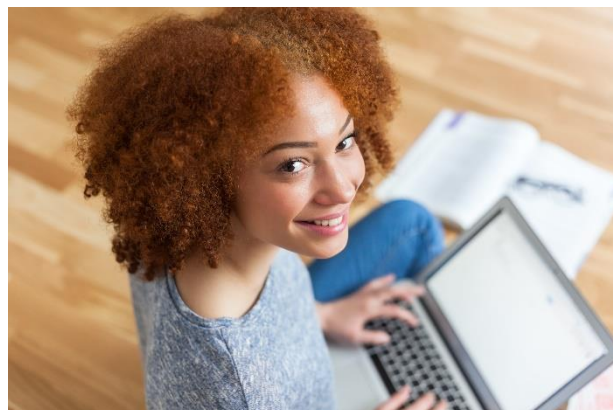# HSC 6506 Epidemiology
Fall 2023

Professor: Delores. James, PhD, RDN, LDN, FAND
Office Hours: Tues 10:30-11:30 (email chat); 1:30-2:30 (Zoom); Thurs 10:30-11:30 (Zoom); appointments as needed
Office/Phone: Room 10 FLG, (352) 294-1806
Email: Please do all class email through Canvas
Tech Support: UF HELP Desk at (352) 392-HELP

COURSE OVERVIEW

Epidemiology is one of the basic disciplines of public health. One of the tasks of epidemiology is to unravel the risk factors of disease at the population level. The course will teach how to evaluate relationships between potential risk factors and health outcomes and how causal relationships are interpreted for public health decision making. This course will also provide a comprehensive understanding of sources of population data in terms of morbidity, mortality, and other vital statistics. Scientific methods for approaching population data and identifying public health problems and empirical analysis of data will be emphasized.

This is an online course. Thus, all course instruction and communication are done through Canvas. Students are expected to own a computer with a webcam and be proficient in several programs, including Microsoft Office Professional Suite (Word, Excel. PowerPoint, Publisher). These and other programs are available free to all UF students at http://info.apps.ufl.edu/

Student Learning Outcomes

By the end of the course, students will be able to:
- Identify key sources of data for epidemiologic purposes.
- Identify the principles and limitations of public health screening programs.
- Critique current and emerging use of artificial intelligence (AI) in public health.
- Describe a public health problem in terms of magnitude, person, time and place.
- Explain the importance of epidemiology for informing scientific, ethical, economic and political discussion of health issues.
- Comprehend basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of epidemiologic data.
- Apply the basic terminology and definitions of epidemiology.
- Calculate basic epidemiologic measures.
- Communicate epidemiologic information to lay and professional audiences.
- Draw appropriate inferences from epidemiologic data.
- Evaluate the strengths and limitations of epidemiologic reports.

TEXTS

1. Friis, R.H. & Sellers, T.A. (2020). Epidemiology for Public Health Practice, 6th ed. Jones and Bartlett. The eBook is available through UF All Access as well as www.vitalsource.com for immediate access.
2. Additional readings and course materials are available on Canvas.

TECH SUPPORT

We understand that computer problems are a fact of life. However, your instructor will not be troubleshooting problems with your computer or Internet. For technical difficulties with the course website, please contact the UF Help desk at helpdesk@ufl.edu or (352) 392-HELP.

WIFI CONNECTION VIA EDUROAM

Students can connect nationally and internationally via the UF on-campus wifi, **eduroam**, for free with GatorLink log-in credentials. The eduroam network is fast and secure and has more than 10,000 wi-fi hotspots in 106 countries and territories worldwide.

How to connect to eduroam:
1. If you can get a Wi-Fi signal at any of the eduroam locations (see below) and your mobile device (laptop, smartphone, or tablet) has already been configured for eduroam, then you will automatically connect.
2. Otherwise, follow the instructions for connecting here: https://helpdesk.ufl.edu/connecting-to-eduroam-off-campus/.

There are more than 100 Wi-Fi hotspots in Florida, including several state university campuses and community colleges. You don't have to sit in a car--many locations have open spaces and communal rooms available so you can get online while socially distancing and following CDC guidelines in an air-conditioned space.

Also, in Florida all of the UF/IFAS Research and Education Centers (REC) are equipped with eduroam, so if you live in a rural area of your county you can visit an REC to securely watch course videos and take care of your academic needs. **Here's a link to all the eduroam sites in the U.S.:** https://incommon.org/eduroam/eduroam-u-s-locator-map/

LIBRARY SUPPORT

Each department at UF has a designated librarian at the George A. Smathers Libraries to support your research needs.   Scroll down the list of subject specialists to find the librarian for Health Education and Behavior for help in using the libraries and finding resources.
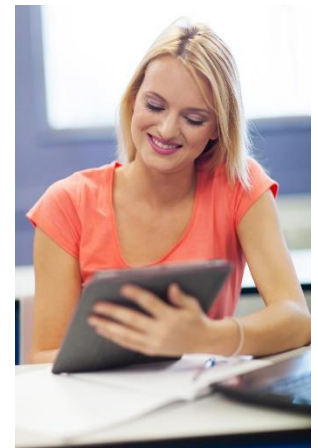
CONNECTING VIA ZOOM

Office hours will be conducted via Zoom. If there is a guest speaker or special live session, an audio-visual recording will be recorded for 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.

CLASS POLICIES

- **Emails.** All class emails will be done via Canvas, not through the instructor's UF email account. Emails are usually returned within 24 hours during regular business hours (9 am to 5 pm) Monday through Friday.

- **Special Accommodations**: "Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Students who need special accommodation should follow this procedure as early as possible in the semester. I am asking that you notify me of any accommodation letter as early in the semester as possible, but ideally in the second week. This will allow us to have an action plan as soon as possible.

- **Academic Honesty:** "The University of Florida requires all members of its community to be honest in all their endeavors. Students are required to commit themselves to the highest standard of honor and integrity by abiding by the Honor Code on all work submitted, The following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."* Violations of the UF Academic Honesty Guidelines will not be tolerated and shall be treated in accordance with the UF Student Honor Code.

- **Respect and Trust.** It is imperative that there be an atmosphere of trust and safety in our learning environment. Thus, I will do my best to foster an environment in which we hear and respect each other. Please let me know if something is said or done by me or other students that offends you or causes your discomfort. While our intention may not be to cause discomfort or offense, the impact of what happens throughout the course is not to be ignored and is something that I consider to be very important and deserving of attention. Your suggestions on how to improve the course are encouraged and appreciated.

- **Attendance**. Students are expected to attend class and have a high level of engagement with their classmates, instructor, and online course materials. Two important measures of **online class attendance** are weekly participation in Yellowdig discussion board and submission of weekly reading questions. The university recognizes the right of the instructor to make attendance mandatory and require documentation for absences (except for religious holidays), missed work, or inability to fully engage in class. After due warning, an instructor can prohibit further attendance and subsequently assign a failing grade for excessive absences. This information can be found via the following link https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/.

- **Assignment Submission:** Late assignments will be accepted within 24 hours of the deadline, but with a 50% penalty. You can always turn in an assignment early.   Please submit documentation for medical and family emergencies.

- **Student Athletes:** Student athletes are required to provide the instructor with written documentation of away games that are in conflict with exams as early in the semester as possible.

- **Evaluations**. Students can provide professional and respected feedback on the quality of instruction in this course by completing online evaluations via GatorEvals at https://evaluations.ufl.edu. Students will be notified when the evaluation period opens and can be completed in the Canvas course menu. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

- **Publishing and Recording Class Materials.** This is an online course. Thus, students are allowed to use all written, video and audio course material and recordings for 1) personal educational use, 2) in connection with a complaint to the university, or 3) as evidence in, or

in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures or other course materials without the written consent of the instructor. Publication of course materials without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium to another person, including classmates. Furthermore, it is prohibited to publish course materials to any media platform, including but not limited to social media, book, magazine, newspaper, leaflet or third party note/tutoring services.

COUNSELING AND WELLNESS RESOURCES

- *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.

MY EXPECTATIONS OF YOU

Students will be notified to any changes and updates to the syllabus in a timely manner. I will do all that I can to help you succeed, but you must decide that you want the very best for yourself. In order to do this, you must resolve to actively engage in your learning and do everything possible to make it worthwhile for you and your classmates. You must also do the following:

- Read your syllabus.
- Participate in class discussions.
- Write all due dates on your personal calendar.
- Submit assignments on time.
- Visit the course website several times a week.
- Respond to emails in a timely manner.
- Be considerate of your group members.
- Give your best at all times.
- Make excellence your goal.
- Make good choices and accept the consequences of your poor choices.
- Take responsibility for your learning.
- Manage your time well.
- Develop discipline and good study habits.
- Do it right the first time.
- Show initiative.
- Don't make assumptions.
- Ask if you don't understand something.
- Have integrity—don't cheat, plagiarize, or lie.

Time Commitment for the Course. This 3-credit course will require approximately a 10-hour commitment each week. Some weeks may require less. Time will be spent reading course materials, completing assignments, engaging with classmates and instructor, and responding to discussion posts.

PROFESSIONALISM AND CLASS PARTICIPATION

Professionalism (10 possible points). This includes, but is not limited to, responding to professor's emails and announcements in a timely manner, turning in all assignments on time, responding to classmates' postings on time, interacting positively with group members, using appropriate language in discussion posts, having a respectful attitude toward the instructor, not asking for extra points/credits; and respecting class policies. Professionalism is a subjective assessment and the final point value will be determined by the instructor at the end of the semester.
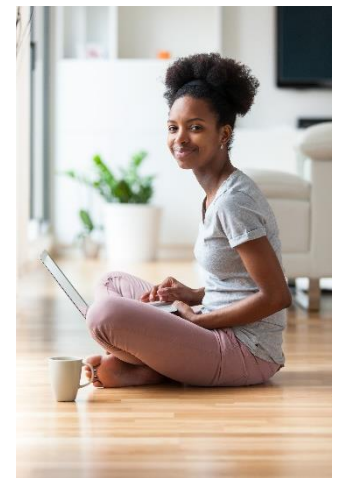
Hump Day Inspirational Video
An inspirational video will be posted under the announcement link each Wednesday. Please respond/comment or create your own inspirational message.

Yellowdig Community Participation. Yellowdig is an online conversation platform for this course that contributes to your interaction and participation points. It encourages engagement, casual conversation, and the exchange of ideas. You receive points for participating in Yellowdig posts and conversations each week, and those points factor into your final grade. More information is under the assignment section on the website.

EXAMS (3@ 75 possible points each)
Students are expected to synthesize and integrate the information presented in the lectures, readings, videos, and other supplemental materials. Exams and quizzes will consist of multiple choice, true/false, matching, and fill-in-the-blanks. Quizzes are open book. However, please do not underestimate the difficulty of these quizzes. Exams are open book and students have **two attempts** that must be completed on the same day. Please note that the second attempt is optional. The highest score will be taken. Please contact the UF HELP Desk if you encounter technical problems during an exam.

ASSIGNMENTS
A. Video Assignments

Personal Video Introduction (5 points). Students must make an on-camera personal video introduction (2 to 3 minutes) of themselves to the class and upload and embed it into Canvas so that it opens and plays in the assignment. Do not send video files as attachments. Please post as early as possible, so your classmates have enough time to respond. You must also respond to at least 3 video introductions to receive full credit. **Late assignments are accepted within 24 hours of the due date, but will automatically incur a 50% deduction (no exception)**.

Video Reflection on Course (5 points). Students are required to do **a video reflection on a topic or issue that they have learned from the textbook, other readings, or assignment.** Your video post must be **3-5 minutes and be posted by the due date**. Please post as early as possible so your classmates have enough time to respond. You also must respond to **at least 3 postings from the class**. Your response to the each post must be at least **100 words**. **Please note the deadline for these assignments. You must do your post at least 2 days before the due date to give your classmates enough time to respond. Late assignments are accepted within 24 hours of the due date, but will automatically incur a 50% deduction (no exception)**.

B. Weekly Questions from Text

Weekly Questions from Readings (0.5 points per question). Each student must turn in **5 multiple-choice questions from <u>each</u> book chapter assigned for the week.** If two chapters are assigned, then you must submit 10 questions, etc. Please provide 4 choices (A, B, C, D) for each question submitted. **The correct answer and the chapter and page number for each question must be given**. Each question is worth 0.5 points. Please submit the questions each week under the assignment link by the due date. About 25%-30% of the exam will be from questions submitted by students. Making up sample questions is a way to help you study and retain the information. Write the questions in the space provided online. **<u>Late assignments are accepted within 24 hours of the due date, but will automatically incur a 50% deduction (no exception)</u>**.

C. Yellowdig Discussion

Yellowdig Health Discussion Board (75 points). Yellowdig is an online conversation platform for this course that contributes to your interaction and participation points. It encourages engagement, casual conversation, and the exchange of ideas on health-related topics relevant to the course. You receive points for participating in Yellowdig posts and conversations, and those points factor into your final grade. Each week for **12 weeks (dates provided on website)**, you will post and or comment on health stories in the news (article or video) that relate in some way to topics health, tech, epidemiology, or vulnerable population groups from a local, national, or international source.

You receive points for participating in Yellowdig posts and conversations, and those points factor into your final grade. You are awarded points based on your participation in each topic. Points are accumulated each week by posting, commenting, and engaging with others. To earn as many points as possible, you are strongly encouraged to contribute to our Yellowdig Community early and often. **Note: Your Yellowdig points are not equivalent to your grade book points in Canvas.** The maximum Yellowdig points for the semester is 6000, which translates to 75 points in Canvas. **This is equivalent to an exam.**

Please go to the course website under the Yellowdig assignment for more details about the guidelines and expectations. A link to the Yellowdig community is also linked in the respective weekly assignments. **Yellowdig discussions open on Wednesdays (12 am) and close on Tuesdays (11:59 pm)**.

D. Technical Training

HIPPA Training (5 points). Students will complete the HIPPA training and submit proof of completing and passing the assessment. Be sure to print a copy as a PDF file and save it. Upload a copy of the PDF file to the assignment link by the due date. If the HIPAA training was done in the past 12 months, then submit the PDF certificate for it by the due date. **<u>Late assignments are accepted within 24 hours of the due date, but will automatically incur a 50% deduction (no exception)</u>**. Complete the HIPPA training by going to the http://mytraining.hr.ufl.edu/ and search for HIPPA.

IRB 803 Training (5 points). Students will complete the IRB 803 training and submit proof of completing and passing the assessment. Be sure to print a copy as a PDF file and save it. Upload a copy of the PDF file to the assignment link by the due date. If the IRB 803 was done in the past 2 years, then submit the PDF certificate for it by the due date. **<u>Late assignments are accepted within 24 hours of the due date, but will automatically incur a 50% deduction (no</u>**

exception). Complete the IRB 803 training from this link
http://irb.ufl.edu/index/requiredtraining.html

AI Literacy Training (15 points). Students will complete an online training on AI in Health Education and Promotion. This aligns with a UF goal to help students become literate and competent in artificial intelligence (AI), regardless of their major. The course includes 5 short lessons:1) Understanding AI and Machine Learning, 2) AI in Healthcare and Public Health, 3) AI in Health Education and Health Promotion, 4) AI Ethics, and 5) AI Bias and Privacy Concerns. This training is a step toward increasing AI literacy and competence among students who want to have a leading edge in the digital health field.

One of the great things about this training is that it **appears on your transcript** when you pass the training. **This 0-credit short course, HSC 4912**, contains one hour of video lecture materials, several short assignments, and a final quiz. You must **pass the quiz with an 80%** or higher to pass the course with an "S" grade. Please note that a **"U" grade is considered a failing grade and will appear on your transcript**. Please see the assignment link on the course website for more details.

E. Project (Student work in pairs)

Literature Matrix (75 points). Students will learn the Matrix Method to conduct a literature review on an assigned public health topic. You are reqSurguired to do an extensive literature review and then select and examine 30-35 sources from peer reviewed journals, government reports, and reputable newspaper investigation in the past five years. Two to three of these articles should relate to digital technology or artificial intelligence and the topic. Please refer to the assignment link on Canvas for a detailed description of the assignment. **Late assignments are accepted within 24 hours of the due date, but will automatically incur a 50% deduction (no exception)**.

Video Presentation of Epidemiologic Investigation (50 points). Students will create a research presentation based on the findings from the literature review on their assigned topics. Think of the presentation as part of an epidemiologic toolkit on the topic. The on-camera video presentation should be delivered via Zoom since it allows for multiple presenters. All team members must participate in the presentation.   Think of this as a professional presentation for an epidemiologist to use in a toolkit on the topic. Please see the assignment website for more details.

TOPICS

Surgical Treatment of Obesity	Parkinson's Disease	Red Tide
Health Issues of Night Shift Workers	Glaucoma	Ebola Virus
Environmental Cancers	Gestational Diabetes	Bipolar Disorders
Endometrial Cancer	RSV Virus and Children	Cyberbullying
Suicide and LGBTQ+ Youth	Testicular Cancer	

GRADING SYSTEM

93%-100%=A	90%-92.999%=A-	87%-89.99%=B+	83%-86.99%=B
80%-82.99%=B-	77%-79.99%=C+	73%-76.99%=C	70%-72.99%=C-
67%-69.99%=D+	63%-66.99%=D	60%-62.99%=D-	0%-59.99%=E

UF's grading policy can be found at
http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html.

Class Schedule*

Week 1 August 23-25

Weekly Activities	Readings	Due Dates
Weekly Activities • Purchase textbook • Complete course contract • Post video introduction • Read the syllabus and review website features • Email instructor via Canvas if you added the class • Read Ch 1 • Make up and submit exam questions for the week **Lectures for the Week** • Overview and Scope of Epidemiology • History of Epidemiology	Ch 1	

Week 2 August 28-September 1

Weekly Activities	Readings	Due Dates
Weekly Activities • Email instructor immediately via Canvas if you just added the class • Complete course contract • Post video introduction • Read Ch 2 • Make up and submit exam questions for the week **Lectures for the Week** • Practical Applications of Epidemiology	Ch 2	• Course contract quiz due August 30 • Post video introduction by August 30 and respond by September 1 • Submit Ch 1 by August 31

Week 3 September 4-8

Weekly Activities	Readings	Due Dates
Weekly Activities • Labor Day, September 4ᵗʰ (no classes) • Engage with course materials • Read Ch 3 • Make up and submit exam questions for the week • Start working on Literature matrix • Participate on Yellowdig • **Labor Day September 4** **Lectures for the Week** • Measures of Morbidity and Mortality	Ch 3	• **Yellowdig opens September 6** • Submit Ch 2 & 3 questions by September 7

Week 4 September 11-15

Weekly Activities	Readings	Due Dates
Weekly Activities • Engage with course materials • Read Ch 4 • Make up and submit exam questions for the week • Participate on Yellowdig **Lectures for the Week** • Descriptive Epidemiology	Ch 4	• Submit Ch 4 questions by September 14

Week 5 September 18-22		
Weekly Activities • Engage with course materials • Read Ch 5 • Make up and submit exam questions for the week • Submit proof of HIPPA training • Prepare for Exam 1 • Participate on Yellowdig **Lectures for the Week** • Sources of Data	Ch 5	• Submit Ch 5 questions by September 21 • HIPPA training due September 18
Week 6 September 25-29		
Weekly Activities • Engage with course materials • Read Ch 6 • Make up and submit exam questions for the week • Continue working on Annotated Bibliography • Exam 1 (Weeks 1-5) • Participate on Yellowdig **Lectures for the Week** • Ecologic, Cross-Sectional, and Case-Control Designs	Ch 6	• Exam 1 September 25 • Submit Ch 6 questions by September 28
Week 7 October 2-6		
Weekly Activities • Homecoming, October 6 (no classes) • Engage with course materials • Read Ch 7 • Submit Annotated Bibliography • Make up and submit exam questions for the week • Participate on Yellowdig • **Homecoming October 6** **Lectures for the Week** • Cohort Study Designs	Ch 7	• Submit Ch 7 questions by October 5
Week 8 October 9-13		
Weekly Activities • Engage with course materials • Read Ch 8 • Complete IRB 803 online training • Look for news item to post • Make up and submit exam questions for the week • Participate on Yellowdig **Lectures for the Week** • Experimental Study Designs • Ethics in Research	Ch 8	• Literature Matrix October 9 • Submit Ch 8 questions by October 12

Week 9 October 16-20		
Weekly Activities • Engage with course materials • Read Ch 9 • Submit proof of IRB training • Make up and submit exam questions for the week • Participate on Yellowdig **Lectures for the Week** • Measures of Effect	Ch 9	• IRB training due October 16 • Submit Ch 9 questions by October 19
Week 10 October 23-27		
Weekly Activities • Engage with course materials • Read Ch 10 • Make up and submit exam questions for the week • Participate on Yellowdig **Lectures for the Week** • Data Interpretation Issues	Ch 10	• Submit Ch 10 questions by October 26
Week 11 October 30-November 3		
Weekly Activities • Engage with course materials • Read Ch 11 • Make up and submit exam questions for the week • Participate on Yellowdig • Exam 2 (Ch 6-10) • **Veterans Day Observed November 10** **Lectures for the Week** • Screening for Diseases in the Community	Ch 11	• Exam 2 November 2 • Submit Ch 11 questions by November 2
Week 12 November 6-10		
Weekly Activities • Engage with course materials • Read Ch 12 • Make up and submit exam questions for the week • Participate on Yellowdig **Lectures for the Week** • Epidemiology of Infectious Diseases	Ch 12	• Submit Ch 12 questions by November 9 • AI training due November 6

Week 13 November 13-17		
Weekly Activities • Engage with course materials • Read Ch 13 & 14 • Make up and submit exam questions for the week • Participate on Yellowdig **Lectures for the Week** • Epidemiology of Work and the Environment • Molecular and Genetic Epidemiology	Ch 13 & 14	• Submit Ch 13 & 14 questions November 16
Week 14 November 20-24		
Weekly Activities • Thanksgiving, November 22-24 • Engage with course materials • Read Ch 15 • Start working on video reflection assignment • Make up and submit exam questions for the week • Participate on Yellowdig **Lectures for the Week** • Psych, Behavioral, and Social Epidemiology	Ch 15	• Submit Ch 15 questions by November 21 •
Week 15 November 27-December 1		
Weekly Activities • Engage with course materials • Read Ch 16 & 17 • Make up and submit exam questions for the week **Lectures for the Week** • Epidemiology as a Profession • Epidemiology and Health Policy	Ch 16 Ch 17	• Yellow dig ends November 29 • Submit Ch 16 & 17 questions by November 30 • Course video reflection on course due November 27 and respond to video reflection post by November 29
Week 16 December 4-8		
• Prepare for Exam 3 • Reading Days, December 7-8 (no classes)		• Video Project Presentation December 4
Week 17 December 11-15		
• **Exam 3**		• December 12

*Subject to change, and updates will be posted as needed