

Tipo de curso / Course type

A-Conferencia / A-Lecture

Modalidad(es) / Modality

Nivel del curso / Course level

Subgraduado / Undergraduate

Descripción

Evaluación de los aspectos bioquímicos y fisiológicos que interactúan en la utilización de los nutrientes por el cuerpo humano. Se examinarán los problemas de salud asociados a excesos o deficiencias nutricionales como obesidad, anemia, osteoporosis, entre otros desórdenes nutricionales.

Description

Evaluation of the biochemical and physiological aspects that interact on the utilization of nutrients by the human body. Health problems associated with nutritional excesses or deficiencies such as obesity, anemia, osteoporosis and others nutritional disorders are examined.

Requisitos (cursos) / Requisites (courses)

BIOL 350, NUTR 420

Co-requisitos (cursos) / Co-requisites (courses)

N/A

Requisitos adicionales / Additional requisites

NONE

Créditos / Credits

3

Objetivos específicos / Specific objectives

1. Describe the processes in which micro and macro nutrients are digested, absorbed, transported & metabolized.
2. Explain the digestive system functions in the transport and metabolism of nutrients.
3. Describe the metabolic processes in energy storage and utilization.
4. Describe the body metabolic adaptations in response to different types of stress.

Contenido / Content

- I. Cells and their nourishment (Role, structure, division, movement of substances, cell aging, cells and cancer)
- II. Overview of digestion, absorption, transport and excretion human processes
- III. Heredity and Heredity Diseases
- IV. Macronutrients (Structure, properties functions, digestion, absorption, excretion and metabolism)
- V. Body Fluids (Acidosis, alkalosis, ascites, buffer, dehydration, edema and effusion)
- VI. Energy (Energy needs: assessment and requirements in human)
- VII. The Vitamins (Structure, properties functions, digestion, absorption, excretion and metabolism)
- VIII. The Minerals (Structure, properties functions, digestion, absorption, excretion and metabolism)

Horas contacto (incluyendo horas examen) / Contact hours (including test hours)

Presencial /
Traditional:
45

***Política de horas crédito:** Por cada crédito el estudiante dedicará un mínimo de dos (2) horas adicionales en actividades requeridas para lograr los objetivos del curso, incluyendo las horas en contacto con el profesor.

Metodología y actividades / Methodology and activities

Leyenda/Legend:

D/I = Dentro del salón / Inside classroom

F/O = Fuera del salón / Outside classroom

Estudio de casos, entrevistas / Case studies, interviews *Presencial: D/I, F/O*

Presentaciones, demostraciones / Presentations, demonstrations *Presencial: D/I, F/O*

Debates, juego de roles / Debates, role-playing *Presencial: D/I, F/O*

Aprendizaje colaborativo. / Collaborative learning. *Presencial: D/I, F/O*

Sistema de notas / Grading system

Sistema Estándar (A, B, C, D, F) / Standard System (A, B, C, D, F)

Texto sugerido / Suggested text

Gropper, Sareen S. Smith, Jack L & Groff, James L. (2005). Advanced Nutrition and Human Metabolism. Thomson Wadsworth. 4th ed.

Referencias bibliográficas / Bibliography

Gropper, Sareen S. (2000). The Biochemistry of Human Nutrition. A desk reference. Thomson Wadsworth. 2nd. ed.

Stipanuk, Martha H. (2000). Biochemical and Physiological Aspects of Human Nutrition. Elsevier - Health Sciences Division.

Evaluación del estudiante / Student evaluation

	Presencial		Híbrido		En línea		Acelerado	
	Qty	Por ciento	Qty	Por ciento	Qty	Por ciento	Qty	Por ciento
Exámenes parciales / Partial Exams	2	15%						
Pruebas cortas / Quizzes	2	15%						
Examen final / Final Exam	0	0%						
Presentaciones, demostraciones / Presentations, demonstrations	1	20%						
Trabajos escritos / Written works	1	10%						
Proyectos, investigaciones / Projects, research	1	25%						
Totales	7	85%						

Tipo de prontuario / Syllabus type

Revisado

Fecha en que comenzará a ofrecerse / Date on which it will begin to offer

August 18, 2014