| 6 | ILLINOIS | VALLEY COMMUNITY COLLEGE |
|--------------------------------------|-----------------------|--|
| | CC | URSE OUTLINE |
| DIVI | SION: Health P | rofessions |
| COL | JRSE: ALH 100 | 00 Introduction to Nutrition |
| Date: Fall, 201 | 18 | |
| Credit Hours: 3 | | |
| Prerequisite(s): Delivery Method: | None Lecture Seminar | 0 Contact Hours (1 contact = 1 credit hour) 0 Contact Hours (1 contact = 1 credit hour) |
| | ☐ Lab | 0 Contact Hours (2-3 contact = 1 credit hour) |
| | Clinical | 0 Contact Hours (3 contact = 1 credit hour) |
| | ⊠ Online ☐ Blended | |
| Offered: 🔀 Fall | Spring | Summer |

IAI Equivalent - Only for Transfer Courses-go to http://www.itransfer.org:

CATALOG DESCRIPTION:

The objective of this course is to provide the student with the scientific principles of nutrition across the lifespan and to acquaint him/her with the recent scientific findings in the nutrition field. With the knowledge acquired, the student should be able to evaluate her/his daily lifestyle thereby enabling her/him to reach and maintain optimum health, nutrition, and fitness. The nutrition student should be able to evaluate her/his personal food choices as well as to evaluate nutritional information found in popular books and magazines and scientific nutritional journals. The student will examine the basic concepts of nutrition as they apply to various stages of the life cycle and to common disease processes.

GENERAL EDUCATION GOALS ADDRESSED

[See last page for Course Competency/Assessment Methods Matrix.] Upon completion of the course, the student will be able: [Choose up to three goals that will be formally assessed in this course.]

| To apply analytical | and problem | solving skills | s to personal, | social, | and prof | fessional | issues | and |
|---------------------|-------------|----------------|----------------|---------|----------|-----------|--------|-----|
| situations. | | | | | | | | |

- To communicate successfully, both orally and in writing, to a variety of audiences.
- To construct a critical awareness of and appreciate diversity.
- To understand and use technology effectively and to understand its impact on the individual and society.
- To develop interpersonal capacity.
- To recognize what it means to act ethically and responsibly as an individual and as a member of society.
- To recognize what it means to develop and maintain a healthy lifestyle in terms of mind, body, and spirit.
- To connect learning to life.

EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:

[Outcomes related to course specific goals. See last page for more information.]

Upon completion of the course, the student will be able to:

Upon completion of the course, the student will be able to:

1. Identify the basic principles of nutrition

- 1.1 Identify six (6) classes of nutrients and their primary function.
- 1.2 Define at least five (5) characteristics of a nutritious diet.

1.3 Describe the mechanical and chemical digestive process.

- 1.4 Identify factors that can affect food safety
- 1.5 Discuss the use and regulation of additives in our food supply

2. Evaluate scientific research studies and nutritional information found in scientific journals, popular magazines, books, and on the internet.

- 2.1 List and describe sources of nutritional information. (scientific and nonscientific).
- 2.2 Evaluate various nutritional information sources for accuracy, reliability and timeliness.
- 2.3 Discuss qualification of individuals and organizations dispersing nutritional information.
- 2.4 Discuss the scientific process and the terms used in research design.

3. Apply the concepts diet planning skills in developing a nutritious diet using nutritionally dense food.

- 3.1 Identify various food groups, serving sizes and recommended servings suggested for use by the USDA MyPlate.
- 3.2 Compare the USDA MyPlate with other food guidance systems (Asian, Mediterranean, older adult, child and vegetarian).
- 3.3 Discuss the relationship of the five characteristics of a nutritious diet to the MyPlate and other food guidance systems.

4. Identify the Dietary guidelines and Daily Values developed by the USDA, WHO, AMERICAN HEART ASSOCIATION, AMERICAN CANCER SOCIETY, and HEALTHY PEOPLE 2020.

- 4.1 Describe the role of various agencies in setting nutrition standards and guidelines.
- 4.2 Identify the Dietary Guidelines for Americans developed by the Academy of Nutrition and Dietetics.
- 4.3 Use the Ingredient List and Nutrition Facts panel on food labels to make healthy food choices.
- 4.4 Identify various health claim messages allowed on food labels.
- 4.5 Discuss the role of Daily Values and Dietary Reference Intakes in relationship to information of food labels.
- 5. Evaluate his/her diet and fitness level by using recent findings on weight control and physical fitness.
 - 5.1 Discuss physical, emotional and psychological effects of alternations in body size and appearance.
 - 5.2 Discuss various procedures used to determine body fat.
 - 5.3 Discuss theories of obesity.
 - 5.4 Compare and contrast various diets and weight loss methods.
 - 5.5 Discuss the relationship of diet, exercise and behaviors modification in contributing to a sound weight control program.

6. Discuss basic concepts of nutrition as they apply to various stages of the life cycle and common disease processes.

- 6.1 Discuss the impact of prenatal nutrition and lifestyle on the developing fetus.
- 6.2 Compare and contrast the benefits/risks of breast feeding and formula feeding.
- 6.3 Discuss the nutrient needs of the infant, preschool and school age child.
- 6.4 Discuss the nutrient needs and eating patterns of the adolescent.
- 6.5 Describe the special nutritional needs of the older adult.
- 6.6 Discuss the eating and lifestyle habits that promote health and wellness in the older adult.
- 6.7 Discuss the need and scientific principles involved in alternative feeding methods.
- 6.8 Describe the relationship between various disease states (including cardiovascular disease, diabetes, cancer and HIV) and nutrition.
- 6.9 Discuss the role of nutritional assessment in medical nutritional therapy.
- 6.10 Discuss the implications of food-drug interactions.

MAPPING LEARNING OUTCOMES TO GENERAL EDUCATION GOALS

[For each of the goals selected above, indicate which outcomes align with the goal.]

| Goals | Outcomes |
|-------------------------------------|---|
| First Goal | |
| To recognize what it | Apply the concepts diet planning skills in developing a |
| means to develop | nutritious diet using nutritionally dense food. |
| and maintain a | , |
| healthy lifestyle in terms of mind, | Discuss the basic concepts of nutrition as they apply |
| body, and spirit. | to various stages of the life cycle and common disease processes. |

COURSE TOPICS AND CONTENT REQUIREMENTS:

- Unit 1: Chapter 1 and 2 Food Choices/Nutrition Tools
- Unit 2: Chapter 3 and 4 Remarkable Body/Carbohydrates
- Unit 3: Chapter 5 and 6 Lipids and Proteins
- Unit 4: Chapter 7 and 8 Vitamins, Water/Minerals
- Unit 5: Chapter 9 and 10 Energy Balance Healthy Body Weight/Performance Nutrition
- Unit 6: Chapter 11 and 12 Diet/Health Food Safety/Technology
- Unit 7: Chapter 13 and 14 Mother/Infant, Child/Teen/Older Adult
- Unit 8: Chapter 15 Hunger and Future of Foods

Please note: The chapters of the course are broken down unit the units noted above. In addition, the exams are broken down by units as noted above.

INSTRUCTIONAL METHODS:

Audiovisual Aids

- Audiovisual Aids
- Quizzes
- Exams
- Case Studies
- Article Evaluation
- Diet Skill Building Activities
- Projects
- MindTap

INSTRUCTIONAL MATERIALS:

Sizer and Whitney (2017) <u>Nutrition Concepts and Controversies.</u> Cengage Learning ISBN # ISBN 9781337127547

Mind Tap software code

STUDENT REQUIREMENTS AND METHODS OF EVALUATION:

Your final semester grade will be determined by calculating the percentage of total points scored out of all of the quizzes, exams and assignments. The following grading scale will be used: (Grade is calculated by: the total points earned divided by points possible).

A= 90-100 B= 80-89 C= 70-79 D= 60-69 F= 0-59

| Health Professions ALH | Assessment Methods Matrix Assessment Options | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|----------------|--------------|----------------|----------|--------------------|----------------|---------|---------------|------------------------------------|-------------------|---------------------------------|---------------------------|----------------------|-------------|-----------------|----------------------|---------------------|---------------------|-----------------------------------|----------------------|-------------------------------|---------------------------|------------------|------------------|----------------------------|----------------|-------------------|------------|-----------|----------------|------------|
| 1000 | | | | | | | | | | | | / 101 | | 0 | 0111 | - - F | 5110 | | | | | | | | | | | | | | | |
| For each competency/outcome place an "X" below the method of assessment to be used. | Assessment of Student Learning | Article Review | Case Studies | Group Projects | Lab Work | Oral Presentations | Pre-Post Tests | Quizzes | Written Exams | Artifact Self Reflection of Growth | Capstone Projects | Comprehensive Written Exit Exam | Course Embedded Questions | Multi-Media Projects | Observation | Writing Samples | Portfolio Evaluation | Real World Projects | Reflective Journals | Applied Application (skills) Test | Oral Exit Interviews | Accreditation Reviews/Reports | Advisory Council Feedback | Employer Surveys | Graduate Surveys | Internship/Practicum /Site | Licensing Exam | In Class Feedback | Simulation | Interview | Written Report | Assignment |
| Assessment Measures – Are direct or indirect as indicated. List competencies/outcomes below. | Direct/ Indirect | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | | | | | D | D | | | | | | |
| 1. Identify the basic principles of nutrition | | Х | × | | | | | × | × | | | | | | | | | | | | | | | | | | | | | | | × |
| 1.1 Identify six (6) classes of nutrients and their primary function. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 Define at least five (5) characteristics of a nutritious diet.1.3 Describe the mechanical and chemical digestive process. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.4 Identify factors that can affect food safety. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.5 Discuss the use and regulation of additives in our food supply. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Course Competency/Assessment Methods Matrix

| · · · · · · · · · · · · · · · · · · · | | | | | | | | | 1 | - | | | | | | |
|---------------------------------------|---|-----|-------|----------|---|------|-------|------|-------|---|------|------|--|------|------|---|
| 2. Evaluate scientific research | | | | | | | | | | | | | | | | |
| studies and nutritional | | | | | | | | | | | | | | | | |
| information found in scientific | > | < × | | \times | × | | | | | | | | | | | × |
| journals, popular magazines, | | | | | | | | | | | | | | | | |
| books, and on the internet. | | | | | | | | | | | | | | | | |
| 2.1 List and describe sources of | | | | | | | | | | | | | | | | |
| nutritional information. (scientific | | | | | | | | | | | | | | | | |
| and nonscientific). | | | | | | | | | | | | | | | | |
| 2.2 Evaluate various nutritional | | | | | | | | | | | | | | | | |
| information sources for accuracy, | | | | | | | | | | | | | | | | |
| reliability and timeliness. | | | | | | | | | | | | | | | | |
| 2.3 Discuss qualification of | | | | | | | | | | | | | | | | |
| individuals and organizations | | | | | | | | | | | | | | | | |
| dispersing nutritional information. | | | | | | | | | | | | | | | | |
| 2.4 Discuss the scientific process | | | | | | | | | | | | | | | | |
| and the terms used in research | | | | | | | | | | | | | | | | |
| design. | | | | | | | | | | | | | | | | |
| 3. Apply the concepts diet | | | | | | | | | | | | | | | | |
| planning skills in developing a | | | | | | | | | | | | | | | | |
| nutritious diet using | , | < | | | × | | | | | | | | | | | × |
| nutritionally dense food. | | | | | | | | | | | | | | | | |
| 3.1 Identify various food groups, | | | | | | | | | | | | | | | | |
| serving sizes and | | | | | | | | | | | | | | | | |
| recommended servings | | | | | | | | | | | | | | | | |
| suggested for use by the USDA | | | | | | | | | | | | | | | | |
| MyPlate. | | | | | | | | | | | | | | | | |
| 3.2 Compare the USDA MyPlate | | | | | | | | | | | | | | | | |
| with other food guidance | | | | | | | | | | | | | | | | |
| systems (Asian, Mediterranean, | | | | | | | | | | | | | | | | |
| older adult, child and | | | | | | | | | | | | | | | | |
| vegetarian). | | | | | | | | | | | | | | | | |
| 3.3 Discuss the relationship of the | | | | | | | | | | | | | | | | |
| five characteristics of a | | | | | | | | | | | | | | | | |
| nutritious diet to the MyPlate | | | | | | | | | | | | | | | | |
| and other food guidance | | | | | | | | | | | | | | | | |
| systems. | | | | | | | | | | | | | | | | |
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| 4. Identify the Dietary | | | | | | | | | | | | | | | | | | |
| guidelines and Daily Values | | | | | | | | | | | | | | | | | | |
| developed by the USDA, WHO, | × | × | | | \times | × | | | | | | | | | | | | × |
| AMERICAN HEART ASSOCIATION, | . , | | | | | | | | | | | | | | | | | |
| AMERICAN CANCER SOCIETY, | | | | | | | | | | | | | | | | | | |
| and HEALTHY PEOPLE 2020. | | | | | | | | | | | | | | | | | | |
| 4.1 Describe the role of various | | | | | | | | | | | | | | | | | | |
| agencies in setting nutrition | | | | | | | | | | | | | | | | | | |
| standards and guidelines. | | | | | | | | | | | | | | | | | | |
| 4.2 Identify the Dietary Guidelines | | | | | | | | | | | | | | | | | | |
| for Americans developed by | | | | | | | | | | | | | | | | | | |
| the Academy of Nutrition and | | | | | | | | | | | | | | | | | | |
| Dietetics. | | | | | | | | | | | | | | | | | | |
| 4.3 Use the Ingredient List and | | | | | | | | | | | | | | | 1 | | | |
| Nutrition Facts panel on food | | | | | | | | | | | | | | | | | | |
| labels to make healthy food | | | | | | | | | | | | | | | | | | |
| choices. | | | | | | | | | | | | | | | | | | |
| 4.4 Identify various health claim | | | | | | | | | | | | | | | | | | |
| messages allowed on food | | | | | | | | | | | | | | | | | | |
| labels. | | | | | | | | | | | | | | | | | | |
| 4.5 Discuss the role of Daily | | | | | | | | | | | | | | | | | | |
| Values and Dietary Reference | | | | | | | | | | | | | | | | | | |
| Intakes in relationship to | | | | | | | | | | | | | | | | | | |
| information of food labels. | | | | | | | | | | | | | | | | | | |
| 5. Evaluate his/her diet and | | | | | | | | | | | | | | | | | | |
| fitness level by using recent | | | | | | | | | | | | | | | | | | |
| findings on weight control and | \times | × | | | \times | × | | | | | | | | | | | | \times |
| physical fitness. | | | | | | | | | | | | | | | | | | |
| 5.1 Discuss physical, emotional | | | | | | | | | | | | | | | | | | |
| and psychological effects of | | | | | | | | | | | | | | | | | | |
| alternations in body size and | | | | | | | | | | | | | | | | | | |
| appearance. | | | | | | | | | | | | | | | | | | |
| 5.2 Discuss various procedures | | | | - | | | | | | | | | | | | | | |
| used to determine body fat. | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | -+ | | $\left \right $ | | -+ | | | $\left \right $ | | +-+ |
| 5.3 Discuss theories of obesity. | | | | | | | | | | | | | | | | | | |
| 5.4 Compare and contrast various | | | | | | | | | | | | | | | | | | |
| diets and weight loss methods. | | | | | | | | | | | | | | | | | | |
| 5.5 Discuss the relationship of | | | | | | | | | | | | | | | | | | |
| diet, exercise and behaviors | | | | | | | | | | | | | | | | | | |
| modification in contributing to a | | | | | | | | | | | | | | | | | | |
| sound weight control program. | | | | | | | | | | | | | | | 1 | | | |

| 6 Discuss basis concepts of | | | | 1 | | | | | | | | | | | | | | | _ |
|--|-------|---|---|-----------|---|---------------|--|---|---|--|--|------|----|---|---|--|------|---------------|---|
| 6. Discuss basic concepts of | | | | | | | | | | | | | | | | | | | |
| nutrition as they apply to | | | | | | | | | | | | | | | | | | | |
| various stages of the life cycle and common disease | × | × | | $ \times$ | × | | | | | | | | | | | | | | × |
| processes. | | | | | | | | | | | | | | | | | | | |
| 6.1 Discuss the impact of | | | | | | | | | | | | | | | | | | | |
| prenatal nutrition and lifestyle | | | | | | | | | | | | | | | | | | | |
| on the developing fetus. | | | | | | | | | | | | | | | | | | | |
| 6.2 Compare and contrast the | | | | | | | | | | | | | | | | | | | |
| benefits/risks of breast feeding | | | | | | | | | | | | | | | | | | | |
| and formula feeding. | | | | | | | | | | | | | | | | | | | |
| 6.3 Discuss the nutrient needs of | | | | | | | | | | | | | | | | | | | |
| the infant, preschool and | | | | | | | | | | | | | | | | | | | |
| school age child. | | | | | | | | | | | | | | | | | | | |
| 6.4 Discuss the nutrient needs | | | | | | | | | | | | | | | | | | | |
| and eating patterns of the | | | | | | | | | | | | | | | | | | | |
| adolescent. | | | | | | | | | | | | | | | | | | | |
| 6.5 Describe the special | | | | | | | | | | | | | | | | | | | |
| nutritional needs of the older | | | | | | | | | | | | | | | | | | | |
| adult. | | | | | | | | | | | | | | | | | | | |
| 6.6 Discuss the eating and | | | | | | | | | | | | | | | | | | | |
| lifestyle habits that promote | | | | | | | | | | | | | | | | | | | |
| health and wellness in the | | | | | | | | | | | | | | | | | | | |
| older adult. | | | | | | | | | | | | | | _ | | | | | |
| 6.7 Discuss the need and | | | | | | | | | | | | | | | | | | | |
| scientific principles involved in | | | | | | | | | | | | | | | | | | | |
| alternative feeding methods. | _ | | | | | | | | _ | | | | | | | | | | |
| 6.8 Describe the relationship | | | | | | | | | | | | | | | | | | | |
| between various disease | | | | | | | | | | | | | | | | | | | |
| states (including | | | | | | | | | | | | | | | | | | | |
| cardiovascular disease, | | | | | | | | | | | | | | | | | | | |
| diabetes, cancer and HIV) and | | | | | | | | | | | | | | | | | | | |
| nutrition. 6.9 Discuss the role of nutritional | _ | | _ | | | | | | | | | | | | + | | | | _ |
| assessment in medical | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| nutritional therapy. 6.10 Discuss the implications of | + | _ | + | | | \rightarrow | | + | - | | | | -+ | - | + | | | \rightarrow | - |
| food-drug interactions. | | | | | | | | | | | | | | | | | | | |
| Toou-urug interactions. | | | | | | | | | | | | | | | | | | | |