

# HSC 6506 Epidemiology

## Fall 2025

**Professor:** Delores. James, PhD, RDN, LDN, FAND  
**Office Hours:** Tues 10:30-11:30 (email chat); 1:30-2:30 (Zoom);  
Thurs 1:30-2:30 (Zoom); appointments as needed  
**Office/Phone:** Room 10 FLG, (352) 294-1806  
**Email:** Please do all class emails 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/>

### EPIDEMIOLOGY CORE COMPETENCIES

#### *Association of Schools and Programs of Public Health*

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.
- 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.
- Outline 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.
- Explain the evolving nature of artificial intelligence (AI) and its current and evolving applications in public health, health promotion, and healthcare.
- Apply and evaluate ethical principles of AI to different scenarios.

## TEXTS

1. Friis, R.H. & Sellers, T.A. (2021). Epidemiology for Public Health Practice, 6<sup>th</sup> ed. Jones and Bartlett. The eBook is available through UF All Access as well as [www.vitalsource.com](http://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](mailto:helpdesk@ufl.edu) or (352) 392-HELP.

## WIFI CONNECTION VIA EDUROAM

Students can connect nationally and internationally via the UF on-campus Wi-Fi, **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.

To connect to off-campus, go here: <https://helpdesk.ufl.edu/connecting-to-eduroam-off-campus/>. **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. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

## UF ACADEMIC POLICIES & RESOURCES

A list of UF's academic policies and resources is available at <https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/>.

## CLASS POLICIES

- **Emails.** All class emails will be done on the online course website, not through the instructor's UF email account. Emails sent to the instructor's email will be acknowledged and replied to in Canvas. Emails will be returned within 24 hours during regular business hours (9 am to 5 pm) Monday through Friday.
- **Appropriate Use of Artificial Intelligence (AI) Technology.** Some assignments in this course require the use of AI tools. These assignments will state the acceptable use of AI and how to cite the tools used appropriately. AI tools are never acceptable for taking exams or quizzes. AI tools sometimes produce inaccurate information. Thus, you are expected to review, edit, and take responsibility for all the work you submit under the scope of the [UF Student Honor Code and Conduct Code](#).
- **Respect and Trust.** We need to make sure that our learning spaces feel safe and trusting. 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 throughout the semester.

- **Attendance and Participation:** 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 asked to provide the instructor with written documentation of away games that are in conflict with exams and assignments as early as possible. This ensures timely accommodation and extensions of deadlines as needed.

## MY EXPECTATIONS OF YOU

Students will be notified of 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. 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, positive interaction with class members, using appropriate language in discussion posts, having a respectful attitude toward the instructor, not arguing for points, and respecting class policies. Professionalism is a subjective assessment, and the instructor will determine the final point value at the end of the semester.

- **10 points.** Responds to all emails and progress reports, proactive in communicating with instructor, high level of contribution to class discussions, demonstrates respectful and professional interaction with instructor and classmates, does not request extra credit points, turns in all assignments on time, and has a very positive influence on the class environment.
- **6-9 points.** Regular contribution to class discussions, occasionally responds to instructor emails, all assignments are turned in on time, generally has a respectful and professional interaction with instructor and classmates, does not request extra credit points, and positively influences the class environment.
- **0-5 points.** Does not respond to emails, has little or no contribution to class discussion, has several assignments that are late or missing, has poor participation in online discussion posts, and has a generally distracting presence in class.

### Hump Day Inspirational Video

Each Wednesday, an inspirational video will be posted under the announcement link to motivate, encourage, and brighten your day. Please respond/comment or post your inspirational message. This ungraded assignment is always a favorite activity for students.

## EXAMS (3@ 75 possible points each=225 points)

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-blank. Quizzes are open book, meaning you can use your class notes. 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. No make-up exams are given unless a medical reason is provided or there are very extreme circumstances that are documented. See the online exam link for more information.

## ASSIGNMENTS

**Course Contract Quiz.** Students must complete the course contract quiz before proceeding to the course materials. Please complete this as early as possible in the first week.

**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** within 2 days after your post to get full credit. Your response to the posts 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).**

**Weekly Questions from Readings (0.5 points per question).** Each student must turn in **5 multiple-choice questions from each 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, the chapter, and the 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. **Late assignments are accepted within 24 hours of the due date, but will automatically incur a 50% deduction (no exception).**

**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 **11 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 **artificial intelligence, digital technology, health and data science, health promotion, epidemiology, or health issues among vulnerable population groups.** You may use local, national, or international sources.

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).** You will not be able to go back and finish missed weeks.

**Mandatory Completion of IRB 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 3 years, then submit the PDF for it by the due date. **Late assignments are accepted within 24 hours of the due date, but will automatically incur a 50% deduction (no exception).** Complete the IRB 803 training from this link <http://irb.ufl.edu/index/requiredtraining.html>

**Mandatory Completion of 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 for it by the due date. **Late assignments are accepted within 24 hours of the due date, but will automatically incur a 50% deduction (no exception).** Complete the HIPPA training by going to the <http://mytraining.hr.ufl.edu/> and search for HIPPA.

**AI Literacy Training (10 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. Please see the assignment link on the course website for more details.



### **Project (Students work in pairs)**

**Literature Matrix (75 points).** One of the more useful tools in conducting research is the literature matrix. You are required to do an extensive literature review on an assigned topic. You will elect and examine 30-35 sources from peer-reviewed journals, government reports, and reputable newspaper investigations 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.

**Project topics are listed on the course website.**

## **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 21-22		
<p><b>Weekly Activities</b></p> <ul style="list-style-type: none"> <li>• Read the syllabus and review website</li> <li>• Purchase the textbook</li> <li>• Complete course contract</li> <li>• Create and post a video introduction</li> <li>• Email the instructor via Canvas if you added the class</li> <li>• Read Ch 1</li> <li>• Make up and submit exam questions for the week</li> </ul> <p><b>Lectures for the Week</b></p> <ul style="list-style-type: none"> <li>• Overview and Scope of Epidemiology</li> <li>• History of Epidemiology</li> </ul>	<p><b>Readings</b></p> <p>Ch 1</p>	<p><b>Due Dates</b></p>
Week 2 August 25-29		
<p><b>Weekly Activities</b></p> <ul style="list-style-type: none"> <li>• Email the instructor via Canvas if you added the class</li> <li>• Read Ch 2</li> <li>• Make up and submit exam questions for the week</li> <li>• Complete</li> </ul> <p><b>Lectures for the Week</b></p> <ul style="list-style-type: none"> <li>• Practical Applications of Epidemiology</li> </ul>	<p>Ch 2</p>	<ul style="list-style-type: none"> <li>• Course contract quiz due August 29</li> <li>• Post video introduction by August 29 and respond by September 2</li> <li>• Submit Ch 1 by August 29</li> </ul>
Week 3 September 1-5		
<p><b>Weekly Activities</b></p> <ul style="list-style-type: none"> <li>• Engage with course materials</li> <li>• Read Ch 3</li> <li>• Make up and submit exam questions for the week</li> <li>• Start working on the literature matrix assignment</li> <li>• Participate on Yellowdig</li> <li>• Labor Day, September 2</li> </ul> <p><b>Lectures for the Week</b></p> <ul style="list-style-type: none"> <li>• Measures of Morbidity and Mortality</li> </ul>	<p>Ch 3</p>	<ul style="list-style-type: none"> <li>• Yellowdig opens September 3</li> <li>• Submit Ch 2 &amp; 3 questions by September 4</li> </ul>
Week 4 September 8-12		
<p><b>Weekly Activities</b></p> <ul style="list-style-type: none"> <li>• Engage with course materials</li> <li>• Read Ch 4</li> <li>• Make up and submit exam questions for the week</li> <li>• Complete and submit proof of AI training</li> <li>• Participate on Yellowdig</li> </ul> <p><b>Lectures for the Week</b></p> <ul style="list-style-type: none"> <li>• Descriptive Epidemiology</li> </ul>	<p>Ch 4</p>	<ul style="list-style-type: none"> <li>• Submit Ch 4 questions by September 11</li> <li>• AI Training Due September 8</li> </ul>

<b>Week 5 September 15-19</b>		
<p><b>Weekly Activities</b></p> <ul style="list-style-type: none"> <li>Engage with course materials</li> <li>Read Ch 5</li> <li>Make up and submit exam questions for the week</li> <li>Prepare for Exam 1</li> <li>Participate on Yellowdig</li> </ul> <p><b>Lectures for the Week</b></p> <ul style="list-style-type: none"> <li>Sources of Data</li> </ul>	Ch 5	<ul style="list-style-type: none"> <li>Submit Ch 5 questions by September 18</li> </ul>
<b>Week 6 September 22-26</b>		
<p><b>Weekly Activities</b></p> <ul style="list-style-type: none"> <li>Engage with course materials</li> <li>Read Ch 6</li> <li>Make up and submit exam questions for the week</li> <li>Exam 1 (Weeks 1-5)</li> <li>Participate on Yellowdig</li> </ul> <p><b>Lectures for the Week</b></p> <ul style="list-style-type: none"> <li>Ecologic, Cross-Sectional, and Case-Control Designs</li> </ul>	Ch 6	<ul style="list-style-type: none"> <li><b>Exam 1 September 25</b></li> <li>Submit Ch 6 questions by September 25</li> </ul>
<b>Week 7 September 29-October 3</b>		
<p><b>Weekly Activities</b></p> <ul style="list-style-type: none"> <li>Engage with course materials</li> <li>Read Ch 7</li> <li>Submit proof of HIPPA training</li> <li>Make up and submit exam questions for the week</li> <li>Participate on Yellowdig</li> </ul> <p><b>Lectures for the Week</b></p> <ul style="list-style-type: none"> <li>Cohort Study Designs</li> </ul>	Ch 7	<ul style="list-style-type: none"> <li>HIPPA training due September 29</li> <li>Submit Ch 7 questions by October 2</li> </ul>
<b>Week 8 October 6-10</b>		
<p><b>Weekly Activities</b></p> <ul style="list-style-type: none"> <li>Engage with course materials</li> <li>Read Ch 8</li> <li>Make up and submit exam questions for the week</li> <li>Participate on Yellowdig</li> <li>Submit proof of IRB training</li> </ul> <p><b>Lectures for the Week</b></p> <ul style="list-style-type: none"> <li>Experimental Study Designs</li> <li>Ethics in Research</li> </ul>	Ch 8	<ul style="list-style-type: none"> <li>Submit Ch 8 questions by October 9</li> <li>IRB training due October 6</li> </ul>



Week 9 October 13-17		
<p><b>Weekly Activities</b></p> <ul style="list-style-type: none"> <li>Engage with course materials</li> <li>Read Ch 9</li> <li>Make up and submit exam questions for the week</li> <li>Participate on Yellowdig</li> <li>Homecoming October 18</li> </ul> <p><b>Lectures for the Week</b></p> <ul style="list-style-type: none"> <li>Measures of Effect</li> </ul>	Ch 9	<ul style="list-style-type: none"> <li>Submit Ch 9 questions by October 16</li> </ul>
Week 10 October 20-24		
<p><b>Weekly Activities</b></p> <ul style="list-style-type: none"> <li>Engage with course materials</li> <li>Read Ch 10</li> <li>Submit literature matrix assignment</li> <li>Make up and submit exam questions for the week</li> <li>Participate on Yellowdig</li> </ul> <p><b>Lectures for the Week</b></p> <ul style="list-style-type: none"> <li>Data Interpretation Issues</li> </ul>	Ch 10	<ul style="list-style-type: none"> <li>Submit Ch 10 questions by October 23</li> <li>Literature Matrix October 20</li> </ul>
Week 11 October 27-31		
<p><b>Weekly Activities</b></p> <ul style="list-style-type: none"> <li>Engage with course materials</li> <li>Read Ch 11</li> <li>Make up and submit exam questions for the week</li> <li>Participate on Yellowdig</li> <li>Exam 2 (Ch 6-10)</li> </ul> <p><b>Lectures for the Week</b></p> <ul style="list-style-type: none"> <li>Screening for Diseases in the Community</li> </ul>	Ch 11	<ul style="list-style-type: none"> <li>Exam 2 October 30</li> <li>Submit Ch 11 questions by October 30</li> </ul>
Week 12 November 3-7		
<p><b>Weekly Activities</b></p> <ul style="list-style-type: none"> <li>Engage with course materials</li> <li>Read Ch 12</li> <li>Make up and submit exam questions for the week</li> <li>Participate on Yellowdig</li> </ul> <p><b>Lectures for the Week</b></p> <ul style="list-style-type: none"> <li>Epidemiology of Infectious Diseases</li> </ul>	Ch 12	<ul style="list-style-type: none"> <li>Submit Ch 12 questions by November 6</li> </ul>

<b>Week 13 November 10-14</b>		
<b>Weekly Activities</b> <ul style="list-style-type: none"> <li>Engage with course materials</li> <li>Read Ch 13 &amp; 14</li> <li>Make up and submit exam questions for the week</li> <li>Participate on Yellowdig</li> <li>Veterans Day, November 11</li> </ul> <b>Lectures for the Week</b> <ul style="list-style-type: none"> <li>Epidemiology of Work and the Environment</li> <li>Molecular and Genetic Epidemiology</li> </ul>	Ch 13 & 14	<ul style="list-style-type: none"> <li>Submit Ch 13 &amp; 14 questions November 13</li> <li>Video Project Presentation November 10</li> </ul>
<b>Week 14 November 17-21</b>		
<b>Weekly Activities</b> <ul style="list-style-type: none"> <li>Engage with course materials</li> <li>Read Ch 15 &amp; 16</li> <li>Start working on video reflection assignment</li> <li>Make up and submit exam questions for the week</li> <li>Participate on Yellowdig</li> </ul> <b>Lectures for the Week</b> <ul style="list-style-type: none"> <li>Psych, Behavioral, and Social Epidemiology</li> <li>Epidemiology as a Profession</li> </ul>	Ch 15, Ch 16	<ul style="list-style-type: none"> <li>Submit Ch 15 &amp; 16 questions by November 20</li> <li>Yellowdig ends November 19 12:30 am</li> </ul>
<b>Week 15 November 24-28 Thanksgiving Break Week</b>		
<b>Week 16 December 1-5</b>		
<b>Weekly Activities</b> <ul style="list-style-type: none"> <li>Engage with course materials</li> <li>Read Ch 17</li> <li>Make up and submit exam questions for the week</li> <li>Reading Days, December 5-6 (no classes)</li> </ul> <b>Lectures for the Week</b> <p>Epidemiology and Health Policy</p>	Ch 17	<ul style="list-style-type: none"> <li>Submit Ch 17 questions by December 3</li> <li>Course video reflection due December 1 and respond to video reflection post by December 3</li> </ul>
<b>Finals Week December 8-12</b>		
<ul style="list-style-type: none"> <li>Exam 3</li> </ul>		<ul style="list-style-type: none"> <li>Exam 3 December</li> </ul>

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