

**University of Florida**  
**College of Public Health & Health Professions Syllabus**  
**PHC 6009: Biology and Epidemiology of HIV/AIDS (3 credits)**  
Semester: Summer 2017  
Delivery Format: Online  
E-learning in Canvas

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Instructor Name: Robert Cook, MD, MPH

Room Number: CTRB 4232

Phone Number: 352-273-5869

Email Address: cookrl@ufl.edu

Office Hours: I'm happy to have appointments via canvas discussion; skype, phone, or in-person.

Contact Dominique Easterling 352-294-5672 | Email: deasterling@ufl.edu to set up an appointment.

Preferred Course Communications (e.g. email, office phone): email or scheduled appointment

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### **Prerequisites**

PHC 6001 – Principles of Epidemiology, or permission of the instructor

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## **PURPOSE AND OUTCOME**

### **Course Overview and Goals**

The overall goals of this course are: 1) To provide a basic understanding of the biological process by which HIV causes infection and AIDS, including the physiologic processes and cellular process involved in HIV infection and treatment; 2) To promote the development of skills in finding and interpreting current epidemiologic data on HIV/AIDS, including risk factors, comorbid health issues, special populations, and health outcomes; 3) To present an overview of HIV prevention strategies and their effectiveness; 4) To discuss issues specific to the epidemiology of HIV/AIDS in the rural south; 5) to explain ongoing efforts to identify a cure for HIV.

### **Course Objectives**

Upon successful completion of the course, students should be able to:

- Describe the emergence of HIV as a new pathogen, particularly within the US
- Discuss the pathogenesis of HIV and its effect on the immune system
- Identify current treatment strategies for HIV infection and barriers to treatment success
- Identify current behavioral and biomedical strategies to prevent HIV transmission
- Analyze and interpret epidemiologic data related to HIV/AIDS to measure the burden of disease in their respective geographic areas and among populations of interest
- Design epidemiologic studies related to the prevention and treatment of HIV/AIDS overall and within specific groups of persons.
- Explain the role of public health in the prevention and management of HIV in Florida
- Explain the barriers to creating a cure or a vaccine for HIV
- Apply knowledge of legal and ethical issues related to HIV-infected individuals and prevention of infection

### **How to Succeed in This Course**

The summer session is shorter than other semesters but the course content is not shorter so the pace of this course will be fast. It's critical that you keep up with the schedule –each week expect about 2-3 hours of formal content, and 2-3 hours of homework per week (at minimum). This course is not self-paced so be sure to mark the assignment due dates, quiz dates, and book discussion date in your calendar and participate in them as scheduled. I will try to open up course modules 1-2 weeks in advance so you can work ahead if desired. You are expected to have reliable internet access for this course. If you plan to go out of town then you'll need to plan ahead to ensure that your assignments are submitted on-time. The final paper in this course is a critical element, so start early, schedule a discussion with the instructor, and follow the guidelines.

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## ACADEMIC REQUIREMENTS AND GRADING

### Quizzes

There will be three **online quizzes** during the semester to assess overall understanding of the material presented during lectures. The quizzes will be open book/open note, with a mixed format of short answer, long answer, and multiple choice. Each quiz is worth 10% of the course grade. You are supposed to do the quiz independently, and without help or input from others. Quiz questions will, for the most part, be based on the individual learning objectives for each class.

### Course Homework and Discussions

There will be several **homework** assignments during the semester, most of which are worth 15 points (2.5% of the course grade). Instructions for completing homework assignments can be found on the Canvas site.

### Book Discussion

All students will read *My Own Country*, by Abraham Verghese, (ISBN 0-679-75292-7) for the book discussion during week 10 of the course. Write and answer three **book discussion questions** that we will use during our **group discussion**. You will participate in a live book discussion during the week of July 11 to July 17. The book discussion questions are worth 25 points of your grade and your participation in and contribution toward the book discussion is worth 25 points (total book discussion is 8.33% of grade).

### Final Project

Students will design an original epidemiologic study related to HIV/AIDS prevention, transmission, treatment, behavior, policy, or other topics as approved by the instructor. This project is intended to be somewhat like a grant application in which you identify a problem (or gap in our knowledge) and propose a research study to answer the question. As part of this requirement, students will submit a **Research Paper Question (draft 10 points and final 15 points)**, an **Outline of Study Design and Key Measures (25 points)**, a **Rough Draft (25 points)** and two **Peer Evaluations of each other's designs and rough drafts (25 points)**. The **Final Project (100 points)** will be the write-up of the study proposal, including one to two research questions, a brief literature review relevant to the proposed study, and a description of the proposed study. The write-up should be 8 to 10 pages, double-spaced, and is due on August 4. More details will be provided in the Canvas course site and in brief video clips provided by the instructor. As you can see this project paper is worth 200 points (33% of the grade!). You are encouraged to schedule times to speak with Dr. Cook about your project before you submit your Paper outline and again before the final paper.

The specific weekly topics for this course, and weekly graded assignments are summarized in the table on the next page.

## DESCRIPTION OF COURSE CONTENT

### Topical Outline/Course Schedule

Week	Dates	Topic	Requirement	Due date	Points*
1	5/8 – 5/14	<ul style="list-style-type: none"> <li>Intro and History</li> </ul>	<ul style="list-style-type: none"> <li>Syllabus Quiz</li> <li>Introductions</li> <li>Reflection Paper</li> </ul>	5/15	5 15 15
2	5/15 – 5/21	<ul style="list-style-type: none"> <li>Study designs and HIV</li> <li>HIV/AIDS surveillance</li> </ul>	<ul style="list-style-type: none"> <li>Study Design Paper</li> <li>State Surveillance Report</li> </ul>	5/22	15 15
3	5/22 – 5/28	<ul style="list-style-type: none"> <li>Virology basics and intro to biology of HIV</li> <li>HIV and the immune system</li> </ul>	<ul style="list-style-type: none"> <li>Research Paper Question - Draft</li> <li>Homework</li> </ul>	5/30	10 15
4	5/29 – 6/4	<ul style="list-style-type: none"> <li>HIV Care continuum: Care engagement and treatment</li> </ul>	<ul style="list-style-type: none"> <li>Homework</li> <li>Research Paper Question - Final</li> </ul>	6/5	15 15
5	6/5 – 6/11	<ul style="list-style-type: none"> <li>Study design comments for papers</li> </ul>	<ul style="list-style-type: none"> <li>Outline of Research Paper and Design</li> <li>Quiz #1</li> </ul>	6/12	25 50
6	6/12 – 6/18	<ul style="list-style-type: none"> <li>Biomedical prevention strategies.</li> <li>Behavioral prevention strategies</li> </ul>	<ul style="list-style-type: none"> <li>Homework</li> <li>Interventions Discussion</li> </ul>	6/26	15 15
7	6/19 – 6/25	Summer Break			
8	6/26 – 7/2	<ul style="list-style-type: none"> <li>HIV testing</li> <li>HIV and aging</li> </ul>	<ul style="list-style-type: none"> <li>Homework</li> <li>Rough Draft of Paper</li> </ul>	7/3	25 15
9	7/3 – 7/9	<ul style="list-style-type: none"> <li>No Lecture</li> </ul>	<ul style="list-style-type: none"> <li>Book Discussion Writing Assignment</li> <li>Quiz #2</li> </ul>	7/10	25 50
10	7/10 – 7/16	<ul style="list-style-type: none"> <li>HIV in the rural south</li> <li>Book Discussion</li> </ul>	<ul style="list-style-type: none"> <li>Peer evaluation of rough drafts</li> <li>Book Discussion</li> </ul>	7/17 TBA	25 25
11	7/17 – 7/23	<ul style="list-style-type: none"> <li>Infections associated with HIV/AIDS</li> <li>HIV and health disparities.</li> </ul>	<ul style="list-style-type: none"> <li>Homework</li> <li>5-slide summary of one infection associated with HIV</li> </ul>	7/24	15 15
12	7/24 – 7/30	<ul style="list-style-type: none"> <li>Substance abuse and HIV</li> <li>Worldwide epidemiology of HIV/AIDS</li> </ul>	<ul style="list-style-type: none"> <li>Infections discussion board</li> <li>World Country Profile</li> </ul>	7/31	15 15
13	7/31 – 8/4	<ul style="list-style-type: none"> <li>The AIDS-free generation - HIV cure</li> <li>Current NIH funding priorities</li> <li>Quiz 3</li> </ul>	<ul style="list-style-type: none"> <li>Final Paper due</li> <li>Quiz #3</li> </ul>	8/4	100 50

\* There are 600 total points. 15 points is 2.5% of your grade, 50 points is 8.33% of your grade

**Grading:** Each assignment contributes somewhat to the overall course grade. The final paper is a large chunk of the grade so it is important to not fall behind on that assignment. If you miss an assignment due date, you will be assigned a zero. Please discuss with the instructor ASAP about possible make-up options, which can be considered in some circumstances but not always. Although an assignment worth 2.5% of your grade does not seem like much, if you miss more than 3-4 of these it will be nearly impossible to obtain an A.

Point system used (i.e., how do course points translate into letter grades).

<b>Points earned</b>	<b>93%- 100%</b>	<b>90%- 92%</b>	<b>87%- 89%</b>	<b>83%- 86%</b>	<b>80%- 82%</b>	<b>77%- 79%</b>	<b>73%- 76%</b>	<b>70%- 72%</b>	<b>67%- 69%</b>	<b>63%- 66%</b>	<b>60%- 62%</b>	<b>&lt;60%</b>
<b>Letter Grade</b>	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E

<b>Letter Grade</b>	<b>A</b>	<b>A-</b>	<b>B+</b>	<b>B</b>	<b>B-</b>	<b>C+</b>	<b>C</b>	<b>C-</b>	<b>D+</b>	<b>D</b>	<b>D-</b>	<b>E</b>	<b>WF</b>	<b>I</b>	<b>NG</b>	<b>S-U</b>
<b>Grade Points</b>	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at:

<http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

#### **Policy Related to Make up Exams or Other Work**

Make-up exams or make-ups of assignments will only be given in the event of illness that is documented by a physician.

Please note: Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail me promptly (within one hour) after the technical difficulty if you wish to request a make-up.

#### **Course Materials and Technology**

Required course readings will be drawn from multiple open-access sources and posted on the course website. To participate in the online book discussion, you should have headphones with a microphone and a high-speed internet connection.

The required book for the book discussion is ***My Own Country***, by Abraham Verghese,

For technical support for this class, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

#### **Policy Related to Required Class Attendance**

Students are expected to access online lectures before the assignment due date, to prepare for and participate in at least one online discussions in a professional manner, and to complete quizzes and assignments by the due date posted. There are several opportunities for peer discussion and feedback, and usually these are timed to a specific week or assignment. Please be respectful and timely with your responses.

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## Academic Integrity

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

**“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”**

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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.”**

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:

<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>  
<http://gradschool.ufl.edu/students/introduction.html>

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

## Online Faculty Course Evaluation Process

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>. The instructor will provide a bonus on the final quiz if there is over a 93% response rate for course evaluations.

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## SUPPORT SERVICES

### Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, you must register with the Dean of Students Office <http://www.dso.ufl.edu> within the first week of class. The Dean of Students Office will provide documentation of accommodations to you, which you then give to me as the instructor of the course to receive accommodations. Please make sure you provide this letter to me by the end of the second week of the course. The College is committed to providing reasonable accommodations to assist students in their coursework.



### U Matter, We Care

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

### **Counseling and Student Health**

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: <http://www.counseling.ufl.edu>. On line and in person assistance is available.
- You Matter We Care website: <http://www.umatter.ufl.edu/>. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: <https://shcc.ufl.edu/>
- Crisis intervention is always available 24/7 from:  
Alachua County Crisis Center  
(352) 264-6789  
<http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx>

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

### **Inclusive Learning Environment**

HIV infection, and related issues such as sexual behavior and drug use, are topics on which people have a range of attitudes, beliefs, and opinions. A diverse mix of people from many different backgrounds take this course. In fact, one advantage of an online course is the opportunity to engage with a wider range of classmates than one might encounter within a classroom on campus at UF. We have the opportunity to gain understanding of different ideas through respectful communication and discussion. Please be respectful of each other.

The course instructor and the University of Florida are committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status. If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please communicate with your instructor or refer to the Office of Multicultural & Diversity Affairs website: [www.multicultural.ufl.edu](http://www.multicultural.ufl.edu)

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