



Syllabus

CENTRAL THEMES IN NUTRITIONAL SCIENCES - 71264

Last update 04-09-2022

HU Credits: 2

Responsible Department: Nutrition Sciences

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Limor Ben-Yacov

Coordinator Email: Limor.Ben-Yacov@mail.huji.ac.il

Coordinator Office Hours: By appointment

Teaching Staff:
Dr. Limor Ben-Yacov

Course/Module description:
The course is aimed to present a broad view of the main topics in human

metabolism and nutritional sciences. It explores the basic pathways of metabolism and physiology that are related to dietary requirements and weight regulation.

Course/Module aims:

1. In depth presentation of nutritional factors that impact body metabolism
2. Understanding the primary nutritional recommendations in health and disease
3. Experiencing nutritional aids

Learning outcomes - On successful completion of this module, students should be able to:

- ☐ Present the benefits of nutritional Recommendations to promote health and reduce the risk of common metabolic chronic diseases
 - ☐ Evaluate energy requirements of adults
 - ☐ Assess appropriate anthropometric measurements
 - ☐ Comprehend the complexity of weight regulation
 - ☐ Assess and compare food products
- benefits of nutritional Recommendations to promote health and reduce the risk of common metabolic chronic diseases
- ☐ Comprehend the complexity of weight regulation
 - ☐ Assess and compare food products

Attendance requirements(%):

none

Teaching arrangement and method of instruction: Frontal lectures and student discussions

Course/Module Content:

1. Biology and nutrition basic concepts, scientific presentations of selected topics within the discipline
2. Energy-balance; energy intake or expenditure components, body composition,
3. Anthropometric parameters and measurements
4. Macronutrients: proteins, lipids- functions, types, requirements, metabolism. Dyslipidemia
5. Carbohydrates, dietary fibers- functions, types, requirements, metabolism. The microbiom
6. Impaired homeostasis of carbohydrates metabolism: diabetes mellitus, lactose intolerance, constipation
7. Summary of nutritional Recommendations for improving health, based on Dietary

References Intake, the Israeli Ministry of Health and the current academic literature

8. Nutritional aids such as food pyramids and nutritional labeling. The mediterranean pyramid
9. Eating and weight control: Weight regulation components
10. Obesity and the metabolic syndrome.
11. Negative energy balance achieving by nutritional or medical treatment. Practical aspects of appetite regulation.

Required Reading:

reading material would be given during the course

Additional Reading Material:

1. ההמלצות התזונתיות החדשות, אגף התזונה, משרד הבריאות הישראלי, 2020.
<https://health.gov.il/PublicationsFiles/dietary-guidelines.pdf>
2. הנחיות תזונתיות לכלל האוכלוסייה בעת מגפת הקורונה, אגף התזונה, משרד הבריאות הישראלי, 2020.
<https://govextra.gov.il/media/18223/nutd-214986720.pdf>
3. זילבר-רוזנברג, א'. מזון ותזונה בבריאות ובחולי. הוצאת האוניברסיטה הפתוחה, 2014
4. קובץ מונחים בסיסיים בתזונה - English. ניתן להורדה. בקישור:
An Introduction to Nutrition - 2012 Book Archive - lardbucket. Chapter1

Course/Module evaluation:

End of year written/oral examination 100 %
Presentation 0 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 0 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %

Additional information:

Presenting a nutritional issue (5-7 benefactor points)