

Health Mythbusters: Quest 2 Syllabus

Primary General Education Designation: Social and Behavioral Sciences

I. Course Information

IDS2935

Class #23066, Section #2SE1

Fall 2020

Meeting Day/Time: Online 100%

<https://elearning.ufl.edu/>

General Education Designation: Social and Behavioral Sciences

* A minimum grade of C is required for general education credit *

Instructor

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Course Description

Why do erroneous beliefs about health continue to persist even without any scientific support? In a world where so much information is at our fingertips, why are there persistent health myths? How can we help spread health information and squash misinformation? In this course, you will learn how to separate health fact from myth. Health myths persist for various reasons, such as a lack of understanding related to the scientific process, motivated and/or biased reasoning, or political, religious, and cultural influences. In this class, we will explore health myths related to exercise, food/nutrition, sexual health, mental well-being, alternative medicines, and the environment. For each myth, we will examine how this myth came about, the scientific evidence supporting or refuting the myth, and why this myth persists. We will also learn what we can do as mythbusters to help refute health myths through social and traditional media.

Inclusive Learning Statement

Your success in this class—and at UF and beyond—is important to me. I strive to provide an environment that is equitable and conducive to achievement and learning for all students. I ask that we all be respectful of diverse opinions and of all class members. If there are circumstances that may affect your performance in this class, please let me know as soon as possible so that we can work together to develop strategies to meet both your needs and the needs of the course.

Required & Recommended Course Materials

All of the media for the course, including videos, readings and audio recordings are available through our Canvas course (see www.elearning.ufl.edu) and some materials will also be available through the UF Libraries Course Reserves.

II. Coursework & Schedule

1. List of Graded Work

- A) **Quizzes (30 points)**- There will be 3 quizzes. Each quiz will be 10 questions and worth 10 points each. These quizzes will be on Canvas, following each of the first three weeks of the course. These quizzes will allow you to demonstrate your learned knowledge and understanding about scientific principles and pseudoscience.
- B) **Reflecting (70 points)**- There will be 7 reflection assignments throughout the semester, and each reflection assignment is worth 10 points each. You will complete a short pre-reflection about a health myth and then a short post-reflection. These assignments are to help you see your understanding develop throughout the myth-busting process.
- C) **Sleuthing (70 points)**- There will be 7 sleuthing assignments throughout the semester, and each sleuthing assignment is worth 10 points each. For this assignment, you will share with your peers relevant health myths you have found on social media platforms. These assignments will help you see how information about health is conveyed through social media, from those who spread health myths to scientists and journalists who are trying to bust health myths.
- D) **Investigating (105 points)**- There will be 7 investigating assignments throughout the semester, and each sleuthing assignment is worth 15 points each. In order to bust a myth, you need to investigate! These assignments will be given to help you better become better mythbusters: some of these activities will entail taking the steps to bust myths in real life/class, whereas others will help you break down the research related to busting myths.
- E) **Myth-busting (175 points)**- Time to put all your myth-busting skills into practice! In small groups (3-5 students), you will bust a health myth. This assignment will culminate in a project, where your group will examine why the myth exists (and persists), the scientific evidence refuting the myth, and then present possible ways to help spread myth-busting information to the general public. This project format will be determined by your group and could be a video, Spark page, podcast, etc. You will also present your mythbusting project to the class, during a group presentation.
- This overall myth-busting assignment is comprised of the following smaller assignments:
 - i. *Health myth topic* (group submission; 10 points)- You will need to submit a health myth topic. This myth cannot be one that we will discuss in class, and it needs to be a health myth that can be scientifically assessed. Topics need to be approved before moving forward with any other steps of the project.
 - ii. *Group learning assessment/contract* (group submission; 10 points)- Groups will submit a group learning assessment rubric. Working in groups

can be challenging and having common goals are helpful. A group learning assessment rubric will be provided and groups will work together to submit their initial rubric and set up their goals for their group work.

- iii. *Myth-busting project* (group submission; 85 points) -Groups will submit a project (format can be video, podcast, Adobe Spark, etc.) that explains the health myth: what the myth entails, why it exists and persists today, and the scientific evidence that helps refute the myth. You will also provide possible avenues of how myth-busting evidence could be presented to the general public in a way that would help bust this myth once and for all. [Note: In the individual reflection assignment, you will list the components of the project and presentation you contributed. Your project grade will reflect not only the overall project that your group submits but the work of you individually as well.]
- iv. *Presentation* (group presented; 40 points)- Groups will present about their project in class. 30 of the 40 points will be a group grade, the remaining 10 points will be based on an individual's portion of the group
- v. *Reflection* (individually graded; 30 points)- You will submit a reflection that examines your personal and professional growth throughout the semester. In this reflection, will 1) describe the learning experience of this project, 2) examine your experiences with the project linked to the learning outcomes of the course/project, 3) articulate learning, by expanding and deepening your learning of the experience of this project, including how your learning can improve your future actions. The specific reflection questions will be posted in this Canvas assignment to help guide you through the post-reflection process.

Point Breakdown

Work	Point Totals	Point Total / Percentage of Grade
Quizzes	10 points (x 3 assignments)	30 points
Reflecting	10 points (x 7 assignments)	70 points
Sleuthing	10 points each (x 7 assignments)	70 points
Investigating	15 points (x 7 assignments) = 105 points	105 points
Busting	175 points total	175 points

2. Weekly Course Schedule

Week	Topic (Question/Subject)	Homework: Reading & Activities for Before Class	Assigned Work Due
Week 1	Defining Myths & Basics of Scientific Method	https://nobaproject.com/modules/why-science and https://nobaproject.com/modules/research-designs and https://nobaproject.com/modules/thinking-like-a-psychological-scientist	
			Quiz #1 Due
Week 2	Why Do Myths Persist?	Readings: Kruger, Savitsky, & Gilovich, 1999; Chapter 2 of Offit, 2018; Pratkanis, 1995; Shermer, 1994	
		Jasińska-Stroschein, M., Kurczewska, U., & Orszulak-Michalak, D. (2019). Pharmacy students' beliefs in popular myths about health and therapy. <i>Health Education Journal</i> , https://doi.org/10.1177/0017896919886607 .	Quiz #2 Due
Week 3	How Can We Bust Myths? (Translating Science)	Follow scientists on social media! Readings: Cozma (2009); Cook, J., Ellerton, P. & Kinkead, D. (2018); Debunking Handbook (https://skepticalscience.com/docs/Debunking_Handbook.pdf)	
			Quiz #3 Due
Week 4	Myths related to Remedies/Complementary Medicines	Acupuncture: Smith, Armour, Lee, Wang, & Hay (2018). Acupuncture for Depression (Review). Cochrane Database of Systematic Review.	

Week	Topic (Question/Subject)	Homework: Reading & Activities for Before Class	Assigned Work Due
			Sleuthing #1 Due
Week 5	Myths related to Remedies/Complementary Medicines	CBD: Mucke, Phillips, Radbruch, Petzke, & Hauser (2018). Cannabis-based medicines for chronic neuropathic pain in adults. Cochrane Database of Systematic Review.	Investigate #1
			Reflection #1 Due
Week 6	Myths related to Exercise	Tentative In-Class Speaker from RecSports speaking on common exercise myths	Investigate #2
		Forming Habits: Lally, P., Van Jaarsveld, C. H., Potts, H. W., & Wardle, J. (2010). How are habits formed: Modelling habit formation in the real world. <i>European Journal of Social psychology</i> , 40(6), 998-1009.; Kaushal, N., & Rhodes, R. E. (2015). Exercise habit formation in new gym members: a longitudinal study. <i>Journal of Behavioral Medicine</i> , 38(4), 652-663.	Sleuthing #2 Due
Week 7	Myths related to Food	Mythbusting Activity in Class- Are “healthy” versions of food actually better?	Investigate #3
		Listen to podcast: https://gimletmedia.com/shows/science-vs/o2hoag/organic-food Listen to podcast: https://soundcloud.com/senscipod/episode-8-processed-food	Reflection #2 Due
Week 8	Myths related to Nutrition	Sugar Readings: Wolraich M.L., Wilson D. & White J. (1995); Chp 10 ‘Sugar Water’ in Fitzgerald, 2014; Chp 10 ‘Sugar’ in Warner, 2018	Investigate #4
		Listen to podcast: https://gimletmedia.com/shows/science-vs/76hdko/fasting-diets-whats-the-skinny	Sleuthing #3 Due

Week	Topic (Question/Subject)	Homework: Reading & Activities for Before Class	Assigned Work Due
Week 9	Myths related to Obesity	Fang, V., Gillespie, C., Crowe, R., Popeo, D., & Jay, M. (2019). Associations between medical students' beliefs about obesity and clinical counseling proficiency. <i>BMC Obesity</i> , 6(1), 5.; Ramos Salas, X., Forhan, M., & Sharma, A. M. (2014). Diffusing obesity myths. <i>Clinical Obesity</i> , 4(3), 189-196.; Lucan, S. C., & DiNicolantonio, J. J. (2015). How calorie-focused thinking about obesity and related diseases may mislead and harm public health. An alternative. <i>Public Health Nutrition</i> , 18(4), 571-581.	Investigate #5
			Reflection #3 Due
Week 10	Myths related to Sex/Sexual Health	Tentative Skype Guest Speaker; Readings TBD	Investigate #6
		Readings from 2017 issue of Scientific American "It's Not a Women's Issue" (Special issue on Sex & Gender)	Sleuthing #4 Due
Week 11	Myths related to Sex/Sexual Health	Tentative Skype Guest Speaker; Readings TBD	
		Listen to: https://gimletmedia.com/shows/science-vs/94hw6a/birth-control-the-biggest-myths	Reflection #4 Due
Week 12	Myths Related to the Environment	https://www.washingtonpost.com/outlook/five-myths/five-myths-about-recycling/2018/04/20/9971de66-43e6-11e8-8569-26fda6b404c7_story.html ; https://www.nytimes.com/2019/03/16/business/local-recycling-costs.html ;	Sleuthing #5 Due
			Reflection #5 Due; Investigate #7

Week	Topic (Question/Subject)	Homework: Reading & Activities for Before Class	Assigned Work Due
Week 13	Cancer Myths: Repercussions & Solutions	Gansler, T., Henley, S. J., Stein, K., Nehl, E. J., Smigal, C., & Slaughter, E. (2005). Sociodemographic determinants of cancer treatment health literacy. <i>Cancer: Interdisciplinary International Journal of the American Cancer Society</i> , 104(3), 653-660.; Denberg, T. D., Melhado, T. V., & Steiner, J. F. (2006). Patient treatment preferences in localized prostate carcinoma: The influence of emotion, misconception, and anecdote. <i>Cancer</i> , 107(3), 620-630.	Sleuthing #6 Due
		Collier, R. (2018). Containing health myths in the age of viral misinformation.; Vogel, L. (2017). Viral misinformation threatens public health. <i>CMAJ: Canadian Medical Association Journal</i> , 189(50), E1567.; Bode, L., & Vraga, E. K. (2018). See something, say something: Correction of global health misinformation on social media. <i>Health Communication</i> , 33(9), 1131-1140.	Reflection #6 Due
Week 14	Group Presentations		Sleuthing #7 Due
			Reflection #7 Due
Week 15	Group Presentations		
			Final Components Group Projects & Presentations Due

III. Grading

1. Grading Scale

For information on how UF assigns grade points, visit: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

A	94 – 100% of possible points		C	74 – 76%
A-	90 – 93%		C-	70 – 73%
B+	87 – 89%		D+	67 – 69%
B	84 – 86%		D	64 – 66%
B-	80 – 83%		D-	60 – 63%
C+	77 – 79%		F	<60

III. General Education and Quest Objectives & SLOs

9. This Course's Objectives—Gen Ed Primary Area and Quest

Social and Behavioral Sciences Objectives →	Quest 2 Objectives →	This Course's Objectives → (This course will....)	Objectives will be Accomplished By: (This course will accomplish the objective in the box at left by...)
Social and behavioral science courses provide instruction in the history, key themes, principles, terminology, and underlying theory or methodologies used in the social and behavioral sciences.	Address in relevant ways the history, key themes, principles, terminologies, theories, or methodologies of the various social or biophysical science disciplines that enable us to address pressing questions and challenges about human society and/or the state of our planet.	... present information related to the scientific method that will allow students to better understand how others can misunderstand and misconstrue the process and discoveries of science.	... examining scientific studies and popular press articles related to a wide range of health-related topics (nutrition, exercise, sexual health, etc.).
Students will learn to identify, describe and explain social institutions, structures or processes.	Present different social and/or biophysical science methods and theories and consider how their biases and influences shape pressing questions about the human condition and/or the state of our planet.	...present the various psychological heuristics and biases involved in health decision-making that can influence understanding and acceptance of health research.	...analyzing the possible heuristics and biases at play for each health myth.
These courses emphasize the effective application of	Enable students to analyze and evaluate (in writing and other forms of communication	...enable students to become mythbusters, by understanding scientific support and critically	...examining scientific studies and using the knowledge of the study, along with

Social and Behavioral Sciences Objectives →	Quest 2 Objectives →	This Course's Objectives → (This course will....)	Objectives will be Accomplished By: (This course will accomplish the objective in the box at left by...)
accepted problem-solving techniques.	appropriate to the social and/or biophysical sciences) qualitative or quantitative data relevant to pressing questions concerning human society and/or the state of our planet.	examining and dismantling biases and arguments that perpetuate health myths.	heuristics and biases, to critically dismantle health myths.
Students will apply formal and informal qualitative or quantitative analysis to examine the processes and means by which individuals make personal and group decisions, as well as the evaluation of opinions, outcomes or human behavior.	Analyze critically the role social and/or the biophysical sciences play in the lives of individuals and societies and the role they might play in students' undergraduate degree programs.	...analyze the impact of believing health myths on the overall health of the society, and the role that informed consumers and scientists can play in disputing these myths.	...examine specific outcomes related to the health myths (i.e., spread of disease, the "wellness" industry) and the methods scientists utilize to mitigate these potential outcomes.
Students are expected to assess and analyze ethical perspectives in individual and societal decisions.	Explore or directly reference social and/or biophysical science resources outside the classroom and explain how engagement with those resources complements classroom work.	...explore health myths through the use of the scientific method and scientific research available to argue against myths. Engage with individuals and locations that are actively working to combat societal health myths.	...accomplished by hearing from active scientists who are doing the work that helps to bust myths and visiting (either physically or virtually) locations where students can see a myth being busted. Students will also participate in and generate myth-busting science communications (e.g., infographics).

Social and Behavioral Sciences Objectives →	Quest 2 Objectives →	This Course's Objectives → (This course will....)	Objectives will be Accomplished By: (This course will accomplish the objective in the box at left by...)

10. This Course's Student Learning Outcomes (SLOs)—Gen Ed Primary Area and Quest

	Social and Behavioral Sciences SLOs → Students will be able to...	Quest 2 SLOs → Students will be able to...	This Course's SLOs → Students will be able to...	Assessment Student competencies will be assessed through...
Content	Identify, describe, and explain the history, underlying theory and methodologies used.	Identify, describe, and explain the cross-disciplinary dimensions of a pressing societal issue or challenge as represented by the social sciences and/or biophysical sciences incorporated into the course.	Identify, describe, and explain the role psychological heuristics and biases related to decision-making have in perpetuating health myths and how the scientific process clarifies the refutation of certain health myths.	Quizzes, in-class activities ('investigating'), group presentation/project ('myth busting')
Critical Thinking	Identify and analyze key elements, biases and influences that shape thought within the subject area. Approach issues and problems within the discipline from multiple perspectives.	Critically analyze quantitative or qualitative data appropriate for informing an approach, policy, or praxis that addresses some dimension of an important societal issue or challenge.	Identify and apply the potential reasons (heuristic biases, motivated reasoning, unfamiliarity with scientific reasoning, cultural reasoning, etc.) why health myths persist. Apply the knowledge of sound scientific principles to critical consumerism of health information. Analyze the impact of believing health myths on the overall health of the society, and the role that informed consumers and scientists can play in disputing these myths	In-class activities, sleuthing, group presentation/project

	Social and Behavioral Sciences SLOs → Students will be able to...	Quest 2 SLOs → Students will be able to...	This Course's SLOs → Students will be able to...	Assessment Student competencies will be assessed through...
Communication	Communicate knowledge, thoughts and reasoning clearly and effectively.	Develop and present , in terms accessible to an educated public, clear and effective responses to proposed approaches, policies, or practices that address important societal issues or challenges.	Bust health myths, by understanding basic principles of science and experimentation, biases that may impact public's understanding. Develop presentations and health communication information that helps bust common health myths.	In-class activities, group presentation/project
Connection	N/A	Connect course content with critical reflection on their intellectual, personal, and professional development at UF and beyond.	Connect class work to the current work scientists are doing in mythbusting.	In-class activities, sleuthing, mythbusting

IV. Required Policies

1. Students Requiring Accommodation

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://disability.ufl.edu/>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

2. UF Evaluations 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/>.

3. University Honesty Policy

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 (<https://www.dso.ufl.edu/sccr/process/student-conduct-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.

4. Counseling and Wellness Center

Contact information for the Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

5. The Writing Studio

The writing studio is committed to helping University of Florida students meet their academic and professional goals by becoming better writers. Visit the writing studio online at <http://writing.ufl.edu/writing-studio/> for one-on-one consultations and workshops.

6. Zoom Policy

Our online class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or 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. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

7. Campus Resources (More/Updated Descriptions in Canvas)

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](#).