

NYU ACCRA

NUTR-UE 9269

NUTRITION AND THE LIFE CYCLE

Instructor Information

- Name: Prof. Matilda Steiner-Asiedu
- Office address: Department of Nutrition, University of Ghana
- Telephone: 0541260704
- office hours: TBA
- Email address: tillysteiner@gamil.com

Course Information

- **Course number:** NUTR-UE 9269
- **Course Title;** Nutrition and the life cycle
- **Course Description:** Nutrition and the life cycle looks into the relationship between nutrition, growth and development across the stages of life. Specific nutrient needs and challenges across the stages of human life (conception to old age) are considered. Additionally, the interaction and specific roles of physiology, social and human behavior on growth and development across the life stages of pregnancy, infancy, childhood, adolescence, adulthood as well as the elderly/aged and the impact on nutrition and health are explored.
- **Lecture Hours:** Tuesdays, 9:00 AM – 12:00 Noon
- Venue : Classroom 2, NYU Accra Academic Centre.

Course Overview and Goals

- The course is designed to enhance students' understanding and exploration of nutrition and nutrient needs across the stages of life (Pre-conception, pregnancy, infancy, childhood, adolescence, adulthood and the elderly/aged). Perspectives from nutritional physiology and metabolism, social, and behavioral within global context in relation to nutrient needs will be discussed. Specific nutritional needs and challenges per life stage for optimal growth and development will be considered. The processes involved in aging,

and the role of nutrition within socio-cultural context is an integral part of the course as well as the overall health and well-being. The controversies surrounding the nutrition of people with specific disability will be debated. Nutritional surveillance and growth monitoring are important strategies to inform policy and improving nutrition; the methods involved will be discussed with practical experiences.

Teaching will include lectures, question-answer sessions, group discussions, problem solving and presentations. Students are expected to have read assigned readings prior to class to facilitate teaching and learning.

Experiential learning: Field visits are part of the course to enable students see and understand real challenges of nutrition across the life cycle and help plan interventions that are tailored. Three field trips will be organized to complement class lectures.

- A visit to rehabilitation centers to experience and understand the features of childhood under-nutrition, impact on growth and development and its management.
- A visit to a day care center to assess the nutrition status of the children and observe their motor skills.
- A visit to an elderly care center to interact with the elderly and identify their challenges that may impact negatively on nutrition.

Upon Completion of this Course, students will be able to:

- Identify the various stages of life, preconception, pregnancy, infancy, childhood, adolescence, adulthood, and the elderly/age and why nutrition matter at each stage
- Describe the importance of maternal nutrition to fetal growth and development.
- Appraise the inter-relationship between culture, social, economic, environmental and lifestyle behaviors on nutrition and health.
- Outline the nature and scope of nutrition challenges across the stages of life
- Demonstrate the ability to apply knowledge of the ABCDEs of nutrition and lifestyle choices to plan and develop programs within diverse socio-cultural context for individuals and groups throughout the life cycle.
- Evaluate the advantages and disadvantages of breastfeeding vs. bottle-feeding of infants.

- Explain the effects of the aging process on nutrient digestion, absorption, and metabolism and how these changes affect nutrient requirements of elderly people.

Course Requirements

Class Participation

Class participation/contribution: Preparation and class participation are required. Students should be prepared to report on and discuss topics in the readings. Students are also expected to relate what they learn in class to everyday life and field experiences. **All field trips are compulsory.**

Assignment 1:

Identify two challenges facing pregnant women across the globe. Suggest separate interventions improve pregnancy outcomes. Consider a developed and a developing country and let this inform you in your choice of intervention, taking into account socio-economics as well as culture.

Assignment 2:

Response paper based on field trip to PML

A two to three -page paper on **field experience** and what you learned will be expected of you. This should be handed in the next class.

Assignment 3:

Response paper based on field trip to school

A two to three -page paper on **field experience** and what you learned will be expected of you. This should be handed in the next class.

Assignment 4:

Response paper based on field trip to elderly home or center

A two to three -page paper on **field experience** and what you learned will be expected of you. This should be handed in the next class.

Assignment 5;

Term paper

Students will be assigned topics on specific nutrition challenges. It may take the form of a case study or situation analysis or an evaluation of a nutrition program. Write an 8-10 page (typed, double spaced). This will be followed by 15-20 minutes in class presentation on the last lecture day. **Students will be paired randomly to foster team work which is important in the field of nutrition.**

Students are expected to submit work on date specified. Late submission is not acceptable. Failure to submit or fulfill any required course components results in failure of the course.

Grading of Assignments

The grade for this course will be determined according to the following formula:

| Assignments/Activities | % of Final Grade |
|------------------------|------------------|
| Class participation | 20% |
| Quizzes | 20% |
| Field Reports | 15% |
| Mid Term Test] | 20% |
| Class presentation | 5% |
| Term Paper | 20% |

Letter Grades

Letter grades for the entire course will be assigned as follows:

| Letter Grade | Points | Percent |
|--------------|--------|----------|
| A | 4.00 | 94%-100% |
| A- | 3.67 | 90%-93% |
| B+ | 3.33 | 87%-89% |
| B | 3.00 | 84%-86% |
| B- | 2.67 | 80%-83% |
| C+ | 2.33 | 77%-79% |

| Letter Grade | Points | Percent |
|--------------|--------|------------|
| C | 2.00 | 74%-76% |
| C- | 2.00 | 70%-73% |
| D | 1.00 | 65% -69% |
| F | .00 | Below 65 % |

View Grades

All assignments will be graded and handed over in class. However, midterm grades and final grades will be uploaded unto NYU Classes.

Course Schedule

Topics and Assignments

| Week/Date | Topic | Reading | Assignment Due |
|--------------------------------|--|-----------------------------------|--|
| Week 1, Aug. 28 th | Introduction to Course and Overview -Basic nutrition | | |
| Week 2, Sept. 4 th | Reproductive Physiology, Nutrition before, and during Pregnancy. (Guest lecturer) | Brown <i>et al</i> , pages 50-163 | |
| Week 3, Sept. 11 th | Maternal Nutritional challenges and lifestyle behaviors | | Suggest interventions improve pregnancy outcomes |
| Week 4, Sept. 18 th | Nutrition during lactation, breast milk production and composition | | Come to class with a List of 5 challenges facing lactating women for discussions |
| Week 5, Sept. 25 th | Infant feeding, I: breastfeeding versus | WHO code of breastfeeding | QUIZ: The next lecture (Sept.25th) |

| Week/Date | Topic | Reading | Assignment Due |
|--------------------------------|---|---|---|
| | cow's milk/formula feeding – challenges and controversies | | there will be a short quiz at end of class based on the first four lectures.) |
| Week 6, Oct. 2 nd | Infant and Young Child Feeding and nutritional challenges II-complementary feeding, growth charts | | [Insert assignment] |
| Week 7, Oct. 9 th | MID Term Exams Preschooler and child nutrition Life cycle challenges for children under 5years. Prep toward field visit. | | |
| Week 8, Oct.16 th | FALL BREAK | | |
| Week 9, Oct. 23 rd | Malnutrition – a real life situation Growth Faltering and Nutritional Management of PEMs (Hospital experience) - <i>Guest Lecturer</i> ; <i>Chief Dietician at PML</i> | Read on PEMs, Handout | |
| Week 10, Oct 30 th | Adolescent nutrition and nutrient needs, gender specific and challenges In-class practical work on body measurements (<i>Guest lecturer; Research fellow</i>) | Handout on anthropometric measurements and clinical observation | Field report 1 |
| Week 11, Nov. 6 th | School visit for observations and growth assessment | | |
| Week 12, Nov. 13 th | Adult nutrition and lifestyle challenges; observations and cases | | Field report 2 |

| Week/Date | Topic | Reading | Assignment Due |
|--------------------------------|--|-------------------------------|-----------------------|
| | from the diet therapy units in hospitals in Ghana (<i>Guest lecturer, PhD, LDN</i>) | | |
| Week 13, Nov. 20 th | Geriatric nutrition | | |
| Week 14, Nov. 27 th | Field visit to elderly Home/Centre | Handout on dietary assessment | |
| Week 15, Dec. 4 th | Class presentations on projects | | Field report 3 |
| Week 16, Dec. 11 th | No exams | | TERM PAPER DUE |

Tests and Quizzes

- **Quiz 1:** lectures 1 to 4 on September 25, 2018
- **Mid-term exams:** lectures 1 to 6; October 9, 2018
- **Quiz 2:** based on all field experiences, basically application questions; December 4, 2018

Course Materials

Required Textbooks & Materials

- Brown, J.E. Isaacs J. Krinke B, Lechtenberg E, & Murtaug M (2014) Nutrition through the Life Cycle, 5th edition, Wadsworth, Belmont, CA.

Optional Textbooks & Materials

- King, F. S., Burgess, A. (2010), *Nutrition for Developing Countries, second edition*. ELBS with Oxford University Press, London.
- Norman J. Temple and Nelia Steyn (2016). *Community Nutrition for Developing Countries*. AU Press, Athabasca University, Canada

Resources

- **Access your course materials:** [NYU Classes](http://nyu.edu/its/classes) (nyu.edu/its/classes)
- **Databases, journal articles, and more:** [Bobst Library](http://library.nyu.edu) (library.nyu.edu)

- Assistance with strengthening your writing: [NYU Writing Center](http://nyu.mywconline.com) (nyu.mywconline.com)
- Obtain 24/7 technology assistance: [IT Help Desk](http://nyu.edu/it/servicedesk) (nyu.edu/it/servicedesk)

Course Policies

Attendance and Tardiness

Study abroad at Global Academic Centers is an academically intensive and immersive experience, in which students from a wide range of backgrounds exchange ideas in discussion-based seminars. Learning in such an environment depends on the active participation of all students. And since classes typically meet once or twice a week, even a single absence can cause a student to miss a significant portion of a course. To ensure the integrity of this academic experience, class attendance at the center is mandatory, and unexcused absences will affect students' semester grades. Students are responsible for making up any work missed due to absence. Repeated absences will result in harsher penalties, including failure. Absences are only excused if they are due to illness, religious observance or family emergencies. For courses that meet once a week, one unexcused absence will be penalized by a two percent deduction from the student's final course grade. For courses that meet two or more times a week, the same penalty will apply to two unexcused absences.

Note: If for any other tenable reason you will be unable to attend class, you are FIRST required to contact and inform the NYU Accra Manager of Student Services directly at the Academic Centre or email mao9@nyu.edu . You are also required to email your professor directly to notify them before the day of the class. You will not be penalized only when this request for Nonattendance has been formally granted and communicated to you. Students observing a religious holiday during regularly scheduled class time are entitled to miss class without any penalty to their grade. This is for the holiday only and does not include the days of travel that may come before and/or after the holiday. Students must notify **the Professor and the Office of Academic Support in writing via email one week in advance before being absent for this purpose. Accommodations would be made to**

allow students who have been absent for religious reasons to make up any missed work.

Requests to be excused from a class on medical grounds should go to the **Student Life Coordinator**. All non-medical requests must go to the **Site Director** and should be made in person (not by email) **BEFORE** the day of class.

Late Assignment Submission

Students are expected to submit work on date specified. Late submission of work is not permitted and will not earn “grade A”. Late submission will be accepted if it is backed with a formal excuse.

Incomplete Grade Policy

Failure to submit or fulfill any required course component results in failure of the course.

Academic Honesty/Plagiarism

Students must adhere to [NYU’s academic integrity policy](#) while studying away at a global site. As that policy states: *“At NYU, a commitment to excellence, fairness, honesty, and respect within and outside the classroom is essential to maintaining the integrity of our community. By accepting membership in this community, students take responsibility for demonstrating these values in their own conduct and for recognizing and supporting these values in others.”*

NYU defines plagiarism as “presenting others’ work without adequate acknowledgement of its source, as though it were one’s own.”

Before submitting assignments, students are expected to reference all sources that you have consulted in preparing them, and to include a full bibliography for every assignment where you make use of outside sources.

Plagiarism, the use of another writer’s words without due acknowledgement, is a serious academic offence for which you will be penalized. The following acts

constitute plagiarism:

- Using a phrase, sentence or passage from another person's work without quotation marks and attribution of the source.
- Paraphrasing words or ideas from another's work without attribution.
- Reporting as your own research or knowledge any data or facts gathered or reported by another (including another student).
- Submitting in your own name papers or reports completed by another.
- Submitting your own original work (be it oral presentations or written work) toward requirements in more than one class without my prior permission. If there is an overlap of the subject of an assignment with one that the student has produced for another course (either in the current or previous semesters,), he/she is obliged to inform me.

Disability Disclosure Statement

Academic accommodations are available for students with disabilities. Please contact the Moses Center for Students with Disabilities (212-998-4980 or mosescsd@nyu.edu) for further information. Students who are requesting academic accommodations are advised to reach out to the Moses Center as early as possible in the semester for assistance.

Note: Aspects of this syllabus could change in the course of the semester