COURSE DETAIL

METABOLISM, NUTRITION, AND EXCERCISE
Country Netherlands
Host Institution Maastricht University – University College Maastricht
Program(s) University College Maastricht
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Health Sciences Biological Sciences
UCEAP Course Number 141
UCEAP Course Suffix
UCEAP Official Title METABOLISM, NUTRITION, AND EXCERCISE
UCEAP Transcript Title METABOLISM & HEALTH
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

This course provides students with a solid understanding of the key aspects in energy metabolism, and the effects of nutrients on (muscle) metabolism during exercise of different types. The course requires prior knowledge on some basic biochemical concepts (e.g. the structure and function of macromolecules, common forms of chemical reactions, basic cell structure, and metabolism of macromolecules). The course builds around a practical case study. With a group of students, develop a cohesive and evidence-based recommendation regarding nutrition and exercise for a client sports team. The first part of the course provides a theoretical foundation on the basics of exercise physiology and biochemistry. In the form of tutorial groups, discuss the physiology of muscles, the metabolism of macronutrients, the hormonal regulation of metabolism, the biochemical and physiological role of macro- and micronutrients in relation to exercise and fatigue, and adaptations of the body to endurance, and resistance training. You are expected to conduct a further search of the literature, as the theoretical foundation covers only part of the concepts important for developing a cohesive recommendation regarding nutrition and exercise. Prerequisite SCI2035 Biochemistry. Recommended SCI2009 Human Physiology and/or, SCI2037 Cell Biology.

Language(s) of Instruction
English

Host Institution Course Number
SCI3005

Host Institution Course Title
METABOLISM, NUTRITION AND EXCERCISE

Host Institution Course Details
https://www.maastrichtuniversity.nl/file/course-catalogue-2025-2026pdf

Host Institution Campus
Maastricht University

Host Institution Faculty
University College Maastricht

Host Institution Degree

Host Institution Department
Sciences

Course Last Reviewed
2025-2026

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