BIOL 2201 \ Nutrition \ Fall 2016
Online \ 2 credit hours

Instructor: Prof K. Moreland, M.S., R.D. 
Office Hours: TBA
Phone: 713-525-2163
Office: 2nd Floor, Nursing Success Center
Email: morelak@stthom.edu

Course Description
A study of the nutrients in foods and the body’s response. Nutrient requirements associated with health at various life stages will be explored.

Course Prerequisites: None

Nursing Program Requirement: A grade of B or higher in math and science courses.

Goals & Objectives of the Course
Students will achieve the following learning outcomes:

• Identify the role of the nursing professional in nutritional care.
• Describe factors that affect food intake and nutrition.
• Describe the digestion, absorption, function, and food sources of nutrients (carbohydrates, proteins, fats, vitamins, minerals, and water) as they relate to diet and disease prevention.
• Discuss nutritional assessment and support as it relates to nursing practice.
• Explain factors that affect energy balance and requirements.
• Apply principles of normal nutrition throughout the lifespan—maternal, infant, childhood and adolescent, adulthood and elderly nutrition.
• Describe the role and clinical application of nutrition in various disease states.
• Discuss current issues related to food and nutrition for patients/consumers.
• Describe current research relating to food, food additives and supplements, and complementary and alternative medicine.
• Incorporate the concepts of nutrition into a holistic health plan.

Course Materials and Supplies
By Michele Grodner, EdD, CHES, Sylvia Escott-Stump, MA, RD, LDN and Suzanne Dorner, BSN, RN, CCRN

Course Content

I. Introduction to the course – syllabus, objectives, requirements, and grading; application of nutrition to nursing professionals
II. Introduction to nutrition – dietary guidelines, intake patterns, and legislations
III. Factors affecting food habits – economics, geography, culture, and religion
IV. Proteins and amino acids – food sources, digestion, absorption, and function
V. Carbohydrates and fiber – food sources, digestion, absorption, and function
VI. Fats and other lipids – food sources, digestion, absorption, and function
VII. Micronutrients: vitamins, minerals, water – food sources, digestion, absorption and function
VIII. Energy metabolism – energy balance, metabolic rate, body composition, and weight management
IX. Nursing role in nutrition screening and assessment – physical assessment, anthropometric measurements, biochemical parameters, and diet history
X. Lifecycle nutrition – maternal, infant, and childhood/adolescent
XI. Lifecycle nutrition – adulthood and elderly
XII. Dietary supplements; complementary and alternative medicine
XIII. Consumer issues – food safety and additives
XIV. Overview of therapeutic nutrition – nutrition in disease states and nutrition support

Instructional Methods

This course will be online instruction via Blackboard.

Blackboard Supplemental Course Access: Major components of this course including resources and assignments will be posted at UST’s Blackboard which can be accessed through the UST website at http://www.stthom.edu (right column has the Blackboard link).

Grading Procedures

Grades are awarded based on the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>95 - 100</td>
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<tr>
<td>B+</td>
<td>87 - 89</td>
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<tr>
<td>B</td>
<td>84 - 86</td>
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<tr>
<td>C</td>
<td>75 - 77</td>
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<tr>
<td>C+</td>
<td>78 - 80</td>
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<tr>
<td>D+</td>
<td>69 - 71</td>
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<tr>
<td>D</td>
<td>65 - 68</td>
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<tr>
<td>B</td>
<td>81 - 83</td>
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<tr>
<td>C</td>
<td>72 - 74</td>
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Major assignments, due dates, and percentage of grade

Exams:
  Mid-term Exam  25%
  Final Exam     25%

Quizzes:
  12 quizzes (1% of final grade each)  11%

Written Assignments:  24%

Other:  Discussion Board postings  12%
  Class participation           3%
## Course Content Outline and Assignments for Online courses

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Task</th>
<th>Due Date</th>
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<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td><strong>Introduction to course</strong></td>
<td>Study orientation module in BB</td>
<td>All BB interactive module work is due by 11:59 p.m. unless otherwise specified</td>
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<tr>
<td>August 22-28, 2016</td>
<td><strong>Module 1</strong></td>
<td>-Study Textbook Chapter 1 and 2</td>
<td>-DB post due 8/31</td>
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<td><strong>Factors affecting food habits; Consumer issues</strong></td>
<td>-Study module 1 (wellness) and module 2 (Community) in BB and perform all interactive activities</td>
<td>-Quizzes due 9/4</td>
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<td>-Post to discussion board</td>
<td>-Assignment due 9/4</td>
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<td>-Take Quizzes in BB</td>
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<td>-Complete Assignment: Food Composition Table</td>
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<td><strong>Week 2</strong></td>
<td><strong>Module 2</strong></td>
<td>-Study Textbook Chapter 3 and 4</td>
<td>-DB post due 9/8; DB reply due 9/11.</td>
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<tr>
<td>August 29-September 4, 2016</td>
<td><strong>Digestion/Absorption; Carbohydrates and Fiber</strong></td>
<td>-Study Chapter 3 Metabolism/ Digestion and Study Module 2 Carbohydrates and Fiber in BB and perform all interactive activities</td>
<td>-Quizzes due 9/11</td>
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<td>-Post to discussion board</td>
<td>Assignment due 9/11</td>
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<td>-Take Quizzes in BB</td>
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<td></td>
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<td>-Complete Assignment: Digestion Questions</td>
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| Week 4 | Module 3 | Fats and Other Lipids | - Review Text Chapter 3  
|        |          |                     | - Study Textbook Chapter 5  
|        |          |                     | - Study Module 3 *Fats and other lipids* in BB and perform all interactive activities  
|        |          |                     | - Post to discussion board  
|        |          |                     | - Take Quizzes in BB  
|        |          |                     | - Complete Assignment: Fat Absorption Questions  
|        |          |                     | - DB post due 9/14; DB reply due 9/18.  
|        |          |                     | - Quiz due no later than 9/18  
|        |          |                     | - Assignment due on 9/18  
| Week 5 | Module 4 | Proteins and Amino Acids | - Review Textbook Chapter 3  
|        |          |                     | - Study Textbook Chapter 6  
|        |          |                     | - Study Module 4 *Proteins and amino acids* in BB and perform all interactive activities  
|        |          |                     | - Post to discussion board  
|        |          |                     | - Take Quizzes in BB  
|        |          |                     | - Complete Assignment: 24-Hour Food Record  
|        |          |                     | - DB post due 9/21; DB reply due on 9/25.  
|        |          |                     | - Quiz due 9/25  
|        |          |                     | - Assignment due on 9/25  
| Week 6 | Module 5 | Micronutrients | - Study Textbook Chapter 7 and 8  
|        |          |                     | - Study module 5 in BB and perform all interactive activities  
|        |          |                     | - Post to discussion board  
|        |          |                     | - Take Quizzes in BB  
|        |          |                     | - Complete Assignment: Case Study on Kelly  
|        |          |                     | - DB post due 9/28: DB reply due on 10/2  
|        |          |                     | - Quizzes due 10/2  
|        |          |                     | - Assignment due 10/2  
|        |          |                     |
| Week 7  | Module 6  | -Study Textbook Chapter 9  
          | Energy, Weight, and Fitness | -Study module 6 in BB and perform all interactive activities  
          |                        | -Post to discussion board  
          |                        | -Take Quizzes in BB  
          |                        | -Complete Assignment: Case Study on John  
          |          | - DB post due on 10/5; DB reply due on 10/9.  
          |          | -Quizzes due on 10/9  
          |          | -Assignment due on 10/9  
| October 3-9, 2016 |          |          |          |          |          |          |          |
| Week 8  | Module 7  | -Complete mid-term exam. Exam will be posted between 6 am on 10/13 and midnight on 10/14  
          | Mid-term Exam | -Exam due no later than midnight on 3/14  
| October 12-16 |          |          |          |          |          |          |          |
| Week 9  | Module 8  | -Study Textbook Chapter 10  
          | Nutrition Across the Life Span | -Study Module 8 in BB and perform all interactive activities  
          |                        | -Post to discussion board  
          |                        | -Take Quizzes in BB  
          |                        | -Complete Assignment: Nutrition in Aging/Case Study on Mr. Jones  
| October 17-23, 2016 |          | - DB post due 10/19; DB reply due 10/23.  
      |          | -Quizzes due 10/23.  
      |          | -Assignment due on 10/23  
| Week 10 | Module 9  | -Study Textbook Chapter 11  
          | Nutritional Assessment and Patient Care | -Study Module 9 in BB and perform all interactive activities  
          |                        | -Post to discussion board  
          |                        | -Take Quizzes in BB  
          |                        | -Complete Assignment:  
| October 24-30, 2016 |          | -DB post due 10/26; DB reply due on 10/30  
      |          | -Quiz due 10/30.  
      |          | -Assignment due on 10/30.
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<tr>
<th>Week 11</th>
<th>Module 10</th>
<th>Medications &amp; Interactions</th>
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| October 31-November 6, 2016 | **Food Related Issues** | - Study Textbook Chapter 12  
- Study Module 10 in BB and perform all interactive activities  
- Post to discussion board  
- Take Quizzes in BB  
- Complete Assignment: Case Study on Faye  |

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<tr>
<th>Week 12</th>
<th>Module 11</th>
<th>Medications &amp; Interactions</th>
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| November 7-13, 2016 | **Nutrition for Disorders of the GI Tract, Liver, GB, Pancreas and Diabetes** | - Study Textbook Chapters 13, 14, and 15  
- Study Module 11 in BB and perform all interactive activities  
- Post to discussion board  
- Take Quiz in BB  
- Complete Assignment: Case Study on Alan  |

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<tr>
<th>Week 13</th>
<th>Module 12</th>
<th>Medications &amp; Interactions</th>
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</table>
| November 14-20, 2016 | **Nutrition in Metabolic Stress** | - Study Textbook Chapter 16  
- Study Module 12 in BB and perform all interactive activities  
- Post to discussion board  
- Take Quizzes in BB  
- Complete Assignment: Case Study on Kristin  |

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<tr>
<th>Week 14</th>
<th>Thanksgiving Break</th>
<th>Medications &amp; Interactions</th>
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- Quiz due on 11/20.  
- Assignment due on 11/20. |
Week 15
November 28-December 4, 2016

Module 13
Nutrition for Diseases of the Cardiopulmonary System, Kidneys, Cancer, AIDS and Neuropsychiatric Disorders

- Study Textbook Chapters 17, 18, 19, and 20
- Study Module 13 in BB and perform all interactive activities
- Post to discussion board
- Take Quizzes in BB
- Complete Assignment: DASH Diet

Week 16
December 7-8, 2016

Module 14
Final Exam

Complete Final Exam. Exam will be posted between 6 am 12/7 and midnight 12/8.

Submit exam no later than midnight on 12/8.

- DB post due on 11/30; DB reply due on 12/4.
- Quizzes due on 12/4.
- Assignment due on 12/4.

The above schedule may be subject to change in the event of circumstances beyond the instructor’s control. Students will be advised of the changes in a timely fashion.
Course Requirements

Participation: Class participation is required and the student is responsible for all material covered. If student is not able to participate in a class activity, the instructor should be notified immediately – preferably before the missed session or the student may relinquish their ability to make up missed material. Withdrawal from the course is the student's responsibility.

Computer Use Policy: You should have access to a computer meeting the Blackboard requirements in order to complete this online course.

Student Accommodations
In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, the instructor will make all possible and reasonable adjustments in policies, practices, services, and facilities to ensure equal and optimal educational programs and activities. Whenever a special accommodation is necessary to ensure access to full participation by students with disabilities, the student must inform the instructor of any disability or needed accommodations.

The University Office for ADA Compliance may ask to seek proof of disability and specify accommodations as requested by students. Students with special needs should inform the instructor within the first two weeks of class. Students must also contact the Office of Counseling and Disability Services (2nd floor of Crooker Center) by calling Dr. Rose Signorello at 713-525-3162 or Ms. Debbie Jones at 713-525-6953; the Office is open 8-5 Monday through Friday.

The accommodations will become official when the instructor receives official, written notification from the officer in charge of ADA compliance. Students should contact the instructor immediately if new needs arise. Students can see the instructor before or after class or request another time to discuss any matters. All information will be kept confidential.

Academic integrity
UST Students should demonstrate integrity in all of their activities, both personal and professional. Any unprofessional behavior or failure to adhere to the honor system is a serious violation of integrity and may result in failure of the course.

Plagiarism involves taking credit for another person’s work. Students must cite sources in APA style any time source material (e.g., books, journal articles, internet material, etc.) has been used, paraphrased, or quoted. Quoted material must be placed in quotation marks and referenced appropriately. Please note that copying information directly from a source without giving credit, using friends’ work, buying papers online, re-using one’s own work from previous classes, etc., all constitute plagiarism.
Any instance of plagiarism will result in failure of the course and may result in dismissal from UST. Ignorance is no excuse; if a student remains uncertain about the guidelines for using and citing source material after these issues are addressed in class, the student should seek input from the instructor.

Please note that Turn It In software will be used routinely to help address insufficient documentation; this software can detect plagiarism.