



COURSE OUTLINE: NUTR3150 - SCIENCE OF NUTRITION

Prepared: Ann Boyonoski

Approved: Bob Chapman, Dean, Health

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| Course Code: Title | NUTR3150: SCIENCE OF NUTRITION |
| Program Number: Name | 3401: HONOURS BSCN |
| Department: | BSCN - NURSING |
| Academic Year: | 2024-2025 |
| Course Description: | This course will explore the science and fundamentals of human nutrition, and the roles that various nutrients play in both health and illness across the lifespan. Students will learn how nutrition influences an individual's health. The course will also investigate metabolic processes, nutritional conditions, and nutrition related diseases which impact body functioning. |
| Total Credits: | 3 |
| Hours/Week: | 3 |
| Total Hours: | 36 |
| Prerequisites: | CHEM1150 |
| Corequisites: | There are no co-requisites for this course. |
| Essential Employability Skills (EES) addressed in this course: | <p>EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.</p> <p>EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.</p> <p>EES 3 Execute mathematical operations accurately.</p> <p>EES 4 Apply a systematic approach to solve problems.</p> <p>EES 5 Use a variety of thinking skills to anticipate and solve problems.</p> <p>EES 6 Locate, select, organize, and document information using appropriate technology and information systems.</p> <p>EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.</p> <p>EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others.</p> <p>EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.</p> <p>EES 10 Manage the use of time and other resources to complete projects.</p> <p>EES 11 Take responsibility for ones own actions, decisions, and consequences.</p> |
| General Education Themes: | Science and Technology |
| Course Evaluation: | Passing Grade: 65%, A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation. |



Other Course Evaluation & Assessment Requirements:

Students will complete 4 Special Topics assignments, Literature Review, Midterm, & Final

Course Outcomes and Learning Objectives:

| Course Outcome 1 | Learning Objectives for Course Outcome 1 |
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| Develop an understanding for the role of nutrition in health. Recognize the mind-body-cultural connections in relation to one's dietary selections. | 1.1 Develop an understanding for the role of nutrition in health. 1.2 Recognize the mind-body-cultural connections in relation to one's dietary selections. |
| Course Outcome 2 | Learning Objectives for Course Outcome 2 |
| Identify tools available for assessing and planning a healthy diet. | 2.1 Understand how requirements and recommendations are determined. 2.2 Explore the various tracking tools, food guides, laboratory tests available to assess diet. |
| Course Outcome 3 | Learning Objectives for Course Outcome 3 |
| Identify the sources, functions, and utilization of common macronutrients. | 3.1 Identify the sources, functions, and utilization of the macronutrients. -Carbohydrates -Fats/Lipids -Proteins 3.2 Identify recommended intakes. |
| Course Outcome 4 | Learning Objectives for Course Outcome 4 |
| Identify the sources, functions, and utilization of common micronutrients. | 4.1 Identify the sources, functions, and utilization of common micronutrients. -vitamins -minerals 4.2 Identify significant deficiency and/or toxicity concerns. |
| Course Outcome 5 | Learning Objectives for Course Outcome 5 |
| Apply the concepts of energy balance and a healthy weight. | 5.1 Discuss calories in, calories out (CICO), macronutrients, fad diets, and Glucagon-like Peptide-1 (GLP-1) receptor agonist medications. |
| Course Outcome 6 | Learning Objectives for Course Outcome 6 |
| Compare and contrast nutritional requirements at various ages and stages of development. Understand the role that nutritional genomics plays in body functioning. | 6.1 Understand the differing nutritional needs throughout the life-span. 6.2 Discuss how genetics may play a role in differing nutritional needs. |
| Course Outcome 7 | Learning Objectives for Course Outcome 7 |
| Relate the concept of diet to the prevention and management of various diseases. | 7.1 Examine the impact of diet on the prevention/development and management of common health conditions - Diabetes |



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| | Explore rationale for nutritional substances provided when patients cannot ingest or digest foods by mouth. | Mellitus, Cardiovascular Disease, Cancer, and Obesity. 7.2 Discuss alternative feeding strategies - parenteral vs enteral feeding. |
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Evaluation Process and Grading System:

| Evaluation Type | Evaluation Weight |
|------------------------|--------------------------|
| Final Exam | 20% |
| Media Review | 15% |
| Midterm | 20% |
| Special Topics X4 | 45% |

Date: August 15, 2024

Addendum: Please refer to the course outline addendum on the Learning Management System for further information.