University of Florida  
College of Public Health & Health Professions Syllabus  
PHC 6009: Biology and Epidemiology of HIV/AIDS (3 credits)  
Semester: Summer 2016  
Delivery Format: Online  
E-learning in Canvas

Instructor Name: Robert Cook, MD, MPH  
Room Number: CTRB 4232  
Phone Number: 352-273-5869  
Email Address: cookrl@ufl.edu  
Office Hours: By appointment  
Preferred Course Communications (e.g. email, office phone): email  
Course TA: Emeka Okafor, MPH (emekaokafor@phhp.ufl.edu)

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

PURPOSE AND OUTCOME

Course Overview  
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

Course Objectives and/or Goals  
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  
• 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. 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. 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, review your epidemiology study designs, and follow the paper guidelines.
## DESCRIPTION OF COURSE CONTENT

### Topical Outline/Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
<th>Requirement</th>
<th>Due date</th>
<th>Points*</th>
</tr>
</thead>
</table>
| 1    | 5/9 – 5/15  | • Intro and History                                                  | 1. Syllabus Quiz  
2. Introductions  
3. Reflection Paper                                                            | 5/15     | 5       |
|      |             |                                                                      |                                                                             |          | 15      |
|      |             |                                                                      |                                                                             |          | 15      |
| 2    | 5/16 – 5/22 | • Study designs and HIV  
• HIV/AIDS surveillance                                                | 1. Study Description Paper  
2. State Surveillance Report                                                   | 5/22     | 15      |
|      |             |                                                                      |                                                                             |          | 15      |
| 3    | 5/23 – 5/29 | • Virology basics and intro to biology of HIV  
• HIV and the immune system                                                  | 1. Research Paper Question Draft  
2. Homework                                                                    | 5/29     | 10      |
|      |             |                                                                      |                                                                             |          | 15      |
| 4    | 5/30 – 6/5  | • HIV Care continuum: Care engagement and treatment                  | 1. Research Paper Question Final  
2. Homework                                                                    | 6/5      | 15      |
|      |             |                                                                      |                                                                             |          | 15      |
| 5    | 6/6 – 6/12  | • No Lecture                                                          | 1. Outline of Research Paper  
2. Quiz #1                                                                     | 6/12     | 25      |
|      |             |                                                                      |                                                                             |          | 50      |
| 6    | 6/13 – 6/19 | • Biomedical prevention strategies.  
• Behavioral prevention strategies                                              | 1. Homework  
2. Homework                                                                    | 6/19     | 15      |
|      |             |                                                                      |                                                                             |          | 15      |
| 7    | 6/20 – 6/26 |                                                                      | Summer Break                                                                 |          |         |
| 8    | 6/27 – 7/3  | • HIV testing  
• HIV and aging                                                      | 1. Rough Draft of Paper  
2. Homework                                                                    | 7/3      | 25      |
|      |             |                                                                      |                                                                             |          | 15      |
| 9    | 7/4 – 7/10  | • No Lecture                                                          | 1. Book Discussion Writing Assignment  
2. Quiz #2                                                                     | 7/10     | 25      |
|      |             |                                                                      |                                                                             |          | 50      |
| 10   | 7/11 – 7/17 | • HIV in the rural south  
• Book Discussion                                                               | 1. Peer evaluation of rough drafts  
2. Book Discussion                                                             | 7/17     | 25      |
|      |             |                                                                      |                                                                             | TBA      | 25      |
| 11   | 7/18 – 7/24 | • Infections associated with HIV/AIDS  
• HIV and health disparities.                                                  | 1. Homework  
2. 5-slide summary of one infection                                           | 7/24     | 15      |
|      |             |                                                                      |                                                                             |          | 15      |
| 12   | 7/25 – 7/31 | • Substance abuse  
• Worldwide epidemiology of HIV/AIDS                                            | 1. Substance abuse discussion board  
2. World Country Profile                                                         | 7/31     | 15      |
|      |             |                                                                      |                                                                             |          | 15      |
| 13   | 8/1 – 8/5   | • The AIDS-free generation - HIV cure  
• Current NIH funding priorities  
• Quiz 3                                                                         | 1. Final Paper due  
2. Quiz #3                                                                     | 8/7      | 100     |
|      |             |                                                                      |                                                                             |          |         |

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

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 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, potential associations in high-risk groups, or other topics as approved by the instructor. This project is supposed to be somewhat like a grant application in which you identify a problem (or gap in our knowledge) and propose a research study to address the problem or gap. As part of this requirement, students will submit a Research Paper Question (draft 10 points and final 15 points), an Outline of Research Paper (25 points), a rough draft (25 points) and a Peer evaluation of each other’s rough drafts (25 points). The final project (100 points) will be the write-up of the study proposal, including one to two study aims, 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 5. 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!). Our course TA (Mr. Okafor) will be checking in with each of you to discuss your ideas after you submit your paper outline, and you are encouraged to speak with either Dr. Cook or Mr. Okafor early in the process of thinking about this paper.

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).

<table>
<thead>
<tr>
<th>Points earned</th>
<th>93%-100%</th>
<th>90%-92%</th>
<th>87%-89%</th>
<th>83%-86%</th>
<th>80%-82%</th>
<th>77%-79%</th>
<th>73%-76%</th>
<th>70%-72%</th>
<th>67%-69%</th>
<th>63%-66%</th>
<th>60%-62%</th>
<th>&lt;60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter Grade</td>
<td>A</td>
<td>A-</td>
<td>B+</td>
<td>B</td>
<td>B-</td>
<td>C+</td>
<td>C</td>
<td>C-</td>
<td>D+</td>
<td>D</td>
<td>D-</td>
<td>E</td>
</tr>
<tr>
<td>Grade Points</td>
<td>4.0</td>
<td>3.67</td>
<td>3.33</td>
<td>3.0</td>
<td>2.67</td>
<td>2.33</td>
<td>2.0</td>
<td>1.67</td>
<td>1.33</td>
<td>1.0</td>
<td>0.67</td>
<td>0.0</td>
</tr>
</tbody>
</table>

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.

Policy Related to Required Class Attendance
Students are expected to access online lectures during the week they are assigned, to prepare for and participate in online discussions in a professional manner, and to complete quizzes and assignments by the due date posted.

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/.

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.

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 website 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.