

## Biology of AIDS (PCB 4232)

### Course Syllabus

**Instructor:** Dr. Maria Cristina Terreros    *e-mail:* [terrerosm@fiu.edu](mailto:terrerosm@fiu.edu)

**Office:** OE 201 (inside OE-200)

**Office hours:** *Monday 1:00-3:00pm and Wednesday 1:00pm - 3:00pm.*

**Students may contact Dr Terreros by e-mail ([terrerosm@fiu.edu](mailto:terrerosm@fiu.edu)) to make an appointment.**

**Credit hours:** 3 hours

**Course objectives:** PCB 4232 is a course that explores the history of AIDS, includes the latest information about HIV, and provides background material to help students understand the biological basis of this continuing pandemic. In this course, Acquired Immune Deficiency Syndrome (AIDS) will be overviewed from biomedical and psychosocial perspectives.

#### Summary

The genesis of AIDS, identifying HIV as the virus that causes AIDS, and the modern global epidemic.

In 1981, an obscure and deadly disease surfaced. Previously healthy homosexual men in the United States began arriving at clinics with rare cancers and infections usually seen in people with weakened immune systems. Most of them died. The medical community was baffled and the public anxious. As the cases multiplied, so did the questions. Who is at risk? What is causing the disease? Why does it lead to failure of the immune system? And most important: Can it be stopped from spreading? The new disease was named acquired immune deficiency syndrome, or AIDS, and it has now killed more than 25 million people worldwide. After the initial outbreak, different sectors of the public health, medical, scientific, and advocacy communities mobilized in response to the deadly epidemic. They focused on surveillance—that is, detecting and mapping the disease—and prevention.

**Text Book:** “*AIDS The biological basis*” by Benjamin S. Weeks and Teri Shors. Jones and Bartlett learning, sixth edition.

**Course Requirements:** This course comprises vast amounts of material. As such, requires significant extracurricular reading and regular class attendance.

Students are responsible for all assigned readings and all material presented in class.

Any and all communications from the instructor to students will be done utilizing the FIU e-mail system. (If you utilize a different e-mail service, it is your responsibility to link your e-mail account to the FIU system).

**Course schedule:**

<b>Week 1</b>	<b>Tu: Introduction and Syllabus</b>	
	<b>Th: The AIDS epidemic</b>	<b>ch. 1</b>
<b>Week 2</b>	<b>Tu: Viruses and HIV</b>	<b>ch. 2</b>
	<b>Th: The immune system and HIV-1</b>	<b>ch. 3</b>
<b>Week 3</b>	<b>Tu: OFF- to do the Homework Assignment #1 (HWA)</b>	
<b>01/25/2018</b>	<b>Th: Exam 1/ HWA #1 due in a hard copy</b>	<b>ch. 1, 2 &amp; 3</b>
<b>Week 4</b>	<b>Tu: Defining and recognizing AIDS</b>	<b>ch. 4</b>
	<b>Th: The epidemiology of AIDS</b>	<b>ch. 5</b>
<b>Week 5</b>	<b>Tu: Preventing HIV transmission</b>	<b>ch. 6</b>
	<b>Th: HIV testing and diagnosis</b>	<b>ch. 7</b>
<b>Week 6</b>	<b>Tu: OFF- to do the Homework Assignment #2</b>	
<b>02/15/2018</b>	<b>Th: Exam 2 / HWA #2 due in a hard copy</b>	<b>ch. 4, 5, 6 &amp; 7</b>
<b>Week 7</b>	<b>Tu: Presentations- Group 1</b>	
	<b>Th: Presentations- Group 2</b>	
<b>Week 8</b>	<b>Tu: Presentations- Group 3</b>	
	<b>Th: OFF- to do the Homework Assignment #3</b>	
<b>Week 9</b>	<b>Tu: Presentations- Group 4 / HWA #3 due in a hard copy</b>	
	<b>Th: Presentations- Group 5</b>	

**Week 10 Spring Break**

**Week 11 Tu: Presentations- Group 6**

**Th: Presentations- Group 7**

**Week 12 Tu: Presentations- Group 8**

**Th: OFF- to do the Homework Assignment #4 (HWA)**

**Week 13 Tu: Presentations- Group 9 / HWA #4 due in a hard copy**

**Th: Presentations- Group 10**

**Week 14 Tu: Presentations- Group 11**

**Th: Presentations Group 12**

**Week 15 OFF – to do evaluations online.**

### **Assignments:**

**Students will be asked to submit homework assignments during the course semester. Assignments will be no more than 2 pages in length (double spaced, 1 inch margins, times new roman or similar, size 12, references in case it applies). Homework assignments are due on the day and time showed in the schedule and will not be accepted after that.**

### ***PRESENTATIONS:***

The professor or instructor will make the division into groups, select one of the projects to be presented for each group and schedule talks. The presentation should be no less than 10 minutes long per each member of the group and the students shouldn't be reading from the computer, papers, cards or power point slides to avoid a "C". Below you will find the different topics for project presentations. The professor or instructor will select one of the projects to be presented for each group.

### **PROJECT #1 - "Famous person who is alive or died of AIDS" –**

Students will research a "famous person" (artist, writer, activist, actor, model, film director, Singer, songwriter, musician, sport player, American politician, professor, etc.) who is alive or died of AIDS and prepare a power point presentation on the life of the individual, how he/she

contracted the virus, and what opportunistic infection caused death. Power point slides should include the references and citations.

**PROJECT #2 - "The personal face of AIDS" –**

This project involves interviewing people who are personally involved with AIDS. Students are to select **one professional from Category A and one person from Category B:** (a total of two interviews):

Category A

A professional who works directly with those who are HIV infected (physician, nurse, social worker, etc.)

A professional who works indirectly on behalf of those who are HIV infected (community planner, politician, hospital administrator, researcher, etc.)

Category B

A volunteer providing services to HIV infected people

An HIV infected person

A significant other/family member of an HIV infected person

Your interviews should focus on:

1. How has HIV/AIDS affected the life of these persons (personally and professionally)?
2. What strategies have they developed to cope with HIV/AIDS?
3. Have they had any negative or positive experience in receiving/delivering services or having any of their needs met? Explain.
4. What recommendations do they have for improving service delivery?
5. What recommendations would they make to another person who is in the same circumstances as themselves?

After completing your two interviews, discuss your findings as related to the materials you have been reading about the psychosocial, service delivery and political aspects of AIDS. The final

portion of the project should focus on what you learned and how this assignment affected you? Avoid simply reporting on the responses to your interview questions. Students should be prepared to discuss their findings and experiences with other members of the course. This project should be presented in a power point and/or video recording by the student in person. It means that the student cannot send the video recording to be presented for someone else.

### **PROJECT #3- "AIDS Education/Prevention Project" -**



Ryan White

This experiential project can be completed individually or in small groups. Each individual or group will develop an HIV/AIDS Education/Prevention Project to be carried out by the student(s) into classrooms or in another community setting. The text "You Can Do Something About AIDS", the website [www.dosomething.org](http://www.dosomething.org), Elton John's letter to Ryan White, all of them provides many ideas that are suitable.

Each student will prepare their own project. The power point will include a brief description of the project and the learning goals that the individual/group hope to accomplish. These should be addressed as they relate to the course materials and library resources.

### **PROJECT #4 - "Debates of HIV/AIDS" -**

In this project, students will be divided into 2 group pairs: A/B. Each group will have 4 students. I will assign a debate topic. Each student in a group will prepare materials for the debate. Every student is required to collect as much support evidence as possible. Students can work as a group to prepare the debate, but each student has to demonstrate his/her own independent work in collecting support materials. Scores will be given based on the vigor of the debate and the quality of the arguments.

The steps of the debate:

1. Opening statement by group leaders from both sides
2. Questioning
3. Debating
4. Answering audience
5. Closing statement

**Debate Topics:** arguing for and against the proposition:

- 1- Should we isolate people with HIV/AIDS?
- 2- Should the fact that individuals have HIV/AIDS be made public?
- 3- Should "treatment as prevention" become HIV prevention policy in countries?
- 4- Providing material incentives is an ethical and effective tool for HIV prevention and should be implemented.

5- Testing and treating approaches should immediately be built into and consume at least 50 percent of HIV prevention resources in Africa.

6- Intra couple HIV transmission between couples in long term stable partnerships drive a majority of HIV transmission and should receive the majority of HIV prevention funding.

7- Mandatory AIDS testing: Is mandatory AIDS testing a valid concept?

**PROJECT #5 - "Original Scientific Articles of HIV/AIDS" -**

Every semester, the instructor will identify different sub areas in the major field of AIDS. Students will select an article from the recently published in peer reviewed journals (from 2015- to date) and provide the copy of the abstract to the instructor. After reviewing the abstract based on the research design and results and significance of the paper, the instructor will approve the scientific original article to be presented by a student.

**PERFORMANCE MEASURES:**

Students will be evaluated on the following:

- Exam 1	25%
- Exam 2	25%
- Homework Assignments	25%
- Presentation in power point	25%

Two multiple choice exams will be given. Each exam will cover all the lectures which have been assigned prior to each exam.

**NO MAKE-UPS ARE GIVEN FOR MISSED PRESENTATIONS.**

**Make-Up Exams will be given only to students providing valid documentation of a medical or other serious situation. Make-Up exams could be based in the form of **essay questions.****

**YOU WILL BE EVALUATED USING THE FOLLOWING SCALE:**

A= 92.6-100%

A-= 89.6-92.5%

B+= 86.6-89.5%

B= 82.6-86.5%

B-= 79.6-82.5%

C+= 76.6-79.5%

C= 70.6-76.5%

D= 70.5- 59.6%

F= 59.5% or below

## **THE FINAL GRADE WILL NOT BE CURVED.**

### **Extra Points: will be given for perfect attendance to the lectures and all group presentations:**

Five (5) extra points will be added to the final grade. In order to get the 5 extra points you have to sign in every lecture with your panther ID at hand.

### **Perfect attendance allows just ONE absence:**

You can use this absence for any interview, medical emergency, jury service, etc., since the 5 extra points is a **reward**, if you have more than one absence you lose the 5 extra points. It means that, you can have 5 extra points or nothing.

### ***ACADEMIC MISCONDUCT***

All students in this class are expected to abide by the university's Code of Academic Integrity, which states:

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 to 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 Florida International University.

As a student of this university:

I will be honest in my academic endeavors.

I will not represent someone else's work as my own.

I will not cheat, nor will I aid in another's cheating.

All students are deemed by the University to understand that if they are found responsible for academic misconduct, they will be subject to the Academic Misconduct procedures and sanctions, as outlined in the Student Handbook.

***NOTE: This syllabus is subject to change. Please check the on-line syllabus often for modifications. Also, changes or modifications will be announced during the lectures.***