Diet and Disease
NFS 260
Fall 2017

Professor: Haley Dienst MS, RD, CD

Office: 255 Marsh Life Sciences

Phone: please use email

Email: hdienst@uvm.edu
Please include UVM or NFS in subject line

Office Hours: by appointment

Class Time: 5:05-8:05

Course Credits: 3 hours

Course Description: Examination of the physiologic, biochemical, and psychological basis of several disease states and the application of medical nutrition therapy in treatment.

Course Prerequisites: NFS 53, 143, 243

Course Objectives:
The student will:

1. Understand and appreciate the profession of dietetics, the scope of dietetics practice, standards of practice, standards of professional performance, and ethical practice.
2. Understand the role and function of the clinical dietitian in the profession of dietetics.
3. Obtain a working knowledge of the different techniques and parameters utilized by a clinical dietitian.
4. Practice critical thinking skills and apply their knowledge while assessing nutritional status, formulating individual care plans, modifying dietary intake, and educating and counseling clients in the analysis of case studies.
5. Exhibit understanding of disease, diet and food through effectively using communication skills in written assignments and class discussion.
6. Understand the chemical, biochemical, and physiological basis of disease.
7. Understand the pathophysiology of specific disease states and disorders.
8. Understand alterations which occur in nutrient metabolism during certain disease states, eg. fluid and electrolyte changes, drug-nutrient interactions, nutrient-nutrient interactions.
10. Read and understand clinical research articles, eg. interpretation, statistics, medical terminology.
11. Understand the influence of socioeconomic, cultural, and psychological factors on food and nutrition behavior and apply those influences in planning and calculating menus and medical nutrition therapy for individuals.
12. Understand and utilize nutrition assessment data to implement the Nutrition Care Process for certain disease states.
13. Understand the use of medical nutrition therapy in the treatment of specific disease states and disorders.
14. Understand alternative feeding modalities and be able to calculate enteral and parenteral formulas

Core Knowledge and Competencies for the Registered Dietitian

KDR 1.1 The curriculum must reflect the scientific basis of the dietetics profession and must include research methodology, interpretation of research literature and integration of the research principles into evidence-based practice

Learning outcome: 70% of students will receive 80 of 100 point of the Evaluation of a Research Article Project

KDR 2.1 The curriculum must include opportunities to develop a variety of communication skills sufficient for entry into preprofessional practice

KDR 2.3 The curriculum must include opportunities to understand governance of dietetics practice, such as Scope of Dietetics Practice and the Code of Ethics; and interdisciplinary relationships in various practice settings

KDR 3.1 The curriculum must reflect the principles of Medical Nutrition Therapy and the practice of the nutrition care process, including principles and methods of assessment, diagnosis, identification and implementation of interventions and strategies for monitoring and evaluation

Learning outcome: 60% of students will receive 80% or better on the Complex MNT Case Study Analysis

KDR 5.2 The physical and biological science foundation of the dietetics profession must be evident in the curriculum

Textbooks:
Required:
Medical Dictionary. Mosby’s, Taber’s, Stedman’s or Dorland’s
helpful but medical dictionaries are available online.
All readings besides Krause listed under assignments are on Blackboard or the Academy of Nutrition and Dietetics website at www.eatright.org

Students are expected to become student members of the Academy of Nutrition and Dietetics as materials discussed are available on the member only Academy website. Materials related to the Nutrition Care Process, Standards for Professional Practice, Professional Ethics, and the Evidence Based Library are all available to student
members of the Academy. You also need to be a member of the Academy to apply for scholarships given by the Academy of Nutrition and Dietetics Foundation.

**Supplemental Books:**
Escott-Stump S. Nutrition Diagnosis and Related Care, 7th Edition, 2011.

**Grading:**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
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<tbody>
<tr>
<td>Enteral Calculations</td>
<td>50</td>
</tr>
<tr>
<td>Parenteral Calculations</td>
<td>50</td>
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<tr>
<td>Evaluation of Research Article</td>
<td>100</td>
</tr>
<tr>
<td>Case Study</td>
<td>100</td>
</tr>
<tr>
<td>Class Participation/Attendance</td>
<td>100</td>
</tr>
<tr>
<td>Exam 1</td>
<td>100</td>
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<tr>
<td>Exam 2</td>
<td>100</td>
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<tr>
<td>Exam 3</td>
<td>100</td>
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<tr>
<td>Total Points</td>
<td>700</td>
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Students obtaining 630 or more points will be assured of an A grade, students with 560 or more points will be assured of a B grade, students with 490 or more points will be assured of a C grade, students with 420 or more points will be assured of a D grade, and students with less than 410 points are in jeopardy of failure. Plus and minus grades will be given for each grade range.

**Grading:** Exams will be graded and returned to you within two weeks. Case study and Evaluation of Research Article will be graded and returned to you within three weeks.

**Class Structure:** Class will be a combination of lecture, class discussion, and group discussion and reporting to the class. Because of the class size, each student will need to be responsible for the reading of class materials and assignments prior to coming to class. All students will participate in class discussion. They will be active participants in their discussion groups involving case studies, some of which may be evaluated by peers in
their group. The group discussions are an attempt to help each of you obtain problem solving and critical thinking skills regarding case studies without having a written assignment for each case study. These techniques are to help you learn the NCP and use your problem solving and critical thinking skills in your group. Additionally, all students should come to class prepared to be called upon to answer questions regarding class materials or to report findings of their group discussion.

**Class Attendance:** Attendance will not be taken in the class, however, if you miss the discussion groups and other in class assignments, it will affect your participation points. If you become ill or for other reasons will miss more than one class in a row, please contact Rose Laba in the CALS Dean’s Office to discuss what you can do.

**Late Policy:** Assignments are expected to be turned in on the date they are due, either in class or emailed to me by midnight. Assignments turned in one day late will be marked down 10%; those turned in two days late will be marked down 20%. No assignments will be accepted or graded if handed in more than 2 days after the due date. If you believe that you have extenuating circumstances, speak to me as soon as possible to make other arrangements.

**Class Conduct:** All class participants are expected to refrain from the use of cell phones in the classroom. In case of a campus emergency, the instructor will be notified via the classroom computer, and the instructor will notify students of the emergency. Computers are allowed for note taking in class. Any student not following the above guidelines will be asked to leave the classroom. No computers or cell phones will be allowed during exam periods. As entering and leaving disrupt other students and class flow, please take care of personal needs prior to class unless it is an emergency.

**Class Code:** All class participants are expected to adhere to the academic honesty policies of the University of Vermont. Additionally, the University prohibits discrimination and unlawful harassment. Please see the University of Vermont Code and Student Handbook available on the UVM website.

Offences against the Code of Academic Integrity are deemed serious and insult the integrity of the entire academic community. Any suspected deliberate violations of this code are taken very seriously and will be forwarded to the Center for Student Ethics & Standards for further investigation.

**Religious Holidays:** The official policy for excused absences is: Students have the right to practice the religion of their choice. Each semester students should submit in writing to their instructors by the end of the second full week of classes their documented religious holiday schedule for the semester. Faculty must permit students who miss work for the purpose of religious observance to make up this work.
## Course Outline:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assignment*</th>
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| Aug 30| Introduction<br>Dietetics as a Profession<br>Scope of Dietetics Practice<br>Professional Ethics<br>Clinical Dietitians<br>Medical Nutrition Therapy<br>Nutrition Care Process (NCP)<br>Overview<br>Assessment<br>Food and Nutrition Related History<br>Anthropometrics<br>Biochemical Data<br>Nutrition Focused Physical Findings<br>Client History<br>Diagnosis | **Recommended:**<br>
<p>| Sept. 6| Intervention&lt;br&gt;Monitoring/Evaluation&lt;br&gt;PES Statements&lt;br&gt;ADIM(E)&lt;br&gt;Charting and Documentation&lt;br&gt;Health Care Team&lt;br&gt;Interprofessional Practice |                                                                               |</p>
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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading Material</th>
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<tbody>
<tr>
<td>Sept. 13</td>
<td>Charting and Documentation, Delivering Nutrients, Enteral Nutrition</td>
<td>Krause, Chapter 2, 7, 12, 14</td>
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<tr>
<td>Sept. 20</td>
<td>Parenteral Nutrition, Obtaining Science Based Information in Medical Nutrition Therapy</td>
<td>Krause, Chapter 14, DUE: Enteral Calculations Academy website</td>
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<td>DUE: Parenteral Calculations</td>
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<td>Sept. 27</td>
<td>Upper Gastrointestinal Diseases</td>
<td>Krause, Chapter 28, DUE: Parenteral Calculations</td>
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<td>Oct. 4</td>
<td>Exam 1</td>
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<td>Oct. 11</td>
<td>Lower Gastrointestinal Diseases, Thyroid</td>
<td>Krause, Chapter 29, 32, Discussion of Celiac Disease case and Gluten Free Diet</td>
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<td>Oct. 18</td>
<td>Heart Failure and Transplant Pulmonary Disease</td>
<td>DUE: Evaluation of Research Article</td>
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<td>Krause, Chapter 34, 35, Discuss Case Study Assignment</td>
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<tr>
<td>Oct. 25</td>
<td>Endocrine Disorders, Liver Disease, Gallbladder and Pancreatic Disease</td>
<td>Krause, Chapter 30, 32, Discussion of Liver case</td>
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<td>Nov. 8</td>
<td>Exam 2</td>
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**Nov. 15**

| Pulmonary Disease | Kidney Disease | **DUE**: Case study assignment
| Krause, Chapter 35 |
| Krause, Chapter 36 |
| Discussion of Kidney Disease Case |

**Nov. 22**

Thanksgiving Recess

**Nov. 29**

| Cancer Treatment and Recovery |
| HIV |
| Neurologic Disorders |

**Krause, Chapter 37**

**Krause, Chapter 38**

**Krause, Chapter 41, 42**

**Dec. 6**

| Rheumatic Disorders |
| Metabolic Disorders |

**Krause, Chapter 40**

**Krause, Chapter 44**

**Week of Dec 11**

Final Exam

*Other current literature may be assigned for discussion if deemed pertinent by the instructor.*