MODULE SPECIFICATION

Academic Year (student cohort covered by specification)	2025-26
Module Code	2440
Module Title	Maternal & Child Nutrition
Module Organiser(s)	Helen Harris-Fry, Andrew Prentice, Megan Deeney
Faculty	Epidemiology & Population Health
FHEQ Level	Level 7
Credit Value	**CATS:** 15 **ECTS:** 7.5
HECoS Code	100247 : 100455 : 101309
Term of Delivery	Term 2
Mode of Delivery	For 2025-26 this module will be delivered by predominantly face-to-face teaching modes. Where specific teaching methods (lectures, seminars, discussion groups) are noted in this module specification these will be delivered by predominantly face-to-face sessions. There will be a combination of live and interactive activities (synchronous learning) as well as recorded or self-directed study (asynchronous learning).
Mode of Study	Full-time
Language of Study	English
Pre-Requisites	None
Accreditation by Professional Statutory and Regulatory Body	None
Module Cap (indicative number of students)	40 (numbers may be capped due to limitations in facilities or staffing)
Target Audience	This module is intended for those requiring training in basic concepts and provides an update in maternal and child nutrition issues.
Module Description	Maternal and Child Nutrition module gives students core knowledge about nutrition issues across the life cycle - from pre-conception, through pregnancy and infancy, to childhood and adolescence. We encourage you to think critically about current nutrition recommendations and interventions, and create your own ideas.

	We use a mixture of lectures, interactive discussions, and skills sessions to help to practice interpreting and communicating scientific evidence. By the end of the module you will know the physiological basis for nutrient requirements, the key causes of undernutrition, and be able to compose nutritional advice.
Duration	5 weeks at 2.5 days per week
Timetabling slot	Slot C1
Last Revised (e.g. year changes approved)	August 2025

Programme(s) This module is linked to the following programme(s)	**Status**
MSc Nutrition for Global Public Health	Compulsory
MSc Public Health for Global Practice	Recommended

Module Aim and Intended Learning Outcomes

Overall aim of the module
The overall module aim is to: • Outline key issues concerning the diets of mothers, infants, children, and adolescents • Evaluate the effectiveness of nutrition interventions to improve maternal and child nutrition.

Module Intended Learning Outcomes
Upon successful completion of the module a student will be able to: 1. Demonstrate an understanding of the physiological basis for nutrient requirements during pregnancy, lactation, infancy, early childhood, and adolescence 2. Assess the dietary needs appropriate to each stage 3. Summarise the key causes of low birthweight, low breast milk output, and growth faltering and debate the controversy surrounding specific nutritional interventions to address these problems 4. Compose appropriate nutritional advice regarding the feeding of mothers, children and adolescents 5. Design and critically appraise a range of interventions to address current issues in maternal and child nutrition

Indicative Syllabus

Session Content
The module is expected to cover the following topics: • Nutritional requirements in pregnancy • The determinants of birthweight • The consequences of low birthweight • Common disorders of pregnancy • The impact of prenatal supplementation programmes to improve birthweight • Nutritional requirements of lactation • Determinants of low breast milk output • Breast feeding biology and immunology • Breast feeding promotion and support • Supplementation programmes to improve lactation • The Developmental Origins of Health and Disease (DOHAD) theory • Infant and child feeding practices in developed and developing countries • Diets and dietary requirements in adolescents • Interventions to improve these practices • Treatment of moderate and severe malnutrition • Aetiology and pathophysiology of malnutrition • Micronutrient interventions for mothers and children • Interpreting and reporting evidence on maternal and child nutrition

Teaching and Learning

Notional Learning Hours

Type of Learning Time	Number of Hours	Expressed as Percentage (%)
Contact time	56	37
Directed self-study	4	3
Self-directed learning	40	27
Assessment, review and revision	50	33
Total	**150**	**100**

Student contact time refers to the tutor-mediated time allocated to teaching, provision of guidance and feedback to students. This time includes activities that take place in face-to-face contexts such as lectures, seminars, demonstrations, tutorials, supervised laboratory workshops, practical classes, project supervision as well as where tutors are available for one-to-one discussions and interaction by email.

The division of notional learning hours listed above is indicative and is designed to inform students as to the relative split between interactive and self-directed study.

Teaching and Learning Strategy
Our module follows a life cycle structure, which guides students through key aspects of maternal and child nutrition at each stage in the life cycle. We do this to ensure that the course content connects together logically, and sessions from different stages reinforce one another. • **Lectures**: We cover each stage using a mixture of internal and guest lectures, including world-leading experts on the subject matter. • **Q&A**: The lectures cover a lot of technical content, so we provide frequent opportunities for Q&A using a mix of dialogical approaches, for example by having quizzes, games, thought experiments, posing questions to students, showing a discussion-provoking video, or facilitating interactive discussion. This allows students to clarify questions and lecturers can give feedback in this way. • **Group work**: In some sessions we have group work for students to discuss issues among themselves, facilitating peer-to-peer feedback; • **Practical skills sessions**: In addition to the technical content on maternal and child nutrition, we also provide practical skills sessions on scientific writing, interpreting tables and figures, and multi-sectoral approaches. Some of these sessions are directly tailored to help students with the summative assignment (writing a scientific paper, described below). All of these sessions give students a chance to receive formative feedback – in the form of direct feedback from tutors as well as model answers that they can review in their own time. • **Module overview**: To help students navigate this course, we provide an overview document that gives profiles of the lecturers and key learning objectives for each session. • **Reading list**: We accompany this with a carefully curated reading list of essential and additional articles, where the essential articles provide seminal work on the session, and additional articles provide more information for the interested student.

Assessment

Assessment Strategy
The assessment for this module has been designed to measure student learning against the module intended learning outcomes (ILOs) as listed above. Formative assessment methods may be used to measure students' progress. The grade for summative assessment(s) only will go towards the overall award GPA. The assessment for this module will be online.

Summative Assessment

Assessment Type	Assessment Length (i.e. Word Count, Length of presentation in minutes)	Weighting (%)	Intended Module Learning Outcomes Tested
Coursework	Maximum of 2500 words	100	1 – 5

Resitting assessment
Resits will accord with Chapter 8a of the LSHTM Academic Manual. Resit/deferred/new attempts - The task will be writing a short report based on a choice of one from several topics; the next assessment deadline will be during mid/late September of the current academic year.

Resources

Indicative reading list

1. Development Initiatives. *2021 Global Nutrition Report: The State of Global Nutrition.* Development Initiatives; 2021. https://globalnutritionreport.org/reports/2021-global-nutrition-report/
2. UNICEF. Conceptual framework. *Nutrition, for every child UNICEF Nutrition Strategy 2020–2030*. Published online 2020:5-5. https://www.unicef.org/media/91741/file/UNICEF-Nutrition-Strategy-2020-2030-Brief.pdf
3. Emily C Keats JKD. Effective interventions to address maternal and child malnutrition: an update of the evidence. *The Lancet Child & Adolescent Health*. 2021;5(5):367-384. http://ez.lshtm.ac.uk/login?url=https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(20)30274-1/fulltext
4. Victora CG, Christian P, Vidaletti LP, Gatica-Domínguez G, Menon P, Black RE. Revisiting maternal and child undernutrition in low-income and middle-income countries: variable progress towards an unfinished agenda. *The Lancet (British edition)*. 2021;397(10282):1388-1399. doi:10.1016/S0140-6736(21)00394-9
5. Hoffman DJ, Reynolds RM, Hardy DB. Developmental origins of health and disease: current knowledge and potential mechanisms. *Nutrition reviews*. 2017;75(12):951-970. doi:10.1093/nutrit/nux053
6. Imdad A, Bhutta ZA. Effect of balanced protein energy supplementation during pregnancy on birth outcomes. *BMC public health*. 2011;11(Suppl 3):S17-S17. doi:10.1186/1471-2458-11-s3-s17
   Keats EC HB. Multiple-micronutrient supplementation for women during pregnancy. *Cochrane Database of Systematic Reviews*. 2019;(3).

https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD004905.pub6/epdf/standard
Victora CG, Bahl R, Barros AJD, et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *The Lancet*. 2016;387(10017):475-490. doi:10.1016/S0140-6736(15)01024-7
7. Castenmiller J, Henauw S, Hirsch-Ernst K, et al. Appropriate age range for introduction of complementary feeding into an infant's diet. *EFSA journal*. 2019;17(9):e05780-n/a. doi:10.2903/j.efsa.2019.5780
WHO. *Guideline: Updates on the Management of Severe Acute Malnutrition in Infants and Children*. World Health Organization; 2013. http://www.who.int/nutrition/publications/guidelines/updates_management_SAM_infantandchildren/en/
Michie S, van Stralen MM, West R. The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation science : IS*. 2011;6(1):42-42. doi:10.1186/1748-5908-6-42
8. Mwangome M, Prentice AM. Tackling the triple threats of childhood malnutrition. BMC medicine. 2019;17(1):210-210. doi:10.1186/s12916-019-1464-9
9. World Health Organisation. *Guideline: Implementing Effective Actions for Improving Adolescent Nutrition*. World Health Organization; 2018. https://apps.who.int/iris/handle/10665/260297
Zulfiqar A. Bhutta ZSL. Delivering an action agenda for nutrition interventions addressing adolescent girls and young women: priorities for implementation and research. *Annals of the New York Academy of Sciences*. 2017;1393(1):61-71. doi:10.1111/nyas.13352

Other resources

- Module overview with profiles of speakers and learning objectives for each session
- Tips and tricks on scientific writing
- Assessment guidance documents

Teaching for Disabilities and Learning Differences

The module-specific site on Moodle gives students access to lecture notes and copies of the slides used during the lecture. Where appropriate, lectures are recorded and made available on Moodle. All materials posted on Moodle, including computer-based sessions, have been made accessible where possible.

LSHTM Moodle is accessible to the widest possible audience, regardless of specific needs or disabilities. More detail can be found in the Moodle Accessibility Statement which can also be found within the footer of the Moodle pages. All students have access to "SensusAccess" software which allows conversion of files into alternative formats.

Student Support Services can arrange learning or assessment adjustments for students where needed. Details and how to request support can be found on the LSHTM Disability Support pages.