripted news report on the results of a case study, will give students practice in effectively communicating ideas across a wide variety of formats. Further, the multi-component Final Paper will not only extend that practice but also foster critical analysis and discussion between students. We predict that these assignments will allow students to develop their own views based on objective means and strengthen their abilities to articulate these views to different audiences.

GE Expected Learning Outcome #2: Students apply written, oral, and visual communication skills and conventions of academic discourse to the challenges of a specific discipline

(a) Several of the course-specific objectives aim at supplying the students with basic discipline knowledge and resources to use in the application of communication skills.

(b and c) The readings provide the discipline-specific content for students to master as they apply their communication skills throughout the semester.

(d) The larger assignments throughout the semester are geared to develop the ability of the individual student to develop information literacy on a medically relevant topic and successfully communicate in particular formats. The Final Paper, Oral Presentation, and Poster Presentation provide opportunities for students to apply their communication skills via written, oral, and visual formats, respectively. Of note, these formats are prevalent in the medical and scientific community.

GE Expected Learning Outcome #3: Students access and use information critically and analytically.

(a) The first two course-specific objectives -- (1) Identify ways to access medical and scientific studies and differentiate anecdotal evidence, pilot studies, and FDA-approved clinical trials and (2) Analyze cases and statistics, news releases, and government policies surrounding drug use in the United States--are aimed directly at teaching students how to access and critically assess various sources of information related to drug use in American culture. The third and fourth objectives -- (3) Employ different methods for communicating information to audiences of varying expertise and (4) Research the health and environmental effects of a given drug's (i.e., marijuana) use and identify gaps in current knowledge—are meant to teach students how to use this information in their communications with other professionals and the general public.

(b) The readings provide planned opportunities for students to encounter many different sources of information and for the instructor to help students learn how to objectively analyze the information and the source through in class discussion.

(c) The course begins with very basic ideas of how to access medical journals and studies and to critically distinguish between subjective and objective approaches to delivering information on health risks and benefits. By teaching the students how to access different types of information and to think critically about alternative channels and methods of delivery, the course directly addresses this expected learning outcome through these topics. The course will help students develop the ability to differentiate between anecdotal evidence, pilot studies, and FDA-approved clinical trials, and employ relevant information from these sources to their written and oral presentations.

(d) The written assignments challenge students to access and use information critically in a variety of capacities. Some short response writing assignments push students to prioritize the importance of information and arrange it in a way that is compelling and concise to particular audiences (i.e. summarizing benefits and harms to different audiences, Week 6; 'You're the Reporter' on Case Study Finding, Week 7). Others are geared toward developing students' ability to critically assess information to identify strengths and weaknesses of proposed solutions (Tabled Critique, Week 4). Finally, the Final Paper requires students to be able to conduct their own research on a given topic, identifying and accessing sources and determining how best to use the information to support their arguments.

Additional Required Questions:

1. Does the course build on the fundamentals of the First Writing Course?

This course enhances both the student's ability to utilize conventions of academic discourse and reading critically and analytically. Students will be required to carefully read and analyze a variety of required reading assignments ranging from news reports, medical studies, and government reports. They will also pursue their own research paper through a developmental process that spans the length of the entire semester, with multiple opportunities to incorporate feedback and apply what they have learned from the short response writing assignments.

2. How does the course incorporate topics and writings related to the United States?

The course centers around issues of drug use in American culture, including government regulation and legalization, and familiarization with U.S. government authorities, medical societies, and advocacy groups. It also specifically analyzes U.S. drug data and statistics, including a Colorado case study on legalization of marijuana. Finally, it helps students understand the influence of U.S. businesses and economics on the legalization of marijuana.

This emphasis on drug culture in the United States is reinforced by the reading and writing assignments, which include:

- Reading assignments ranging from the Office of National Drug Control Policy and the U.S. Department of Justice to news reports involving the Center for Disease Control.
 - Short writing assignments such as an analysis of the impact of U.S. government authorities on drug policy and several assignments
 - An oral presentation on the historical use of drugs in America.
 - A final paper on a current issue regarding the legalization of medicinal marijuana in the United States, in addition to a respective poster.
3. Is an appropriate text, writing manual, or other resource about the pedagogy of effective communication being used in the course?

Open access resources on effective communication will be used in the course to help students strengthen their writing and presentation skills. Examples of such resources to assist students in developing the clarity of their arguments include:

- 1) Concise Writing <http://knowledge.thinkingstorm.com/ArgumentClarity/ConciseWriting.aspx>
- 2) Using Logic <http://knowledge.thinkingstorm.com/ArgumentClarity/UsingLogic.aspx>
- 3) Avoiding Bias <http://knowledge.thinkingstorm.com/ArgumentClarity/AvoidingBias.aspx>
- 4) 30-second Script Template http://news.bbc.co.uk/2/shared/bsp/hi/pdfs/30_08_06worksheet3.2.pdf.

4. In what ways does this course give students the opportunity to receive feedback on their writing and oral communication and revise their communications in light of this feedback?

The short response writing assignments throughout the term are geared toward providing students iterative feedback on their writing with the specific intent to improve their ability to 1) tailor their message to their audience and 2) synthesize complex information into clear explanations and summaries. Students will use instructor- and peer-based feedback to improve their communication skills on subsequent assignments including their final research paper and presentations.

GE Assessment Plan for PHR 2367 Drug Use in American Culture

<p align="center">GE Expected Learning Outcomes</p>	<p align="center">Methods of Assessment <i>*Direct methods are required. Additional Indirect methods are encouraged.</i></p>	<p align="center">Level of student achievement expected for the GE ELO. <i>(for example define percentage of students achieving a specified level on a scoring rubric)</i></p>	<p align="center">What is the process that will be used to review the data and potentially change the course to improve student learning of GE ELOs?</p>
<p align="center"><u>ELO 1</u></p> <p>Through critical analysis, discussion, and writing, students demonstrate the ability to read carefully and express ideas effectively</p>	<p align="center">GE ELO Scoring Rubric-based evaluation of Final Paper (Appendix A)</p>	<p align="center">100% of students meeting milestone 2. 70% of students meeting milestone 3.</p>	<p align="center">At the end of each course offering, the instructors will convene to review the data compiled from the GE ELO scoring rubric, identify any deficiencies, and make changes to the lessons/ assignments as appropriate. If the 100% milestone 2/70% milestone 3 benchmark proves too low, they will discuss adjustments to ensure that students are being challenged to an appropriate level.</p>
<p align="center"><u>ELO 2</u></p> <p>Students apply written, oral, and visual communication skills and conventions of academic discourse to the challenges of a specific discipline.</p>	<p align="center">GE ELO Scoring Rubric-based evaluation of Final Paper (Appendix A)</p>	<p align="center">100% of students meeting milestone 2. 70% of students meeting milestone 3</p>	
<p align="center"><u>ELO 3</u></p> <p>Students access and use information critically and analytically</p>	<p align="center">GE ELO Scoring Rubric-based evaluation of Final Paper (Appendix A)</p>	<p align="center">100% of students meeting milestone 2. 70% of students meeting milestone 3</p>	

Appendix A: PHR 2367.01: GE Outcome Scoring Rubric

Instructors will put an “x” in the appropriate cell for each ELO and each student based upon their final paper. The instructor will then compile the number of students who met each milestone (1-4) for each of the ELOs, and this is how the data will be reported (i.e. ELO1: 3 students achieved level 4, 6 students level 3, 15 students level 2, and 4 students level 1).

	Capstone (4)	Milestone (3)	Milestone (2)	Benchmark (1)
(ELO 1) Through critical analysis, discussion, and writing, students demonstrate the ability to read carefully and express ideas effectively.	Student expresses sophisticated ideas clearly and demonstrates a superior ability to read carefully. Student demonstrates these abilities through superior written communication, discussion, and critical analysis.	Student effectively expresses their own ideas and shows ability to read critically through clear writing, group discussion, and critical analysis of material.	Student is able to express some ideas clearly but shows room for improvement in critical analysis, discussion, and writing skills needed to express all ideas effectively.	Student demonstrates limited ability to read carefully and does not express ideas effectively. Student demonstrates limited ability for critical analysis, effective writing, and clear discussion.
(ELO2) Students apply written, oral, and visual communication skills and conventions of academic discourse to the challenges of a specific discipline.	Student uses superior communication skills and a clear understanding of the conventions of academic discourse to express original ideas concerning a specific discipline.	Student uses effective communication skills and a clear understanding of the conventions of academic discourse and applies these skills successfully to the challenges of a specific discipline.	Student is able to use an understanding of conventions of academic discourse and basic communication skills and apply them to the challenge of a specific discipline.	Student demonstrates limited communication skills and understanding of conventions of academic discourse. Student is unsuccessful in applying their limited skills to a specific discipline.
(ELO 3) Students access and use information critically and analytically.	Student uses highly credible and relevant sources and shows an ability for sophisticated analysis.	Student accesses credible information and uses it critically. Analysis of the information shows a clear understanding of its content.	Student is able to access useful information, but application of the information is not entirely useful and requires further analysis.	Student accesses information from less credible sources and does not clearly analyze the sources.