FND 455 (UG)/FND 555 (GR) Nutrition Fitness and Athletic Performance Independent Study (3 credits)

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Pre-Requisites:
FND 250 Principals of Nutrition

Course Description:
The study of basic principles of normal nutrition and their application to dietary practices promoting physical fitness and athletic performance.

Course Objectives:
At the completion of the course, the student will be able to demonstrate knowledge and understanding of:
1. The classes of nutrients and their major functions, as related to fitness and athletic performance.
2. The basis of energy metabolism, fuel sources, and fuel utilization during exercise.
3. Nutrition misinformation pertaining to athletes.
5. Weight management (loss, gain, and maintenance).
6. Diagnostic criteria, treatment and prevention of disordered eating

Required Texts:

Additional Readings: Gatorade Sports Science Website articles, additional electronic articles indicated in Course Materials

This course is enhanced with Canvas, an internet program that provides additional course instructions, references and requirements. Each student is expected to access the program on a regular basis to read instructional materials.

Course Content:
I want you to get the most out of this course, as well as being accommodating to your various work and personal schedules. At the same time, just like an on-campus course, you will need to create for yourself a certain time schedule to keep on track. You will need to follow the Unit sequencing and complete the material review, readings, assignments, and exams in order. Exams are not to be taken until assignments for each unit have been submitted and feedback has been received from the instructor. Remember, you will need to be finished with the course within a year after enrolling.

Course Calendar

The calendar below indicates the units with topics, assignments, and exams. Exams are available online and are available to take one time, with a time limit on availability when logged on.

Unit 1
Course Topics:
Introduction to Sports Nutrition
Essential Nutrients/Dietary Recommendations
Role of Nutrition and Exercise in Disease Prevention
Evaluating Ergogenic Aids and Diet Claims
Carbohydrates
Fats
Assignments:
Supplement Evaluation
Exam 1

Unit 2
Course Topics:
Proteins
Energy Expenditure
Healthy Body Weight
Eating Disorders
Assignments:
Vegetarian Diet Evaluation
Macronutrient Calculation Worksheet
Exam 2

Unit 3
Course Topics:
Body Composition
Fluid and Electrolyte Balance
B-Complex Vitamins and Energy Metabolism
Assignments:
Healthy Body Weight Evaluation
Case Study - B Vitamins
Exam 3


**Unit 4**  
**Course Topics:**  
Anti-oxidant Nutrients  
Minerals  
Micronutrients for Blood Health  
**Assignment:**  
Case Study - Supplements  

**Exam 4**

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**Unit 5**  
**Course Material Topics**  
Nutrients for Bone Health  
Nutrition and Fitness Assessment  
Recent Research on Dietary Supplements for Performance  
Recent Research on Nutrition for Performance  
Nutrient Requirements of Special Groups  
**Assignments:**  
Case Study - Basketball Player  
Research Review Project  

**Final Exam**

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**Course Requirements:**  
Course assignments:  
1) Supplement evaluation - 15 points  
2) Case Study - 30 points  
3) Research Review Presentation - 50 points  
4) Calculation Worksheets (5 @ 10 points each) = 50

Course Exams  
Exam 1 - 4 (50 points each) - 200 points  
Final Exam - 75 points

**TOTAL - 420 points**

Additional requirement for graduate students (FND 555): Research paper on nutrition and performance - 100 points

**Grading:**  
A standard percentage system of total points earned will be used to determine your final course grade as follows:  
90 - 100% = A  
80 – 89% = B  
70 – 79% = C
60 – 69% = D
0 – 59% = F

Administrative Information:
On-line learning is a different experience for both the student and the professor. Here are some ground rules that will help this be a positive learning environment!

E-Mail
You have the option of contacting me via email at any point in the course – remember to put a subject heading on your message, and identify yourself with your full name and the course number FND 455 Extended Studies. I will check my email on weekdays and will respond to your messages as soon as possible.

Grammar and Spelling
All e-mail correspondence should reflect good grammar and correct spelling (no text messaging “shortcuts”). To assist those individuals who may not have Word, you should save the file as a RichText file (rtf)

Disability Support Services
Students who believe they may need accommodations in this class are encouraged to contact the Disability Support Services (970) 351-2289 as soon as possible to better ensure that accommodations are implemented in a timely fashion.

Honor Code
All members of the University of Northern Colorado community are entrusted with the responsibility to uphold and promote five fundamental values: Honesty, Trust, Respect, Fairness, and Responsibility. These core elements foster an atmosphere, inside and outside of the classroom, which serves as a foundation and guides the UNC community's academic, professional, and personal growth. Endorsement of these core elements by students, faculty, staff, administration, and trustees strengthens the integrity and value of our academic climate.

UNC's Policies
UNC's policies and recommendations for academic misconduct will be followed.

Library Access and Use
Use your local area libraries as your primary resource. When there is a choice, you should use an academic library since it is more likely to have the indexes and other resources you will need for college-level research. Because many libraries now provide dial-in access, you can search various library databases from your own home or business, at your own convenience, if you have access to a computer with a modem.

Independent study students who live outside a 50-mile radius of Greeley are extended many of the same library services available to their on-campus counterparts. These services include remote access to electronic resources, instruction in the use of libraries and library resources, reference assistance, and access to/delivery of library materials not available in local area libraries. See http://library.unco.edu/services/distance.htm for details.
Students who live within the 50-mile radius are expected to visit the UNC Michener Library in person. To borrow materials from the Michener Library in person, bring positive identification and your confirmation/receipt from registration for your independent study course.

**Independent Study Online Student Guide**
http://extended.unco.edu/courses-workshops/independent-study/is-docs/IS_Student_Guide.pdf/