DEGREE CURRICULUM

METABOLISM AND NUTRITION

Coordination: HERNANDEZ JOVER, TERESA

Academic year 2017-18

METABOLISM AND NUTRITION 2017-18

Subject's general information

Subject name	METABOLISM AND NUTRITION
Code	100637
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION
Typology	<table><tr><th>Degree</th><th>Course</th><th>Typology</th><th>Modality</th></tr><tr><td>Bachelor's Degree in Human Nutrition and Dietetics</td><td>2</td><td>OPTIONAL</td><td>Attendance-based</td></tr></table>
ECTS credits	3
Groups	1GG
Theoretical credits	30
Practical credits	0
Coordination	HERNANDEZ JOVER, TERESA
Department	TECNOLOGIA D'ALIMENTS
Important information on data processing	Consult this link for more information.
Language	Català English (articles)
Distribution of credits	2 credits masterful activity (classes) 1 credit seminar activity
Office and hour of attention	Time to be determined with the professor Office of Human Nutrition. Faculty of Medecine

METABOLISM AND NUTRITION 2017-18

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
HERNANDEZ JOVER, TERESA	teresa.hernandez@tecal.udl.cat	3	

Subject's extra information

Is known as metabolism and nutrition at chemical transfromations suffering nutrients in tissues, once surpassed the processes o digestion and absortion corresponding. This metabolism include degradative reacions to obtain energy (catabolism) and biosynthetic reactions to form biomolecules using part of this energy (anabolism).
This course aims to expmad knowledge regarding energy metabolism.

Learning objectives

1. Expand knowledge on the concept of energy metabolism of nutrients
2. Know the regulation of energy metabolism
3. Know the concept pf energy consumption and the factors that influence
4. Know the latets developments in the field of energy metbolism and acquire the skills necessary to saty in place constantly update.

Objective	Activity	Attended	Student dedication
1-4	Classes	20	30
1-4	Seminars	10	18

***Student dedication** = attended hours + hours of student work

Competences

1. Know the basis chemical, biochemical and biological application in Dietetics and Human Nutrition

26. Know the basis of nutrition and energy balance and its regulation

32. Know early detection of deviations and evaluate quantitative and qualitative energy balance and nutritional

Subject contents

1. Energy metabolism. Concept and regulation.

2. Energy intake. Energy values of nutrients

3. Energy bioavailability

4. Glycemic index

5. Energy expenditure. Basal metabolism.

6. Adaptative thermogenesis. Diet-induced thermogenesis .

7. Energy expenditure and physical activity

8. Energy expenditure in different physiological situations. Influence of chronobiology, stress and genetic factors.

Methodology

Classes

Classes are developed with all students. They aim to provide an overview of educational conten related to specific knowledge of the subject

Seminars

Seminars are required, will take place in the classroom. Seminars will include the analysis of scinetific articles and/or search information, complementing the contents developed in class. Stimulate discussion and particiption of students.

Supervised academic work

Academic work will be conducted in groups of 2-3 people, on a issue which must be chosen from a list provided by the professor. Each groupwill present the work and will make a brief presentation in the classroom.

Evaluation

Evaluation consits of weighted average grades obtained from the following elements:

1. **Written test I** (individual exam): 35%
2. **Written test II** (individual exam): 35%
3. **Seminars:** 15%
4. **Supervised academic work:** 15%

It will have 2 partial exams of theoretical part and seminars, with test and developed questions. Students must pass each partial mark of 5 out of 10. Partial examinations suspended shall be recovered in a new examination.

Bibliography

- Hernández Rodríguez, M.; Sastre Gàllego, A. *Tratado de Nutrición*. Ed Díaz de Santos, S.A. Madrid, 1999.
- Bellido Guerrero, D.; de Luis Roman, D. A. *Manual de nutrición y metabolismo.* Ed. Díaz de Santos, Madrid, 2006.
- Gil Hernández, A. *Tratado de Nutrición*. Ed. Acción Mèdica, 2005.

- www.eufic.org
- www.consumer.es
- www.sennutricion.org
- www.fesnad.org