

Health Mythbusters: Quest 2 Syllabus

Primary General Education Designation: Social and Behavioral Sciences

I. Course Information

IDS2935

Spring 2025

Meeting Day/Time:

Tuesdays 10:40 – 11:30

Thursdays 10:40 – 12:35

<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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Office location: 126 Florida Gym

Office hours: Check Canvas Calendar

Teaching Assistant:

TBA

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.

Course Objectives

By the end of this course, you should be able to:

- **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.
- **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
- **Bust** health myths, by understanding basic principles of science and experimentation, biases that may impact public's understanding.
- **Connect** class work to the current work scientists are doing in myth-busting.
- **Develop presentations** and health communication information that helps bust common health myths.

II. Assignments

1. List of Graded Work

- A) **Quizzes (30 points)**- There will be 3 quizzes. Each quiz will be worth 10 points each. These quizzes will be on Canvas and will be closed note quizzes. These quizzes will allow you to demonstrate your learned knowledge and understanding of scientific principles and pseudoscience.
- B) **Weekly Assignments (10 points each)**
- **Each week there will be one of the following assignments**

- i. **Reading/Annotating** – For these assignments, you will read the assigned articles and then participate in either online or in-class discussions about the reading.
 - ii. **Sleuthing**- For this assignment, you will share relevant health myths you have found on social media platforms with your peers. 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 trying to bust health myths.
 - iii. **Investigating**- 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.
- C) **Myth-busting (130 points)**- Time to put all your myth-busting skills into practice! In small groups or by yourself, you will bust a health myth. This assignment will culminate in a project, where you/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. You/your group will determine this project format and could be a video, Spark page, podcast, etc. You also present your myth-busting project to the class in an “art gallery”/“poster presentation” format.
- This overall myth-busting assignment is comprised of the following smaller assignments:
 - i. **Health myth topic** (10 points)- You will 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 project steps.
 - ii. **Myth-busting project and presentation** (100 points) -You/your group 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.
 - iii. **Reflection** (20 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 |
|--------------------|------------------|-------------|
| Quizzes | 10 points (x 3) | 30 points |
| Weekly Assignments | 10 points (x 16) | 160 points |

| | | |
|-----------------|------------------|------------------|
| Busting Project | 130 points total | 130 points |
| | | 320 points total |

III. Grading

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 |

IV. Required Policies

Course Policies

Quiz Policy: Quiz feedback is provided to the student immediately following the due date. Students have one week to view quiz feedback. Questions about quiz questions will be answered following the completion of the quiz by all students. If you have a question about specific quiz questions, you must describe your concern in an email *within 1 week after completing the quiz*.

Late Work Policy: Your success in this class depends on keeping up with coursework. While this is your responsibility as a student, I also understand that “life happens” and things come up that affect our ability to complete all of our responsibilities according to a predetermined schedule, especially with recent world events. Accordingly, there is a Life Happens Pass (LHP) that allows you to submit *three* assignments up to four calendar days past the deadline to remain eligible for grading. See the LHP page in Canvas for more details.

Assignment Policy: Assignments are due according to the due dates and times listed in the course schedule. Rubrics for assignments can be found in Canvas. Only uploaded work in Canvas will be accepted. All work should be uploaded as PDFs or .doc(x). Please be aware that Canvas closes assignments at the time they are due. *Do not wait* until the last minute to upload your assignment or the assignment may be closed. It is your responsibility that you upload the correct document by the due date/time. Check to make sure you have uploaded the correct document. Failure to upload the correct document before Canvas closes the assignment will result in a 0 for that assignment. Submit early to avoid being stressed about this!

Feedback Policy: I strive to return all grades within 10 days, but there may be occasional delays in grading. Please note that it is unethical and in direct violation of the UF Student Honor Code to request an unjustifiable (e.g., “rounding up”) grade adjustment ([UF Student Honor Code](#): “Conspiracy to Commit Academic Dishonesty”).

Attendance Policy: Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with [university policies](#). Attendance will be taken and for missed attendance for “life happens” days, you may use your LHP. See the LHP page in Canvas for more details.

UF Policies

Students Requiring Accommodations: 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.

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

University Policy on Academic Conduct: 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 Conduct Code](#) specifies behaviors that are in violation of this code and the possible sanctions. If you have any questions or concerns, please consult with the instructor for this class.

[The Student Honor Code and Student Conduct Code](#) states that:

"A Student must not represent as the Student’s own work all or any portion of the work of another. Plagiarism includes but is not limited to:

- Stealing, misquoting, insufficiently paraphrasing, or patch-writing.
- Self-plagiarism, which is the reuse of the Student’s own submitted work, or the simultaneous submission of the Student’s own work, without the full and clear acknowledgment and permission of the Faculty to whom it is submitted.

- Submitting materials from any source without proper attribution.
- Submitting a document, assignment, or material that, in whole or in part, is identical or substantially identical to a document or assignment the Student did not author."

University of Florida students are bound by the Honor Pledge. On all work submitted for credit by a student, the following pledge is required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Student Honor Code and Conduct Code (Regulation 4.040) specifies a number of behaviors that are in violation of this code, as well as the process for reported allegations and sanctions that may be implemented. All potential violations of the code will be reported to Student Conduct and Conflict Resolution. If a student is found responsible for an Honor Code violation in this course, the instructor will enter a Grade Adjustment sanction which may be up to or including failure of the course.

UF Resources

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.

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.

Campus Resources (More 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](#)

Weekly Course Schedule

| Week | Topic (Question/Subject) | Homework: Reading & Activities for Before Class | Assigned Work Due |
|--------|---|---|-----------------------------|
| Week 1 | 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 | Defining Myths | Burgoon, M., & Hall, J. R. (1994). Myths as health belief systems: The language of salves, sorcery, and science. <i>Health Communication</i> , (2), 97-115. | Activity #1 |
| | | | |
| Week 3 | Psychology of Misinformation | Readings: Kruger, Savitsky, & Gilovich, 1999; Chapter 2 of Offit, 2018; Pratkanis, 1995; Shermer, 1994 | |
| | | Video on Sagan's "Baloney Detection Kit; in-class activity creating our own baloney detection kits | Activity #2; Quiz #2 Due |
| Week 4 | Tackling Misinformation | Follow scientists on social media! Readings: Cozma (2009); Cook, J., Ellerton, P. & Kinkead, D. (2018); <i>Debunking Handbook</i> (https://skepticalscience.com/docs/Debunking_Handbook.pdf) | |
| | | Collier, R. (2018). Containing health myths in the age of viral misinformation. <i>CMAJ: Canadian Medical Association Journal</i> , 190(19), E578. Mheidly, N., & Fares, J. (2020). Leveraging media and health communication strategies to overcome the COVID-19 infodemic. <i>Journal of Public Health Policy</i> , 1-11. | Quiz #3 Due; Activity #3 |
| | | <u>In-Class Activity; creating viral videos tackling misinformation</u> | |
| Week 5 | Myths related to Remedies/Complementary Medicines | Acupuncture: Smith, Armour, Lee, Wang, & Hay (2018). Acupuncture for Depression (Review). <i>Cochrane Database of Systematic Review</i> . | Activity #4 |

| Week | Topic (Question/Subject) | Homework: Reading & Activities for Before Class | Assigned Work Due |
|---------|---|---|----------------------|
| | | Course Discussion: Culture & Health Myths | Activity #5 |
| Week 6 | 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. | |
| | | Review: https://www.nccih.nih.gov/health/atoz | Activity #6 |
| Week 7 | Myths related to Exercise | Swift, D. L., Johannsen, N. M., Lavie, C. J., Earnest, C. P., & Church, T. S. (2014). The role of exercise and physical activity in weight loss and maintenance. <i>Progress in Cardiovascular Diseases</i> , 56(4), 441-447 | |
| | | | Activity #7 |
| Week 8 | Myths related to Nutrition | Mythbusting Activity in Class- Are “healthy” versions of food actually better? | Activity #8 |
| | | | Activity #9 |
| Week 9 | Myths related to Nutrition | Readings: Wolraich M.L., Wilson D. & White J. (1995); Chp 10 ‘Sugar Water’ in Fitzgerald, 2014; Chp 10 ‘Sugar’ in Warner, 2018 | |
| | | | Activity #10 |
| Week 10 | 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. Video: What BMI Doesn’t Tell You About Your Health | |
| | | | Activity #11 |
| Week 11 | Myths related to Sex/Sexual Health | Watch Video: Dismantling the Myths Around Sex (by Veronica Whitehead) | |
| | | Create: Infographic Refuting Sexual Health Myth | Activity #12 |

| Week | Topic (Question/Subject) | Homework: Reading & Activities for Before Class | Assigned Work 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 ; | Activity #13 |
| | | Activity: What Actually Gets Recycled? | Activity #14 |
| 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. | Activity #15 |
| | Mental Health | In-Class Activity: Examining Therapy Websites for Factual Information | Activity #16 |
| Week 14 | Group Presentations | | |
| | | | |
| Week 15 | Group Presentations | | |
| | | | Group Projects & Presentations Due |

General Education and Quest Objectives & SLOs

IV. Student Learning Outcomes (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 | ...enable students to become mythbusters, by understanding | ...examining scientific studies and using the knowledge of |

| 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. | forms of communication 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. | scientific support and critically examining and dismantling biases and arguments that perpetuate health myths. | the study, along with 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...) |
|--|-----------------------------|---|--|
| | | | |

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 |

