# **Clinical Management of HIV**

Dates: 08, April – 16, June 2024

**Location: Online** 

#### **Instructors**

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### **Student Support Specialist**

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## **Course Description**

**Clinical Management of HIV** provides in-depth training in the diagnosis and clinical management of HIV as practiced around the world. You will collaborate with participants from 25 different countries in this course through a weekly web-based curriculum.

Weekly lecturers provide first-hand perspectives on diagnosing and treating HIV and STIs in both resource-rich and in resource-constrained settings. The web-based homework focuses on the clinical epidemiology as well as diagnosis and treatment of HIV-related conditions.

## **Course Learning Objectives**

After completing this course, you will be able to:

Introduction to Clinical HIV and the initial Evaluation

- Describe the global epidemiology of HIV, its history, and current UNAIDS goals
- Conduct an initial history and physical of a newly diagnosed HIV-infected patient.
- Stage patients' HIV disease severity based on both CDC and WHO HIV classifications.

• Explain the challenges of delivering HIV care and the current strategies for meeting these challenges.

#### HIV Testing and Prevention

- Answer the question "Who needs an HIV test:" Describe strategies for testing and testing requirements for different populations.
- Outline the strategies to reduce secondary HIV transmission, starting with the infected patient.
- Describe the role of pre-exposure prophylaxis, identify the patients most likely to benefit from PrEP and review PrEP delivery.
- Recognize the indications for post-exposure prophylaxis for both occupational and sexual HIV exposures and review PEP delivery.

#### ART

- Describe the goals of antiretroviral therapy
- Discuss key considerations related to the timing of antiretroviral therapy initiation
- List the classes of antiretroviral drugs and identify their distinguishing features, including key drug-drug interactions and potential adverse effects
- Identify recommended first-line antiretroviral regimens, as well as the pros/cons of different regimens
- Describe the adverse effects of antiretroviral agents, both common and severe

#### Treatment Failure

- Define treatment failure and identify the most common underlying causes
- Review WHO guidelines for diagnosing and managing treatment failure, including how approaches may differ based on the availability of resistance testing
- Describe the clinical significance of key HIV resistance mutations

### Non-Communicable Diseases (NCDs)

- Summarize the epidemiology and significance of non-communicable diseases (NCDs) among PLHIV
- Describe the benefits and current approaches to integrating NCD care into routine HIV services

#### Tuberculosis (TB)

 Describe the epidemiology of TB and the epidemiologic relationship between HIV and TB

- Explain the pathogenesis of TB in PLHIV, clinical manifestations and algorithms for screening and diagnosis
- Explain the principles of TB treatment for PLHIV
- Outline modalities for TB prevention among PLHIV
- Describe LTBI diagnosis and treatment among PLHIV

### Opportunistic Infections (OIs)

- Describe the approach to diagnosis and management of OIs affecting the CNS
- Review the clinical features, diagnosis, and management of common non-CNS OIs
- Discuss the benefits of co-trimoxazole prophylaxis and the rationale for its expanded role in resource-limited settings
- Explain the significance of IRIS, including key diagnostic and management principles

### **HIV-Associated Malignancies**

- Review the epidemiology and clinical features of important HIV-associated malignancies
- Explain the distinction between AIDS-defining and non-AIDS-defining cancers
- Describe key factors that influence cancer treatment outcomes among PLHIV

### **HIV Dermatology**

- Identify common clinical presentations and themes in HIV-related skin disease
- Recognize important drug hypersensitivity syndromes that may occur more commonly in PLHIV

#### Pediatric HIV

- Contrast the natural history and manifestations of HIV in infants and children versus that in adults
- Explain key principles in the diagnosis and management of HIV infection in infants and children

#### **Preventing Vertical Transmission**

- Discuss approaches to preventing vertical HIV transmission, as well as the progress and challenges of vertical transmission prevention efforts globally
- Describe the unique challenges, considerations, and strategies in the management of HIV in adolescents and how adolescents' needs differ from those of pediatric or adult patients.

Sexually Transmitted Infections (STIs)

- Explain how sexually transmitted infection (STI) syndromes can present in persons living with HIV and review STI etiologies.
- Differentiate between the syndromic versus etiologic approach to management of STIs in HIV-infected patients.

#### **Special Populations**

- Appreciate the unique issues central to caring for an HIV-infected woman. (Women)
- Describe key (high-risk) populations and understand their unique challenges and needs (CSW, MSM, Transgender & PWID)
- Explain how women differ from other populations in terms of HIV epidemiology, testing, and care
- Review evidence-based approaches to improving access and outcomes among women living with HIV
- Describe the global importance of identifying key (high-risk) populations (CSW, MSM, Transgender, PWID)
- Explain the unique challenges, barriers and needs of key populations
- Review evidence-based approaches to improving access and outcomes among key populations

## **Target Audience**

The course is aimed at students with basic clinical proficiency who understand the components of obtaining a medical history, conducting a physical exam, and diagnosing and treating patients. Examples of potential students include medical, pharmacy, or nursing students; medical officers or medical officer interns; clinical officers or clinical officer interns; advanced nursing students; and international AIDS and research training scholars.

Other interested clinicians who meet the basic prerequisites are welcome.

### **Format**

This is a self-paced, online modular course divided into 10 weeks.

This course will be delivered entirely online through a course management system named (Moodle).

Learning activities include:

- Watching lecture videos
- Completing homework assignments
- Completing readings
- Taking weekly quizzes
- Participating in discussion forums (optional, but recommended)

Most participants will also meet with a local study group that is led by a site facilitator. This is meant to increase opportunities for discussion about the relevance of the material to the local setting. Completion of a final course evaluation is strongly encouraged for successful completion of the course.

If you have any questions, please look at the course FAQ. If your question isn't answered there, please email edgh@uw.edu.

**Note:** This is a clinical course focusing on clinical content and images. Some videos contain graphic images that you may not be used to seeing. If you anticipate that the images will be too distressing, you can listen to the **mp3 (audio) file** of the video instead.

### **Materials**

All reading materials for this course are provided, in PDF form, or by linking to online sources.

### **Grading**

To be successful in the course you will need to complete all the learning activities listed. Final grades will be calculated as follows:

Activity	Percentage
Online Self-study Homework Assignments	50%
Weekly Quizzes	50%
Total	100%

## **Submitting Assessments**

All assignments for this course will be **submitted electronically through Moodle**. Assignments must be submitted by the given deadline.

## **Viewing Grades in Moodle**

Points you receive for graded activities will be posted to the **Moodle Grade Book**.

Quizzes will be graded upon submission. Grades are posted by the end of the day Monday after an assignment is due. If you submit your assignment late (after the due date), please allow at Department of Global Health

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least 24 hours for your grade to be updated. We do not update late submission grades over the weekend.

## **Assignments**

### **Homework Assessments**

Most weeks will include required homework assignments from **National HIV Curriculum**, a free educational website.

Links from each week's module will direct you to the relevant readings. Please be sure to complete the homework assignments in the form of a self-assessment quiz directly on the course Moodle site.

You can complete the assessment associated with each homework as many times as you like until you receive a score you are happy with.

**Please note**: Many of the **National HIV Curriculum** cases include the possibility of obtaining CME. For more information, visit the **Free CME/CNE/CE link** on their website. While you are welcome to apply for CME credit, it will not apply towards this course.

To successfully complete this course, you must complete the homework assignments via the course Moodle website. International participants will receive Continuing Education Units for completing the course, which will appear on their certificate of completion.

### **Weekly Quizzes**

Quizzes will be opened each week along with the Module. It is important to stay on track with completion of each weekly quiz. These quizzes are graded. Unlike Homework Assessments, you are permitted TWO attempts on weekly quizzes.

Note, there is NO FINAL EXAM.

### **Weekly Discussion Forums**

The goal of the weekly discussion forums is for participants to post questions or comments about lecture content. These are answered by the TA. Posting to the weekly discussion forums is not required, however we encourage you to visit these weekly, as they contain valuable content. Please do not post for the sake of posting, but rather if you have a question or substantive comment.

We encourage participants to share their experiences with implementing new guidelines and updated practices in their clinical settings.

No-content posts, such as, 'thank you', 'great lecture', etc. will be deleted. While we appreciate your participation, there are many participants posting, and the forums can become very long and difficult to read through. Also, please make sure you read all posts before asking your question to ensure they are not repeated. If you have a question, try and make it as clear as possible so that we can properly answer it!

### **Optional Learning Activities**

In some modules, we have included Optional Homeworks. These contain a reading and a quiz component.

Completing these Optional Homeworks is for your own enrichment and will not count toward your grade. There are no points awarded for completing the Optional Homeworks.

### **Readings and Additional Resources**

Readings and links to additional resources are available every week as optional learning material for motivated students. These are not part of required weekly work.

### **Certificate of Completion**

Active participation is required to receive a Certificate of Completion for the course. To receive a Certificate of Completion from the University of Washington, USA, you must pass the course, which means getting a final score of 70% or higher on all graded activities.

If you are a site participant, you must earn a qualifying score and attend 3 of the site meetings your site will hold. Attendance at more, if offered, is encouraged but not required to meet the site participation requirement. After the course, site participant certificates will be sent to site coordinators for distribution.

# **Late Work Policy**

If you are unable to submit your assignment by the due date, you may still submit it anytime during the course. Just be sure to have all assignments completed by the end of the course.

## **Commitment to Integrity**

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As a participant in this course you are expected to maintain high degrees of professionalism, commitment to active learning and participation in this class and also integrity in your behavior in and out of the classroom.

### **Definitions**

"Plagiarism is defined as the use of the words, ideas, diagrams, etc., of publicly available work without appropriately acknowledging the sources of these materials. This definition constitutes plagiarism whether it is intentional or unintentional and whether it is the work of another or your own, previously published work. Plagiarism is a very serious offense that the University of Washington's eDGH Program does not tolerate."

### **Enforcement**

Corroborated reports of plagiarism, cheating, or other misconduct will result in no credit on that assignment and may result in suspension from the course and ban from participation in future courses.

### **Religious Accommodations**

eDGH uses the UW's **policy on religious accommodations** for participants who need to make special arrangements in meeting course deadlines due to reasons of faith or conscience or for religious activities. Accommodations must be requested within the first two weeks of this course by contacting **edgh@uw.edu**.

## **Copyright Statement**

All content associated with this course is copyrighted. This includes the syllabus, assignments, reading lists, and lectures, as well as any material generated by your fellow students. Within the constraints of "fair use", you may copy these materials for your personal use in support of your education. For example, you may download materials to your computer for study, but you may not copy the materials and distribute or upload to a website. Such "fair use" by you does not include further distribution by any means of copying, performance or presentation beyond the circle of your close acquaintances, student colleagues in this class and your family. If you have any questions regarding any use violates the creator's copyright interests, please feel free to email edgh@uw.edu.

### **Modules**

Topics covered each module (subject to change):

- Module 1: Introduction to Clinical HIV
- Module 2: HIV Testing and Prevention
- Module 3: Antiretroviral Therapy (ART)
- Module 4: Treatment Failure and Non-Communicable Diseases (NCDs)
- Module 5: Tuberculosis (TB)

Module 6: Opportunistic Infections (OIs)

- Module 7: HIV-Associated Malignancies & HIV Dermatology
- Module 8: Pediatric HIV and Preventing Vertical Transmission
- Module 9: Sexually Transmitted Infections (STIs) and Mental Health in PLHIV
- Module 10: Special Populations