

COURSE OUTLINE**HUN 6321 Proteins and Amino Acids in Nutrition**

Catalog Description: HUN 6321 Proteins and Amino Acids in Nutrition (4). Prereq: HUN 3221 plus BCH 3025 or equivalent. Nutritional aspects of proteins and amino acids, with emphasis on metabolism, nitrogen and amino acid requirements, assessment of protein quality, effects of deficiencies, toxicities and physiological stresses, and techniques for improving protein nutriture.

Objectives: To provide the student with a comprehensive comparative analysis of the role of proteins and amino acids in the nutrition of humans and animals; to interpret, analyze, criticize, and apply information derived from current research on protein and amino acid nutrition.

Course Format: Four 50-minute lectures per week, which include discussions.

Frequency: Fall semester of odd numbered years.

Instructor: Harry S. Sitren, Ph.D.
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P. O. Box 110370
Phone: 392-1991 x216
Office hours: M, W, F 3:00-4:00 P.M. (no appointment needed)

Contents of Course: Biochemical and physiological review of protein digestion and absorption, thermogenic response to protein intake, regulation of nitrogen detoxification pathways, protein turnover, protein-energy relationships, protein and essential amino acid requirements, protein reserves, protein and amino acid imbalances, deficiencies and toxicities, inborn errors of metabolism, evaluation of protein quality, nutritive value of plant and animal proteins, protein intake recommendations for maintenance, growth, pregnancy, and lactation, protein and amino acids and cognitive function, protein and amino acids and physical performance, and protein nutrition in injury and disease.

References: No textbook is available. Lecture material will include journal references.

Grading System: Exam I 20%
Exam II 20%
Final Exam 30%
Short quizzes 10%
Homework assignments 20%

Quizzes are given once/week at the beginning of the period and cover the lecture material from the previous week.

The homework assignments (n=10-12) typically consist of first seeking out specific journal articles and then writing a report (usually 2-4 pp.) that includes, for example, the rationale for the research, major findings, comparisons and contrasts with the findings of other researchers, and finally your own interpretation.

Final Grade: A=90 & up, B+=87-89, B=80-86, C+=77-79, C=70-76, D+=67-69, D=60-66, E=59 & down

NOTE: ACADEMIC HONESTY - AS A RESULT OF COMPLETING THE REGISTRATION FORM AT THE UNIVERSITY OF FLORIDA, EVERY STUDENT HAS SIGNED THE FOLLOWING STATEMENT: "I UNDERSTAND THAT THE UNIVERSITY OF FLORIDA EXPECTS ITS STUDENTS TO BE HONEST IN ALL THEIR ACADEMIC WORK. I AGREE TO ADHERE TO THIS COMMITMENT TO ACADEMIC HONESTY AND UNDERSTAND THAT MY FAILURE TO COMPLY WITH THIS COMMITMENT MAY RESULT IN DISCIPLINARY ACTION UP TO AND INCLUDING EXPULSION FROM THE UNIVERSITY."

UF COUNSELING SERVICES - RESOURCES ARE AVAILABLE ON-CAMPUS FOR STUDENTS HAVING PERSONAL PROBLEMS OR LACKING CLEAR CAREER AND ACADEMIC GOALS WHICH INTERFERE WITH THEIR ACADEMIC PERFORMANCE. THESE RESOURCES INCLUDE: (1) UNIVERSITY COUNSELING CENTER, 301 PEABODY HALL, 392-1575, PERSONAL AND CAREER COUNSELING; (2) STUDENT MENTAL HEALTH, STUDENT HEALTH CARE CENTER, 392-1171, PERSONAL COUNSELING; (3) SEXUAL ASSAULT RECOVERY SERVICES (SARS), STUDENT HEALTH CARE CENTER, 392-1161, SEXUAL COUNSELING; AND (4) CAREER RESOURCE CENTER, REITZ UNION 392-1601, CAREER DEVELOPMENT ASSISTANCE AND COUNSELING.

SOFTWARE USE - ALL FACULTY, STAFF AND STUDENTS OF THE UNIVERSITY ARE REQUIRED AND EXPECTED TO OBEY THE LAWS AND LEGAL AGREEMENTS GOVERNING SOFTWARE USE. FAILURE TO DO SO CAN LEAD TO MONETARY DAMAGES AND/OR CRIMINAL PENALTIES FOR THE INDIVIDUAL VIOLATOR. BECAUSE SUCH VIOLATIONS ARE AGAINST UNIVERSITY POLICIES AND RULES, DISCIPLINARY ACTION WILL BE TAKEN AS APPROPRIATE.

WE, THE MEMBERS OF THE UNIVERSITY OF FLORIDA COMMUNITY, PLEDGE TO HOLD OURSELVES AND OUR PEERS TO THE HIGHEST STANDARDS OF HONESTY AND INTEGRITY.