

**Biology of AIDS PCB 4232-B51**  
**Florida International University**  
**Spring 2017**

**Course Time:** Tuesday and Thursday 12:30 PM – 1:45 PM  
**Course Location:** Academic Center One 194  
**Instructor:** Helena Schmidt Mayerova, Ph.D.  
Office: AC1 383A  
Office hours: Mon: 12:00 PM – 2:00 PM  
Wed: 10:00 AM- 1:30 PM  
Tue/Thur: 2:00 PM - 3:00 PM (except for the 2nd Thursday of the month) or by the appointment  
Phone: (305) 919-4135  
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**COURSE DESCRIPTION:**

This course will explore HIV/AIDS history, biological bases of the infection, mechanisms by which the virus overcomes the body defenses, epidemiology of AIDS, development of the treatment strategies and the current hopes and hurdles towards the development of HIV vaccine. The important part of the course discussions will be devoted to the AIDS impact on the society and the psychosocial prospective.

**COURSE GOAL** is to translate a fundamental knowledge on HIV and the mechanisms by which HIV overcomes the body defenses and triggers AIDS and apply this knowledge towards recognizing different faces of HIV pandemics and their impact on society. Upon completion of the course, students will be able to:

1. Outline major characteristics of AIDS pandemics and define origin of HIV
2. Explain replication of HIV and identify the mechanisms by which the virus alters immune system.
3. Define and recognize AIDS and discriminate between scientific facts and misinformation about HIV/AIDS
4. Estimate HIV/AIDS risk assessments and outline prevention strategies
5. Outline current and future treatment strategies
6. Appraise psychological impact of HIV/AIDS on individuals living with AIDS
7. Evaluate the impact of HIV/AIDS on society

**LEARNING MATERIAL:** The textbook is recommended, not mandatory. Benjamin S. Weeks and Teri Shors: “*AIDS: The Biological Basis*”, 6<sup>th</sup> edition, 2014 Jones & Bartlett Learning, ISBN: 978-1-4496-1488-1

You will have assigned readings posted on blackboard periodically throughout the semester.

**You will need iClickers for in class activity.**

## CLASS ATTENDANCE AND PARTICIPATION

- Class attendance is highly recommended. Class attendance will help you master the course material. In addition, exams may cover material not included in textbook or lecture PowerPoint outlines.
- In the case of missed lecture days or impending absences, **students are responsible for obtaining lecture notes and in-class announcement information from fellow classmates.**
- **All electronic communication equipment (i.e. phones, computers, i-pads) must be silenced** so as to not encumber the learning and thinking process of others. Disruptive behavior during lectures/exams is deemed inappropriate and will not be tolerated. I encourage you to limit use of computers, i-pads, tablets, etc. in the classroom. I want you to be an active participant of the course engaged in discussions and disputes.

## HOW WILL YOU SUCCEED IN THIS COURSE?

**Prepare and Participate:** Be active in the classroom. Active class participation is very important and even though you might feel nervous to raise your hand and speak, please do so; ask questions, answer questions, trigger discussions, share what you have been reading. Any course material relevant question is appropriate, so do not hesitate to ask. Remember that having an inquisitive mind is vital for science and learning. You will discover that being active in the class will help you to learn. However, in order to be active in the class **you have to come prepared.** If you want to succeed in the class you have to do your work, complete your home assignments and readings before coming to the class. Identify challenging concepts and material and prepare relevant questions for the class. Remember that: *"The will to succeed is important, but what's more important is the will to prepare (Bobby Knight)"*. This applies not only to sport, but to your studies as well.

**Communicate:** Don't try to solve all class challenges by yourself. Talk.....Talk to your peers, talk to me. Come to my office and share your concerns, request further clarifications of the material, share your thoughts. Let me know if any of the material or class activity is challenging for you and you struggle with it. We will try to find solution together. Don't wait until the end of semester to do so; come early and come as many time as you need. If you can't come during my office hours, please take an appointment. It is important that you start doing this early in the semester in order to overcome obstacles and succeed.

## ASSESSMENT:

Your grade will be assessed based on your performance in **three tests (the third one will be cumulative), group project, and class activity.**

**Grade Distribution:** Test 1 – 150 points  
Test 2 – 150 points  
Test 3 – 150 points  
The final exam: 150 points  
Group project – 200 points  
Class activity – 200 points  
**Total: 1000 points = 100%**

**Tests** will consist of multiple-choice, matching, true-false, and short answer questions.

**Exam make-up:** You will be able to make-up for one missed exam. **All make-up exams will have fill in blank and an essay format.**

**There will be no make-up for the third cumulative exam unless circumstances beyond the student's control arise and are accompanied by the appropriate documentation:**

- Death of an immediate family member requires official bereavement statement.
- Student/immediate family member with acute/terminal illness require an official hospital/clinic notification.
- Traffic accident requires official accident report.
- Jury duty requires county clerk summons.
- Military duty.

**If granted, the make-up will have an essay format**

**Class activity** will consist of iClicker questions, or short class assignments that will NOT be posted online. **Class activity will NOT be announced in advance and you will NOT be able to make-up for them.**

**Group Project:** You will form groups of five during the first week of the course. You will hand in the names of students in your group during the first class of the 2<sup>nd</sup> week, January 17, 2017. Students without group affiliation will be assigned the groups. I will **not accept individually prepared projects.**

Each group will design and prepare an HIV-AIDS awareness project. The project can be executed in different forms; you can make a poster, brochure, presentation, videos, organized discussion forum with students or general population, awareness project targeting the most vulnerable populations, such as minorities, or teenagers. All forums and community projects must be video recorded. All projects will be uploaded to Turnitin via Blackboard. Groups that will have recordings or videos will prepare and upload transcripts to Turnitin. Every group will also prepare class presentation of the project. Detailed instructions will be posted on blackboard.

**Don't forget to include contribution (percent effort) of each person in the group!**

**The deadline for project submission is Sunday, April 2, 2017**

<b><u>Grading scale:</u></b>	A	93 % - 100%
	A-	90 % - 92.9 %
	B+	88 % - 89.9 %
	B	83 % - 87.9 %
	B-	80 % - 82.9 %
	C+	78 % - 79.9 %
	C	70 % - 77.9 %
	D	60 % - 69.9 %
	F	<60%

**EXAM DATES:**

**Exam 1 – Thursday, Thursday, February 2**

**Exam 2 – Thursday, Thursday, March 9**

**Exam 3 – Thursday, Thursday, April 6**

**The final Exam: Tuesday, April 25, 12:00- 2:00 PM**

**IMPORTANT NOTE: Please remember that your grades are earned, not given. I will not answer emails or personal requests asking for better grades than earned in class. Your grades will be based on your achievements and class activity.**

## ACADEMIC MISCONDUCT POLICY:

Florida International University is a community dedicated to generating and imparting knowledge through excellent teaching and research, the rigorous and respectful exchange of ideas, and community service. All students should respect the right of others to have an equitable opportunity to learn and honestly demonstrate the quality of their learning. Therefore, all students are expected to adhere to a standard of academic conduct, which demonstrates respect for themselves, their fellow students, and the educational mission of the University. All students are deemed by the University to understand that if they are found responsible for academic misconduct (e.g. *cheating, plagiarism, academic dishonesty*), they will be subject to the Academic Misconduct procedures and sanctions, as outlined in the *FIU Student Handbook* under the “Academic Misconduct” section.”

**If found cheating** (the unauthorized use of books, notes, aids, electronic sources, or assistance from another person with respect to examinations, course assignments, or the unauthorized possession of examination papers or course materials, whether originally authorized or not) **you will receive an “F”, no exception.**

## TENTATIVE ASSIGNMENT SCHEDULE:

(Please be advised that the course syllabus schedule of events is subject to change)

Week	Subject	Assign textbook chapters to read
1 <sup>st</sup> week January 9- 15	• Overview of the AIDS Epidemics	Ch1
2 <sup>nd</sup> week January 16-22	• Overview of the AIDS Epidemics, cont.	Ch1
3 <sup>rd</sup> week January 23- 29	• Viruses and HIV	Ch2
4 <sup>th</sup> week January 30- February 5	• <b>Test 1: Thursday, February 2</b>	
5 <sup>th</sup> week February 6- 12	• The Immune System and HIV	Ch3
6 <sup>th</sup> week: February 13- 19	• Defining AIDS	Ch4
7 <sup>th</sup> week February 20- 26	• The epidemiology of HIV/AIDS	Ch5
8 <sup>th</sup> week February 27- March 5	• How to prevent HIV transmission?	Ch6

<b>9th week</b> <b>March 6- 12</b>	<ul style="list-style-type: none"> <li>• <b>Test 2: Thursday, March 9</b></li> </ul>	
<b>10th week</b> <b>March 13- 19</b>	<b>Spring Break</b>	
<b>11<sup>th</sup> week</b> <b>March 20- 26</b>	<ul style="list-style-type: none"> <li>• <b>HIV testing and Diagnosis</b></li> <li>• <b>Treatment options for HIV infection</b></li> </ul>	<b>Ch7</b> <b>Ch8</b>
<b>12<sup>th</sup> week</b> <b>March 27- April 2</b>	<ul style="list-style-type: none"> <li>• <b>HIV vaccine; can it be done?</b></li> <li>• <b>AIDS and Society</b></li> </ul>	<b>Ch9</b> <b>Ch10</b>
<b>13<sup>th</sup> week:</b> <b>April 3- 9</b>	<ul style="list-style-type: none"> <li>• <b>Test 3: Thursday, April 6</b></li> </ul>	
<b>14th week:</b> <b>April 10- 16</b>	<ul style="list-style-type: none"> <li>• <b>Student's presentations</b></li> </ul>	
<b>15th week:</b> <b>April 17- 23</b>	<ul style="list-style-type: none"> <li>• <b>Student's presentations</b></li> </ul>	

**The Final Exam: Tuesday, April 25, 12:00- 2:00 PM**