

| MODULE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | CONTENT   | YEAR | TERM                                                                                                                                                                                                                                                    | CREDITS | TYPE         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------|
| Sciences of Nutrition, Dietetics and Health                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Nutrition | 2nd  | 2st                                                                                                                                                                                                                                                     | 6.0     | Core subject |
| <b>LECTURER(S)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |      | <b>Postal address, telephone nº, e-mail address</b>                                                                                                                                                                                                     |         |              |
| <ul style="list-style-type: none"> <li>Fátima Olea Serrano</li> <li>Reyes Artacho Martín-Lagos</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |           |      | Department of Nutrition and Food Science.<br>Faculty of Pharmacy.<br>Fátima Olea Serrano: 958 242841, <a href="mailto:folea@ugr.es">folea@ugr.es</a><br>Reyes Artacho Martín-Lagos: 958 243865.<br><a href="mailto:rantacho@ugr.es">rantacho@ugr.es</a> |         |              |
| <b>DEGREE WITHIN WHICH THE SUBJECT IS TAUGHT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           |      |                                                                                                                                                                                                                                                         |         |              |
| Human Nutrition and Dietetics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           |      |                                                                                                                                                                                                                                                         |         |              |
| <b>PREREQUISITES and/or RECOMMENDATIONS (if necessary)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |           |      |                                                                                                                                                                                                                                                         |         |              |
| Having studied the subjects of Physiology, Biochemistry, Food Science and Nutrition I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           |      |                                                                                                                                                                                                                                                         |         |              |
| <b>BRIEF ACCOUNT OF THE SUBJECT PROGRAMME (ACCORDING TO THE DEGREE???)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |           |      |                                                                                                                                                                                                                                                         |         |              |
| This subject includes the study and interpretation of the different tools used in the assessment of nutritional status. Also discusses the nutritional needs at different stages of the life cycle and the relationship between nutritional status and health.                                                                                                                                                                                                                                                                                                                                                                                                                                         |           |      |                                                                                                                                                                                                                                                         |         |              |
| <b>GENERAL AND PARTICULAR ABILITIES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |      |                                                                                                                                                                                                                                                         |         |              |
| <ul style="list-style-type: none"> <li>That students can apply their knowledge to their work or vocation professionally.</li> <li>Ability to gather and interpret relevant data to make judgments.</li> <li>Potential to communicate information, ideas, problems and solutions to a specialized and unskilled audience.</li> <li>Ability to express oneself correctly in Spanish</li> <li>Troubleshooting.</li> <li>Teamwork</li> <li>Ability to apply theoretical knowledge to practice.</li> <li>Capacity for analysis and synthesis</li> <li>Critical thinking.</li> <li>Develop skills of research initiation.</li> <li>Motivation for quality.</li> <li>Ability to organize and plan.</li> </ul> |           |      |                                                                                                                                                                                                                                                         |         |              |



- Ability to manage information.

**OBJECTIVES (EXPRESSED IN TERMS OF EXPECTED RESULTS OF THE TEACHING PROGRAMME)**

- Properly handling of the tools needed to make an assessment of the nutritional status.
- Understanding the relationship between nutritional status and health.
- Know how to establish nutritional needs in health situation at any stage of the life cycle.

**DETAILED SUBJECT SYLLABUS**

**THEORETICAL PROGRAM**

1. Introduction to human nutrition. Relationship between nutrition and health.
2. Nutritional status assessment. Body composition.
3. Anthropometric methods.
4. Measuring food intake. Indirect measurements of food intake. Food balance sheets. Household food surveys.
5. Direct measures of food intake. Retrospective methods.
6. Direct measures of food intake. Prospective methods. Reproducibility and validity of food surveys.
7. Biochemical methods.
8. Nutrition during pregnancy and lactation.
9. Nutrition during infancy.
10. Nutrition in childhood.
11. Nutrition in adolescence.
12. Nutrition in the adult years.
13. Nutrition in aging.
14. Nutrition for exercise and sport performance.
15. Malnutrition: concept and types. Deficit or excess of nutrients.
16. Nutrition for weight management.
17. Alternative sources of nutritional information.
18. Implications of the total energy intake in epidemiological studies.
19. Nutrition: perspectives on the future.

**PRACTICAL PROGRAM:**

1. Nutritional status assessment: Anthropometric measurements and body composition techniques.
2. Nutritional status assessment: Practical aspects of dietary surveys.
3. Evaluation of nutritional reports from international agencies.
4. Miracle diets: Influence on the nutritional status.
5. Evaluation of scientific papers.

**READING**

**KEY LITERATURE**

- Cameron ME, Van Staveren WA (1988). Manual on methodology for food consumption



studies, Oxford Medical Publications.

- Frayn KN (1998). Regulación del metabolismo, una perspectiva humana. Ed. Omega
- Gibney MJ, Kok Frans J, Voster Hester H (2005). Introducción a la nutrición humana. Ed. Acribia, Madrid.
- Gil A. (2010). Tratado de nutrición clínica (4 tomos). Ed. Panamericana, Madrid.
- Mahan LK, Escott-Stump S (2009). Nutrición y dietoterapia de Krauser, 12ª ed. Ed. Interamericana McGraw-Hill, Madrid.
- Groff JL, Gropper SS, Hunt SM (1995) Advanced nutrition and human metabolism.
- Linder MC (1992). Nutrición. Aspectos bioquímicos, metabólicos y clínicos. Ediciones Universidad de Navarra (Eunsa), Pamplona.
- Martínez JA (2004). Fundamentos teórico-prácticos de nutrición y dietética. Ed. Interamericana McGraw-Hill, Madrid.
- Mataix J. (2009). Nutrición y alimentación humana. Ed. Ergon, Madrid.
- Serra Majem LI, Aranceta Bartrina J, Mataix Verdu J. (2006) Nutrición y salud pública. Métodos, bases científicas y aplicaciones. Ed. Masson, Barcelona
- Wardlaw GM. (2008). Perspectivas sobre nutrición. Ed Paidotribo, Badalona
- Willet W. Nutritional epidemiology (1993) Oxford University Press

#### **ADDITIONAL LITERATURE**

- WHO reports

#### **RECOMMENDED INTERNET LINKS**

[www.efsa.europa.eu/](http://www.efsa.europa.eu/)

[www.aesan.msc.es/](http://www.aesan.msc.es/)

[www.fao.org/](http://www.fao.org/)

[www.nlm.nih.gov/](http://www.nlm.nih.gov/)

