

 SANT PAU Campus Salut Barcelona	 Campus d'Aprenentatge Sant Pau	NURSING DEGREE – EUI SANT PAU	 EUI-SANT PAU Centre adscrit a la UAB
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Teaching Guide of the subject

Year 2026 - 2027

NUTRITION

Code: 106099

ECTS credits: 6

Qualification	Types	Course	Semester
2500891 Nursing	FB	1	2

Contact	Use of languages
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Prerequisites

There are no official prerequisites.

Contextualisation and objectives

This subject is part of the Basic Sciences, Nutrition subject training module and is planned in the second semester of the Bachelor's Degree in Nursing.

The purpose of this course is to introduce students to the basic concepts of nutrition, food and dietetics to help healthy people meet the need to eat properly at different stages of life, as well as people who have health problems and require dietary treatment.

Learning objectives of the subject

1. Identify the different nutrients and foods where they are found.
2. To know the nutritional needs throughout the life cycle of healthy people with health problems.
3. Describe how to promote and reinforce healthy eating patterns.
4. Identify the most prevalent nutritional problems and make appropriate dietary recommendations.
5. Integrate scientific evidence into nutritional analysis and the development of dietary recommendations.

Learning outcomes

Learning Outcomes of the DEGREE (RAT)	LEARNING OUTCOMES OF THE SUBJECT (RAM)
KT06. Define the purpose of public health and the related factors that increase the risk of diseases and health problems.	KM06. Identify risk factors that may influence health and illness across the life cycle (KT06). KM08. Describe macronutrients, micronutrients, metabolic cycles, and basic recommendations in dietetics and nutrition (KT06). KM09. Identify the most prevalent nutritional problems (KT06). KM10. Identify the nutritional needs of individuals who are healthy or have health problems (KT06).
ST03. Plan nursing care directed at individuals, families, or the community and oriented toward health outcomes.	SM02. Establish principles of healthy eating based on knowledge of nutrients and nutritional requirements (ST03). SM03. Develop strategies to promote and reinforce healthy eating behaviours across the life cycle (ST03).
ST04. Formulate clinical judgments based on clinical and care practice guidelines, applying diagnostic and therapeutic reasoning in care delivery.	SM01. Use scientific evidence in professional practice (ST04).
CT07. Use health promotion and education strategies in health and social care settings that foster self-care and preventive and therapeutic behaviours, promoting community well-being and minimising suffering, risks, and disabilities.	CM04. Provide appropriate dietary recommendations for individuals who are healthy or have health problems (CT07).

Contents

MODULE 1. Physiological and biochemical bases of nutrition

1. Introduction to nutrition.
2. Energy needs. Concept of energy balance. Concept of energy income. Expense concept and measurement of energy expenditure. Equations for calculating a person's energy expenditure. Determination of a person's nutritional needs.
3. Classification, function, digestion and metabolism of Macronutrients (carbohydrates, lipids and proteins) and Micronutrients (vitamins and minerals).

MODULE 2. Composition and nutritional quality of food. Healthy, sustainable and safe food.

1. Food groups and composition:
 - 1.1.- Milk and dairy products.
 - 1.2.- Meat and derivatives.
 - 1.3.- Fish and shellfish.
 - 1.4.- Eggs and egg products.

- 1.5.- Cereals and derived products.
- 1.6.- Legumes, vegetables and horticultural products. Fiber.
- 1.7.- Fruit and derived products.
- 1.8.- Nuts.
- 1.9.- Fats and oils.
- 1.10.- Drinks: vegetables, alcoholics, soft drinks, coffee and herbal teas.
- 1.11.- Others: functional foods, additives, transgenic foods, new sources of nutrients, processed foods.

- 2. Healthy and Sustainable Food. Healthy eating guides. Dietary reference intakes. Qualitative and quantitative recommendations for healthy eating. Mediterranean Diet. Concept of sustainable food and food waste.
- 3. Food in vegetarianism and veganism.
- 4. Food composition tables and nutritional databases. Concept of portions.
- 5. Food safety and hygiene. Concepts. Food safety control systems. Labeling. Low Bacterial Load Diet (BCB).

MODULE 3. Assessment of nutritional status

- 1. Nutritional assessment.
- 2. Body composition analysis. Anthropometric parameters and body composition techniques.
- 3. Biochemical data.
- 4. Malnutrition: types, causes, diagnoses, treatment and health consequences.

MODULE 4. Nutrition in the different stages of the life cycle.

- 1. Feeding during pregnancy and breastfeeding.
- 2. Feeding in childhood.
- 3. Nutrition in adolescence.
- 4. Food in old age, frail old and sarcopenia.
- 5. Nutrition during menopause.
- 6. Gender equality and nutrition. Concepts of gender and nutrition. Gender and impact on health and nutrition. Gender inclusion in nutritional interventions.

MODULE 5. Diet therapy in the most prevalent health problems.

- 1. Nutrition and obesity. Definition, assessment and types of obesity. Etiopathogenesis. Treatment. Obesity surgery.
- 2. Nutrition in Diabetes Mellitus. Objective of nutritional treatment. Nutritional recommendations.
- 3. Nutrition and cardiovascular disease. Diseases associated with atherosclerosis. Mediterranean diet model and cardiovascular risk. Nutrition and heart failure. Low-sodium diet.
- 4. Nutrition in kidney diseases. Adequate diet in dialysis and pre-dialysis.

5. Nutrition and cancer. Objective of nutritional support. Nutritional requirements. Nutritional strategy. Concept of immunonutrition.
6. Nutrition in digestive pathologies. Inflammatory bowel disease. Ulcerative colitis. Malabsorption syndrome. Colostomies and ileostomies. Gastrectomy. ERGE.
7. Nutrition and neurological diseases. Dysphagia.
8. Nutrition in food allergies and intolerances. Differences between allergy and intolerance. Celiac disease. Lactose intolerance. Fructose and sorbitol intolerance. Allergy to Cow's Milk Protein (CMPA).
9. Nutrition in eating disorders.
10. 10. Interactions between drugs and nutrients.
11. Exploratory diets.
12. Hospital Allowance Index. Indications and characteristics.
13. Artificial nutrition. Oral supplementation. Enteral and parenteral nutrition. Home Enteral Nutrition (NED).
Adapted Basic Nutrition (ABA).

Methodology

The methodological approach of the subject is based on considering that each student is the protagonist in the teaching and learning process. Students must be active and autonomous throughout the process and teachers must support them, providing the necessary information and resources for learning to take place.

The subject is face-to-face with non-compulsory attendance, but it is recommended.

Theory (TE)

The master class is mainly used, through the transmission of information in a time occupied mainly by oral presentation and the support of ICTs. During the theoretical session, the raising of doubts and questions, debate, practical activities are introduced, and the search for information is oriented.

Classroom Practices (PAUL)

The central methodological strategy is learning from individual and small group work. Activities are carried out that complement the theory as well as exercises from which the theory is elaborated.

Tutorials, face-to-face or online, allow the accompaniment, support and monitoring of the student throughout the process.

Training activities¹

Activity	Hours	ECTS	Learning Outcomes
Type: Directed . Theory (TE) . Classroom Practices (PAUL)	45	1,80	THEORY: KM06 ,KM08 , KM09, KM10 CLASSROOM PRACTICES: SM02, SM03, CM04, KM09, KM10
Type: Supervised . Tutorials	1	0,04	SM01 , SM02 ,CM04 ,KM06, KM10
Type: Self-employed: . Personal study. . Preparation of works . Bibliographic consultation	90	3,60	STUDIO: KM06, KM08, KM09, KM10 SM01 WORKS: SM01, SM02, SM03 ,CM04 CONSULTATION : SM01 KM08, KM09, KM10

Evaluation

Continuous assessment

The evaluation of the subject consists of 3 blocks:

- **Individual work.** The individual work consists of the assessment of the food intake of a person close to the student. The grade is carried out according to the complexity of the exercise, numerically (1-10). A minimum grade of 5 is required to weight this block with 25%. If the grade is < 5, it must be recovered, being the maximum grade, a 5. The delay in delivery, maximum 24 hours, will be penalized by subtracting one point from the grade of the work.
- **Group work + oral presentation.** The group work will consist of the development of a practical case in relation to the food-disease binomial, of which an oral presentation must be made in class. The distribution of gender in the work and oral presentation between the groups will be equitable. The grade is numerical (1-10). A minimum final grade of 5 is required throughout this category, to weight this block with 25%. The delay in delivery, maximum 24 hours, will be penalized by subtracting one point from the grade of the work.
- **Multiple-choice written test.** Two multiple-choice written tests: written test I (Module 1, 2 and 3) and written test II (Module 4 and 5). A minimum grade of 5 is required to weight this block with 50%. The test is multiple-choice type. The negative answers subtract according to the following formula: $X = \text{hits} - (\text{errors} / n - 1)$, where n is the number of answer options. Thus, in the most frequent type of exam of 5 possible options (A, B, C, D or E), each item answered incorrectly, subtracts 0.25 correctly answered items; therefore 4 errors subtract a correct answer.

¹ The teaching staff will allocate approximately 15 minutes once the subject is finished to allow that their students can answer the assessment surveys on teaching and subject.

Feedback on the results of the evaluation tests will be made through the classroom and tutorials if necessary.

The evaluation rubric of the work is available in the virtual classroom.

Qualification

- 0 to 4.9: Suspense
- 5.0 to 6.9: Passed
- 7,0 to 8,9: Notable
- 9.0 to 10: Excellent (in the event that the student has obtained a grade equal to or higher than 9, he/she may opt, at the discretion of the teacher, for an honors degree).

Single assessment

1. In this subject there is no task programmed to be done in a group.
2. The date of the single test will coincide with the date of the last continuous assessment test that appears in the daily programme and in the calendar of training and assessment activities.
3. The single assessment will consist of:
 - Test 1 which will consist of an **objective multiple-choice test (Module 1, 2 and 3)** and weights 25 %.
 - Test 2 which will consist of the **objective multiple-choice test (Module 4 and 5)** and weights 25 %.
 - Test 3 which will consist **of the delivery of individual work** and weights 25 %.
 - Test 4 which will consist of **individual work** delivery and weights 25 %.

Recovery activity

1. A single date is determined for the recovery activity for all students, whether or not they are subject to single assessment
2. A recovery activity is proposed for those students who have been previously evaluated for the set of activities whose weight is equivalent to a minimum of 2/3 of the total grade of the subject, and have obtained a final grade higher than 3.5 and less than 5 out of 10.
3. This activity will consist of an evaluation test, to be determined by the teaching staff, which will include the failed contents, will be carried out in the period established for this purpose and will only allow a grade of 5 to be obtained.
4. The retake grade, 5, will replace the grade originally obtained and the final weighted grade will be recalculated.
5. Once the subject has been passed, it cannot be subject to a new evaluation.

No evaluable

It is considered that the subject will not be assessable when one of these circumstances is met:

1. Not having delivered any of the continuous assessment activities provided for in the teaching guide.
2. Not having attended any of the practical or compulsory sessions, when these are necessary to assess learning outcomes and as indicated in the teaching guide.
3. Not having taken the final test (exam, written or oral test, work defense, etc.), if This represents an essential percentage of the grade.
4. Not having completed the minimum required participation in training activities (for example, seminars, presentations, forums, etc.), when these are part of the evaluation.
5. Not having submitted the final project or compulsory project, if this constitutes central evidence of learning of the subject.

Exam Review

Once the final grade has been published, the student can request the revision of the retake test within the established period. Review requests are not accepted on dates outside of this period.

Procedure in case of copying / plagiarism

1. Copying **or plagiarism** in any type of evaluation activity constitutes a crime, and will be penalized with a 0 as a grade for the subject, losing the possibility of recovering it, whether it is an individual or group work (in this case, all members of the group will have a 0).
2. If, during the completion of an individual assignment in class, the teacher considers that a student is trying to copy or is discovered some type of document or device not authorized by the teacher, the same will be graded with a 0, without the option of recovery, and therefore, the subject will be suspended.
3. A work, activity or exam will be considered to be "copied" when it reproduces all or a significant part of the work of oneself, another classmate.
4. A work or activity will be considered "plagiarized" when a part of a text by an author is presented as one's own without citing the sources, regardless of whether the original sources are in paper or digital format.

The use of Artificial Intelligence (AI) technologies

The use of Artificial Intelligence (AI) technologies is regulated according to the type of work to be carried out:

1. In the event that the work aims at personal reflection and meaningful learning by the student, **the use of AI technologies is prohibited** in any of its phases of completion.

Any work that includes AI-generated fragments (e.g. abstracts, translations, text writing or image creation) will be considered a lack of academic honesty and may lead to a partial or total penalty in the grade of the activity, as well as greater penalties in cases of seriousness.

2. In other works, **the restricted use of AI technologies is allowed** exclusively in those support tasks, such as bibliographic or information searches, proofreading, translations, and other specific situations that are indicated. In these cases, the student will have to clearly identify which parts have been generated with this technology, specify the tools used and include a critical reflection on how they have influenced the process and the final result of the activity. The non-transparency of the use of AI in this assessable activity will be considered a lack of academic honesty and may lead to a partial or total penalty in the grade of the activity, as well as greater sanctions in cases of severity.

In any case, in the description of each assignment, the teacher in charge will clearly indicate **whether the prohibited or restricted use of AI applies**.

Aspects of evaluation related to values and attitudes

1. The teacher may reduce the grade of the subject by between 1 and 2 points when the student repeatedly does not respect the indications of behavior in the classroom and/or disturbs the normal functioning of the same.
2. "No lack of respect for classmates or teachers will be tolerated. Homophobic, sexist or racist attitudes will also not be tolerated. Any student in whom any of the attitudes described above are detected will be classified as having failed the subject."

Formal aspects of written work

In all activities (individual and group) linguistic correction, writing and formal presentation aspects will be taken into account.

Other considerations

1. All the evaluation tests will be published in the daily program and in the calendar of training and evaluation activities.
2. The date of the single test will coincide with the date of the last continuous assessment test.
3. Students who repeat the subject may request at the beginning of the course to carry out only one final synthesis assessment (article 117, page 46 of the Academic Regulations of the Universitat Autònoma de Barcelona (Approved by agreement of the Governing Council of 7 July 2022, and modified by agreement of the Governing Council of 1 February 2023)).

Students in second or more enrolment who have taken all the assessment tests in the previous year may opt to be assessed with a single synthesis assessment activity. This activity will consist of an exam at the end of the subject coinciding with the written exam of the subject. Students in second or more enrolment who wish to opt for the final exam must notify the teaching staff responsible for the subject in writing two weeks before the published date.

Evaluation Activity

Activity	Weight	Hours	ECTS	Learning Outcomes
Written evaluation through two objective tests	25% 25%	2 2	0,16	KM06 ,KM08 , KM09, KM10
Submission of works: - Individual: - In a group:	25% 25%	2	0,08	INDIVIDUAL WORK SM01 SM02 KM09 KM10 GROUP WORK SM03 CM04 SM01 SM02

Bibliography

Books:

FOOD. COMPOSITION AND PROPERTIES

Editor: Iciar Astiasarán

Edition: 2nd; McGraw-Hill; 2000

ISBN: 8448603052

NUTRITION AND CLINICAL DIETETICS

Editor: Jordi Salas Salvadó

Edition: 3rd; Elsevier Masson; 2014

ISBN: 9788445823774

DIET THERAPY, CLINICAL NUTRITION AND METABOLISM

Editor: Daniel A. de Luis Román

Edition: 3a; Díaz de Santos; 2017

ISBN: 9788478856213

NUTRIGUÍA. CLINICAL NUTRITION MANUAL.

Editor: Ortega RM, Requejo AM.

Edition: 2nd. Pan American; 2015

ISBN: 978-84-9835-867-4

FUNDAMENTALS OF NUTRITION AND DIETETICS. METHODOLOGICAL BASES AND APPLICATIONS.

Madrid.

Edition: Panamericana

KRAUSE. DIET THERAPY

Editor: Raymond JL, Morrow K.

Edition: 15th. Elsevier Spain; 2021

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<https://efsa.europa.eu/en/interactive-pages/drvs>

To the program

- Moodle
- Kahoot
- Google Forms