Instructor: Kim Quigley, PhD, RD  
E-mail: kquigley@uco.edu

Office: Wantland Hall Room 17  
Phone: (405) 974-5364

Office Hours: Monday-Friday 8:30am -10am

Classroom Schedule: TBD  
Credit Hours: 2

Course Description: The course will examine sound nutritional knowledge and practices based on current scientific literature essential to optimal health for all populations engaged in various levels of activity. Credit may not be earned for both HLTH 3412 and NTRN 1513.

Course Prerequisites: None


Specific Course Objectives:

Upon completion of this course, the student will be able to:
1) Understand the categories of nutrients and learn what constitutes a healthy diet to provide those nutrients.

<table>
<thead>
<tr>
<th>KSA</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8.8</td>
<td>Knowledge of the USDA Food Pyramid and Dietary Guidelines for Americans.</td>
</tr>
</tbody>
</table>

2) Understand the role of supplementation in providing nutrients for enhanced performance. Understand the benefits and risks associated with the use of ergogenic aids.

<table>
<thead>
<tr>
<th>KSA</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8.14</td>
<td>Knowledge of common nutritional ergogenic aids, the purported mechanism of action, and any risk and/or benefits (e.g., carbohydrates, protein/amino acids, vitamins, minerals, herbal products, creatine, steroids, caffeine).</td>
</tr>
<tr>
<td>1.5.2</td>
<td>Knowledge of the effects of the following substances on the exercise response such as antihistamines, tranquilizers, alcohol, diet pills, cold tablets, caffeine, and nicotine.</td>
</tr>
</tbody>
</table>

3) Understand the role of vitamins, minerals, and water in normal metabolism.

<table>
<thead>
<tr>
<th>KSA</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8.6</td>
<td>Knowledge of the difference between fat-soluble and water-soluble vitamins</td>
</tr>
<tr>
<td>1.8.7</td>
<td>Knowledge of the importance of maintaining normal hydration before, during, and after exercise</td>
</tr>
</tbody>
</table>
4) Understand the metabolism of carbohydrates, fats and proteins as a source for physical activity.

<table>
<thead>
<tr>
<th>KSA</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8.1</td>
<td>Knowledge of the role of carbohydrates, fats, and proteins as fuels for aerobic and anaerobic metabolism.</td>
</tr>
</tbody>
</table>

5) Understand the role of nutrition to chronic disease and how physical exercise can improve chronic conditions

<table>
<thead>
<tr>
<th>KSA</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2.1</td>
<td>Knowledge of the physiological and metabolic responses to exercise associated with chronic disease (heart disease, hypertension, diabetes mellitus, and pulmonary disease).</td>
</tr>
<tr>
<td>1.2.3</td>
<td>Knowledge of risk factors that may be favorably modified by physical activity habits.</td>
</tr>
<tr>
<td>1.2.4</td>
<td>Knowledge to define the following terms: total cholesterol (TC), high-density lipoprotein cholesterol (HDL-C), TC/HDL-C ratio, low-density lipoprotein cholesterol (LDL-C), triglycerides, hypertension, and atherosclerosis.</td>
</tr>
<tr>
<td>1.2.7</td>
<td>Knowledge of the atherosclerotic process, the factors involved in its genesis and progression, and the potential role of exercise in treatment.</td>
</tr>
<tr>
<td>1.2.8</td>
<td>Knowledge of how lifestyle factors, including nutrition and physical activity, influence lipid and lipoprotein profiles.</td>
</tr>
</tbody>
</table>

6) Understand the considerations and needs of special populations who participate in physical activity.

<table>
<thead>
<tr>
<th>KSA</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8.9</td>
<td>Knowledge of the importance of calcium and iron in women's health.</td>
</tr>
<tr>
<td>1.8.15</td>
<td>Knowledge of nutritional factors related to the female athlete triad syndrome (i.e., eating disorders, menstrual cycle abnormalities, and osteoporosis).</td>
</tr>
<tr>
<td>1.8.18</td>
<td>Knowledge of the nutrition and exercise effects on blood glucose levels in diabetes.</td>
</tr>
</tbody>
</table>

7) Understand the role of nutrients, calories, and physical activity in weight control.

<table>
<thead>
<tr>
<th>KSA</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8.5</td>
<td>Knowledge of the importance of an adequate daily energy intake for healthy weight management.</td>
</tr>
<tr>
<td>1.8.10</td>
<td>Knowledge of the myths and consequences associated with inappropriate weight loss methods (e.g., fad diets, dietary supplements, over-exercising, starvation diets).</td>
</tr>
<tr>
<td>1.8.11</td>
<td>Knowledge of the number of kilocalories in one gram of carbohydrate, fat, protein, and alcohol.</td>
</tr>
<tr>
<td>1.8.13</td>
<td>Knowledge of the guidelines for caloric intake for an individual desiring to lose or gain weight.</td>
</tr>
</tbody>
</table>

7) Understand body composition and body fat distribution and the health implications of each.

<table>
<thead>
<tr>
<th>KSA</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3.7</td>
<td>Knowledge of the advantages/disadvantages and limitations of the various body composition techniques including but not limited to: air displacement plethysmography (BOD POD®), dual energy X-ray absorptiometry (DEXA), hydrostatic weighing, skinfolds and bioelectrical impedance.</td>
</tr>
</tbody>
</table>
1.8.2 Knowledge of the following terms: obesity, overweight, percent fat, BMI, lean body mass, anorexia nervosa, bulimia, metabolic syndrome and body fat distribution.

1.8.3 Knowledge of the relationship between body composition and health.

1.8.4 Knowledge of the effects of diet, exercise and behavior modification as methods for modifying body composition

1.8.17 Ability to describe the health implications of variation in body fat distribution patterns and the significance of the waist to hip ratio.

### Instructional Methods and Techniques
1. Lecture/
2. Class and small group critical thinking discussion
3. Audio/visual support
4. Other as needed

### Methods of Evaluation
A = 90% and above; B = 80% and above; C = 70% and above; D = 60% and above; F = below 60%

- A final grade of “C” or better is required of all majors in KHS.

Course grades will be based on the following:
- Exam 1: 100 points
- Exam 2: 100 points
- Exam 3: 100 points
- Exam 4: 100 points
- HEI: 25 points
- Food Label: 25 points
- Nutrition Makeover: 100 points
- Snack Presentation: 100 points
- Attendance: 50 points

Total: 750 points

### Course Requirements
The final grade will be based upon total possible including all of the areas listed below:

**Written Exams (100 points each):** Students are expected to take all exams as scheduled. There are no makeup exams. Any exam scheduled on a day of a University sanctioned event or military obligation must be taken early, at a time arranged with the instructor. If an emergency occurs that prevents the administration of the final exam, the student’s final course grade will be calculated based on the work in the course completed to that point in time and the faculty member’s considered judgment. Testing format may include multiple choice, short answer, and true false, and equation questions.

**Attendance and Class Participation (50 points):** Regular, attentive, and participatory attendance is essential to this course, and students are expected to attend all class meetings. Attendance recording begins the first day of class unless the student is not previously enrolled. The following attendance policy will be utilized: 0-2 absences = 50 points; 3 absences = 35 points; 4 absences = 20 points; 5 absences = 10
points; 6 absences = 0 points; More than 6 absences = Failure of course. **Please note:** Excused absences will only be granted due to documented illness or emergency or for University sanctioned events or military obligation with required documentation submitted beforehand.

**Tardy/Early Departure Policy:** Students are expected to be on time and remain the whole class period. Two “tardies” and/or “early departures” will equal one absence. Students arriving late or leaving early will be seated near the door to avoid disturbing others. Please be respectful of class time, your instructor, and your fellow classmates!

**GENERAL ASSIGNMENTS:**

**HEI (25 points):** The student will complete a 24 hour dietary recall use mypyramid.gov. The analyses pages of the diet recall including a one page summary of the student’s findings will be submitted.

**Food Label (25 points):** The student will be required to bring a food label to class that demonstrates a nutritional claim.

**Nutrition Makeover (100 points):**
The student will attend lab instructions for conducting a dietary analysis and makeover. This assignment requires recording dietary intake, making behavior modifications, and reevaluating dietary intake.

**Snack Presentation(100 points):**
The student will identify or develop a healthy snack. List the purpose or goal of the snack. List all ingredients and the amounts of the ingredients in the snack food recipe. Conduct a nutrition analysis (in the lab) for calories, protein, carbohydrate, fiber, fat, plus any additional nutrients that you may be interested in for your particular sport. Prepare the snack item and bring it to class in addition to the recipe, nutrition analysis, and any changes that you recommend for future preparation.

**General Notes**
- Students interested in strengthening personal writing skills may contact the Writing Center at “Tutoring Central” in West Hall, 974-2487.

**Fatal Error Policy:**
All written assignments must meet minimal presentation standards to be acceptable. These standards address spelling, punctuation, format and basic grammar. The term Fatal Errors refers to technical American English errors of form. Specifically, they include the following:

- a) each different word misspelled;
- b) each sentence fragment;
- c) each run-on sentence or comma splice;
- d) each mistake in capitalization;
- e) each serious error in punctuation that obscures meaning;
f) each error in verb tense or subject/verb agreement;
g) lack of conformity with assignment format; and,
h) each improper citation, or lack of citation, where one is needed.

Papers with more than three (3) fatal errors marked by an instructor on any one page, or more than 12 non-repeated errors for the entire document will be returned to the student and subject to 20% off the grade immediately and may be subject to 10% off for each day until the paper is returned corrected.

Instructors will determine the number of resubmissions allowed for each assignment. Final course papers (where there is no time for a resubmission) will be docked one percent of the grade for each error including one percent off for each repeated error.

**Ethical conduct** is expected in this course; academic dishonesty will not be tolerated. Academic dishonesty includes, but is not limited to: plagiarizing; cheating on exams or in the preparation of academic work; copying from tests, reports, etc.; collaborating with others without prior authorization; reuse of work in more than one class without informing the instructor; possessing contents of an un-administered examination; and using materials during a test not authorized by the instructor. While collaboration with cohorts in study groups is encouraged, **each student is responsible for his or her own work. Students may not, under any circumstances, turn in work that has been prepared by someone else.**

Disciplinary action (as outlined by the Code of Student Conduct) will result in one of the following at the instructor’s discretion:
- A substitute assignment or examination
- A reduced grade for the assignment, examination, or course
- A grade of zero or F for the assignment, examination, or course
- A grade of F for the course

*NOTE: UCO subscribes to the Turnitin.com plagiarism prevention service. Students agree that by taking this course, all required assignments may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted assignments will be included as source documents in the Turnitin.com restricted access reference database for the purpose of detecting plagiarism of such assignments. Use of the Turnitin.com service is subject to the Terms and Conditions of Use posted on the Turnitin.com website. Turnitin.com is just one of various plagiarism prevention tools and methods which may be utilized by your faculty instructor during the term of the semester. In the UCO Student Handbook, there is a process for contesting any plagiarism allegations against you.*

**Special Accommodations:** The University of Central Oklahoma complies with Section 504 of the Rehabilitation Act of 1973 and the American with Disabilities Act of 1990. Students with disabilities who need special accommodations must make their requests by contacting Disability Support Services, at (405) 974-2516. The DSS Office is located in the Nigh University Center, Room 309. Students should also notify the instructor of special accommodation needs by the end of the first week of class.

“If an emergency occurs that prevents the administration of a final examination, the student’s final course grade will be calculated based on the work in the course completed to that point in
time and the faculty member’s considered judgment. Final exams will not be rescheduled, and a grade of “I” will not be given as a result of the missed exam.”

UCO Weather Line: 974-2002 or access weather related closing info at www.uco.edu

Please see the Academic Affairs’ “Student Information Sheet and Syllabus Attachment” @ http://www.uco.edu/academic-affairs/files/aa-forms/faculty/StudentInfoSheet.pdf

Nutrition for Sports and Fitness -- *Tentative Schedule

Note: the following schedule is tentative and subject to modification by the instructor. Also, we will not be reviewing chapters verbatim in class. Reading these chapters prior to class provides you information that we can build upon in class and will better prepare you for class discussion, and tests!

Week 1  1/10 & 1/12  Intro to class

Week 2  1/17  Chapter 1: Nutrition and the Athlete
         1/19  Portions, Food label, shopping

Week 3  1/24  Labor Day Holiday. No Class
         1/26  Bring food label: Assign HEI

Week 4  1/31  Chapter 2 Defining and Measuring Energy
         2/2  Chapter 3 Energy Systems; HEI Due

Week 5  2/7  EXAM I (chapters 1, 2, 3)
         2/9  Chapter 11: Weight and Body Composition

Week 6  2/14  Exercise out of Class
         2/16  Chapter 4: Carbohydrates

Week 7  2/21 & 2/23  Chapter 5: Protein

Week 8  2/28  Exam II (Chapters 4, 5, and 11)
         3/1  Chapter 10: Diet Planning: How much Protein, calories, fat

Week 9  3/6  Chapter 6: Fats How to lower fat in recipes and foods……
         3/8  Chapter 12: Disordered Eating

Week 10 3/20  Spring Break
         3/22  Spring Break

Week 11 3/27  In-class exercise
         3/29  Lab work and Assign Nutrition Makeover

Week 12 4/3  Exam III (Chapters 6, 10, and 12)
         4/5  Chapter 7 Water and Electrolytes

Week 13 4/10  Chapter 8: Vitamins
         4/12  Chapter 9: Minerals
<table>
<thead>
<tr>
<th>Week</th>
<th>Date(s)</th>
<th>Event/Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 14</td>
<td>4/17</td>
<td>Chapter 13 Lifelong Fitness and Health; <strong>Nutrition Makeover</strong></td>
</tr>
<tr>
<td></td>
<td>4/19</td>
<td>Wrap-Up Grades, Final Study Guide</td>
</tr>
<tr>
<td>Week 15</td>
<td>4/24 &amp; 4/26</td>
<td>Snack Presentations; Extra Credit Due</td>
</tr>
<tr>
<td>May 1</td>
<td>1pm</td>
<td><strong>FINAL EXAM (Chapters 7, 8, 9, and 13)</strong></td>
</tr>
</tbody>
</table>