*NOTES ABOUT THE USE OF THIS FORM:*

1. *This form is designed to be completed on a computer. Cells in the table below will expand to accommodate any amount of text … but we suggest that you keep the narrative as succinct as possible!*
2. *Please keep the use of formatting to a minimum. Importing formatted text onto a virtual learning platform presents challenges!*
3. *This form assumes that the “unit of learning” is a module. The module, in turn, would be included in a “course” (which is not referred to here). Each module will have a series of components which have been called “units” – they may be called something different in your design (like “weeks”, or “sections”) and you are free to change the terminology.*
4. *In the section about the authors of and contributors to the course, we have provided space for 5 co-authors (or co-contributors). If there were more than six people on the team, please add additional rows to the table.*
5. *Please ensure that you use student-friendly language. So the intended learning outcomes will be framed using the word “you”, and not “the student”. (This may be at odds with what you understand to be “academic” language. The aim, in online and blended learning, is to use language that includes the student to the greatest extent possible.)*
6. *Please note that module-level outcomes should be “overarching” outcomes onto which the unit-level outcomes map. You should have a few (maybe 4) module-level outcomes, and a very few (two or three at the most) unit-level outcomes for each unit.*
7. *The unit-level template should be copied so that there is a copy of the template for EACH unit/week/section. Thus, if there are 15 units/weeks/sections in a module, you will copy the template 14 times and complete each copy for one unit/week/section.*
8. *In the unit-level template, there is a space for a detailed description of student and teacher engagement with the unit. Here we would expect to see a “blow-by-blow” account of how the unit “hangs together”. What happens first? And then? What resources would students need to access for each part of the unit’s work? Where would they find these? Where is collaboration expected to happen? How is it scaffolded? And so on? What happens in class? What happens online? How do these elements build on each other? How long should students spend on each part of the unit?*

*This is NOT a list of things that students (or teachers) do. It is a* ***detailed description*** *of the* ***process****.*

*We have used a generic set of headings in the template. You are free to change the headings to suit the particular unit, but you are* ***not*** *free to ignore any of the required information.*

*Be sure, when completing the unit-level template to contextualise the content … by which we mean that content needs to be grounded in real life – even mathematical equations need to be demonstrably linked to real life! A student needs to know* ***why*** *they are engaging with the content.*

There are 2 templates on the following pages. The **Module-level template**should be completed once, and the **Unit-level template** should be completed in respect of each of the Units (or Sections, or Weeks) in the Module

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| --- | --- |
| **Details of institution that has developed the module** | |
| Name of University | Kampala International University |
| Name of institutional contact | Elizabeth Walabyeki Kyamanywa |
| Email address of institutional contact | elizabeth.kyamanywa@kiu.ac.ug |

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| --- | --- |
| **Details of Creative Commons licence (**[**https://creativecommons.org/licenses/**](https://creativecommons.org/licenses/)**)** | |
| Licence type | This module is released following the guidance of the Association of Commonwealth Universities (ACU), licensed under a Creative Commons Attribution-Non-commercial-Share Alike 4.0 International License. |

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| **Details of the authors of/contributors to the course and their role** *(You can delete any sections that don’t apply.)* | |
| Original author (if applicable) |  |
| Project Lead (+ email address) | **Ms. Elizabeth W. Kyamanywa** |
| *Responsible for:* | **Content creation, module developer** |
| Co-author/co-contributor | **Dr. Margaret Kareyo** |
| *Responsible for:* | **Content creation, module developer** |
| Co-author/co-contributor | **Dr. Sarah Nwozo** |
| *Responsible for:* | **Corroborating and content reviewer** |
| Co-author/co-contributor | **Ms. Hellen W. Kinyi** |
| *Responsible for:* | **Corroborating and content reviewer** |
| Co-author/co-contributor | **Ms. Stellamaris Kembabazi** |
| *Responsible for:* | **Corroborating and content reviewer** |

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| **Information regarding format of material to upload onto the OER Africa repository** | |
| Primary resource (Not PDF) | Word |
| Will a Moodle common cartridge be uploaded as well? | Yes |

*(A Moodle common cartridge is a .ZIP file of your module – if it is created in Moodle – that can be imported into another university’s Moodle platform.)*

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| **Course details** | | | |
| Module title: | Human Nutrition and Dietetics | | |
| Under- or Post-graduate? | Undergraduate | Year of study: | Two |
| Class contact time (hours): | 30 hours | Number of credits: | Three |
| Private/online study hours: | 70 hours | Number of weeks of study: | 13 weeks |
| Total student learning hours: | 100 hours | Number of units of study: | 11 |

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| Programme(s) which might include this Module: | Bachelor of Public Health, Bachelor of Food Science and Technology, Bachelor of Medicine And Surgery, Bachelor of Nursing, Bachelor Science in Nutrition and Dietetics |
| Pre-requisite student abilities and knowledge: | You should have prior knowledge of Chemistry/Biology, Biology, Basic computer fundamentals |
| Pre-requisite (or co-requisite) modules: | No modules |

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| Aim of the module: | The aim of this module is to introduce to you a broader understanding of theoretical and applied aspects of nutrition and dietetics, which knowledge is needed in society to prevent diseases and optimize health. |
| Brief description of module: | The Human Nutrition and Dietetics is a 13 week, three-credit unit module prepared for Year two (2) semester one (1) students.  Nutrition is the cornerstone of human life. Adequate nutrition promotes growth and development, reduces disease risk and increases human productivity.  This module therefore, provides knowledge of how human nutrition relates with health, and how it is affected by nutrition policies and practices. This course will provide an overview on digestion, functions and deficiencies syndromes of macronutrients and selected micronutrients. In addition, it will describe concepts of energy metabolism, energy balance and malnutrition. |

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| Intended learning outcomes: | *At the end of this* ***module****, you will be able to:*   * Define the key concepts in Nutrition and Dietetics. * Describe the principles of Nutrition and Dietetics. * Discuss methods of assessment and management of malnutrition and nutrition-related diseases. |
| Indicative content: | Introduction to nutrition and dietetics, nutrients –macronutrients, nutrients-micronutrients(vitamins), nutrients- micronutrients(minerals), nutrition needs throughout the lifespan, nutrition needs through pregnancy and lactation, nutritional assessment, food security, malnutrition, principles of clinical nutrition, current trends and policies in nutrition and dietetics. |
| Form of final/summative assessment: | The formative assessment will contribute 50% of the overall marks and will comprise of field studies, presentations and continuous assessments tests while the final examination will contribute 50%.  The marks will be distributed as follows:   * Continuous assessment test:20% * Capstone project:20% * Class presentation:10% * Final Examination:50% |

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| **Assessment of module-level learning outcomes** | |
| Module-level learning outcome | Module assessment task |
| 1. To define the key concepts in Nutrition and Dietetics | Online quizzes, discussion forum and summarised reports. |
| 1. To describe the principles of Nutrition and Dietetics | Discussion forum, Presentation tutorials, case study and summarised reports |
| 1. To discuss methods of assessment and management of malnutrition and nutrition-related diseases. | A capstone project, peer-reviewed draft policy note to guide the management of HIV patients, chronic diseases and critically ill patients; summarized reports, case studies. |

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| **Significant features or elements of the module** |
| This module has both practical and theoretical components. From time to time, you may need to initiate conversations with practicing nutritionists to familiarise yourself with nutrition-related trends in your community. |

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| **Student profile in the context of this module:** | |
| What is the target group of students who would do this module? | All undergraduate programmes with a bias towards health science. |
| What **skills** should a *student* have **already** mastered before starting this Module? | Basic computing, Communication and Research especially Internet-based navigation/orientation skills. |
| What **prior knowledge** of the subject matter should a *student* have? | You should have prior knowledge of Chemistry, Biology and Basic computer fundamentals. |

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| **Non-expert support:** | |
| What **skills** and **prior knowledge** of the subject matter  should *facilitators* have **already** mastered before starting to deliver this Module? | Communication and e-moderation skills  Knowledge about the current nutritional trends locally and globally. |
| What **skills** do *support staff* need to support the delivery of this module? | Communication and computer application skills (IT skills). |

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| **Quality assurance matters** | | |
| How will feedback on the module be obtained from students? | Staff-evaluation surveys by students to be conducted by Quality Assurance (QA), continuous QA- class coordinator consultative meetings and sending direct messages to the customer care office. | |
| How will student feedback be used to improve module? | The students’ feedback will be reviewed by the module program team and then relevant feedback will be integrated into the module including its delivery if required. This review exercise will include the in-charge subject matter experts and will be held after the end of the module. | |
| A certificate, signed by the university’s Head of Quality Assurance, confirming that the module meets the requirements of the PEBL QA rubric is attached. | | Yes ☐ No ☐ |

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| **Unit-level overview** | | **Unit/week/section** | **0** |
| Topic name: | Course Introduction and Overview. | | |
| Aim of the topic: | You will receive an introduction to the virtual learning environment including the code of conduct. | | |
| This topic covers: | * Self-introductions * Course structure and requirements | | |
| Intended learning outcomes: | *At the end of this* ***topic****, you will be able to:*   1. log in to the Learning Management System(LMS) and update your profile by adding information and a photograph 2. introduce yourself in the discussion forum and comment on two other people's bios 3. describe the general organization of the course. | | |

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| Overview of student activity: | In this unit, you will be expected to:   * login onto the LMS at least twice, * update your profile and introduce yourself to your classmates. * You will familiarize yourself with the learning management system as well as the course overview. |

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| **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. Log in to the LMS and update your profile by adding information and a photograph |  | WA 0.1 | Evidence of updated profiles |
| 1. Introduce yourself in the discussion forum and comment on two other people's bios |  | WA 0.2 | Discussion forum posts |
| 1. Describe the general organization of the course. |  | WA 0.3 | [Survey](file:///C:\Users\jabulanis\AppData\Local\Microsoft\Windows\INetCache\Downloads\Survey%201.docx) 1 |

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| 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 these are cross-referenced in this section.)* | | | |
| Module-level outcomes addressed: | | | |
| This unit supports all outcomes since it lays a foundation upon which module units will be delivered. | | | |
| Purpose of the unit/week/section: | | | |
| To introduce the learners to the virtual learning environment and the general expectations of the course. | | | |
| Over to you: *(a description of the process of the section)* | | | |
| The virtual learning environment will facilitate efficient interaction amongst its users. You will therefore introduce yourself to your tutor and fellow students online before engaging in any other academic interactions. Your communication is valuable and feedback to the other classmates creates a good platform for further academic debates or discussions that you will have later in the course. | | | |
| Pre-topic activity: | | Number of hours | 2 |
| Ensure that you have the official student login details and have acquainted yourself with the basic acceptable code of conduct during online classes as you navigate the LMS. | | | |
| Face to face time: *(if applicable)* | | Number of hours |  |
|  | | | |
| Online activity: | | Number of hours | 1 |
| What should students do? | WA 0.1   * Go to your profile page on the LMS and edit your profile (Upload a photograph of yourself, add a contact-optional). * Write a brief biography that should include your name, expectations about the course and how it is going to contribute to your academic prospects. * Post your bio in the discussion forum on the Week 0 discussion board. Anticipated task duration: 45Minutes   WA 0.2   * Visit your group’s discussion forum and welcome your colleagues. Read what the other students have posted, and comment on at least two of their bios, suggesting how you might work together to exploit your strengths for each other’s benefit. This task should take you about 45minutes.   WA 0.3   * Read through the course details section above. Anticipated duration for the activity is 30minutes | | |
| Where do they do it? | LMS | | |
| By when should they do it? | Before the close of the week | | |
| E-moderator/tutor role | | | |
| Guide, oversee and facilitate the work activities(WA) of the sessions | | | |
| How are the learning outcomes in this unit assessed? | | Number of hours | 1 |
| Evidence of self-introductions and two comments on their colleagues’ bio-information and the [Quiz](file:///C:\Users\jabulanis\AppData\Local\Microsoft\Windows\INetCache\Downloads\Human%20Nutrition%20and%20Dietics_Quizzes%20rubric%201.docx) | | | |
| How does this section link to other sections of the module? | | | |
| This is the formation of team spirit and work. | | | |

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| = Total number of hours | 4 |

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| **Some important questions** | |
| Which learning resources/ references will scaffold the students’ learning? | Video: LMS students’ guidance provided on the video link.  Course structure and module. |
| How are students enabled to access the resources? | They are availed personal with log-in details  Computer laboratories with internet are availed plus accessible hotspots at the university’s library. |
| Where in this unit are students expected to work collaboratively? | The profile update is individual while self-introductions will be collaborative |
| How has an inclusive approach been incorporated in this unit? | * A clear code of conduct protocols, expectations and netiquette to foster a safe, supportive and welcoming online environment for all learners is communicated. * Content is presented in accessible and usable multiple formats. In other words, a collection of study resources have been used i.e. Video, e-books, plus printable materials that can be accessed by students who may not be in position to access the online materials. * Students’ feedback will be continually solicited and positively considered in improvement of the module delivery. * Use of colour combinations that are high contrast that can be read by learners who are colour blind. |
| How will feedback on the unit be obtained from students? | From the discussion forum |
| How will student feedback be used to improve the unit? | Feedback will be used to improve the subsequent sessions. |
| At which point(s) will students receive formative feedback on the work they have done in the unit? | By the end of the week. |

END OF UNIT 0

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| **Unit-level overview** | | **Unit** | **1** |
| Topic name: | Introduction to Human Nutrition and Dietetics | | |
| Aim of the topic: | To introduce the key terms and basic concepts of Human Nutrition and Dietetics. | | |
| This topic covers: | * Definition of nutrition. * Relationship between nutrition and health. * Food diet and nutrients. * Evolution of the human diet. | | |
| Intended learning outcomes: | *At the end of this* ***topic****, you will be able to:*   1. Define the basic terms used in nutrition and dietetics. 2. Describe the relationship between nutrition and health. 3. Outline the evolution of the human diet. | | |

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| Overview of student activity: | * Watch the introductory video on nutrition and make notes. * Additionally, utilize the e-books in the reference section to complete the individual learning activity. * Post your summary onto the online forum and contribute to the discussion. |

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| **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:*** | | | |
| W1.1 Define the basic terms used in nutrition | 1 | WA1:1 | Discussion forum and quiz on the LMS. |
| W1.2 Describe the relationship between nutrition and health | 1, 3 | WA1:2 | Summary report and discussion Forum on the LMS |
| W1.3 Outline the evolution of the human diet | 1, 3 | WA1:3 | Summary report and quiz on the LMS |

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| 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 these are cross-referenced in this section.)* | | | |
| Module-level outcomes addressed: | | | |
| This addresses module level outcomes one and three. | | | |
| Purpose of the unit/week/section: | | | |
| To understand the basic principles of Human Nutrition and Dietetics. | | | |
| Over to you: *(a description of the process of the section)* | | | |
| First of all, we are going to explore the basic concepts of nutrition and dietetics, how they are related to health followed by a study of how the human diet has evolved over the years. These concepts introduced will form the basis for the whole module. There will be an opportunity to share what you have learned with your colleagues in Moodle. | | | |
| Pre-topic activity: | | Number of hours | 2 |
| **WA1:1**   * Watch the [video](https://youtu.be/-CGOnspXce8) @Study.com. The video highlights the principles of human nutrition and dietetics. * Additionally, read the following PowerPoint notes from [slides](https://www.slideshare.net/Jen_castle/basic-principle-of-good-and-proper-nutrition?qid=b03aaeab-ab38-4278-9c4b-f1a8913a4bc2&v=&b=&from_search=6) 1-19 or [notes](file:///C:\Users\jabulanis\AppData\Local\Microsoft\Windows\INetCache\Downloads\•%09https:\www.open.edu\openlearncreate\mod\oucontent\view.php%3fid=315&printable=1) on nutrients and their sources. * Summarize the definitions of the following concepts: food, nutrition, meal, nutrient, diet, RDA and anti-nutrients. * Post your summary onto the discussion forum in not more than 250 words and join the discussion on the LMS before the face to face lecture. * You will then complete the quiz at the end of the week. | | | |
| Face to face time: *(if applicable)* | | Number of hours | 2 |
| The moderator is supposed to;   1. Give an overview of Nutrition and dietetics as a discipline and the career paths 2. Introduce the topic nutrition and dietetics 3. Stimulate the and guide the discussion forum | | | |
| Online activity: | | Number of hours | 2 |
| What should students do? | **WA1:2**   * Read the article on how nutrients influence health provided in the [Resources](https://www.takingcharge.csh.umn.edu/how-does-food-impact-health) section. * Explain how nutrient intake influences health. * Post the summary of not more than 250 words on the online discussion forum. * Comment on two other colleagues’ findings. | | |
| **WA1:3**   * Read the [article](https://doi.org/10.1093/ajcn.81.2.341) 1 and [article](https://www.takingcharge.csh.umn.edu/how-does-food-impact-health) 2 (pages 341 up to 354) provided and make [notes](https://doi.org/10.1017/CBO9781139046794.006;%20pp%20117-150) on how the industrial, social, economic evolution of man has influenced food production and consumption. Your summary should not exceed 250 words; be clear and succinct. * Send your summarised report to the tutor via email. * Complete the online quiz thereafter. | | |
| Where do they do it? | Do this online using your smartphone, Laptop, etc. | | |
| By when should they do it? | This work should be posted by (date). | | |
| E-moderator/tutor role | | | |
| To facilitate and guide the online discussion and promote active participation of the learners.  The e-moderator will receive, read the notes and provide constructive feedback to the students. | | | |
| How are the learning outcomes in this unit assessed? | | Number of hours | 1 |
| Learning outcome 1 will be assessed by WA1:1  Learning Outcome 2 will be assessed by WA1:2  Learning Outcome 3 will be assessed by WA1:3  **MARKING RUBRIC FOR AN ESSAY/ SUMMARY**  **WA1:2 How nutrient intake influences health**  **WA1:3 How the industrial, social and economic evolution of man has influenced food production and consumption**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Performance Criteria** | **Excellent** | **Good** | **Needs Improvement** | **Unacceptable** | | Grading | 10-7 | 6-4 | 3-2 | 1-0 | | Content | Summary has specific main idea; clearly stated in the Introduction.  (The relationship between Nutrition and health) or for essay on (Outline for the evolution of the human diet) | Main idea is vague; sketchy and the discussion is not in line with the topic, lacks focus | Unable to find specific supporting details, more than 4 errors in the information. | Summary has no main idea and is off topic. | | Organization | Summary organized and well-structured displaying a body with a brief on the Relationship of nutrition and health and is well concluded. Has critical thinking skills | Summary digresses from the main idea. Ideas are not logical and the relationship of nutrition and health or how the industrial, social, economic evolution of man has influenced food production and consumption ; are partly mentioned | Main point and flow of essay is lacking organization and continuity | Ideas are disorganized and vague. No flow | | Research | Cited researched information; introduced personal ideas to enhance essay cohesiveness | Some research on the summary was inconclusive and cited information vague. Not all information is mentioned | Little gathering of information on topic. No citation. | No research of the topic was done. | | Style | Writing is smooth, coherent and consistent with central idea. Sentences are strong and expressive with varied structure. | Sentences are varied and inconsistent with the main idea, vocabulary and word choice. | Lacks creativity and focus. Unrelated word choice to the main idea. Diction is inconsistent | Writing is confusing. Inappropriate diction. | | Mechanics | Written work has no errors in word selection and use, sentence, structure, punctuation and spellings | Summary is relatively free of errors in word selection and use, sentence structure, spelling and punctuation (1-2 errors) | Summary has several errors in word selection and use, sentence, structure, spelling, punctuation (3-2 errors) | Summary has serious and persistent errors in word selection and use, sentence structure , spelling and punctuation | | Timelines | Posted complete assignment on or before the deadline | Posted complete d assignment 24 hours within deadline | “Posted completed assignment 24 hours after deadline | Assignment posted 48hours post deadline | | | | |
| How does this section link to other sections of the module? | | | |
| This is the introduction to the module on human nutrition and dietetics. | | | |

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| = Total number of hours | 6 |

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| **Some important questions** | |
| Which learning resources/ references will scaffold the students’ learning? | Video link, article 1 link, article 2 link and notes links are provided. |
| How are students enabled to access the resources? | * They are registered onto the university’s LMS * Students are provided with a tutorial video that guides them on resource access and utilization. * Each school or college has designated personnel whose contact (email address and phone contact) is uploaded onto the LMS, to whom any further inquiries about LMS accessibility are channelled. * The university has two helpdesks with two computer lab technicians that offer students practical assistance regarding course enrolment. |
| Where in this unit are students expected to work collaboratively? | Online |
| How has an inclusive approach been incorporated in this unit? | * A collection of study resources, that is, video, e-books and printable materials, can be accessed by students who may not have access to the online materials. * The assessment will comprise diverse approaches, such as group discussions, quiz. * The slow learners may take time making use of the available access to learning materials instead of being constrained to learning at a specific point in time in a typical classroom. |
| How will feedback on unit be obtained from students? | Feedback will be obtained from the discussion forum, email, blogs, QA surveys, |
| How will student feedback be used to improve unit? | It will be used to improve the next unit. |
| At which point(s) will students receive formative feedback on the work they have done in the unit? | Immediate feedback will be given during the face to face lecture.  Within one week of posting the assignments. |

END OF UNIT 1

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| **Unit-level overview** | | **Unit** | **2** |
| Topic name: | Nutrients-Macronutrients | | |
| Aim of the topic: | To describe the types, sources, functions, digestion and absorption of macronutrients. | | |
| This topic covers: | * Macronutrients (sources, functions, RDA). * Digestion and absorption of macronutrients. * Health implications of excesses/ deficiencies of macronutrients. | | |
| Intended learning outcomes: | *At the end of this* ***topic****, you will be able to:*   1. Outline the types, sources and functions of macronutrients. 2. Describe the digestion, absorption and utilization of macronutrients. 3. Outline health implications of excesses or deficiencies of macronutrients. | | |

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| Overview of student activity: | * This week we are going to learn about macronutrients. * You are encouraged to carry out personal reading about the sources and functions of macronutrients before the face-to-face lecture. * Identify 3-4 colleagues you can work with to prepare for the class presentation on sources and functions of macronutrients. * Join the discussion in class after watching a video on the digestion, absorption and utilization of macronutrients. * Lastly, you will be given a case study to read, thereafter please answer the questions that follow. |

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| **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:*** | | | |
| W2:1 Outline the types, sources and functions of macronutrients. | 1,3 | WA2:1 | Class presentation regarding macronutrients-types, sources, and functions. |
| W2:2 Describe the digestion, absorption and utilization of macronutrients. | 1,3 | WA2:2 | Essay report and discussion forum on the LMS explaining the digestion process |
| W2:3 Outline health implications of excesses or deficiencies of macronutrients. | 1,3 | WA2:3 | Case study on the LMS |

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| 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 these are cross-referenced in this section.)* | | | |
| Module-level outcomes addressed: | | | |
| This addresses module level outcome one and three. | | | |
| Purpose of the unit/week/section: | | | |
| To understand the different types of macronutrients, sources, functions and the health implications of having them in excesses or as deficiencies. | | | |
| Over to you: *(a description of the process of the section)* | | | |
| In this unit, we are going to learn about macronutrients, their sources, digestion, absorption and utilization. We will also learn about the implications of having deficiencies or excesses of macronutrients. | | | |
| Pre-topic activity: | | Number of hours | 2 |
| **WA2:1**   * Read chapter 1 on Macronutrients from the [e-book](http://pressbooks.oer.hawaii.edu/humannutrition2/front-matter/preface/) provided. * Make notes and describe the types, sources and functions of macronutrients. * Identify 3-4 colleagues you can work with to prepare for the class presentation .This should be completed before the face-to-face lecture where you will present to the class. | | | |
| Face to face time: *(if applicable)* | | Number of hours | 2 |
| Attend the lecture and take part in the discussion on macronutrients during the group presentation. | | | |
| Online activity: | | Number of hours | 2 |
| What should students do? | **WA2:2**   * After the lecture, watch a [video](https://www.youtube.com/watch?v=n2eCc1eHQDc) on the digestion and absorption of macronutrients. * With your group members write a brief summary explaining the digestion process and absorption of nutrients * Post this on the discussion forum of WA2:2. Participate on the discussion forum on digestion, absorption and utilization of macronutrients. | | |
| Where do they do it? | Online | | |
| By when should they do it? | This should be posted by (date) | | |
| What should students do? | **WA2:3**  Carefully read the Case study and answer the questions that follow;  Aster is a one-year-old girl who was brought to your health post by her mother, with a complaint of body swelling and poor appetite for one month. Upon anthropometric assessment her weight-for-height was less than 3 SD and on examination, she has bilateral pitting oedema.   1. What is the nutritional problem Aster is suffering from? (2marks) 2. what are the indicators of this nutritional problem?(8mks)   **Optional etivity**   * Read the following [journal](https://www.cambridge.org/core/journals/british-journal-of-nutrition/article/dietary-protein-quality-and-malnutrition-in-africa/B77459A0CE379BADA38C184AE518ACD7) article and in less than 250 words, summarize the importance of dietary protein quality in malnutrition. | | |
| Where do they do it? | Online | | |
| By when should they do it? | This should be posted by (date). | | |
| E-moderator/tutor role | | | |
| To supervise and provide feedback to the students. | | | |
| How are the learning outcomes in this unit assessed? | | Number of hours | 1 |
| Learning outcome 1 is assessed by WA2:1  Learning outcome 2 is assessed by WA2:2  Learning outcome 3 is assessed by WA2:3  **Rubric for online discussion**   |  |  |  |  | | --- | --- | --- | --- | | **Criteria** | **Satisfactory(3)** | **Fair(2)** | **Unsatisfactory(1)** | | **Content understanding (comprehension of the content under discussion)** | Information and knowledge are accurately aligned, implying the student shows serious contemplation of readings. | Post has summarized basic, correct information which doesn’t link to real-life applications. | The post has little or no evidence that readings were completed. Most of the content presented is personal opinions or feelings. | | **Participation in the learning community** | Demonstrates concerted and honest effort to engage with others.  Student interacts accurately with other posts in the thread. | Student rehearses ideas from other posts. | Student does not participate or rarely acknowledges other posts. | | **Etiquette in dialogue with others** | Written interactions show respect and sensitivity to peers’ gender, cultural and linguistic background, political and religious beliefs. | Some of the written interactions show respect. | Written interactions show disrespect for the viewpoints of others. | | **Quality of prose** | Writing is free of grammatical, spelling and punctuation errors. | Writing contains less than 5 grammatical, spelling or punctuation errors | Post contains more than 5 grammatical, spelling or punctuation errors. | | **Scholarly writing** | Post articulately acknowledges authorship of other persons' academic works and is presented with acceptable referencing styles. | Acceptable referencing styles used but some of the authorship of other person’s academic works is not acknowledged. | Post is more than 35% plagiarized. | | | | |
| How does this section link to other sections of the module? | | | |
| This section is linked to units 4, 5, 7, 8, 10, 11. | | | |

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| = Total number of hours | 7 |

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| **Some important questions** | |
| Which learning resources/ references will scaffold the students’ learning? | Notes on macronutrients are provided on the e-book link, video link and journal link. |
| How are students enabled to access the resources? | * Through the e-library * They are registered onto the university’s LMS * Students are availed with a tutorial video that guides them about resource access and utilization. * Each school or college has designated personnel whose contact (email address and phone contact) is uploaded onto the LMS, to whom any further inquiries about LMS accessibility are channelled. * The university has two helpdesks with two computer lab technicians that offer students practical assistance regarding course enrolment. |
| Where in this unit are students expected to work collaboratively? | During the class discussion |
| How has an inclusive approach been incorporated in this unit? | * A collection of study resources, that is, video, e-books and printable materials, can be accessed by students who may not have access to the online materials. * A deliberate effort to encourage active participation from all learners will be made so that none feels left out. * The slow learners may take time making use of the available access to learning materials instead of being constrained to learning at a specific point in time in a typical classroom. |
| How will feedback on unit be obtained from students? | From the discussion forum, during class and QA survey. |
| How will student feedback be used to improve unit? | This will be used to improve the subsequent units. |
| At which point(s) will students receive formative feedback on the work they have done in the unit? | After one week of posting. |

END OF UNIT 2

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| **Unit-level overview** | | **Unit** | **3** |
| Topic name: | Nutrients- Micronutrients (Vitamins) | | |
| Aim of the topic: | To describe the types, sources, functions, digestion and absorption of micronutrients. | | |
| This topic covers: | * Vitamins-fat soluble and water-soluble | | |
| Intended learning outcomes: | *At the end of this* ***topic****, you will be able to:*   1. Describe the sources, functions and clinical conditions associated with excesses and deficiencies of vitamins. | | |

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| Overview of student activity: | * Vitamins are obtained from different sources of food. * In groups of 5-10 students, you will watch a video and an e-book to read where you will make your notes. * A case study will also be presented to each group, to read and answer the questions. |

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| **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:*** | | | |
| W3:1 Describe the sources, functions and clinical conditions associated with excesses and deficiencies of vitamins. | 1 | WA3:1 | Case study on vitamin deficiency on the LMS. |

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| 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 these are cross-referenced in this section.)* | | | |
| Module-level outcomes addressed: | | | |
| This addresses module level outcome 1. | | | |
| Purpose of the unit/week/section: | | | |
| To understand the sources and functions of micronutrients. | | | |
| Over to you: *(a description of the process of the section)* | | | |
| This week we learn about micronutrients, specifically vitamins. You will be given questions to guide your reading.  In your face-to-face session, you will watch a video and thereafter join the interactive discussion in class.  A video link on micronutrients is provided. Read the case study and answer the questions. | | | |
| Pre-topic activity: | | Number of hours | 2 |
| Read the lecture [notes](https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=315&printable=1) on nutrients and their sources provided before the lecture and answer the following questions:  1. What are the food sources of vitamins?  2. What is the implication of having excess vitamins?  3. What are the health implications of lack of vitamins? Summarize this for your reading. | | | |
| Face to face time: *(if applicable)* | | Number of hours | 2 |
| Watch the [video](https://youtu.be/qylwPI5MOlc) on micronutrients- vitamins. There will be an interactive session thereafter. At the end of the lecture, a case study will be availed for your groups to discuss and answer the questions. | | | |
| Online activity: | | Number of hours | 2 |
| What should the students do? | **WA3:1**  Case Study  A 32-year-old body builder has decided to go on diet consisting of egg whites to ensure only proteins for muscle growth, after a few weeks, he experienced decreased energy and is found hypoglycaemic. A nutritionist tells the patient that he most likely has a vitamin deficiency!   1. Suggest the vitamin deficiency associated with consumption of raw eggs? (2mks) 2. Give a brief account of how the deficiency occurs? (4mks) 3. List any two food sources for the above vitamin (2mks) | | |
| Where do they do it? | Online | | |
| By when should they do it? | After the face-to-face lecture | | |
| E-moderator/tutor role | | | |
| To supervise and provide feedback. | | | |
| How are the learning outcomes in this unit assessed? | | Number of hours | 1 |
| Learning outcome 1 will be assessed by WA3:1.  [Case](file:///C:\Users\jabulanis\AppData\Local\Microsoft\Windows\INetCache\Downloads\QUIZZES%20Human%20nutrition%20and%20dietetics%20Module.docx) study | | | |
| How does this section link to other sections of the module? | | | |
| This section is linked to week 6, 7, 8, 10, 11 | | | |

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| = Total number of hours | 7 |

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| Which learning resources/ references will scaffold the students’ learning? | Lecture notes on vitamins are provided on the notes and video link  Additional Resources on different types of vitamins are provided on these links:     1. <https://acewebcontent.azureedge.net/continuingeducation/courses/support_items/OLC-NHP-10/Nutrients.pdf> 2. <https://www.slideshare.net/sumankc26/micronutrients-24574773> 3. <https://www.slideshare.net/ArunViswanathan3/fat-soluble-vitamins-199839596> |
| How are students enabled to access the resources? | * They are registered onto the university’s LMS * Students are availed with a tutorial video that guides them about resource access and utilization. * Each school or college has designated personnel whose contact (email address and phone contact) is uploaded onto the LMS, to whom any further inquiries about LMS accessibility are channelled. * The university has two helpdesks with two computer lab technicians that offer students practical assistance regarding course enrolment. |
| Where in this unit are students expected to work collaboratively? | Group work |
| How has an inclusive approach been incorporated in this unit? | * A collection of study resources, that is, video, e-books and printable materials, can be accessed by students who may not have access to the online materials. * The unit has both face to face and online sessions * A wide range of accessible communication platforms e.g. emails, WhatsApp chats, zoom are availed for interactions and soliciting feedback from both the e-moderator as well as the students. |
| How will feedback on unit be obtained from students? | Quality assurance survey, WhatsApp chats, blogs. |
| How will student feedback be used to improve unit? | This will be done in the subsequent units. |
| At which point(s) will students receive formative feedback on the work they have done in the unit? | During the face- to- face lecture  After one week from the deadline |

END OF UNIT 3

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| **Unit-level overview** | | **Unit** | **4A** |
| Topic name: | Nutrients- micronutrients-(Minerals) | | |
| Aim of the topic: | To describe the types, sources, functions, digestion and absorption of micronutrients. | | |
| This topic covers: | * Minerals | | |
| Intended learning outcomes: | *At the end of this* ***topic****, you will be able to:*   1. Describe the sources, functions, excesses/deficiencies of minerals. | | |

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| Overview of student activity: | Minerals, too, play a vital role in providing different sources of micronutrients. In your groups, please watch a video provided in the resource section, read an e-book and answer the questions after the case study. |

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| **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:*** | | | |
| W4:1 To describe the sources, functions, excesses/deficiencies of minerals. | 1 | WA4:1 | Case study and Discussion forum on the LMS |

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| 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 these are cross-referenced in this section.)* | | | |
| Module-level outcomes addressed: | | | |
| This addresses module level outcome 1. | | | |
| Purpose of the unit/week/section: | | | |
| To understand the sources and functions of micronutrients. | | | |
| Over to you: *(a description of the process of the section)* | | | |
| This topic is a continuation of the previous week’s session on micronutrients. You will read the notes on minerals from the e-book provided, thereafter read and answer the questions from the case study. | | | |
| Pre-topic activity: | | Number of hours | 2 |
| Read and make the notes on sources and functions of minerals from the notes provided for your reading. | | | |
| Face to face time: *(if applicable)* | | Number of hours |  |
|  | | | |
| Online activity: | | Number of hours | 1 |
| What should students do? | WA4:1  Task 1. Watch the [video](https://youtu.be/N-Lzx3Qepro) link on Minerals from this link: A case study has been provided. Read and answer the questions that follow and post this on to the LMS for further discussion in your groups.  Answer the following questions.  An 18 year old female reported to the physician for consultation, she complained of general weakness, lethargy and inability to do routine work for the previous few months. On further questioning, she revealed that she revealed that she was having excessive bleeding during menstruation for the previous six months.   1. What mineral deficiency is she likely to be suffering from?(2mks) 2. What are the effects of the mineral deficiency to her health given she is of reproductive age?(6mks) 3. Which vitamin enhances the absorption of the mineral above in (a) above?(2mks) | | |
| Where do they do it? | Online | | |
| By when should they do it? | This work should be posted by (date) | | |
| E-moderator/tutor role | | | |
| To supervise, guide the discussion and provide feedback to the students. | | | |
| How are the learning outcomes in this unit assessed? | | Number of hours | 30minutes |
| Learning outcome W4:1 is assessed by WA4:1.   |  |  |  |  | | --- | --- | --- | --- | | **Criteria** | **Satisfactory(3)** | **Fair(2)** | **Unsatisfactory(1)** | | **Content understanding (comprehension of the content under discussion)** | Information and knowledge are accurately aligned, implying the student shows serious contemplation of readings. | Post has summarized basic, correct information which doesn’t link to real-life applications. | The post has little or no evidence that readings were completed. So much of the content presented is personal opinions or feelings. | | **Participation in the learning community** | Shows concerted and honest effort to engage with others.  Student interacts accurately with other posts in the thread | Student rehearses ideas from other posts | Student does not participate or rarely acknowledges other posts | | **Etiquette in dialogue with others** | Written interactions show respect and sensitivity to peers’ gender, cultural and linguistic background, sexual orientation, political and religious beliefs | Some of the written interactions show respect. | Written interactions show disrespect for the viewpoints of others | | **Quality of prose** | Writing is free of grammatical, spelling and punctuation errors. | Writing contains less than 5 grammatical, spelling or punctuation errors | Post contains more than 5 grammatical, spelling or punctuation errors | | **Scholarly writing** | Post articulately acknowledges authorship of other people’s academic works and is presented with acceptable referencing styles | Acceptable referencing styles used but some of the authorship of other people’s academic works is not acknowledged. | Post is more than 35% plagiarized. | | | | |
| How does this section link to other sections of the module? | | | |
| This section is linked to weeks 6, 7, 8, 10 and 11. | | | |

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| = Total number of hours | 3hrs 30mins |

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| **Unit-level overview** | | **Unit** | **4B** |
| Topic name: | Nutrients- micronutrients-(Minerals) | | |
| Aim of the topic: | To describe the types, sources, functions, digestion and absorption of micronutrients. | | |
| This topic covers: | * Minerals | | |
| Intended learning outcomes: | *At the end of this* ***topic****, you will be able to:*   1. Describe the sources, functions, excesses/deficiencies of minerals. | | |

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| Overview of student activity: | Minerals, too, play a vital role in providing different sources of micronutrients. In your groups,   * watch a video provided in the resource section, * read an e-book * answer the questions after the case study. |

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| **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:*** | | | |
| W4:1 To describe the sources, functions, excesses/deficiencies of minerals. | 1 | WA4B:1 | Summary report on the LMS |

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| 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 these are cross-referenced in this section.)* | | |
| Module-level outcomes addressed: | | |
| This addresses module level outcome 1. | | |
| Purpose of the unit/week/section: | | |
| To understand the sources and functions of micronutrients. | | |
| Over to you: *(a description of the process of the section)* | | |
| This topic is a continuation of the previous week’s session on micronutrients. You will read the [notes](file:///C:\Users\jabulanis\AppData\Local\Microsoft\Windows\INetCache\Downloads\2.%09https:\acewebcontent.azureedge.net\continuingeducation\courses\support_items\OLC-NHP-10\Nutrients.pdf) on minerals from the [slide](https://www.slideshare.net/sumankc26/micronutrients-24574773) provided, thereafter read and answer the questions from the case study. | | |
| Pre-topic activity: | Number of hours | 2 |
| **WA4B:1**  Carry out research on the internet and read the [article](https://www.iaea.org/sites/default/files/publications/magazines/bulletin/bull45-1/45105785461.pdf) provided. Make brief notes about the four ways (supplementation, food fortification, dietary diversification, bio fortification) of handling micronutrient malnutrition (hidden hunger).  Post the summary report to the e-moderator thereafter read two colleagues’ posts before the face to face lecture. | | |
| Face to face time: *(if applicable)* | Number of hours | 2 |
| Attend a Lecture on hidden hunger | | |
| E-moderator/tutor role | | |
| To supervise, guide the discussion and provide feedback to the students. | | |
| How are the learning outcomes in this unit assessed? | Number of hours | 30 minutes |
| Learning outcome W4:1 is assessed by WA4B:1.  Use Essay rubric | | |
| How does this section link to other sections of the module? | | |
| This section is linked to weeks 6, 7, 8, 10 and 11. | | |

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| = Total number of hours | 4hrs 30mins |

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| **Some important questions** | |
| Which learning resources/ references will scaffold the students’ learning? | Slide share links, notes link and article link on minerals are provided |
| How are students enabled to access the resources? | * They are registered onto the university’s LMS * Students are availed with a tutorial video that guides them about resource access and utilization. * Each school or college has designated personnel whose contact (email address and phone contact) is uploaded onto the LMS, to whom any further inquiries about LMS accessibility are channelled. * The university has two helpdesks with two computer lab technicians that offer students practical assistance regarding course enrolment |
| Where in this unit are students expected to work collaboratively? | Online in their groups |
| How has an inclusive approach been incorporated in this unit? | * A collection of study resources, that is, video, e-books and printable materials, can be accessed by students who may not have access to the online materials. * The assessment will comprise diverse approaches, such as discussion, quiz. * The slow learners may take time making use of the available access to learning materials instead of being constrained to learning at a specific point in time in a typical classroom. |
| How will feedback on unit be obtained from students? | On the discussion forum, emails, WhatsApp groups and blogs. |
| How will student feedback be used to improve unit? | This will be done in the subsequent units |
| At which point(s) will students receive formative feedback on the work they have done in the unit? | One week after posting |

END OF UNIT 4

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| **Unit-level overview** | | **Unit** | **5** |
| Topic name: | Nutrient Needs throughout the Lifespan. | | |
| Aim of the topic: | To study the changing nutritional needs throughout the major stages of human lifespan. | | |
| This topic covers: | * Factors that influence nutrient needs. * Nutrient requirements for specific age groups: 0-6 months, 6 months to 1 year, 1-5 year, 6-12 years, teenagers, adults(18years+), elderly (special nutritional needs for each group). | | |
| Intended learning outcomes: | *At the end of this* ***topic****, you will be able to:*   1. Describe specific nutrient needs throughout the life span. 2. Design dietary plans for a specific age group. | | |

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| Overview of student activity: | The class will be split into groups, each of which will research the nutrition requirements, challenges and underlying factors at the different phases of life and then compile a presentation.   * Group 1. Pregnancy and lactation nutrition * Group 2. Infant and childhood nutrition (0-6 months), (6 months-1yr), (1-5years), (6-12yrs). * Group 3. Adolescents nutrition * Group 4. Adults * Group 5. Nutrition for the elderly   You will be assessed later on how to prepare a meal plan for the different life phases. |

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| **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:*** | | | |
| W5.1 Describe specific nutrient needs throughout the life span | 2 | WA5:1 | Class presentation about the nutrition requirements of a particular assigned age group. |
| W5.2 Design dietary plan for a specific age group | 2 | WA5:2 | Design a meal plan for the age group that you have presented on the LMS. |

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| 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 these are cross-referenced in this section.)* | | | |
| Module-level outcomes addressed: | | | |
| This addresses module level outcome 2 | | | |
| Purpose of the unit/week/section: | | | |
| To identify and plan adequate nutrition for individuals in the different stages of life from birth to old age. | | | |
| Over to you: *(a description of the process of the section)* | | | |
| You are expected to research in your study groups (group names displayed on the LMS). Each group has been assigned one life stage to research. Read the e-book provided. | | | |
| Pre-topic activity: | | Number of hours | 3 |
| **WA5:1**  Groups have been formed and students assigned to these groups to research. The student groups should research different age groups as follows:  Group 1. Pregnancy and lactation nutrition  Group 2. Infant and childhood nutrition (0-6months), (6 months-1yr), (1-5 years), (6-12years).  Group 3. Adolescents nutrition  Group 4. Adults  Group 5. Nutrition for the elderly  Read chapter 13 of the [e-book](https://open.umn.edu/opentextbooks/textbooks/711) provided and summarize one life stage your group has been assigned to present on during the face to face session.  You will also summarise in not more than 500 words, the nutrition requirements of different phases in life and the disease conditions that may present. Post the PowerPoint presentation onto the discussion forum and make comments about two phases in life. | | | |
| Face to face time: *(if applicable)* | | Number of hours | 2 |
| Present your work on the nutrition requirements of a different phase in life and the disease conditions during the face to face session. Each group will be given 15 minutes each to present and the final write-up should be presented to your lecturer after making corrections if any two days after the lecture. | | | |
| Online activity: | | Number of hours | 3 |
| What should students do? | **WA5:2**  Still with your groups, prepare meal plans for the following categories  Group 1. Pregnancy and lactation nutrition – Meal plan for an expectant mother.  Group 2. Infant and childhood nutrition (0-6 months), (6 months-1year), (1-5 years), (6-12 years).  Meal plan for a malnourished child aged between 6 months to 1 year.  Group 3. Adolescents nutrition- Design a meal plan for young adults who have a sports activity in school.  Group 4. Adults -meal plan for an obese adult.  Group 5. Nutrition for the elderly- meal plan for the elderly.  Post this on to the discussion forum for your colleagues to critique two meal plans. | | |
| Where do they do it? | Online | | |
| By when should they do it? | This work should be posted by (date). | | |
| E-moderator/tutor role | | | |
| Supervise, guide the discussion and provide feedback | | | |
| How are the learning outcomes in this unit assessed? | | Number of hours | 1 |
| Learning Outcome W5:1 is assessed by WA5:1  Learning Outcome W5:2 is assessed by WA5:2 | | | |
| How does this section link to other sections of the module? | | | |
| This section is linked to unit 6, 7, 9, 11 | | | |

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| = Total number of hours | 9 |

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| **Some important questions** | |
| Which learning resources/ references will scaffold the students’ learning? | 1. Margaret Cameron and Yngve Hofvander. 1983. Manual for feeding infants and young children, Second edition.  2.Ministry of Health (2007), Infant and young child feeding policy guidelines –Uganda |
| How are students enabled to access the resources? | * The university repository is available and accessible by students * Each school or college has designated personnel whose contact (email address and phone contact) is uploaded onto the LMS, to whom any further inquiries about LMS accessibility are channelled. * Fully furnished computer laboratories with 24/7 internet connection are in place |
| Where in this unit are students expected to work collaboratively? | During the group presentations and online |
| How has an inclusive approach been incorporated in this unit? | * A collection of study resources, that is, video, e-books and printable materials, can be accessed by students who may not have access to the online materials. * The assessment will comprise both online discussion and individual reviews by the e-moderator. * The slow learners may take time making use of the available access to learning materials instead of being constrained to learning at a specific point in time in a typical classroom. |
| How will feedback on unit be obtained from students? | From the QA survey, WhatsApp groups, blogs, emails |
| How will student feedback be used to improve unit? | This will be used to improve the subsequent units to improve the mode of delivery. |
| At which point(s) will students receive formative feedback on the work they have done in the unit? | By the end of the week |

END OF UNIT 5

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| **Unit-level overview** | | **Unit** | **6** |
| Topic name: | Nutrient needs through pregnancy and lactation. | | |
| Aim of the topic: | This unit highlights the nutritional requirements through pregnancy and lactation. | | |
| This topic covers: | * Nutrition during pregnancy and lactation * Breastfeeding | | |
| Intended learning outcomes: | *At the end of this* ***topic****, you will be able to:*   1. Describe specific nutrient needs for pregnant and lactating women. 2. Highlight the benefits and proper breastfeeding practices 3. Demonstrate proper feeding practices through pregnancy and lactation. | | |

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| Overview of student activity: | The nutritional status has an important role in the pregnancy and lactation outcomes of a mother and child. This unit comprises of;   * Reading an article and e-book on the nutritional needs of pregnant and lactating mothers. * A role play on the best breastfeeding practices * Preparing a PowerPoint presentation on the best nutrition practices of a mother to ensure they have breast milk and that the baby is feeding well. |

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| **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:*** | | | |
| W6:1 To describe specific nutrient needs for pregnant and lactating women. | 2 | WA6:1 | Summarise the nutritional needs of pregnant women for your reading and post onto the discussion forum. |
| W6.2 Highlight the benefits and proper breastfeeding practices. | 2 | WA6:2 | Read and summarize the benefits of breastfeeding. You will then take the quiz. |
| W6.3 Demonstrate proper feeding practices through pregnancy and lactation. | 2 | WA6:3 | Role play in class and PowerPoint presentation online |

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| 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 these are cross-referenced in this section.)* | | | |
| Module-level outcomes addressed: | | | |
| This addresses module level outcome 2. | | | |
| Purpose of the unit/week/section: | | | |
| This to understand the nutrition needs and the best breastfeeding practices of a lactating. | | | |
| Over to you: *(a description of the process of the section)* | | | |
| Read the notes provided in the resources section. Take the quiz that follows. Now here is the fun part. You will then prepare a role-play presentation demonstrating proper breastfeeding practices for your face-to-face session. | | | |
| Pre-topic activity: | | Number of hours | 2 |
| **WA6:1**  Research and read [articles](https://pubmed.ncbi.nlm.nih.gov/26383056/) 1 and [article](https://www.health.go.ug/docs/Gl_MN.pdf) 2 about the nutritional needs of breastfeeding and breastfeeding practices from the internet and in your groups post a summary about the nutritional needs of breastfeeding onto the discussion forum. Comment on two summaries posted by the other groups. You will then take the quiz. | | | |
| Face to face time: *(if applicable)* | | Number of hours | 3 |
| **WA6:2**  In your groups, prepare a 10-minute role-play to be presented during the class, demonstrating how you would demonstrate proper breastfeeding practices to breastfeeding mothers at a health centre.  Role Play  Place the breast in the right position for breastfeeding; ensure the baby takes as often as possible. | | | |
| Online activity: | | Number of hours | 2 |
| What should students do? | **WA6:3**  Watch the [video](https://www.youtube.com/watch?v=xWPbykBKEMA) on breastfeeding  Prepare a PowerPoint presentation on what you will teach breastfeeding mothers on what to do to ensure that they have adequate milk and that their babies are feeding well.  Post this to your e-moderator. | | |
| Where do they do it? | Online | | |
| By when should they do it? | This work should be posted by (date). | | |
| E-moderator/tutor role | | | |
| Supervise the students and give feedback. | | | |
| How are the learning outcomes in this unit assessed? | | Number of hours | 1 |
| Learning outcome W6:1 will be assessed by WA6:1  Learning Outcome W6:2 will be assessed by WA6:2  Learning Outcome W6:3 will be assessed by WA6:3  Use presentation Rubric | | | |
| How does this section link to other sections of the module? | | | |
| This section links week 6, 8, 9, 11, 12 | | | |

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| = Total number of hours | 8 |

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| **Some important questions** | |
| Which learning resources/ references will scaffold the students’ learning? | Articles 1 link, Article 2 link and a video link are provided on breastfeeding practices. |
| How are students enabled to access the resources? | * Through the e-library * They are registered onto the university’s LMS * Each school or college has designated personnel whose contact (email address and phone contact) is uploaded onto the LMS, to whom any further inquiries about LMS accessibility are channelled. |
| Where in this unit are students expected to work collaboratively? | In WA6:3 |
| How has an inclusive approach been incorporated in this unit? | * The assessment will comprise quiz, role play and preparation of power point presentations * The slow learners may take time making use of the available access to learning materials instead of being constrained to learning at a specific point in time in a typical classroom. |
| How will feedback on unit be obtained from students? | Online |
| How will student feedback be used to improve unit? | Their views will be considered in the next unit. |
| At which point(s) will students receive formative feedback on the work they have done in the unit? | Within one week. |

END OF UNIT 6

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| **Unit-level overview** | | **Unit** | **7** |
| Topic name: | Nutritional Assessment | | |
| Aim of the topic: | The nutrition assessment identifies the specific nutritional issue that requires clinical intervention. The nutritional assessment identifies the nutritional problem, the probable aetiology of the problem and the signs/symptoms, the evidence that the problem exists. This section considers the various elements of performing a nutrition assessment. | | |
| This topic covers: | * Nutritional assessment -Individual * Community assessment | | |
| Intended learning outcomes: | *At the end of this* ***topic****, you will be able to:*   1. Assess the nutritional status of both the individual and community. | | |

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| Overview of student activity: | Now here is the interesting part, in order to assess overweight, underweight, or normal-weight individuals:   * Take the anthropometric body measurements of 10 people around you and calculate their body mass index (BMI). You will also * Draft a standard survey instrument or clinical guide which you will use during your visit at the health centre in your vicinity. * You will then write a capstone project report after the health centre visit. |

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| **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:*** | | | |
| W7:1 Assess the nutritional status of the individual and community. | 2 | WA7:1 | Task 1: Assess the nutritional Status of Individuals in the Class.  Task 2: Draft a standard survey instrument  Write a capstone project report after the health centre visit. |

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| 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 these are cross-referenced in this section.)* | | |
| Module-level outcomes addressed: | | |
| This addresses module level 2. | | |
| Purpose of the unit/week/section: | | |
| The student should be able to identify the indicators of the nutritional status of an individual, a family and the community.  Specifically, by the end of this assessment you should be able to:-   * identify nutrition related problems; * use the nutrition care process to make decisions; * determine and evaluate nutrition interventions. | | |
| Over to you: *(a description of the process of the section)* | | |
| You have two tasks this week! You will also have a visit to the community health centre nearest to you.  Task 1: Take the weight, height, hip circumference, age and gender of 10 people in your class. Exchange your weight measurements with another group and classify yourselves using BMI. Assess your nutritional status: are you underweight, overweight or of normal weight?  Task 2: Draft a standard survey instrument or clinical guide needed to interact with the clients as you assess their nutritional status (The student’s knowledge on the metrics that guide medical nutrition therapy, disease prevention and health promotion will be reflected in the degree to which the instrument is judged as valid and reliable by the faculty supervisor).  Write a capstone project report after the health centre visit. | | |
| Pre-topic activity: | Number of hours | 6 |
| **WA7:1**  Task 1  Watch the [video](https://youtu.be/mP1LiyD0P_A) 1 and [video](https://youtu.be/b7I83URMYoA) 2 on nutritional assessment and read the lecture [notes](https://www.slideshare.net/soharashed/assessment-of-nutritional-status) 1 , [notes](file:///C:\Users\jabulanis\AppData\Local\Microsoft\Windows\INetCache\Downloads\1.%09https:\www.open.edu\openlearncreate\mod\oucontent\view.php%3fid=318&printable=1) 2 and [notes](https://www.jmedscindmc.com/text.asp?2014/34/5/211/143648) 3 and take notes for your personal use. This should be done before the face-to-face lecture and visit to the community health centre.  Form working groups composed of five members – (Deliberations of the groups will test the interpersonal skills and team spirit expected of health workers at the workplace).  Draft a standard survey instrument or clinical guide needed for interacting with the clients as you establish their nutritional status (The student’s knowledge on the metrics that guide medical nutrition therapy, disease prevention and health promotion will be reflected in the degree to which the instrument is judged as valid and reliable by the faculty supervisor). | | |
| Face to face time: *(if applicable)* | Number of hours | 8 |
| **WA7:1**  Task 2: Take the weight, height, hip circumference, age and gender of 10 people in your class. Exchange your weight measurements with another group and classify yourselves using the Body Mass Index (BMI). Assess their nutritional status: are they underweight, overweight or of normal weight? You will also visit the health centre in your community.  Task 3:  Visit the nearest health centre/hospital for training placement during the 4 weeks this session runs (among other things, the field/clinical supervisor will evaluate the students’ professional knowledge and communication skills during the interaction with patients)  The nutrition assessment identifies the specific nutritional issue that requires clinical intervention. The nutritional assessment identifies the nutritional problem, the probable aetiology of the problem and the signs/symptoms, the evidence that the problem exists. This section considers the various elements of performing a nutrition assessment.  Upon accomplishment of the 4weeks, the field supervisor will give a brief report and grade the team as either Poor (grade<50%), satisfactory (grade= 50%- 75%) or Very good (grade=75+ %)  In your groups, share your individual reflections on your field experience, write a capstone project report which should indicate your application of the Nutrition Care Process, list the symptoms of the identified nutrition-related problems, your evaluation of how grave the nutritional status was and the recommendations made for the individual cases. Additionally, there should be a section on the highlights, challenges and recommendations (This report will be submitted to the faculty supervisor who will assess the report to establish the professional competencies/knowledge (/50) of the students and identify the presence of soft skills like problem‐solving, critical analysis skills (/50). | | |
| Online activity: | Number of hours | 3 |
| E-moderator/tutor role | | |
| To provide feedback and work in unison with the field supervisor | | |
| How are the learning outcomes in this unit assessed? | Number of hours | 2 |
| Learning outcome W7:1 will be assessed by WA7:1  **Rubric for the field supervisor**   |  |  |  |  | | --- | --- | --- | --- | | **Criteria/Score** | **Very good >75** | **satisfactory<50% but <=75** | **Poor=<50%** | | Application of acquired knowledge into practice | * Understands and practices the theories of health promotion | * Understands but doesn’t practice the theories of health promotion | * Neither understands nor practices the theories of health promotion | | Technical skills | * Excellent use of analytical software programs and databases * The learner is comfortable working with medical software, as well as spreadsheet and word-processing programs to draw up written plans for clients. | * The learner has some knowledge of medical software but with no hands-on experience though makes a few attempts at using the spreadsheet and word-processing programs to draw up written plans for clients. | * The learner is has no knowledge of medical software at all | | **Knowledge of the current nutritional and dietetics trends** | * Learner has mastery knowledge of more than seven nutritional thematic trends as indicated in the link below: - * [Ten Key Health and Nutrition Trends for 2021 - KHNI (kerry.com)](https://khni.kerry.com/trends-and-insights/ten-key-health-and-nutrition-trends-of-this-year/) | * Learner has mastery knowledge of at least five nutritional thematic trends | * The learner has no mastery knowledge of any of the nutritional thematic trends | | **Time/self-organizational management** | * Learner delivers service and completes tasks on time and always arrives in time for clinical sessions | * Learner sometimes delivers service and completes tasks on time and arrives in time for clinical sessions | * Learner never delivers service/tasks on time nor arrives in time for clinical sessions | | **People skills** | * Always Friendly and approachable in correspondence * Clear and articulate communication * Works very well collaboratively with teammates | * Sometimes friendly and approachable in correspondence * Fairly clear communication   with clients/patients   * Works fairly well collaboratively with teammates | * Unfriendly and not approachable in correspondence with clear communication * Doesn’t work well collaboratively with teammates |   **Rubric for institutional supervisor**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Criteria/Score** | Application of the Nutrition Care Process | list and symptoms of identified nutrition related problems | Evaluation of the nutrition status | Recommendations | Challenges | | Professional competencies/knowledge(/50) | **20/50** | **5/50** | **10/50** | **10/50** | **5/50** | |  | | | | | | |  | Problem‐solving | Critical, and analytical skills | | Communication skills | | | Presence of soft skills(/50) | **20/50** | **20/50** | | **10/50** | | | | |
| How does this section link to other sections of the module? | | |
| This is linked to unit 2, 3, 4, 5, 6, 7, 9, 10, 11 | | |

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| = Total number of hours | 19 |

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| **Some important questions** | |
| Which learning resources/ references will scaffold the students’ learning? | Nutritional Assessment resource material are provided on the notes 1, notes 2, notes 3 video 1 and video 2 links. |
| How are students enabled to access the resources? | * Through the e-library * Each school or college has designated personnel whose contact (email address and phone contact) is uploaded onto the LMS, to whom any further inquiries about LMS accessibility are channelled. * The e-moderator will guide the students in instrument development and the department will issue an introductory for the learner to be used in the field. * Field supervisor will work together with the learner in order to achieve the required experience. |
| Where in this unit are students expected to work collaboratively? | During the group sessions |
| How has an inclusive approach been incorporated in this unit? | * A collection of study resources, that is, video, e-books and printable materials, can be accessed by students who may not have access to the online materials. * The assessment will comprise both field supervisor and institutional assessments * The slow learners may take time making use of the available access to learning materials instead of being constrained to learning at a specific point in time in a typical classroom. * A practical aspect is also incorporated. |
| How will feedback on unit be obtained from students? | Though the QA survey and email to the e-moderator |
| How will student feedback be used to improve unit? | Through the subsequent sessions |
| At which point(s) will students receive formative feedback on the work they have done in the unit? | Feedback will be given after one week of posting to the supervisor. |

END OF UNIT 7

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| **Unit-level overview** | | **Unit** | **8** |
| Topic name: | Food Security | | |
| Aim of the topic: | To equip the students with knowledge and skills to advise the community on proper nutrition and how to manage nutritional disorders. | | |
| This topic covers: | * Pillars of food security * Assessment of food security and coping Strategies | | |
| Intended learning outcomes: | *At the end of this* ***topic****, you will be able to:*   1. Describe the principles of food security. 2. Assess food security | | |

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| Overview of student activity: | Food security is key in ensuring a healthy community. This unit introduces you to the factors that influence food security.   * You will watch the video and read notes provided about food security * Visit the community to assess the current status of food security. |

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| **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:*** | | | |
| W8:1 Describe the principles of food security | 2, 3 | WA8:1 | Research and summarize the factors that affect food security online. |
| W8:2 Assess food security | 2, 3 | WA8:2 | Report after field visit status of food security and coping strategies |

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| 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 these are cross-referenced in this section.)* | | | |
| Module-level outcomes addressed: | | | |
| This addresses module level outcomes two and three. | | | |
| Purpose of the unit/week/section: | | | |
| In this unit, you will be introduced to food security at the household and community level. You will learn about the causes and coping strategies that households adopt during food shortages. This unit enables you to gain knowledge on what affects food security and how people cope. | | | |
| Over to you: *(a description of the process of the section)* | | | |
| Read an article and notes on food security. Food security plays a key role in influencing health and safety in the community. You will then have the chance to visit the community and investigate what the influencers of food security and the coping strategies are. | | | |
| Pre-topic activity: | | Number of hours | 2 |
| Read the [article](http://www.fao.org/publications/sofi/2020/en/) 1 and [article](http://www.fao.org/3/w0078e/w0078e04.htm) 2 on the state of food security in the world from the link. Take notes for your individual use on factors influencing food security. | | | |
| Face to face time: *(if applicable)* | | Number of hours | 6 |
| Visit the community surrounding the health centre you are at for your field study. While in the community visit 10 homesteads and the nearby market centre and interview and record the participants about the following;   1. Food availability, household food security, maternal and child health practices, education level and their culture. 2. What are their coping strategies? | | | |
| Online activity: | | Number of hours | 4 |
| What should students do? | Read the [slide](https://slideplayer.com/slide/3971846/) notes and articles 1 and 2 on the influencers of food security availed. Carefully analyse the data you collected from the community survey. Give recommendations on how to address the challenges affecting food security identified in the community. Post this to your e-moderator. | | |
| Where do they do it? | In the community and online. | | |
| By when should they do it? | This work should be posted by (date). | | |
| E-moderator/tutor role | | | |
| Supervise and give feedback | | | |
| How are the learning outcomes in this unit assessed? | | Number of hours | 1 |
| Learning outcome W8:1 is assessed by WA8:1  Learning outcome W8:2 is assessed by WA8:2 | | | |
| How does this section link to other sections of the module? | | | |
| It is linked to unit 7, unit 10 and unit 12 | | | |

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| = Total number of hours | 13 |

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| **Some important questions** | |
| Which learning resources/ references will scaffold the students’ learning? | The module, article 1 link, article 2 link and slide share links provided. |
| How are students enabled to access the resources? | * Through the e-library. * Students are availed with a tutorial video that guides them about resource access and utilization. * Each school or college has designated personnel whose contact (email address and phone contact) is uploaded onto the LMS, to whom any further inquiries about LMS accessibility are channelled. |
| Where in this unit are students expected to work collaboratively? | Online and in the community |
| How has an inclusive approach been incorporated in this unit? | * A collection of study resources, that is, video, e-books and printable materials, can be accessed by students who may not have access to the online materials. * The assessment will comprise diverse approaches, such as discussion, quiz. * The medium of both synchronous and asynchronous sessions, written and oral will use English language which is the official national language. Jargons and local slung will be avoided in order to avoid the possible exclusiveness of the international students within the institution. * Students’ feedback will be continually solicited and positively considered in improvement of the module delivery. * The slow learners may take time making use of the available access to learning materials instead of being constrained to learning at a specific point in time in a typical classroom. |
| How will feedback on unit be obtained from students? | A wide range of accessible communication platforms e.g. emails, WhatsApp chats, zoom are availed for interactions and soliciting feedback from both the students. |
| How will student feedback be used to improve unit? | The findings will be used to improve the subsequent units. |
| At which point(s) will students receive formative feedback on the work they have done in the unit? | After one week of posting. |

END OF UNIT 8

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| **Unit-level overview** | | **Unit** | **9** |
| Topic name: | Malnutrition | | |
| Aim of the topic: | This section examines the health challenges associated with malnutrition. Millions around the globe live with the constant threat of hunger and starvation. Under-nutrition and malnutrition are substantial public health challenges. In developing regions experiencing nutritional transition, over-nutrition (obesity) and related health indicators are a growing concern. | | |
| This topic covers: | * Under-nutrition (protein-energy malnutrition (PEM)-kwashiorkor, marasmus, hidden hunger, severe acute malnutrition and moderate acute malnutrition (MAM). * Over-nutrition (overweight, obesity, complications related to obesity such as Diabetes Mellitus [DM], hypertension) | | |
| Intended learning outcomes: | *At the end of this* ***topic****, you will be able to:*   1. Discuss the effects of malnutrition on health. | | |

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| Overview of student activity: | You are expected to watch two videos. Read lecture notes provided. You can also research further on the internet. In addition, read the two case studies that have been provided and answer the questions thereafter. A quiz will also follow. |

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| **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:*** | | | |
| W9:1 Discuss the effects of malnutrition on health | 2 | WA9:1 | Discussion forum, summary report and Case study on the LMS. |

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| 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 these are cross-referenced in this section.)* | | | |
| Module-level outcomes addressed: | | | |
| This addresses module level outcome two. | | | |
| Purpose of the unit/week/section: | | | |
| To know how to identify malnutrition cases from physical examination and clinical biochemistry and probable intervention to prevent a re-occurrence. | | | |
| Over to you: *(a description of the process of the section)* | | | |
| Watch the two videos in the resources section. You will then research further on the internet and summarise notes on the peculiarity of macro-and micro-nutrient deficiency. Read the two case studies provided and thereafter in your groups, answer the questions. | | | |
| Pre-topic activity: | | Number of hours | 2 |
| Watch the [video](https://youtu.be/E4W2DUtR988) 1 on kwashiorkor and marasmus and [video](https://www.who.int/nutrition/topics/WHO_FAO_ICN2_videos_foodsystems/en/) 2 on hidden hunger.  Summarise notes on the peculiarity of Macro and Micronutrient deficiency | | | |
| Face to face time: *(if applicable)* | | Number of hours |  |
|  | | | |
| Online activity: | | Number of hours | 2 |
| What should students do? | **WA9:1**  In your groups, discuss the 2 case studies provided, one on obesity and metabolic syndrome, answer the questions and post this onto discussion forum by the designated date.  Case Study 1  Mr. Kwezi is a 54 year old male with a history medical history of hypertension.On examination, Mr.Kwezi‘s height and weight is 5'11" and 210 lbs respectively.His waist circumference is 40.5 inches and his blood pressure is 135/80 mm Hg (sitting) and 130/80 mm Hg (standing).Currently, Mr. Kwezi snacks on sugary treats throughout the day, as he does not take time to eat breakfast and frequently goes without lunch. By the time he eats dinner, relatively late in the evening, he is famished and tends to overeat. Mr. Kwezi has very little nutritional information about the food he eats. He is also not physically active.  Questions  *1.*Calculate Mr. Kwezi’s BMI.  *2.*What physical conditions make him a likely candidate to be diagnosed with metabolic syndrome?  *3.*Advise Mr. Kwezi on how to change his lifestyle by using food diet.  *4.*What other lifestyle changes should he consider?  Case study 2  Mary is a 4-year-old girl who is significantly obese, weighing nearly 105 pounds.  Questions   1. Create a plan for the mother of Mary to help her daughter improve her eating habits and overall health. The goal of treatment should be weight maintenance as opposed to weight loss. This plan permits the child to increase in height but not in weight, resulting in a decrease in BMI-for-age into a healthier range. | | |
| Where do they do it? | Online | | |
| By when should they do it? | This work should be posted by (date). | | |
| E-moderator/tutor role | | | |
| Facilitate and coordinate a synchronous online discussion. | | | |
| How are the learning outcomes in this unit assessed? | | Number of hours | 1 |
| Learning outcome W9:1 is assessed by WA9:1 | | | |
| How does this section link to other sections of the module? | | | |
| Identifies the causes of malnutrition in society and the need for moderation in our food intake. It is therefore related to all the units. | | | |

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| = Total number of hours | 5 |

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| **Some important questions** | |
| Which learning resources/ references will scaffold the students’ learning? | These are provided in the Video1 and video 2 links provided. |
| How are students enabled to access the resources? | * Through the e-library * Students are availed with a tutorial video that guides them about resource access and utilization. * Each school or college has designated personnel whose contact (email address and phone contact) is uploaded onto the LMS, to whom any further inquiries about LMS accessibility are channelled. |
| Where in this unit are students expected to work collaboratively? | In their groups |
| How has an inclusive approach been incorporated in this unit? | * A collection of study resources, that is, video, e-books and printable materials, can be accessed by students who may not have access to the online materials. * Assessment will comprise diverse approaches, such as discussion, quiz. * A deliberate effort to encourage active participation from all learners will be made so that none feels left out. * The slow learners may take time making use of the available access to learning materials instead of being constrained to learning at a specific point in time in a typical classroom. |
| How will feedback on unit be obtained from their groups of students? | A wide range of accessible communication platforms e.g. emails, WhatsApp chats, zoom are availed for interactions and soliciting feedback from both the e-moderator as well as the students. |
| How will student feedback be used to improve unit? | This will be used to improve the subsequent units. |
| At which point(s) will students receive formative feedback on the work they have done in the unit? | After one week after submission. |

END OF UNIT 9

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| **Unit-level overview** | | **Unit** | **10** |
| Topic name: | Principles of clinical nutrition. | | |
| Aim of the topic: | To understand the importance of clinical nutrition in the healthcare system to deal with ill health, injuries, surgery and for proper recovery. It helps prevent malnutrition, restore body tissue and boosts energy and immunity in the body. | | |
| This topic covers: | * Principles of nutritional management of common clinical conditions   -protein-energy malnutrition (PEM), diabetes mellitus(DM), hypertension (HTN), obesity, HIV, cancers, sicklers, failure to thrive, fluid therapy etc. | | |
| Intended learning outcomes: | *At the end of this* ***topic****, you will be able to:*   1. Describe the nutritional principles of the management of common clinical conditions. | | |

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| Overview of student activity: | This week, you will learn about the managing of some clinical conditions like dehydration, diabetes, HIV/AIDS, cancer, obesity by using nutrition. |

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| **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:*** | | | |
| W10:1 Describe the nutritional principles of the management of common clinical conditions. | 2,3 | WA10:1 | Essay and discussion forum |

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| 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 these are cross-referenced in this section.)* | | | |
| Module-level outcomes addressed: | | | |
| This addresses module levels 2 and 3. | | | |
| Purpose of the unit/week/section: | | | |
| Clinical nutrition is essential for patients with disease, injuries and recovery. This unit focuses on the management of patients using diet. | | | |
| Over to you: *(a description of the process of the section)* | | | |
| Read the numerous notes provided in the resources section. Still in your groups, you will be assigned a clinical health condition to research about and also find out how diet is used to manage the health condition. | | | |
| Pre-topic activity: | | Number of hours | 3 |
| WA10:1  Read the following [articles](https://www.webmd.com/diabetes/guide/diabetes-basics) 1, [article](https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=325&printable=1) 2, [article](https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=325&printable=1) 3 and [publication](https://www.who.int/nutrition/publications/guide_inpatient_text.pdf) and then focus on your group assignment.  Task 1  In your groups, describe in an essay of not more than 500 words, how patients can manage one of the following clinical conditions using diet:   * Diabetes * HIV/AIDs * Cancer * Obesity * Dehydration.   Post this onto the discussion forum and thereafter read your colleagues’ essays and join the discussion. | | | |
| Face to face time: *(if applicable)* | | Number of hours |  |
|  | | | |
| Online activity: | | Number of hours | 2 |
| What should students do? | WA10:1  Task 2  Watch the [video](https://youtu.be/kkdo9DQah6c) on Fluid therapy and read the [article](https://www.unhcr.org/en-ie/3c4d46066.pdf) provided. You will also individually summarise the different concepts for fluid management cases in preparation for the online discussion forum. | | |
| Where do they do it? | Online | | |
| By when should they do it? | This work should be posted by (date). | | |
| E-moderator/tutor role | | | |
| Supervise, moderate the discussion and provide feedback | | | |
| How are the learning outcomes in this unit assessed? | | Number of hours | 1 |
| Learning outcome 10.1 is assessed by WA10:1 | | | |
| How does this section link to other sections of the module? | | | |
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| = Total number of hours | 6 |

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| **Some important questions** | |
| Which learning resources/ references will scaffold the students’ learning? | Additional Links Notes   1. Uganda: Nutrition [Profile](https://www.health.go.ug/docs/Gl_MN.pdf) 2. Ministry of Health. (2010). Integrated management of acute Malnutrition Guidelines |
| How are students enabled to access the resources? | * Through the e-library * They are registered onto the university’s LMS * Students are availed with a tutorial video that guides them about resource access and utilization. * Each school or college has designated personnel whose contact (email address and phone contact) is uploaded onto the LMS, to whom any further inquiries about LMS accessibility are channelled. |
| Where in this unit are students expected to work collaboratively? | Online, in class |
| How has an inclusive approach been incorporated in this unit? | * A collection of study resources, that is, video, e-books and printable materials, can be accessed by students who may not have access to the online materials. * Assessment will comprise diverse approaches, such as discussion, quiz. * The slow learners may take time making use of the available access to learning materials instead of being constrained to learning at a specific point in time in a typical classroom. |
| How will feedback on unit be obtained from students? | Via email to the lecturer, discussion forum, WhatsApp and or the QA survey reports. |
| How will student feedback be used to improve unit? | Use the outcome to improve the subsequent teaching. |
| At which point(s) will students receive formative feedback on the work they have done in the unit? | One week after submission. |

END OF UNIT 10

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| **Unit-level overview** | | **Unit** | **11** |
| Topic name: | Policies in Nutrition and Dietetics. | | |
| Aim of the topic: | Knowledge of nutrition policies and interventions is an important topic so as to be relevant in the community. This unit will introduce you to the current inventions in nutrition and policies in place. | | |
| This topic covers: | * Policies and regulations. | | |
| Intended learning outcomes: | *At the end of this* ***topic****, you will be able to:*   1. Identify the policies and interventions of human nutrition nationally and globally. | | |

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| Overview of student activity: | What are the current interventions and policies in place?   * You will carry out your research on the internet on the current trends, * Visit the nearest Health centre and District office. |

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| **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:*** | | | |
| W11:1 Identify the policies and interventions | 2,3 | WA11:1 | Summary report and discussion forum on the LMS. |

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| 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 these are cross-referenced in this section.)* | | |
| Module-level outcomes addressed: | | |
| This addresses module level outcomes two and three. | | |
| Purpose of the unit/week/section: | | |
| To effectively identify the nutrition policies and interventions in Uganda | | |
| Over to you: *(a description of the process of the section)* | | |
| You will be provided with video to watch. You are also encouraged to improve your research skills by using the internet to get information concerning policies both nationally and internationally. Finally visit the health centre and district offices to identify the policies and interventions in place. | | |
| Pre-topic activity: | Number of hours | 2 |
| Research on the internet about the current policies and interventions in relation to nutrition in Uganda and globally. In addition, watch the following [video](file://C:\Users\jabulanis\AppData\Local\Microsoft\Windows\INetCache\Downloads\Research%20on%20the%20internet%20about%20the%20current%20policies%20and%20interventions%20in%20relation%20to%20nutrition%20in%20Uganda%20and%20globally.%20In%20addition,%20watch%20the%20following%20video%20on%20interventions%20in%20Uganda%20https:\www.youtube.com\watch?v=1CifiZU2N6c) on interventions in Uganda.  In your groups, prepare a brief of about 500 words and post this to the discussion group. Join the discussion and comment on two submissions by other groups as guided and assigned on the LMS before the face to face session. | | |
| Face to face time: *(if applicable)* | Number of hours | 3 |
| Visit the nearest health centre and or the district office near the university and list the interventions and policies in place. Send the report to your e -moderator by the (date). | | |
| Online activity: | Number of hours |  |
| E-moderator/tutor role | | |
| Moderate the forum discussion, provide feedback to the students | | |
| How are the learning outcomes in this unit assessed? | Number of hours | 1 |
| WA11:1 assesses learning outcome W11:1 | | |
| How does this section link to other sections of the module? | | |
| This is linked to all the units since it involves nutrition interventions. | | |

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| = Total number of hours | 6 |

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| **Some important questions** | |
| Which learning resources/ references will scaffold the students’ learning? | A video link and article link are provided to guide the learning of policies and interventions in place. |
| How are students enabled to access the resources? | * Through the e-library * Lecture notes * They are registered onto the university’s LMS * Students are availed with a tutorial video that guides them about resource access and utilization. * Each school or college has designated personnel whose contact (email address and phone contact) is uploaded onto the LMS, to whom any further inquiries about LMS accessibility are channelled. |
| Where in this unit are students expected to work collaboratively? | In class and online in their groups. |
| How has an inclusive approach been incorporated in this unit? | * A collection of study resources, that is, video, e-books and printable materials, can be accessed by students who may not have access to the online materials. * Assessment will include both as discussions, quiz. * The unit will have both synchronous and asynchronous, face to face and online sessions * The slow learners may take time making use of the available access to learning materials instead of being constrained to learning at a specific point in time in a typical classroom. |
| How will feedback on unit be obtained from students? | Via email to the lecturer, discussion forum, WhatsApp and or the QA survey reports. |
| How will student feedback be used to improve unit? | Use the outcome to improve the subsequent teaching. |
| At which point(s) will students receive formative feedback on the work they have done in the unit? | One week after submission. |

END OF UNIT 11

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| **Unit-level overview** | | **Unit** | **12** |
| Topic name: | Current trends in Nutrition and Dietetics. | | |
| Aim of the topic: | Knowledge of nutrition trends is an important topic so as to be relevant in the community. This unit will introduce you to the current nutrition trends. | | |
| This topic covers: | * Fad diets (keto diet, juicing, Atkins, intermittent fasting). * New formulations. * Food fortification. | | |
| Intended learning outcomes: | *At the end of this* ***topic****, you will be able to:*   1. Discuss the current nutrition trends and its implications on diet. | | |

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| Overview of student activity: | It is now time to get introduced to the current trends in nutrition. What are the trends in the current diets? You will carry out your research on the internet on the current trends, at the national and global level. |

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| **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:*** | | | |
| W12:1 Discuss the current nutrition trends and their implications on diet | 2,3 | WA12:1 | Group presentation on one of the current trends in nutrition in class |

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| 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 these are cross-referenced in this section.)* | | |
| Module-level outcomes addressed: | | |
| This addresses module level outcomes two and three. | | |
| Purpose of the unit/week/section: | | |
| To effectively identify the current trends in nutrition in Uganda | | |
| Over to you: *(a description of the process of the section)* | | |
| Still in your groups, an article and OER resources are availed to prepare for the class presentation on either fad diets, New formulas or food fortification as allocated in your groups. | | |
| Pre-topic activity: | Number of hours | 2 |
| **WA12:1**  Read and research about the current trends in nutrition using the internet and e-resources like [articles](Article:%20http://www.brainkart.com/article/Food-Labeling_32678/) available in the e-library and Open Education Resources (OER). Each group will be given one diet trend to research on and present in class. Post this on the discussion forum before the face-to-face lecture. | | |
| Face to face time: *(if applicable)* | Number of hours | 3 |
| Present the different diet trends in class. | | |
| Online activity: | Number of hours |  |
| E-moderator/tutor role | | |
| Moderate the forum discussion, provide feedback to the students | | |
| How are the learning outcomes in this unit assessed? | Number of hours | 1 |
| |  |  |  |  | | --- | --- | --- | --- | | **Assessment indicator/Weight** | **Very good(3)** | **Good(2)** | **Fail(1)** | | **Presented work** | When subjected to a plagiarism test, the similarity index is below 25% | Work with a similarity index above 25% but not more than 35% | A similarity index that is above 35% | | **Quality of work** | Presentation content shows a thorough understanding of the topic. Substantive research effort is evident in locating relevant information and facts. Content is  accurate and sequenced in a clear, logical  way | Presentation content shows general understanding of the topic. There is limited evidence of research in locating relevant information and facts and/or supporting statements made. Content contains some inaccuracies, inconsistencies, misinterpretations, and/or somewhat unclear. A required element may be missing | Presentation content shows a lack of understanding of the topic. There is inadequate evidence of research and insufficient relevant information and facts. Content is confusing and/or contains frequent inaccuracies. Required elements are missing and/or randomly organized | | **Participation during the presentation (Evidence of active teamwork from the group members) e.g. response to questions** | Active participation with relevant examples | Frequent participation with no in-depth mastery of the content | Limited/No participation at all | | **Time management** | Learners present comprehensive work and complete ahead of time | Learners present fair work within the stipulated time | Learners present non-comprehensive work and doesn’t complete ahead of time | | | |
| How does this section link to other sections of the module? | | |
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| = Total number of hours | 10 |

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| **Some important questions** | |
| Which learning resources/ references will scaffold the students’ learning? | An article link and OER resources have been provided to inform about the current nutrition trends. |
| How are students enabled to access the resources? | * Through the e-library * Lecture notes * They are registered onto the university’s LMS * Students are availed with a tutorial video that guides them about resource access and utilization. * Each school or college has designated personnel whose contact (email address and phone contact) is uploaded onto the LMS, to whom any further inquiries about LMS accessibility are channelled. |
| Where in this unit are students expected to work collaboratively? | In class and online in their groups. |
| How has an inclusive approach been incorporated in this unit? | * A collection of study resources, that is, video, e-books and printable materials, can be accessed by students who may not have access to the online materials. * Assessment will include both as discussions, quiz. * The unit will have both synchronous and asynchronous, face to face and online sessions * The slow learners may take time making use of the available access to learning materials instead of being constrained to learning at a specific point in time in a typical classroom. |
| How will feedback on unit be obtained from students? | Via email to the lecturer, discussion forum, WhatsApp and or the QA survey reports. |
| How will student feedback be used to improve unit? | Use the outcome to improve the subsequent teaching. |
| At which point(s) will students receive formative feedback on the work they have done in the unit? | One week after submission. |

END OF UNIT 12