Course Description:
This course is designed to provide the student with an understanding of the fundamental concepts of human nutrition, including digestion, absorption, metabolism, and functions of nutrients as they relate to human health and disease. The course will include weekly homework, reading the textbook and chapter notes. There will be assignments throughout the semester and 4 exams.

The Nutrition Program offers a major and a minor. See the Department website for more information.

Prerequisites:
Completion of General Studies requirements in Quantitative Literacy and Written Communication or permission of instructor.

Credits:
3 credit hours

Required Materials:
Text:

iClickers:
Available at the Auraria Bookstore. Needed by SECOND week of class.

Online Programs:
- My Diet Analysis (an online diet analysis program) needs to be purchased in order to complete the Diet Analysis Projects. If the textbook is purchased new at the Auraria Bookstore it will come with the online access code. Access may also be purchased separately at the bookstore or online at www.mydietanalysis.com.
- You will need Microsoft Word and Excel to complete the assignments. These are FREE to MSU Denver students. Download via Office365, your MSU Denver Email.
- You will need to have Adobe Acrobat, Shockwave and QuickTime reader installed on your machine. See Blackboard Learn for links to free downloads.

Computer Skills:
- Familiarity with Windows.
- Familiarity with a web browser (for example, Internet Explorer, Mozilla) and using the internet
- How to use e-mail; send and retrieve attachments
- Basic word processing skills.
Course Objectives:
1. Describe the role of nutrition in health and individual well-being throughout the life cycle.
2. Describe how the scientific method has led to current nutrition knowledge.
3. Identify the essential nutrients, their functions and significant food sources.
4. Discuss the relationship between nutrition and reducing risk of disease.
5. Recognize the mechanisms of digestion, absorption, and metabolism.
6. Recognize the specific nutritional considerations throughout the life cycle.
8. Review the relationship between nutrition and activity.
9. Identify nutrition resources available to the public.
10. Analyze dietary intake data for deficiency, excess, and/or relationship to disease risk.

For Chapter Objectives, see each Learning Module found in the Content link.

Foundation Knowledge and Skills Met by the Course:
• Exercise physiology
• Microbiology
• Nutrient metabolism
• Fluid and electrolyte requirements
• Scientific method
• Calculate and interpret nutrient composition of foods
• Nutrition and metabolism
• Food safety and sanitation
• Influence of age, growth, and normal development on nutritional requirements
• Dietary supplements
• Determine nutrient requirements across the lifespan

Grading scale and breakdown:

<table>
<thead>
<tr>
<th>Grading Scale</th>
<th>Points Value</th>
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<tbody>
<tr>
<td>A</td>
<td>730-815</td>
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<tr>
<td>B</td>
<td>648-729</td>
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<tr>
<td>C</td>
<td>567-647</td>
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<tr>
<td>D</td>
<td>485-566</td>
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<tr>
<td>F</td>
<td>less than 485</td>
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<table>
<thead>
<tr>
<th>Coursework</th>
<th>Points Value</th>
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</thead>
<tbody>
<tr>
<td>Homework (13 out of 14*)</td>
<td>130</td>
</tr>
<tr>
<td>Exams (3)</td>
<td>300</td>
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<tr>
<td>Final Exam</td>
<td>100</td>
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<tr>
<td>Diet Analysis Projects (4)</td>
<td>200</td>
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<tr>
<td>Fast Food Fantasy</td>
<td>26</td>
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<tr>
<td>iClicker &amp; In-Class Points</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>815</td>
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</tbody>
</table>
Attendance/Evaluation/Homework/Exams and Assignments:

Attendance: Regular attendance is expected and ESSENTIAL to pass this class. If you are late, leave early or miss class, it is your responsibility to attain missed information from a fellow student.

Each class that you attend provides you with a 1 point of extra credit, up to a maximum of 15 points. To earn this extra credit you must be present in class at role call, which is taken at the start of each class. If you miss role call or are late to class you will not earn the extra credit.

Blackboard Learning Management System: In this course you will use Blackboard to access course materials, assignments, homework and more.

E-Mail: Please use the Course Messages within Blackboard. Students are expected to check Blackboard several times weekly, every week during the semester. In the event that Blackboard Learn is not available, you may email me thought Connect U using only your MSU Denver email account. It is college policy to use this e-mail account so I will not reply to non-msudenver.edu emails.

iClicker & In Class Exercises: Points are earned in class through iClicker and in-class collaborative work. These points cannot be made up outside of class for any reason. Students will use Blackboard in this course. It is essential that students read each chapter in the text AHEAD of the scheduled lecture class as iClicker/In Class Exercises will cover readings PRIOR to lecture classes. Some iClicker quiz questions will also assess this aspect of student preparedness.

Group Work: This class involves group collaboration. While it is often easier to complete work individually and simply listen to the instructor, greater learning occurs with a varied educational environment, which includes group work. Other benefits include instructor and student dialogue and meeting other students. Plan to be a cooperative member of groups in this class.

Cell Phone Etiquette: All cell phones should be turned off in class. Cell phone usage (including text messaging) is not permitted while in the classroom. Computers used in classrooms should be used for course purposes ONLY.

Homework: This course includes weekly homework activities administered throughout the semester via Blackboard. Each homework activity is worth 10 points. Some weeks there may be more than 1 homework activity due. See the Course Schedule for specifics. You have an unlimited time to complete the homework during the week it is assigned. Each homework activity will be available ONLY during the time period listed on the schedule. Homework opens on the Monday morning prior to the due date and closes the following Sunday at 11:59 p.m. You may complete the online homework whenever you are ready within that time frame and you may go back to uncompleted homework during the week so long as you have not submitted it. It is your responsibility to plan ahead, give yourself enough time to complete the homework, and enough time if you have technical difficulties. If you do not complete homework by the due date, a "0" will be recorded in the gradebook for the respective assignment.

Late Policy for Homework: All homework should be completed by the due date listed in the schedule. If you have a medical excuse you will be permitted to complete homework within the timeframe of the excuse for full credit. If you do not have a medical excuse you will NOT be permitted to complete the missed work. After documentation of the medical excuse has
been received, the instructor will reopen the homework for the amount of days excused. If
you have a death in the family please contact your instructor to make arrangements. Please
note that documentation of the death in the family needs to be provided.

*Please Note: Your lowest homework grade is dropped, so if you miss a homework assignment,
this will count as your dropped grade. Note that some weeks may have more than 1
homework assignment, so if you were to miss BOTH during that week, only one would be
dropped.

**Exams:** There are four exams administered throughout the semester. Exams will be taken online
with a time limit. Use the study guides, textbook, chapter notes, and assignments to study for
exams. Make sure you know the closing times of each exam. It is your responsibility to plan
ahead. You must take each exam within the time frame listed in the schedule. Please take all
exams from a reliable computer with a high-speed internet connection. It is critical to AVOID
opening NEW browser windows while taking exams.

You have the option to take the exams at the Tivoli Testing Center. You MUST notify the
instructor at least 2 weeks prior to the testing date for approval and arrangements.

**Late Policy for Exams:** The exams should be completed by the due date listed in the schedule.
If you have a medical excuse you will be permitted to take the exam within the timeframe of
the excuse for full credit. If you do not have a medical excuse you will NOT be permitted to
complete the exam. After documentation of the medical excuse has been received, the
instructor will reopen the exam for the amount of days excused. If you have a death in the
family please contact your instructor to make arrangements. Please note that documentation of
the death in the family needs to be provided.

**Assignments:**

**Diet Analysis Project:** You will write 3 essay-style papers for this course that are sections of the
large class project called the Diet Analysis Project. Papers will only be accepted in WORD
format, (typed only) submitted via e-mail using Blackboard. Full paper requirements are
posted in Blackboard.

The Diet Analysis Project requires use of the MyDietAnalysis.com online program. Metro
provides computer access for all students who do not have home computers. If you
experience problems with the MyDietAnalysis.com program, please contact Student Tech
Support at 1-800-667-6337 during regular business hours. Please do this prior to contacting
the instructor, as the instructor cannot solve programming issues. This project is to be
completed individually.

**Diet Analysis Project 1** includes an analysis of the MyDietAnalysis.com (MDA) reports,
specifically addressing macronutrients and food groups from the MyPlate food guide by
using nutritional standards set forth in class. From personal MDA reports, students will
develop a hypothesis to test for improving intake of one of the specific macronutrients.
Hypothesis development will include literature review providing scientific basis for
hypothesis.

**Diet Analysis Project 2** includes analysis of micronutrients obtained in the diet, assessing
nutrient values and determining ways to improve dietary intakes. From personal MDA
reports, students will develop a hypothesis to test for improving intake of one of the specific
micronutrients. Hypothesis development will include literature review providing scientific
basis for hypothesis.
Diet Analysis Project 3: Students design a 3-day diet to test hypothesis developed in Diet Analysis Projects 1 & 2, analyze results and draw conclusions using descriptive statistics to assess precision of measurements. Students will also describe possible source of errors, such as data collection, dietary analysis tool, and report on avenues for future research, such as methods for improvement in assessing diets in the general public.

Fast Food Fantasy Assignment: There is also 1 additional required assignment due during the semester, entitled Fast Food Fantasy. The assignment is worth 26 points and is submitted as a written paper within the ASSIGNMENTS link in this course.

Late Policy for Assignment Submissions: An assignment may be submitted up to one week after the due date and will incur an automatic 10% deduction. No assignments will be accepted more than 1 week after the due date for any reason.

Extra Credit: Extra credit assignments are not given on an individual student basis.

Instructor Availability: The best way to communicate with me is via Course Messages within Blackboard. I have found that most course issues can be settled via e-mail.

Classroom Code of Conduct
Class Conduct: Students spend significant costs on college tuition. As such class behavior matters to each student in the classroom and to the instructor to provide the optimal learning environment. The following behaviors are considered inappropriate in the college classroom setting:
1. Chronic tardiness or repeated early class departure
2. Sleeping in class, Overt inattentiveness
3. Disruptive side conversations
4. Any aggressive behavior
5. Monopolizing class, student and instructor time

Emergencies: In case of an emergency, such as a medical emergency, medical excuse, or death in the family, written documentation must be provided to the instructor in order to make up any course work missed for those days. A written medical excuse must include dates, health care provider name (or other appropriate authority), credentials, and phone number. A written medical excuse from a family member will not be accepted.

University and Department Policies:
Please see Online Syllabus
### NUT 2040, Introduction to Nutrition, Sample Class Schedule

The table below provides an "at-a-glance" overview of the course topics, reading, and activities etc. Use this as a planning tool and checklist to help stay on track throughout the course.

*Please note that you are required to read chapters and complete homework PRIOR to coming to class.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Assigned Readings*</th>
<th>Class Lecture Topic</th>
<th>Assignments and Activities</th>
</tr>
</thead>
</table>
| Jan 20-25   | **Chapter 1:** Linking Food, Function, and Health  
**In Depth:** New Frontiers in Nutrition and Health  
**Chapter 2:** Designing a Healthful Diet  
**In Depth:** Eating Wisely | **Chapter 1:** Linking Food, Function, and Health | From the Syllabus, Schedule & Course Info  
Link:  
1. Print the Schedule.  
2. Read the Syllabus, Schedule, Instructor Info.  
3. Purchase text, iClicker and set up profile in MyDietAnalysis.com  
Modules 1 & 2 (See Content Link):  
1. See Module Objectives and Notes.  
2. Complete Modules 1 & 2 Homework* due **Sunday, 11:59 pm.**  
4. MyDietAnalysis.com Reports due next week. See Assignments link. |
| Jan 26-Feb 1| **Chapter 3:** The Human Body: Are We Really What We Eat?  
**In Depth:** Disorders Related to Specific Foods | **Chapter 2:** Designing a Healthful Diet | Module 3:  
1. See Module Objectives & Notes  
2. Complete Module 3 Homework due **Sunday 11:59 pm.**  
3. MyDietAnalysis.com Reports due **Sunday, 11:59 pm** |
| Feb 2-8     | **Chapter 4:** Carbohydrates  
**In Depth:** Diabetes | **Chapter 3:** The Human Body: Are We Really What We Eat? | Module 4:  
1. See Module Objectives & Notes  
2. Complete Module 4 Homework due **Sunday, 11:59 pm.**  
3. Fast Food Fantasy due next week. See Assignments link. |
| Feb 9-15    | **Chapter 5:** Fats  
**In Depth:** Cardiovascular Disease | **Chapter 4:** Carbohydrates  
**In Depth:** Diabetes | Module 5:  
1. See Module Objectives & Notes  
2. Complete Module 5 Homework due **Sunday, 11:59 pm.**  
3. Fast Food Fantasy due **Sunday, 11:59 pm.** |
| Feb 16-22   | **Chapter 6:** Proteins  
**In Depth:** Vitamins and Minerals | **Chapter 5:** Fats  
**In Depth:** Cardiovascular Disease | Module 6:  
1. See Module Objectives & Notes  
2. Complete Module 6 Homework due **Sunday, 11:59 pm.**  
3. Ch 1-4 Exam **Tuesday, In Class**  
5. Diet Analysis Project 1 due next week. See Assignments link. |
| Feb 23-Mar 1| **Chapter 7:** Nutrients Involved in Fluid & Electrolyte Balance  
**In Depth:** Alcohol | **Chapter 6:** Proteins  
**In Depth:** Vitamins and Minerals | Module 7:  
1. See Module Objectives & Notes  
2. Complete Module 7 Homework due **Sunday, 11:59 pm.**  
3. Diet Analysis Project 1 due **Sunday, 11:59 pm.** |
<p>| Mar 2-8     | <strong>Chapter 8:</strong> Nutrients Involved | <strong>Chapter 7:</strong> Nutrients | Module 8: |</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>Chapter/Module</th>
<th>Module Homework/Due Date</th>
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<tbody>
<tr>
<td>Mar 9-15</td>
<td><strong>Nutrients Involved in Bone Health</strong></td>
<td><strong>Cancer</strong></td>
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<td></td>
<td><strong>Antioxidant Function and Vision</strong></td>
<td><strong>Alcohol</strong></td>
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<tr>
<td>Mar 16-22</td>
<td><strong>Chapter 9: Nutrients Involved in Bone Health</strong></td>
<td><strong>Module 9:</strong></td>
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<td></td>
<td><strong>In Depth:</strong></td>
<td>1. See Module Objectives &amp; Notes</td>
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<td>2. Complete Module 8 Homework <strong>due Sunday, 11:59 pm.</strong></td>
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<tr>
<td>Mar 23-29</td>
<td><strong>No assigned reading.</strong></td>
<td><strong>Spring Break</strong></td>
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<tr>
<td>Mar 30-</td>
<td><strong>Nutrients Involved in Energy Metabolism &amp; Blood</strong></td>
<td><strong>Module 10:</strong></td>
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<td>Apr 5</td>
<td><strong>In Depth:</strong></td>
<td>1. See Module Objectives &amp; Notes</td>
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<td>2. Complete Module 10 Homework <strong>due Sunday, 11:59 pm.</strong></td>
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<td><strong>Dietary Supplements</strong></td>
<td>3. Diet Analysis Project 2 <strong>due Sunday, 11:59 pm</strong></td>
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<td>Apr 6-12</td>
<td><strong>Chapter 11: Achieving &amp; Maintaining a Healthful</strong></td>
<td><strong>Module 11:</strong></td>
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<td></td>
<td><strong>Body Weight</strong></td>
<td>1. See Module Objectives &amp; Notes</td>
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<td><strong>In Depth:</strong></td>
<td>2. Complete Module 11 Homework <strong>due Sunday, 11:59 pm.</strong></td>
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<td>3. Diet Analysis Project 3 <strong>due next week.</strong></td>
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<td>Apr 13-19</td>
<td><strong>Nutrition &amp; Physical Activity: Keys to Good</strong></td>
<td><strong>Module 12:</strong></td>
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<td></td>
<td><strong>Health</strong></td>
<td>1. See Module Objectives &amp; Notes</td>
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<td><strong>In Depth:</strong></td>
<td>2. Complete Module 12 Homework <strong>due Sunday, 11:59 pm.</strong></td>
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<td><strong>Ergogenic Aids</strong></td>
<td>3. Diet Analysis Project 3 <strong>due Sunday, 11:59 pm</strong></td>
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<td>Apr 20-26</td>
<td><strong>Chapter 13: Food Safety &amp; Technology</strong></td>
<td><strong>Module 13:</strong></td>
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<td></td>
<td><strong>In Depth:</strong></td>
<td>1. See Module Objectives &amp; Notes</td>
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<td>2. Complete Module 13 Homework <strong>due Sunday, 11:59 pm.</strong></td>
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<td>3. Ch 9-11 Exam <strong>Tuesday, In Class</strong></td>
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<tr>
<td>Apr 27-</td>
<td><strong>Nutrition Through the Lifecycle: Pregnancy &amp; the</strong></td>
<td><strong>Module 14:</strong></td>
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<td>May 3</td>
<td><strong>First Year of Life</strong></td>
<td>1. See Module Objectives &amp; Notes</td>
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<td></td>
<td><strong>In Depth:</strong></td>
<td>2. Complete Module 14 Homework <strong>due Sunday, 11:59 pm.</strong></td>
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<tr>
<td>May 4-10</td>
<td><strong>Review for Final Exam</strong></td>
<td><strong>Prepare for Cumulative Final:</strong></td>
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<tr>
<td></td>
<td><strong>Chapter 14: Nutrition Through the Lifecycle:</strong></td>
<td>1. Review All Study Guides</td>
</tr>
<tr>
<td></td>
<td><strong>Pregnancy &amp; the First Year of Life</strong></td>
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<tr>
<td>May 11-16</td>
<td><strong>Final Exam Week</strong></td>
<td><strong>Date TBD</strong></td>
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<td></td>
<td></td>
<td><strong>Take Cumulative Final Exam IN CLASS</strong></td>
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