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**THE STATE UNIVERSITY OF ZANZIBAR**

**IT TEACHING METHODS (ED 2216) MODULE**

**CONTENT DEVELOPERS**

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**Instructional Design Storyboard for IT Teaching Methods Course (ED 2216) for OER Africa Platform**

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This free course is available for all PEBL partner universities and beyond.

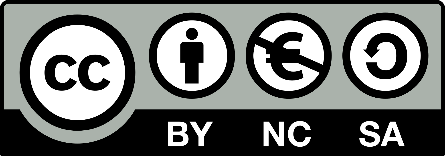
The course has been designed basing on well prepared materials to make it relevant for a wider audience of learners.

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| **Course page** | | Responsible for **content:**  Mwanajuma (lead), Umayra, Raya, Mr Said  Responsible for **Pedagogical aspects**: Dr Maryam | |
| Responsible for **online implementation**:  Mr Said(lead), Umayra (lead), Mwana, Raya and Ali Abdulla | |
| Responsible for **Quality assurance:**  Dr Maryam, Dr Hassan, Iddi | |
|  | **Text on screen (course page)** | **Comment** |
| **Course Title** | **Information Technology Teaching Methods** |  |
| **Course Code** | **ED 2216** |  |
| **Course Description** | **This course is designed for the second year degree students taking Bachelor of Science and Information Technology with Education (BITED) . It is offered in the second semester of the academic year.** |  |
| **Course Credit** | **10** |  |
| **Hours per week** | **7** |  |
| **Course Aim** | This course is designed to enable students to apply professional and technical skills of teaching information technology(IT) in secondary schools. |  |
| **Learning Outcomes** | At the end of the students are expected to:   1. Describe the basics concepts of Information and Communication Technology (ICT) 2. Apply Fundamental Skills for teaching computer studies in classrooms and laboratories to maximize teachers productivity 3. Modelling appropriate methods of teaching ICT at secondary levels (both O and A levels). 4. Teach confidently all topics of ICT face to face in the classroom and using blended learning (Mix of face to face and online) 5. Use various methods and techniques of assessment and evaluation for the purpose of evaluating the learning of computer 6. Apply technology resources and tools appropriately when implementing instruction, assessment and evaluation |  |
| **Syllabus** | Here is your syllabus with timeline.   |  |  |  | | --- | --- | --- | | **Weeks** | **Topic** | **Workload, approx.** | | 1 & 2 | Introduction to ICT in Education | 14 hours  6 Hours (face to face)  8 hours (online) | | 3 | Role and responsibilities of personals and school in ICT Education | 7 hours  3 hours (Face to face)  4 hours (online) | | 4 & 5 | Analysis of ICT curriculum materials (syllabus, Textbook, and Teacher’s guide ) | 14 hours  6 Hours (face to face)  8 hours (online) | | 6&7 | Planning, lesson preparation and record keeping | 14 hours  6 Hours (face to face)  8 hours (online) | | 8 | Computer laboratory | 7 hours  3 hours (Face to face)  4 hours (online) | | 9,10 & 11 | Week 9,10, 11 & 12 (12 hrs): ICT Teaching Methods, Approach and Techniques | 21 hours  9 hours (Face to face)  12 hours (online) | | 13 | Challenges and strategies of Teaching ICT for special cases (large class, slow learner etc) | 7 hours  3 hours (Face to face)  4 hours (online) | | 13 & 14 | Assessment and evaluation in ICT | 14 hours  6 Hours (face to face)  8 hours (online) | | 15 | Microteaching | 7 hours  4 hours (Face to face)  3 hours (online) | | |
| **Assessment Procedures and Gradings** | In this course, you will be assessed formatively and summatively.  Formative assessment will carry 40% of marks and 60% will be for summative. The formative assessment will consist of:   1. Test 10% 2. Seminar Presentation and Reflection Journal 10% 3. Micro teaching 10% 4. Online quizzes 10%   Summative assessment will be done through Final University Examination which consist of 60% marks. |  |
| **Rubric** | Guidelines for Marking Seminar Presentation  <https://drive.google.com/open?id=194wIYdOsJ7iDN2HIQi_kZei3j4H2bDV2> |  |
| **Get Started** | * Course Introduction Video (2 – 3 min)   <https://www.youtube.com/watch?v=HgXJSWYQxF>   * Also find a short summary on how you can prepare yourself for this blended course * **Be Prepared for your Online Learning**   Here are helpful tips and suggestions on how you can succeed in your online course. This is designed for students who are new to online learning, as well as students who may be taking their second or third online course.  [**https://drive.google.com/open?id=1-MDHL6qK87x4eNbxMK\_MXV6eFDMm9tdQ**](https://drive.google.com/open?id=1-MDHL6qK87x4eNbxMK_MXV6eFDMm9tdQ) |  |
| **Netiquette** | It is important to remember that the online classroom should be treated with as much respect as an on-campus classroom, and certain behaviours are expected when you communicate with your peers and your lecturers. These guidelines for online behaviour and interaction are known as netiquette.  This course requires active participation in online forums and free exchange of ideas and experiences. Therefore, when communicating on the discussion board, it is very important to adhere to a set of core principles:  1. Avoid using the caps lock feature as it can be interpreted as yelling  2. Try to be clear and direct: Make it easier for colleagues to read your comments. Make sure that your content title reflects the content of your post and that your post is succinct and direct.  3. Take your posts seriously  4. Review and edit your posts before sending  5. Cite or give proper credit when referencing or quoting another source  6. Read all messages in a thread before replying  7. Don’t repeat someone else’s post without adding something of your own to it  8. Avoid short, generic replies such as, “I agree.” You should include why you agree or add to the previous point  9. Always be respectful of others’ opinions even when they differ from your own  10. When you disagree with someone, be constructive and express your differing opinion in a respectful, encouraging and supportive tone.  11. Do not make personal or insulting remarks  12. Think before you push the ‘send’ button.  13. Be open-minded to other people’s opinions and try not to get emotional if someone disagrees with you.  14. Accept your peers’ differences, e.g., cultural and language differences. |  |
| **Welcome Survey** | Instructions Welcome to SUZA! Thank you for joining our community. Please take 5 minutes to tell us more about you and why you enrolled in this course. Note that once you have submitted the survey, you cannot retake it or change your responses. Please review your responses carefully before submitting. | **Survey**  <https://drive.google.com/open?id=1pFbOuyqbwhdLHf1lIFEByseNcOkAllqw> |
| **Keep a Learning Diary /Reflective Journal** | Reflective journal is a learning tool that can help you to keep a record of useful information, links and ideas from the course. This is a personal journal/diary where you write down your thoughts, lesson learned, achievements, challenges and observations. Of course, do not forget to document about your teaching practicum during micro teaching.  If you have not been given a reflective question at the end of the lesson, ask yourself several questions.  Here are sample questions to help you reflect:   * What did you find the most interesting? Why? * What did you find the easiest? Why? * What did you find the most difficult? Why? * What gave you the newest ideas? * What moments was I most proud of my efforts? | Think and Reflect |
| **Additional Resources** | Swarts, P. and Wachira, E.M., (2010) ICT IN EDUCATION SITUATIONAL ANALYSIS, Report retrieved from <http://www.youthmetro.org/uploads/4/7/6/5/47654969/tanzania_ict_in_education.pdf>  Jo Tondeur, Don Krug, Mike Bill, Maaike Smulders & Chang Zhu (2015) Integrating ICT in Kenyan secondary schools: an exploratory case study of a professional development programme, Technology, Pedagogy and Education, 24:5, 565-584, DOI: [10.1080/1475939X.2015.1091786](https://doi.org/10.1080/1475939X.2015.1091786)  Rwanda Ministry of Education (2015). ICT Essentials For Teachers Based on the UNESCO ICT Competency Framework for Teachers retrieved from <http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Nairobi/ictrwanda.pdf> |  |

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| **Week 1 & 2**  **Topic 1: Introduction to ICT in Education**  **14 hours**  **6 Hours (face to face)**  **8 hours (online)** | | Responsible for content:  Raya |
| Responsible for online implementation:  Mr Said |
| Responsible for Quality assurance:  Dr Maryam, Dr Hassan, Iddi |
|  | **Text on screen (course page)** | **Comments** |
| 1.1 Title: | Introduction to ICT in Education |  |
| Description | In this first course week, you will be introduced to the concept of ICT in general, ICT in education, attitudes toward ICT, challenges of teaching and learning ICT, integrating ICT in teaching and technological tools to use in improving learning and teaching. |  |
| Learning objectives | Learning Objectives After you actively engage in this week learning experiences, you should be able to:  * Describe the concept of ICT and ICT in education * Identify the use of ICT in Education * Identify issues in the use of ICT in Education * Analyse the key challenges of integrating ICT in Education |  |
| 1.2 Activities |  |  |
| Pre-topic activity | Read the material “ICTs in the Curriculum” by Patti Swarts provided in the given slideshow, and make some notes on:   * ICTs in Education * E-content * E-learning * ICT integration in the Curriculum | **Read and make notes** [**https://slideplayer.com/slide/7640740/**](https://slideplayer.com/slide/7640740/)  **Online[2 hours]** |
| Lecture | **Lecture 1**  This week we will talk about the “**Basic concepts of Information and Communication Technology in Education”.** The notes can be found in the given link. | **Face-to-face [2 hours]**  <https://drive.google.com/drive/folders/1b0tM-zPHVftlJUiv40kIac9DaP9tiBu3> |
| Forum discussion | This week we have an online discussion on the followings:   1. Discuss the three most valuable characteristics of ICT in education. 2. As a teacher, why do you think they are valuable for improving learning outcomes? 3. Read other students’ posts and add two additional characteristics that you think are valuable. 4. Rank them in importance from greatest to the least (Justify your reasons for your ranking in not more than 100 words). | **Online [1 hour]** |
| Quiz | Take an online quiz to check your understanding of ICT . | Please find multiple choice questions in [**[quiz1MCS.odt]**](https://drive.google.com/drive/folders/1o4cTeJ_fqML0X0rKTpwwyh53cWSEcDVc)  Pre and Post.  [**quiz1 answers.odt**](https://drive.google.com/drive/folders/1o4cTeJ_fqML0X0rKTpwwyh53cWSEcDVc)  **Online [1 hour]** |
| Seminar/ Presentation | In a group of three, write short notes by reflecting on the following questions and prepare yourself for classroom presentation.:  1. Briefly explain how ICT has changed the way of presenting, commenting and discussing student’s work.  2. Discuss how the use of ICT can help in inclusive education and students with special needs.  3. Briefly discuss how ICT can enhance lifelong learning.  4. Jot down points in your journal | **face-to-face [1 hour]** |
| Pre-topic activity | Please read the paper by following the link below and answer the questions that follow before lecture 2. We will have a short discussion on these questions before the lecture.  *Questions to be discussed:*   1. *Compare the readiness of any local secondary school that you know with the results stated in the article in terms of:*  * ICT knowledge and skills of the teachers * Possession and usage of ICT devices by the teachers   2. Think of the schools you know, then discuss what are the challenges that they face in integrating ICT in teaching and learning.  3. Are the challenges similar to the ones discussed in the article? | Follow the Link: <https://www.researchgate.net/publication/305876096_ICT_Integration_in_Teaching_and_Learning_in_Secondary_Schools_in_Tanzania_Readiness_and_Way_Forward>  **[2 hours]** |
| Lecture | **Lecture 2**  This week we will talk about **“Integrating ICT in Teaching and Learning”** found in the given link.  Note that within the lecture there are some video links, please watch the videos and then answer the questions provided | Notes  [**https://drive.google.com/drive/folders/1dhWeU-ZmZ\_\_Rygg5DKB8fwn9\_mMun5OL**](https://drive.google.com/drive/folders/1dhWeU-ZmZ__Rygg5DKB8fwn9_mMun5OL)  **face-to-face [2 hours]** |
| Practical/Hands-on | This week we have a hand-on practice on the following topic:  ***Challenges facing implementation of ICT in teaching Secondary Schools students.***  Activities:   1. Visit a local secondary school that teaches ICT as a subject, ask the head teacher or the IT teacher (if any) what challenges do they face? 2. Note them down in your notebook. 3. By using screencast-O-Matic software record a five (5) minutes video of yourself explaining about the above topic. 4. Upload your video on the forum for review. (you can download the free software from the link <https://screencast-o-matic.com/> or <https://screencast-o-matic.en.softonic.com/download>) 5. Review two other students’ video and find common challenges identified in the three videos including your own. | **Online [1.5 hour]**  **Upload a video** |
| Presentation | Please follow the link below that will guide you on how to prepare PowerPoint slide presentations.:  Here is a Link <https://www.ismrm.org/03/ppguide.htm>  Task: Prepare a PowerPoint presentation slide using the following instructions:   * Choose any topic that you are currently covering in your class. * Open a new PPT presentation on your laptop. * Choose a theme that you think is relevant to your topic of your interest. * Add information to the various PPT slides. * Edit your slides, and make sure there are no factual or typographical errors (Number of slides 8-10). * Present your slides as part of your teaching on this topic in the classroom.   **Note:** The guidelines provided by the instructor above will be used to assess your Presentation | **face-to-face [1 hour]** |
| Reflection | Discuss the following question:   * **What are the important aspects that you have learnt in these two weeks? Briefly explain how it will help you in your learning process. (use between 50-100 words).** | **online [0.5 hour]**  **Write in your reflection journal** |
| 1.3 Topic Resources | **Additional Resources:**  Harry Hare (2007). Survey of ICT and Education in Africa: Tanzania Country Report,  <https://www.infodev.org/infodev-files/resource/InfodevDocuments_432.pdf>  Clayton Trehal (2014).The Digital Revolution <https://www.youtube.com/watch?v=qxOshY-KjDM><https://wiki.nus.edu.sg/display/cs1105groupreports/History+of+ICT>  Tinio, V. L. (2003). ICT in Education.  <https://akgul.bilkent.edu.tr/egitim/eprimer-edu.pdf> |  |
|  | **End of topic 1** |  |

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| **Week 3:**  **Topic 2: Role and responsibilities of Personnel and school in ICT Education**  **7 hours**  **3 hours (Face to face)**  **4 hours (online)** | | Responsible for content:  Raya |
| Responsible for online implementation:  Raya |
| Responsible for Quality assurance:  Dr Maryam, Dr Hassan, Iddi |
|  | **Text on screen (course page)** | **Comments** |
| 2.1 Title: | Role and responsibilities of school personnels in ICT Education |  |
| Description | In this topic, you will learn about the roles and responsibilities of ICT teacher, and ICT technician in the school community. |  |
| Learning objectives | Learning Objectives After actively engaging in this topic, you should be able to:  * Explain the roles and responsibilities of ICT teacher * Implement the responsibilities of ICT teachers at school |  |
| 2.2 Activities |  |  |
| Pre-topic activity | The Role of the Teacher in the Use of ICT  Read the material “The Role of the Teacher in the use of ICT” by Steve Wheeler and make notes/give your opinions on the following points.-   * whether ICT is used effectively in all cases that Wheeler describes - comment on cases that concern you most. * the roles that teachers would need to assume in order for teachers to best manage the learning processes in those classrooms.   You can write your notes briefly and succinctly using note-taking format you like (eg. linear format, concept map, charting ). Here are examples of note taking formats (see the format attachment ) | **Pre-reading material**  [**https://www.slideshare.net/ChrisKwei/the-role-of-the-teacher-in-the-use-of-ict**](https://www.slideshare.net/ChrisKwei/the-role-of-the-teacher-in-the-use-of-ict)  **Online [2 hours]**  **Note-taking**  [**https://drive.google.com/open?id=1hD0DjZc6Lx5TOdWY81\_\_\_Em4HD4s6Yl5**](https://drive.google.com/open?id=1hD0DjZc6Lx5TOdWY81___Em4HD4s6Yl5) |
| Lectures | Lecture 3  This week we will talk about the **“roles and responsibilities of ICT Teachers”.** The lecture material can befound in the given pdf document.[**lecture 3.pdf**](https://drive.google.com/drive/folders/167b1FW16Y-9UXgev3cgz4Tar6c8phIUu)  We will also have a video on **“Technology and the Changing Roles of Teachers”**  found in the link below for more discussion:   * <https://www.youtube.com/watch?v=lsVKXdrtnxI> | [**lecture3.pdf**](https://drive.google.com/drive/folders/167b1FW16Y-9UXgev3cgz4Tar6c8phIUu)  **2 hours (Face to face)** |
| Assignment/ Quiz | Online quiz  Please open the link to the quiz and attempt the questions that follow. | Find the True and False questions on this document:  [**quiz3.odt**](https://drive.google.com/drive/folders/1uBRtHy2rayZuB628mW3xSWdAq1KParb2)  The answers can be found in:  [**quiz3 answer.odt**](https://drive.google.com/drive/folders/1uBRtHy2rayZuB628mW3xSWdAq1KParb2)ice questions in [document name]  **Online [0.5 hour]** |
| Forum discussion | This week, we have a discussion on the notes that you have made in pre-topic activity:   1. Post your notes/opinions on the given points 2. Read others’ opinions and add those that you think are relevant but missing in your points. | **Online [1 hour]** |
| Seminar/Presentation | Prepare a PowerPoint presentation to be presented in class, briefly explain the following two topics in relation to the roles of ICT teachers:   * **the changing role of the teacher.** * **things that prevent the teacher from using ICT in teaching.** | **[1 hour]** |
| Reflection | What challenges did you face in learning this topic?  What do you think could be improved? **(use between 50-100 words).** | **Online [0.5 hour]** |
| 2.3 Resources |  |  |
|  | **End of topic 2** |  |

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| **Week 4&5**  **Topic 3: Analysis of ICT curriculum materials (syllabus, Text book, Teacher’s guide etc)**  **14 hours**  **6 Hours (face to face)**  **8 hours (online)** | | Responsible for content:  Mr Said |
| Responsible for online implementation:  Mr Said |
| Responsible for Quality assurance:  Dr Maryam, Dr Hassan, Iddi |
|  | **Text on screen (course page)** | **Comments** |
| 3.1 Title: | Analysis of ICT curriculum materials (Syllabus, Textbooks, Teacher’s guide etc) |  |
| Description | In this topic,you will be introduced to the ICT curriculum materials such as syllabus, textbook, teacher’s guide and other related materials. In doing so, you will have a chance to familiarize yourself with ICT materials and make critical analysis on those ICT related materials. |  |
| Learning objectives | Learning Objectives After you actively engage in these weeks learning experiences, you should be able to:  * Identify ICT curriculum materials * Describe different terms related to curriculum materials * Explain criteria for judging good ICT materials * Analyse ICT curriculum materials * Evaluate current ICT syllabus in teaching ICT in secondary schools. |  |
| 3.2 Activities |  |  |
| Pre-topic activity | Please open the [link](https://teach-blog.dariah.eu/wp-content/uploads/2017/02/McKenney-DariahKeynoteFinal.pdf) and read the materials provided in this topic. Make sure you read it before coming to the class. | **Online [2 hours]** |
| Lecture | **Lecture 1**  Teaching and Learning Materials  [**https://drive.google.com/open?id=17eu\_x0mDjmunCfC0oS8pry8jYjn1Zh-E**](https://drive.google.com/open?id=17eu_x0mDjmunCfC0oS8pry8jYjn1Zh-E) | **Face to face [2 hours]** |
| Forum discussion | This week we have an online discussion on the following:   1. “Give three reasons why it is important to analyses curriculum materials.” 2. Read other students’ posts, and add two additional reasons that you think are important. | **Online [1 hour]** |
| Seminar/Presentation | -In a group of 3-5, discuss the following question:   1. Outline important features found in the prescribed curriculum material by the instructor. (5 minutes for each group). | **Face to face [1 hour]** |
| Pre-topic activity | Open the link below, login to the website as a guest and read the pdf document you obtained.  At the end of this document there are some questions to be discussed. Make sure you read it before the lecture. We will discuss it before starting the lecture  <http://smart2.ums.edu.my/pluginfile.php/35550/mod_resource/content/1/SYLLABUS%2C%20TEXTBOOKS%20AND%20COURSEBOOK%20ANALYSIS.pdf> | **Online [2 hours]** |
| Lecture | **Lecture 2**  **Curriculum Analysis**  <https://docs.google.com/presentation/d/1Bl5ThYlndyISxbZsS0Ql2pN-BYlzZwYOwhbfEzUIby8/edit#slide=id.p1> | **[2 hours]**  **Face-to-face** |
| Forum discussion | We have an online discussion on the following question:  *What are the biggest challenges in implementing ICT syllabus in Secondary Schools?*  Activities:   1. Visit a local Secondary School that teaches ICT as a subject, ask the ICT teacher on the challenges they face in implementing ICT syllabus. 2. Post your answers in a forum. 3. Read other students’ posts and find the common challenges in implementing the ICT syllabus. | **Online [1 hour]** |
| Seminar | Use the same groups as in the last lecture, discuss the following questions:   1. Analyze the prescribed curriculum provided by your instructor. 2. Use the criteria provided as your framework to guide you i your analysis. . 3. Give your suggestion(s) if you find any shortcoming. | **Face to face [1 hour]** |
| Assignment/Quiz | Please open the document found in the link below based on the *Information and Communication Technology Syllabus* for Secondary School Activities:  <https://docs.google.com/document/d/1aJHO83LMQb9UgOaXK_a6dX86QchYuAw5XW-Lx3ApXzw/edit>  Read the ICT syllabus from page 12-15 and then make thorough analysis of it based on criteria given.  Post your assignment on the LMS to be assessed by the Instructor | **Online [1 hour]** |
| Reflection | Please reflect on the previous week session by telling us on :   * what went well, * what didn’t go well and * areas that need improvement.   Write your answer and share it online. (Use not more than 80 words) | **Online [1 hour]**  **Update your reflective journal** |
| 3.3 Resources |  |  |
|  | **End of topic 3** |  |

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| **Week 6 &7**  **Topic 4: Planning, lesson preparation and record keeping**  **14 hours**  **6 Hours (face to face)**  **8 hours (online)** | | Responsible for content:  Mr Said, Dr Maryam |
| Responsible for online implementation:  Mr Said |
| Responsible for Quality assurance:  Dr Maryam, Dr Hassan,Iddi |
|  | **Text on screen (course page)** | **Comments** |
| 4.1Title: | Planning, lesson preparation and record keeping |  |
| Description | In this topic, you will be introduced to the process of planning a lesson, |  |
| Learning objectives | Learning Objectives After actively engaging in these weeks learning experiences, you should be able to:Define instructional objectives and competence  * Identify levels of bloom taxonomy in writing instructional objectives * Explain importance of writing instructional objectives * Write well stated instructional objectives  Define lesson plan and scheme of work  * List scheme of work and lesson plan components * Explain the importance of scheme of work and lesson plan in teaching * Design scheme of work and lesson plan based on components identified |  |
| 4.2 Activities |  |  |
| Pre-topic activity | Open the document found in the link below and answer the questions that follow [:](http://www.cetla.howard.edu/teaching_resources/Curriculum_Design/docs/Learning%20Objectives.pdf)  <http://www.cetla.howard.edu/teaching_resources/Curriculum_Design/docs/Learning%20Objectives.pdf>   * Briefly explain the importance of writing instructional objectives for both teachers and students. * Identify four components of an instructional objective. * Jot down the points in your journal | **Online [2 hours]** |
| Lecture | **Lecture 1**  This week we will discuss on "Planning for lesson- Writing Competency and Instructional Objectives"  <https://docs.google.com/presentation/d/1hu20TIw0bWS119MaQUf3QR-juXXzw3KXmTY5oU0gSPY/edit#slide=id.p10> | **Face to face [2 hours]** |
| Seminar | In a group of 3 - 5:   1. Choose one topic and write five instructional objectives based on Bloom’s taxonomy. Your instructional objectives should consists all criteria of well stated objectives. 2. Present and discuss it with your colleagues | **Face to face [1 hour]** |
| Assignment | **Test your knowledge**  After class you should do the following assignment to check that you have understood the main learning points.   * Suppose you want to teach the topic of Significance of Computer to Form one (1)I students. * Write three instructional objectives for teaching this topic. * Post your answer on the VLE | **Online [1 hour]** |
| Reflection | Please reflect on the previous week by telling us on   * what went well, * what went wrong and * areas of improvement   Write your answer and share it online. | **Online [1 hour]**  **Update your journal** |
| Pre-topic activity | Please read page 10-24 by clicking the link below and then answer the questions that follows before lecture 2. We will have a short discussion on scheme of work and lesson plan before starting our lecture.  [Link:](https://books.google.co.tz/books?id=aS5FaFtWafAC&pg=PA10&dq=scheme+of+work+and+lesson+plan&hl=en&sa=X&ved=0ahUKEwj83fnewLDeAhXOpIsKHWZcCWIQ6wEIMzAC#v=onepage&q=scheme%20of%20work%20and%20lesson%20plan&f=false) | **Online [2 hours]** |
| Lecture | **Lecture 2**  This week we will talk about the **“Scheme of work and Lesson Plan”.** The lecture material can befound here [document.](https://docs.google.com/presentation/d/1mtktKjumYFw8gcqAH6mU3GtoONQY9zZcfcrd3oRoaTw/edit#slide=id.g51d8fd3bd6_1_0) | **Face to face [2 hours]** |
| Forum discussion | In this topic we have an online discussion on the following question:   * “Why is important to plan for a lesson? Support your answer with two related literature”   Post your answer in the forum for review by the instructor. (Write 80-100 words) | **Online [1 hour]** |
| Seminar | In a group of 3-5, do the following based on instructions:   1. Suppose you want to teach the topic “The Computer” to Form I students. See page 5 of the ICT Syllabus found in the link below:   <https://docs.google.com/document/d/1aJHO83LMQb9UgOaXK_a6dX86QchYuAw5XW-Lx3ApXzw/edit>   1. Write a one week scheme of work and then write a lesson plan of one 40 minutes. Use format given in the link below to write your [scheme of work and lesson plan.](https://drive.google.com/open?id=1dvTSFSfbuTMecekBNBZQea6x2G_EwlsQ) 2. Post your work on the wall 3. Do gallery walk to comment on other groups work 4. Write three things you have learnt and then post it on the LMS. You can also post lessons learnt on the wall using post-it notes. Stick them on the board. Take photos and then share them on LMS | **Face to face [1 hour]** |
| Assignment | 1. After seminar presentation, write three things you have learnt in this week on planning scheme of work and lesson plan. 2. Comment on two postS of your fellow students. | **Online [1 hour]** |
| 4.3 Resources | **Additional Resources for topic 4:**  [**https://www.youtube.com/watch?v=4DgkLV9h69Q**](https://www.youtube.com/watch?v=4DgkLV9h69Q) |  |
|  | **End of topic 4** |  |

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| **Week 8**  **Topic 5: Computer Laboratory**  **7 hours**  **3 hours (Face to face)**  **4 hours (online)** | | Responsible for content: Raya, Dr Hassan |
| Responsible for online implementation: Raya |
| Responsible for Quality assurance:  Dr Maryam, Dr Hassan, Iddi |
|  | **Text on screen (course page)** | **Comments** |
| 5.1Title: | **Computer Laboratory** |  |
| Description | In this topic, we will explore the best method for set up computer lab as well as to examine the best and effective model. The session will introduce the Concept of Computer Laboratory, purpose of computer laboratory in the learning process. The topic will also explain about the Computer Lab Design and Management including rules governing computer labs. |  |
| Learning objectives | Learning Objectives After actively engaging in these week learning experiences, you should be able to:   * Explain what is a computer lab? its purpose and its importance to the learning process. * Identify other spaces similar to computer lab and explain how they differ from one another * Describe different rules governing Computer Lab. * Design a computer lab for teaching IT |  |
| 5.2 Activities |  |  |
| Pre-topic activity | Depending on the five groups formed by Instructor, prepare a 10 minutes presentation based on the pre-reading materials given below. We expect to have these presentations during class session. Each Group will be assigned one question. The instructor or students will decide how to form the group..  **1. School computer labs: A bad idea?**  **Open the following link and read in order to gain understand about computer labs**  <http://blogs.worldbank.org/edutech/computer-labs>  **2.Computer Lab General rules:**  **Dear participant, please read the following some sort of rules and guidelines governing the use of computer laboratory.**  <http://www.southseattle.edu/computer-labs/rules-policies.aspx>  **3. The Four Best Computer Laboratory Layouts for Schools**  **In this link you will find the four best way of designing computer laboratory, please follow and go through it.**  <https://www.brighthub.com/computing/hardware/articles/52714.aspx>  **4. Equal Access: Universal Design of Computer Labs (1)**  Burgstahler, S. (2012). Equal Access: Universal Design of Computer Labs Do-IT Univ. Washington **(Pdf file).**  **5. Equal Access: Universal Design of Computer Labs (2)**  **Dear participants, please get a chance to watch the following video on how to design computer lab for equal access to all.**  <https://www.washington.edu/doit/videos/index.php?vid=12> | **Online [2 hour]** |
| Lecture | **Lecture 1 - Computer Lab for School Community -** [**Lecture 1.ppt**](https://drive.google.com/file/d/1k68GdCdn763-lNtQDhQBswmNE0WID6FF/view?usp=sharing) | **Face-to-face**  **[2 hours]** |
| Assignment/ Reporting | Go back to the previous reading in the **Pre-readings section** together with a lecture material you have learned above.  Visit any school then think, re-design and prepare a rough sketch of a computer lab that you will suggest it to the School Management. If the school does not yet have one, think and recommend a suitable venue for designing ideal Computer Lab (assume a space for 35 computers). | **Face to face [2 hours]** |
| Forum Discussion | Please share the results of your assignment and then check other two groups’ design and compare them with what your group has discussed. | **Online [0.5 hours]** |
| Reflection | Reflect on what we have discussed earlier. Which layout is best suited for your class in the school of your choice.l. Give concrete reasons for your response. | **Online [0.5 hour]**  **Update your reflective journal** |
| 5.3 Resources | **Additional Resources:**   * The Computer Lab Teacher's Survival Guide: K-6 Units for the Whole Year (2010) by Holy Poteete. * Teachers Discovering Computers: Integrating Technology in a Connected World By Gary B. Shelly, Glenda A. Gunter, Randolph E. Gunter (Page 213) * Computers in the Classroom: How Teachers and Students Are Using Technology to Transform Learning Andrea R. Gooden, Fred Silverman   **URLs:**  **Creating a Dream Lab: Technology Channels That Work!**  <https://www.educationworld.com/a_tech/tech025.shtml>  Learning Spaces: A Tutorial  <https://er.educause.edu/articles/2009/3/learning-spaces-a-tutorial>  The Myth about the Need for Public Computer Labs  <https://er.educause.edu/articles/2007/8/the-myth-about-the-need-for-public-computer-labs> |  |
|  | **End of topic 5** |  |

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| **Week 9, 10 & 11**  **Topic 6: ICT Teaching Methods, Approach and Techniques**  **21 hours**  **9 hours (Face to face)**  **12 hours (online)** | | Responsible for content:  Umayra |
| Responsible for online implementation:  Umayra |
| Responsible for Quality assurance:  Dr Maryam, Dr Hassan, Iddi |
|  | **Text on screen (course page)** | **Comments** |
| 6.1Title: | ICT Teaching Methods, Approach and Techniques |  |
| Description | In this topic, you will be able to explain the meaning of teaching approaches and teaching methods, types and characteristics of teaching approaches, teaching and learning theories,and advanced teaching methods for the ICT classroom. These concepts will enable students to apply the best methods for teaching ICT. |  |
| Learning objectives | Learning Objectives  After actively engaging in these weeks learning experiences, you should be able to:   * Analyse characteristics of teaching methods and approaches. * Discuss different types of teaching and learning theories. * Apply different types of teaching approaches and methods in an ICT classroom. |  |
| 6.2 Activities |  |  |
| Pre-topic activity | Please open the slides “Methods of Teaching ICT” presented by Koigny Hermann Kouadio in the link below:  <https://slideplayer.com/slide/6633186/>  Make notes on the following points to be discussed in the coming lecture:   * Teaching methods * Teaching Aids * Teaching Approach * Best practices for an ICT teacher | **Online [1 hours]** |
| Lecture | **Lecture 1**  Please open the following presentation on the link below. The presentation will help you understand better the concept of teaching methods and approaches. We will discuss more on the topic during the lecture in class.  <https://docs.google.com/presentation/d/132NHQ5BO1xgGj-Pl3diqzygcUHwNsT_OeL-iwFwDZDs/edit?usp=sharing> | **Face to face [2 hours]** |
| Seminar Presentation | Divide yourself in group of 3 students and discuss on the following question:  *“What is the most appropriate teaching approach in an ICT classroom based on the situation of most Secondary schools in your country? Explore the situation in your own home town and compare it with some accepted standards for teaching ICT in an African context?”*  Prepare a ten (10) minutes presentation to present during class. | **Face to face [2 hour]** |
| Assignment | In a group of 3-5, discuss the following question;  What is the most appropriate method in teaching new concepts. Discuss critically using the types of teaching approaches.  Upload your work on the LMS in order for the Instructor to assess it. | **Face to face [1.5 hour]** |
| Reflection | What important aspects of today’s lesson/topic did you find very useful? How and why? | **Online [0.5 hour]**  **Update your reflective journal** |
| Pre-topic activity | Please read the article on Theories of Learning <https://www.cs.ucy.ac.cy/~nicolast/courses/cs654/lectures/LearningTheories.pdf>) .  Based on your own personal experience, make notes on how the theories discussed influence one’s understanding of concepts.  In not more than 100 words summarize all the leaning theories discussed in the chapter article  You will present your ideas in the classroom for discussion . | **Online [2 hours]** |
| Class Debate | **Debate**  Teaching and Learning Theories  You will be divided into two teams and each team will be given a teaching and learning approach to convince the class that it is better than the other.  The approaches are Behaviourist Approach Vs Constructivist Approach  Get Ready, this is going to be FUN! | **Face to face [2 hours]** |
| Forum Discussion | This week we will have an online discussion based on the debate we had in the classroom.  Please discuss the most effective teaching and learning approach based on your personal experience. (Use 100-150 words) | **Online [1 hour]** |
| Seminar | In a group of 2:  Select a section of the syllabus that lends itself to ICT and then, using any of the teaching approaches, create a lesson plan. Make sure the approach you have decided to use is obvious to the course tutor.  You will have a 5 minutes presentation of your lesson in the classroom using ICT tools you mentioned in your lesson plan. | **Face to face [1.5 hour]** |
| Reflection | What challenges/difficulties did you face in learning this topic? What would you change or improve? | **Online [0.5 hour]**  **Update your reflective journal** |
| Pre-topic activity | Please visit the following link and read on page 93 - 95 <https://blogs.ubc.ca/dandt/files/2014/07/Petrina2007.pdf>  Make notes on the Teaching models in not more than 80 words.  Choose three Teaching methods of your choice by Cruikshank, Bainer & Metcalf, 1999 and explain with give examples for each based on your own personal experience. You will have to explain this in the classroom. | **Online [1 hour]** |
| Lecture | Lecture 2 - Please follow the link below which discuss on the ICT and methods of Teaching  <https://docs.google.com/presentation/d/1HFCRAQAZINfqaqzzF2chtbl5iGhCKC14m10oLRom9kg/edit?usp=sharing> | **Face to face [2 hours]** |
| Classroom Discussion | In groups of 3, Discuss the following:   * How are ICTs currently organized at the school you studied? * Do you consider this arrangement good, poor or an adhoc set up? Provide reasons for your opinions. * In your opinion how might a well-designed physical learning environment affect teaching and learning? Provide examples to support your answer. | **Face to face [1 hour]** |
| Seminar | In a group of 3 go to a local Secondary school that has ICT subject, observe and analyze the situation of the ICT classroom in terms of ICT equipment, teachers’ support , and teaching methodologies. Document your observation and then think How would you change the situation in ICT classes as a teacher? | **Face to face [1 hour]** |
| Micro Teaching | Select one topic of your choice of ICT lesson and practice teaching it using one teaching approach. Your teaching should not exceed 8 minutes. You will later on have 5 minutes to explain why you chose that approach and the shortcomings of not using other approaches for teaching that topic. | **Face to face [1.5 hour]** |
| Reflection | * What’s your general opinion of this lesson? * What did you like most and what you didn't like at all. * Do you think the objectives of the topic were met? How? | **Online [0.5 hour]**  **Update your reflective journal** |
| Additional Resources | **Additional Resources:**  Bareen Shaikh, B. and Algannawar, A. (2018). Active Learning Strategies in Classroom using ICT Tools . Aarhat Multidisciplinary International Education Research Journal (AMIERJ) Available from:<https://www.researchgate.net/publication/323847571_ACTIVE_LEARNING_STRATEGIES_IN_CLASSROOM_USING_ICT_TOOL> [accessed Mar 26 2019].  Gámiz-Sánchez, V. M. (2017). ICT-Based Active Methodologies. *Procedia-Social and Behavioral Sciences*, *237*, 606-612 retrieved from <https://www.sciencedirect.com/search?qs=ict%20based&show=25&sortBy=relevance>  Active Learning and ICT retrived from <https://technowellies.wordpress.com/early-years/active-learning-and-ict/>  Teaching in a Digital Age: <https://opentextbc.ca/teachinginadigitalage/>  <https://drive.google.com/file/d/0BxV1LO6iHp1yRFlRakxpNE9rSFU/edit> (pg. 5 - 7)  Teaching Strategy retrieved from <http://www.gmu.edu/resources/facstaff/part-time/strategy.html>  ICT for teachers in Education <http://www.oercommons.org/courses/ict-in-the-classroom/view> |  |
|  | **End of topic 6** |  |

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| **Week 12:**  **Topic 7: Challenges and strategies of Teaching ICT for special cases (large class, slow learner etc)**  **7 hours**  **3 hours (Face to face)**  **4 hours (online)** | | Responsible for content: Umayra, Dr Hassan |
| Responsible for online implementation: Umayra |
| Responsible for Quality assurance:  Dr Maryam, Dr Hassan, Iddi |
|  | **Text on screen (course page)** | **Comments** |
| 7.1Title: | Challenges and strategies of Teaching ICT for special cases (large class, slow learners and students with special needs ) |  |
| Description | In this topic , you will be able to describe with the challenges and strategies of Teaching ICT for special cases. These include challenges like structure of the classrooms, number of students, learners with special needs and insufficient ICT tools. It is very important for the teachers to use effective ways in overcoming such shortcomings. |  |
| Learning objectives | Learning Objectives After actively engaging in these weeks learning experiences, you should be able to:   * Identify challenges of teaching ICT in classrooms with special classes. * Discuss the role of ICTs in providing inclusive education for students in special cases classrooms. * Analyse importance of providing inclusive education to achieve equal opportunities for all with sufficient ICT tools. * Evaluate effective strategies for teaching ICT in special cases classes. |  |
| 7.2 Activities |  |  |
| Pre-topic activities | Analyze the following diagram and :  <http://colccti.colfinder.org/sites/default/files/guyana/resources/TL/TL%20M04U02%20Docs/One%20Computer%20Classroom_Issues.pdf>  Discuss what strategies can a teacher apply in teaching and learning activities in large classrooms vs small classrooms. | **2 hours (online)** |
| Lecture/Classroom Discussion | **Lecture 1:**  The role of ICTs in providing inclusive education for students in special cases classrooms.    You will be divided in groups of 3-5, and each group will be given one sub-unit in unit 1.2 (pages 23-33 in the IITE Training material provided by the instructor)  You will have a total of 25 minutes of preparation : 5 minutes to read , 10 minutes to discuss and 10 minutes to present your ideas to the classroom.  <https://iite.unesco.org/pics/publications/en/files/3214644.pdf> | **2 hours (Face to face)** |
| Discussion | Choose 2-3 ICTs that can facilitate a better learning experience for a very large classroom. Design a lesson whereby you can identify a slow learner student in your classroom and use an ICT tool to assist or support him/her to learn . | **30 minutes ( online)** |
| Seminar | In a group of 3-5, answer the following questions and present in the classroom:   * What is the impact of large classes in teaching ICT? * How can learners with special learning needs can best be supported in learning ICT in education? * What are the effective ways of selection of special technologies according to needs of students. | **1 hour (face to face)** |
| Forum discussion | Read and watch the video on the following link to discuss on our online forum:  <https://www.oneyoungworld.com/blog/challenges-opportunities-icts-education-case-study-malawi>  Suggest three solutions to any existing barriers in adopting ICTs in public schools.  Read other two students’ suggestions and add two more solutions if any in addition to your own. | **1 hour (Online)** |
| Reflective Journal | Please write a reflective journal (critically) on your experiences as a student - teacher on the challenges you have observed/experienced in teaching and learning ICT in large classrooms in schools in your country.  selection and use of special technologies according to needs of students; | **30 minutes (Online)**  **Update your reflective journal** |
| 7.3 Resources | **A**dditional Resources:  Tas Adam, Arthur Tatnall. Use of ICT to Assist Students with Learning Difficulties: An Actor Network Analysis. Nicholas Reynolds; Márta Turcsányi-Szabó. IFIP TC 3 International Conference on Key Competencies in the Knowledge Society (KCKS) / Held as Part of World Computer Congress (WCC), Sep 2010, Brisbane, Australia. Springer, IFIP Advances in Information and Communication Technology, AICT-324, pp.1-11, 2010, Key Competencies in the Knowledge Society. <10.1007/978-3- 642-15378-5\_1>. retrieved from  Learning a sense-maker’s guide Professional development series A publication commissioned by ATL from Chris Watkins retrieved from <https://hal.inria.fr/hal-01054699/file/Adams-KCKS.pdf>  <https://www.atl.org.uk/system/files_force/publication-files/Learning%2C%20a%20sense%20maker%27s%20guide.pdf?download=1>  URL <http://colccti.colfinder.org/sites/default/files/guyana/resources/TL/TL%20M04U02%20Docs/One%20Computer%20Classroom_Issues.pdf>  [http://colccti.colfinder.org/sites/default/files/guyana/resources/TL/TL%20M04U02%20Docs/ICT\_classroom.asp.ht](http://colccti.colfinder.org/sites/default/files/guyana/resources/TL/TL%20M04U02%20Docs/ICT_classroom.asp.htm) |  |
|  | **End of topic 7** |  |

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| **Week 13 & 14**  **Topic 8: Assessment and evaluation in ICT**  **14 hours**  **6 hours (Face to face)**  **8 hours (online)** | | Responsible for content:  Mwana |
| Responsible for online implementation:  Mwana |
| Responsible for Quality assurance:  Dr Maryam, Dr Hassan, Iddi |
|  | **Text on screen (course page)** | **Comments** |
| 8.1 Title: | **Assessment and evaluation in ICT** |  |
| Description | In this topic, you will be introduced to the basic principles of assessment and evaluation in ICT. |  |
| Learning objectives | Learning Objectives At the end of this topic, you will be able to :   * Explain principles of assessment and evaluation in ICT. * Prepare assessment and evaluation tools to evaluate students learning * Use assessment and evaluation tools to evaluate students learning |  |
| Pre-topic materials | Please follow the following links below and try to get some idea and concept on Assessment and Evaluation. Make sure you take notes on importants points that you will be required to discuss during coming lecture:  Principles of Effective Assessment   * [http://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/Unders tanding-the-curriculum/assessment/principles-of-assessment](http://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/Understanding-the-curriculum/assessment/principles-of-assessment)   Assessment and Evaluations - Measurement Tools   * <http://phoenixmed.arizona.edu/students/assessment/assessment-and-evaluations-measurement-tools> | **2 hours (online)** |
| Lecture | **Lecture 1** - **Assessment and Evaluation**  Please find the attached document for lecture 1  <https://drive.google.com/file/d/1zvPZx6WKDjJP-dLhI_uk2EMgiJOlZkb0/view?usp=sharing> | **3 hours ( face to face)** |
| Assignment/Quiz | After reading the required materials, take the following test to check that you have understood the main learning points.  **Measurement Evaluation Online Quiz**   * [https://www.proprofs.com/quiz-school/story.php?title=measurement-evaluation-quiz#](https://www.proprofs.com/quiz-school/story.php?title=measurement-evaluation-quiz)   **Short Answer Questions**   * <https://drive.google.com/open?id=1jLWE0Uk6ghFwL1PRwgEECrBlY_4lbv6q> | Please find multiple choice questions in  **1 hour ( online)** |
| Pre-topic materials | Please follow the following links and try to get some idea and concept on Assessment and Evaluation before we meet face to face for Lecture 2  **How to make marking more efficient: three new techniques for teachers**   * <https://www.theguardian.com/teacher-network/teacher-blog/2014/apr/16/how-to-marking-techniques-teacher-feedback-students>   **How we mark children's work**   * <http://www.raylodgeprimary.co.uk/how-we-mark-childrens-work/> | **2 hours (Online)** |
| Lecture | **Lecture 2 (PPt)**  **Marking and Marking Scheme**   * <https://drive.google.com/file/d/1wnF-H8iAgJcxGnXMrhkKlrMVDZwoGqS3/view?usp=sharing> | **3 hours ( face to face)** |
| Online Individual work | Use the following online source to create a rubric to measure students performance with the following features   * Students class: Form IV * Students Roll: 45 * Topic introduction to computer * Time: 1hr test   The link: RubiStar <http://rubistar.4teachers.org/> | **2 hour (online)** |
| 8.3 Resources | Additional Resources  Measurement, Assessment & Evaluation; Certain basics part 1 and 2  * Watch the following Youtube Videos on Measurement , assessment & evaluation: * <https://www.youtube.com/watch?v=8rFwm_nUZHo> * <https://www.youtube.com/watch?v=3ZmeuoyNT0M> |  |
|  | **End of topic 8** |  |

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| **Week 15**  **Topic 9: Microteaching**  **7 hours**  **4 hours (Face to face)**  **3 hours (online)** | | Responsible for content:  Mwana, Dr Maryam |
| Responsible for online implementation:  Mwana |
| Responsible for Quality assurance:  Dr Maryam, Dr Hassan, Iddi |
|  | **Text on screen (course page)** | **Comments** |
| Title: | **Microteaching** |  |
| Description | In this topic, you will be introduced on the basics practices of Teaching ICT in classroom. You will practice teaching in classroom by applying ICT teaching methods and application of modern media and technology. Also, you will be given a sample video of microteaching where you will be required to prepare micro teaching lesson for presentation. |  |
| Learning objectives | Learning Objectives After you actively engage in this experience, you will be able to:  * Deliver a lesson together with the prepared lesson plan. * Apply teaching learning strategies, approaches and methods through micro-teaching * Assess lesson using assessment tool or rubric. |  |
| 1.2 Activities |  |  |
| Pre-topic activities | Over the years, micro-teaching has been used in teacher education for student teachers to trial use educational theories before arrangement of any black teaching practice or practicum experiences. This is a valuable opportunity to receive comments from lecturers and peers in a simulated environment in order to learn about how teaching occurs. This simulated environment of micro-teaching helps to close the gap between student teachers’ learning  and practice before they step into a real classroom  Please watch this video so as to help you to prepare for your microteaching.  Preparing your microteaching  <https://www.youtube.com/watch?v=le_yAVd0CNg>  Microteaching  <https://www.youtube.com/watch?v=YqesOYx5_mE> | **1 hr (Online)** |
| Preparation of lesson | Prepare a 5 minutes lesson for the topic of your choice and share with your instructor | **1 hr (Online)** |
| Preparation of teaching materials | Prepare materials for teaching your topic that you have chosen. | **1 hr (Online)** |
| Microteaching | Please present your 5 minutes lesson to the class  Update your reflective journal by asking yourself the following questions   * What is the most important thing I learned personally? * Were my students excited to be in class? If not, what can I do to change this? * What went well? * What did not go well? * What could be improved?   Follow up analysis  You may record all the microteaching lessons then use them for collaborative learning or you may use the video clips that illustrate and analyze exemplary teaching in real classroom situations. The use of such video-based teaching provides opportunities to connect pre-service teachers more explicitly with actual classroom practice. | **4 hrs (Face to Face)**  **Update your reflective journal** |
| 1.3 Resources | **Syllabus, Textbook, Teacher’s guide, lesson plan** |  |
|  | **End of topic : 9** |  |