|  |  |  |
| --- | --- | --- |
| **Unit-level overview** | **Unit/week/section** | **6** |
| Unit name or title: | Diagnostic Techniques |
| Aim of the unit: | To learn about the various appropriate methods of HIV diagnosis at different stages of infection. |
| This topic covers: | This unit focuses on techniques directly targeting the virus itself and techniques indirectly targeting the presence of the virus. These techniques are best suited for diagnosis at different stages of infection.* **Direct and** targeting the virus itself and techniques **indirectly** targeting the presence of the virus i.e. predictors of the infective agent (HIV
 |
| Intended learning outcomes: | *At the end of this* ***unit****, you will be able to:*1. Explain the purpose of taking HIV Clinical Diagnostic Test.
2. Assess the different HIV Diagnostic Tests commercially available in the market.
3. Determine the strengths and weaknesses of rapid HIV diagnostic tests.

**Leading Question?** How do you determine the most suitable HIV diagnostic test in your context? |

|  |  |
| --- | --- |
| Overview of student activity: | 1. Read hand out on ‘HIV Diagnostic Slide 4 and make summary notes.
2. In addition, view the Video on ‘Diagnosis and Testing of HIV.’
3. Contribute to the started [Discussion Forum](https://elearning.maseno.ac.ke/mod/forum/view.php?id=246770) on HIV Diagnostic Tests
4. Read page 1-2 of Rapid Diagnostic Test and also slide 19-33 on [Current HIV Diagnosis](https://elearning.maseno.ac.ke/pluginfile.php/174219/mod_resource/content/1/Current%20HIV%20diagnosis_Pages_19_33.pdf).
5. Continue reading on [Current HIV Diagnosis](https://elearning.maseno.ac.ke/pluginfile.php/174220/mod_resource/content/1/Current%20HIV%20diagnosis_Pages_32_39.pdf) from 32-39 and also [HIV Diagnostic Slide 8](https://elearning.maseno.ac.ke/mod/resource/view.php?id=246772).
6. Read [WHO 2004 hand book](https://elearning.maseno.ac.ke/pluginfile.php/174221/mod_resource/content/1/WHO%202004%20HIV%20Testing%20Pages%2013-16.pdf) from page 13-16 as you make notes then discuss the [Advantages of RDTs](https://elearning.maseno.ac.ke/pluginfile.php/163681/mod_resource/content/1/HIV_DIAGNOSIS_A_Guide_for_Selecting_RDT_Jan08.pdf) in this [discussion forum](https://elearning.maseno.ac.ke/mod/forum/view.php?id=246770).
7. Attempt [unit 6 quiz](https://elearning.maseno.ac.ke/mod/quiz/view.php?id=246780) at the end of the unit
8. Read the Guideline for RDT Selection and also watch [HIV slide presentation](https://elearning.maseno.ac.ke/mod/resource/view.php?id=246772) and share your thoughts with your colleagues on the guidelines for RDT selection and principle of western blot technique
 |

|  |
| --- |
| **Constructive alignment of unit level outcomes with module level outcomes, learning activities and assessment***(Pressing <Tab> at the end of the table will provide additional rows in the table, if required.)* |
| Intended unit learning outcomes: | No of module-level outcome | Activity where students engage with this outcome | Where and how is this outcome assessed? |
| ***At the end of this unit, you will be able to:*** |
| 1 Explain the purpose of taking HIV Clinical Diagnostic Test. | 1 | E-tivity 1 | Online quiz  |
| 2 Name the different HIV Diagnostic Tests commercially available in the market. | 1 | E-tivity 2 | Online quiz  |
| 3 Outline advantages and Limitations of rapid HIV diagnostic tests. | 1 | E-tivity 3 | moderated discussion |

|  |
| --- |
|  |

|  |
| --- |
| Detailed explanation of ALL student and teacher engagement with the unit:*(This should be presented in the order that the activities take place. So, if students do work online* ***before*** *coming to the lecture, that should be shown ahead of what happens in class.**If there is more than one opportunity for face-to-face contact, or more than one online task, there should be a separate section for each instance, and they should be presented in the template in the same order that students encounter them.)****Content*** *– such as lecture material – can EITHER be shown here OR added as* ***clearly identifiable*** *addenda to the document. If you plan to use addenda, you should ensure that this are cross-referenced in this section.)* |
| Module level outcomes addressed: |
| At the end of this ***unit***, you will be able to:1. Explain the purpose of taking HIV Clinical Diagnostic Test.
2. Assess the different HIV Diagnostic Tests commercially available in the market.
3. Determine the strengths and weaknesses of rapid HIV diagnostic tests.

**Leading Question:** What HIV molecules are expressed in infected patients at the different stages of the disease progression? What biological assay/ diagnostic test can appropriately detect this biomarker? |
| Purpose of the unit/week/section: |
| To learn about the various appropriate methods of HIV diagnosis at different stages of infection. |
| Pre-topic activity: |  Number of hours | 1 hr |
| Go and research on HIV Diagnostic Techniques and on the HIV AIDS diagnostic tests available commercially in the market, particularly in your country. |
| Face to face time: *(if applicable)* | Number of hours | 2 hr |
| Attend a 2 hour lecture on clinical HIV diagnosis  |
| Online activity: | Number of hours | 4 hrs |
| What should students do? | Over to you: *(a description of the process of the section)***E-tivity 1**This task will shed-light on the importance of HIV clinical diagnosis.**Task**Attend a 2-hour face to face lecture on the importance of HIV clinical diagnosis.* Download and read the handout on ‘*HIV Diagnosis* Slide 4 and 8, and note down the process of taking HIV diagnosis in your portfolio.
* Download and view the video on ‘*Diagnosis and Testing of HIV.’* Focus on the diagnostic methods explained and list them in your portfolio.

**Resources*** HIV Diagnosis Slides handout.
* A video on ‘Diagnosis and Testing of HIV

**Assessment task:**Do the online quiz on HIV Diagnostic techniques. **(2 hours)****E-tivity 2**This activity will introduce the different commercially available HIV diagnostic tests.**Task** * Download and read a handout on rapid Diagnostic Test,  [*Current HIV diagnosis*](https://elearning.maseno.ac.ke/pluginfile.php/174219/mod_resource/content/1/Current%20HIV%20diagnosis_Pages_19_33.pdf)  pg. 32-39 and WHO (2004) handbook pg. 13- 16.
* Write down when each diagnostic test can be used, what are the weaknesses and strengths of each test and which one you would recommend for your fellow students and why? Post your reflection on your portfolio.
* Explore the different HIV & AIDS diagnostic tests available commercially in the market, in your context, noting their accessibility, ease of use and affordability. What can be done to improve on their access? Share this with your group members.

**Resources*** Current HIV Diagnosis complete document
* Current HIV diagnosis

**Assessment task**Do the quiz on HIV diagnostic techniques.***(Online 1 hour)*****E-tivity 3**This activity will present the advantages and disadvantages of rapid HIV diagnostic tests.**Task*** Download and read a handout on Rapid Diagnostic Test
* Download and read a handout on Current HIV diagnosis\_Pages\_32\_39
* Make a summary on rapid diagnostic test and post to your portfolio.
* Read [WHO 2004 hand book](https://elearning.maseno.ac.ke/pluginfile.php/174221/mod_resource/content/1/WHO%202004%20HIV%20Testing%20Pages%2013-16.pdf) from page 13-16 as you make notes then discuss the [advantages of RDTs](https://elearning.maseno.ac.ke/pluginfile.php/163681/mod_resource/content/1/HIV_DIAGNOSIS_A_Guide_for_Selecting_RDT_Jan08.pdf) in this [discussion forum](https://elearning.maseno.ac.ke/mod/forum/view.php?id=246770).
* Make summary notes and post to your portfolio

**Resources*** HIV Diagnosis a Guide for Selecting RDT
* Current HIV diagnosis\_Pages\_32\_39
* WHO 2004 HIV Testing Pages 13-16

**Assessment task**HIV diagnosis detection biomarkers vary with disease progression. **With reasons, suggest the most appropriate HIV diagnostic techniques for the Three HIV infection stages****Task:***Engage in the discussion, responding in the first instance to the lecturer’s statement. Come back to the forum and read what your fellow students have posted. Thoughtfully (and kindly) critique their posts and post your messages on the forum.***Earning marks:*** If you make a relevant post in response to the initial challenge, you’ll earn up to 2 marks.
* If you make an apt comment on another participant’s post, you will earn 1-mark

**(1 hour)** |
| Where do they do it? | On the learner management system. |
| By when should they do it? | Any time within the week during which topic 6week material remain open. |
| E-moderator/tutor role |
| . Moderate and grade the discussion forum posts |
| How are the learning outcomes in this unit assessed? |  Number of hours | 1 |
| Learning outcomes are assessed through reflection by making summaries, grading discussion forum posts and attempting topic specific quiz. |
| How does this section link to other sections of the module? |
| The scope of this topic on HIV diagnostic techniques contributes to the general module objectives aimed at creating awareness for enhanced behaviour change at individual and community level. |