KINE 320 C01 - Principles of Human Nutrition
3 Credits, Summer 2017
Online

Faculty
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Prerequisites/Corequisites
None

University Catalog Course Description
Assesses dietary habits and patterns in relation to nutrient requirements across the age spectrum and for a variety of populations. Emphasizes weight control, diet in relation to physical activity, and current nutritional controversies.

Course Overview
The course focuses on the basic principles of nutrition and its application in practice and overall health. It will be lecture based to elicit thought provoking discussion to help emphasize key components of the lecture. Current topics and cases will be presented and discussed throughout the course to help students translate theory into practice.

The first part of the course will focus on the components of a nutritious diet, nutrition standards, macro and micronutrients. The second part of the course will delve further into nutrition and its relationship to health, disease, fitness, ergogenic aids, obesity, and nutrition through the life cycle

Course Delivery Method
This course will be delivered online (76% or more) using [select either a synchronous or an asynchronous] format via Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @masonlive.gmu.edu) and email password. The course site will be available on June 26 2017 8.00 am EST.
Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.

**Technical Requirements**

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with a standard up-to-date browser, either Internet Explorer or Mozilla Firefox is required (note: Opera and Safari are not compatible with Blackboard).
- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students will need a headset microphone for use with the Blackboard Collaborate web conferencing tool. [Delete this sentence if not applicable.]
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
- The following software plug-ins for PCs and Macs, respectively, are available for free download: [Add or delete options, as desire.]
  - Adobe Acrobat Reader: https://get.adobe.com/reader/

**Expectations**

- **Course Week:** [Include only the sentence below that is appropriate for the course. Delete the sentence that is not applicable.]
  Because asynchronous courses do not have a “fixed” meeting day, our week will start on **Monday**, and finish on **Sunday**.
  Our course week will begin on the day that our synchronous meetings take place as indicated on the Schedule of Classes.
- **Log-in Frequency:**
  Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least 4 times per week.
- **Participation:**
  Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- **Technical Competence:**
  Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- **Technical Issues:**
Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.

- **Workload:**
  Please be aware that this course is **not** self-paced. Students are expected to meet **specific deadlines** and **due dates** listed in the **Class Schedule** section of this syllabus. It is the student’s responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.

- **Instructor Support:**
  Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Those unable to come to a Mason campus can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.

- **Netiquette:**
  The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. **Be positive in your approach with others and diplomatic in selecting your words.** Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.

- **Accommodations:**
  Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

**Learner Outcomes or Objectives**

This course is designed to enable students to do the following:

1. Differentiate the roles of carbohydrates, protein, fats, vitamins, and minerals in one’s diet across the lifespan.
2. Describe the digestive process as it relates to the utilization of nutrients for energy production and metabolism.
3. Explain the various methods utilized to measure body composition.
4. Explain the importance of nutrition as it relates to exercise and physical activity for a healthy lifestyle.
5. Evaluate a variety of diets reported in the popular literature.
6. Plan a nutrition program for both weight loss and weight gain for clients.

**Professional Standards** ([Name of relevant Professional and Accrediting Organization(s) or Association(s), if applicable])

Upon completion of this course, students will have met the following professional standards: This course meets the Commission on Accreditation of Allied Health Education Programs (CAAHEP) requirements and covers the following American College of Sports Medicine’s Knowledge-Skills-Abilities (KSA’s):
<table>
<thead>
<tr>
<th>KSA</th>
<th>Description</th>
<th>Lecture, Lab, or both</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>GENERAL POPULATION/CORE: NUTRITION AND WEIGHT MANAGEMENT</strong></td>
<td></td>
</tr>
<tr>
<td>1.8.1</td>
<td>Knowledge of the role of carbohydrates, fats, and proteins as fuels for aerobic and anaerobic metabolism.</td>
<td>Lecture</td>
</tr>
<tr>
<td>1.8.2</td>
<td>Knowledge of the following terms: obesity, overweight, percent fat, BMI, lean body mass, anorexia nervosa, bulimia, metabolic syndrome and body fat distribution.</td>
<td>Lecture</td>
</tr>
<tr>
<td>1.8.6</td>
<td>Knowledge of the difference between fat-soluble and water-soluble vitamins.</td>
<td>Lecture</td>
</tr>
<tr>
<td>1.8.8</td>
<td>Knowledge of the USDA Food Pyramid and Dietary Guidelines for Americans.</td>
<td>Lecture</td>
</tr>
<tr>
<td>1.8.9</td>
<td>Knowledge of the importance of calcium and iron in women's health.</td>
<td>Lecture</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>
<td>Lecture</td>
</tr>
<tr>
<td>1.8.12</td>
<td>Knowledge of the number of kilocalories equivalent to losing 1 pound of body fat and the ability to prescribe appropriate amount of exercise to achieve weight loss goals.</td>
<td>Lecture</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>
<td>Lecture</td>
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</table>

**Required Texts**


**Course Performance Evaluation**

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy).

This course will be graded on a point system, with a total of 500 possible points.

- **Exams:** The format of these examinations may be multiple choice, true/false, short answer, matching, and fill in the blank type questions. The examinations will be made available by **Wednesday 8.00 am Eastern Standard Time (EST – Note: All times are EST)** and will close at **Sunday 11.59 pm.** The exams will cover all chapter materials and assigned readings.

- **Online Class Discussions:** You are expected to actively participate in online class discussions in the discussion board. Participation in online discussions of course content is expected as topics are introduced and as applied to assigned readings.
Each discussion posted will be assigned a date by which the student must respond. If a student is unable to fulfill this requirement for any reason, he/she should notify the instructor prior to the class and make alternative arrangements. The aim is to encourage interaction, and not simply to present information.

Discussions will typically be open from **Tuesday 8.00 am until Sunday 11.59 pm after which discussion postings will not count.**

Each student should make a minimum of 2 responses for the discussion:
1. One response addressing the discussion question by **Thursday 11.59 pm AND**
2. One comment to responses made from by classmates by **Sunday 11.59 pm.**

Your responses to discussion questions must be substantive, that is, thoughtful and analytical and is graded using the **Grading rubric for discussion postings** below. Understand that you are held to academic standards of writing style and the use of proper grammar, punctuation and spelling. Also see netiquette information above in the EXPECTATIONS section.

**Grading rubric for discussion postings:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Criteria (including but not limited to)</th>
</tr>
</thead>
</table>
| Excellent     | -  In depth response to assigned discussion question.  
-  Additional responses to required number of assigned responses. Responses demonstrate in-depth understanding and knowledge citing/utilizing class materials, resources, and personal experiences (if applicable). |
| Good          | -  Response to assigned discussion question  
-  Response to classmates’ response postings demonstrating an understanding of the topic. |
| Average       | -  Response to assigned discussion question  
-  Responses to postings is superficial, lacks substance/support from readings, exercises, etc.  
-  e.g. a simple “Yes” “No” or “Good /Bad Job” |
| Poor          | -  Does not respond to discussion question, or respond to classmates, or other any of the above criteria |
| Not Applicable| -  No response                                                                                       |

**Nutritional Dietary Analysis Assignment:** You will track and record your or another person’s (family, friend, or colleague’s - hereafter called client) 3-day food intake using Supertracker diet analysis program (Online Resource: USDA Supertracker diet analysis program.
https://www.supertracker.usda.gov/ and make appropriate recommendations to improve nutritional status (i.e. suggest a nutrition program for weight loss and/or weight). More details about this assignment will be offered by **July 20 2017 8.00am**. *Note: While you can mock these data, it is best that you use a real person’s information.*

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Number</th>
<th>Points Each</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1 Ch. 1-4</td>
<td>1</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Exam 2 Ch. 5-6</td>
<td>1</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Exam 3 Ch. 7-10</td>
<td>1</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Exam 4 Ch. 11-15</td>
<td>1</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Online Discussions</td>
<td>4</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>Nutritional Dietary Analysis Assignment</td>
<td>1</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>500</strong></td>
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<table>
<thead>
<tr>
<th>Grading Scale</th>
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<tbody>
<tr>
<td>A</td>
<td>=94-100 (468– 500)</td>
<td>B+</td>
<td>= 88-89 (438–447)</td>
</tr>
<tr>
<td>A-</td>
<td>= 90-93 (448 –467)</td>
<td>B</td>
<td>= 84-87 (418-437)</td>
</tr>
<tr>
<td>B-</td>
<td>= 80-83 (398–417)</td>
<td>C</td>
<td>= 74-77 (368- 387)</td>
</tr>
<tr>
<td>B-</td>
<td>= 70-73 (348 –367)</td>
<td>C-</td>
<td>= 60-69 (298–347)</td>
</tr>
<tr>
<td>C</td>
<td>= 60-69 (298–347)</td>
<td>F</td>
<td>= 0-59 (297 or less)</td>
</tr>
<tr>
<td>C-</td>
<td>= 0-59 (297 or less)</td>
<td></td>
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**Professional Dispositions**

Students are expected to exhibit professional behaviors and dispositions at all times.

**Class Schedule**

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TOPIC</th>
<th>READINGS +</th>
<th>ASSIGNMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 26 – July 2</td>
<td>Introduction, Nutrition Standards and Guidelines, Label Reading, The Body, Carbohydrates</td>
<td>Chapter 1, 2, 3, 4</td>
<td>Discussion 1 Exam 1</td>
</tr>
<tr>
<td>July 3 – July 9</td>
<td>Lipids, Protein and Amino Acids</td>
<td>Chapter 5, 6</td>
<td>Discussion 2 Exam 2</td>
</tr>
</tbody>
</table>
July 10 – July 16  | Vitamins, Water and Minerals, Energy Balance, Performance Nutrition | Chapter 7, 8, 9, 10 | Discussion 3, Exam 3

July 17 – July 23  | Diet and Health, Food Safety and Technology, Life cycle Nutrition: Mother and Infant Child, Teen, Older Adult, Hunger and the Future of Food | Chapter 11, 12, 13, 14, 15 | Discussion 4, Exam 4

July 24 – July 29  | Food Diary, Nutrition Analysis | Assigned readings | Nutrition Analysis Assignment

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: [http://cehd.gmu.edu/values/](http://cehd.gmu.edu/values/).

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see [http://oai.gmu.edu/the-mason-honor-code/](http://oai.gmu.edu/the-mason-honor-code/)).

- Students must follow the university policy for Responsible Use of Computing (see [http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/](http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/)).

- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.

- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see [http://ods.gmu.edu/](http://ods.gmu.edu/)).
• Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor.

Campus Resources

• Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or https://cehd.gmu.edu/aero/tk20. Questions or concerns regarding use of Blackboard should be directed to http://coursessupport.gmu.edu/.

• The Writing Center provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing (see http://writingcenter.gmu.edu/).

• The Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students’ personal experience and academic performance (see http://caps.gmu.edu/).

• The Student Support & Advocacy Center staff helps students develop and maintain healthy lifestyles through confidential one-on-one support as well as through interactive programs and resources. Some of the topics they address are healthy relationships, stress management, nutrition, sexual assault, drug and alcohol use, and sexual health (see http://ssac.gmu.edu/). Students in need of these services may contact the office by phone at 703-993-3686. Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to http://ssac.gmu.edu/make-a-referral/.

For additional information on the College of Education and Human Development, please visit our website https://cehd.gmu.edu/.