FN 225 Nutrition Syllabus

COURSE FN 225 Nutrition

YEAR - QTR 2017-SPRING (BMCC-M-F/Baker/Boardman/Hermiston)

IDENTIFICATION FN225 Nutrition (4 Hours)—Nutrition is the study of the nutrients in food

and how the body uses them through the life cycle. Food sources, functions and recommendations for the six classes of nutrients are covered. Digestion, absorption and metabolism are discussed. Skills will be developed in evaluation of nutrition information, assessment of dietary intake, recognition of timely national nutrition issues, and an increased awareness of the relationship of diet upon chronic diseases. A variety of instructional methods will be selected but emphasis will be upon collaborative learning.

PRE-REQUISITES None.

INSTRUCTOR Kenneth D. James, Ph.D., R.D (retired)

Availability: DO NOT HESSITATE TO EMAIL

E-Mail: kjames@bluecc.edu

SCHEDULE Time: Wednesday 5:15 – 9:15 PM

Room: Contact Administrative Office a Campus Site

TEXT BOOK(S) Whitney, E and Rolfes, SR. *Understanding Nutrition*, 14th Edition.

Wadsworth Cengage Learning

COURSE OBJECTIVES Upon successful completion of the course, the student is expected to be able to:

- Define nutritional terms and understand the relevance of nutrition to every day life.
- Identify methods of assessing nutritional status and be familiar with the results of recent nutrition surveys.
- Demonstrate understanding of the concepts of the Dietary Reference Intakes and the various guidelines and implementation tools to meet these recommendations.
- List the nutrients, and define the functions, food sources and symptoms of excess/deficiency for nutrients discussed in class.
- Interpret nutrition information on food product labels and define uses for common food additives as listed on labels
- Explain the biological functions of nutrients: how they are assimilated, digested, absorbed, metabolized, and excreted from the body.

- Explain the interrelationship of food/nutrition and body composition.
- Demonstrate understanding the rationale for nutritional strategies in work, sports, fitness and health.
- Identify the changes in nutritional needs during the life cycle.
- Discuss the pros and cons of controversies in the field of nutrition as identified in class.

COURSE ASSIGNMENTS

- 1. Assignments consist of Critical Thinking Questions (10 pts each, 4-5 questions per chapter)
- 2. Case Study (20 pts, 1 per chapter)
- 3. Video Assessments (20 pts each, 4 or 5 depending on time)
- 4. Oral presentation at last class session (50 pts)
- 5. Anticipate a total of 1000 points for the course

Assignment Management

Assignments need to be downloaded and a hard copy made (you will need access to a printer to do this.

Complete the assignment in your own handwriting. Don't attempt to complete the assignments on a word processer. The exception to this is for the few assignments that involve a written essay as part of the response. A Word document can be submitted as part of the completion of those assignments.

Upload the file(s) to the appropriate assignment in Canvas. There are two ways to do this:

- 1. Using a smartphone with a camera. Please adhere to the following guidelines.
- Orient your camera to correspond to either portrait or landscape depending on the format of the assignment.
- Make certain there is adequate light and there are no shadows so that the image is clearly readable.
- Send in "large" or "original" size (helps clarity to read the image)
- Double check that your assignments are actually "readable" with respect to resolution and image quality, and contrast.
- When taking the picture (or scan), make certain the page is totally flat and all aspects of it can be read.
- 2. Scanning at your campus (or other scanner available to you)

- Have the office manager at your campus location scan your assignments and email them to kjames@bluecc.edu.
- If there is a scanner available to you in the computer lab, scan them from there.
- Assignments can be submitted in PDF format (preferable) or .JPG image.

The Due date for assignments is identified in Canvas. These dates may be adjusted (moved further in time) depending on when we actually complete a topic in class.

Assignments submitted late will have a one or two point deduction per week late. If submitted during the first week after the due date, there will be a one point deduction on ten-point assignments or two point deduction on a twenty-point assignment. For each additional week late, one or two points again deducted.

WARNING: DO NOT PUT OFF COMPLETING YOUR CASE STUDIES, CRITICAL THINKING QUESTIONS AND/OR VIDEO ASSESSMENTS. PUTTING THEM OFF TO THE LAST WEEK OF CLASS WILL RESULT IN A SERIOUS IMPACT ON YOUR GRADE!

All assignments are meant to be completed individually unless otherwise stated.

CRITICAL THINKING QUESTIONS (CTQ): A series of questions for each chapter/topic are provided to help the student grasp the general content of the material. These questions are structured with the "Cornell Note-Taking System" approach to help in understanding the concept involved.

- The first step, after thoroughly reading the question to fully understand the question's intent, is to make notes in the "Notes" section of the answer sheet provided. These are "notes". It is not intended for you to write complete sentences or to copy from the text book or lecture handout notes.
- The second step is write in "keywords" or "cues" in the Keyword column of the answer sheet. These are intended to help you remember the content of your note.
- The third step is to write the one or two sentence summary of the topic. This should be a well-thought out summary of the topic in question. Think of it as an answer to someone who knows very little about the subject (maybe your grandmother?)

CASE STUDIES (CS): There are 16 case studies (20 points each) planned for the class. These are designed to give practical experience in working with applied nutrition principles, in most cases, as it specifically applies to you. Most of the case studies involve a "form" to be filled in with your calculations or response. Do not attempt to complete these with a word processor, just complete them in your handwriting. They are to be submitted by capturing an image on a smartphone with camera or scanned and submitted as PDF file.

VIDEO ASSESSMENTS (VIDEO) Several full-length videos will be presented in class. These are controversial in nature and are designed to expose the student to a progression in the changes to nutritional guidance over the recent past. The assignment involves making hand-written notes on the form provided as the video is being observed. Then, after (the next day), the Key concepts are added to the notes, and the summary statement at the bottom completed. The assignment is then to be scanned and submitted to the instructor as a PDF file.

NUTRITION ORAL REPORT

TOPIC YOU PLAN TO PRESENT DUE: The 5th week of the term (10 points) PRESENTATION DUE: The last week of the term (50 points)

[Depending on the enrollment size of the class, it may be necessary for some students to present during the second-to-last week of the term. If this is necessary, this will be worked out in advance in class.]

Depending on your interest, choose a topic that is of personal interest or relevance to you or someone in your family. Suggested topics are based on the chapters in the textbook (chapters 8 through 20) that are not covered as thoroughly in class. These topics include but are not limited to:

Weight control (weight gain/weight loss)
Eating disorders (anorexia, bulimia, pica)
Exercise, body composition, metabolism
Sports enhancing nutritional aids/nutritional techniques
Fuel management in work and performance
Water, Hydration, Temperature Control in Exercise/work
Nutrition and Immunity/HIV/AIDS
Nutrition and Degenerative/Chronic Diseases
Nutrition and Atherosclerosis
Nutrition and Hypertension
Nutrition and Diabetes
Nutrition and Cancer
Nutrition and Pregnancy

Nutrition and Lactation
Nutrition and Infancy
Nutrition and Toddlers/Young children
Nutrition and School Aged Children
Nutrition and Teens
Nutrition and Teen pregnancy
Nutrition and Teen Athletes
Nutrition and Older Adults
Consumer Concerns about Foods and Water
Hunger and the Global Environment

Oral presentations are scheduled for the last week of the course.

THERE IS NO WRITTEN REQUIREMENT FOR THIS ASSIGNMENT. IT IS AN ORAL PRESENTATION. AS SUCH, IT SHOULD CONFORM TO THE FOLLOWING GENERAL OUTLINE

TITLE: [This indicates the topic or question that you address in your presentation.]

INTRODUCTION: [This is the identification or statement of the question or problem that is the subject of your paper. This question or problem should be of interest to you. You should include your rationale as to why it is of interest to you as well.]

REVIEW OF THE LITERATURE: [This is where you identify, organize, and present the supporting and/or conflicting information that you have found from your textbook and other research from available resources that provides your answer to your question/problem. BE VERY CAREFUL OF INTERNET REFERENCES. Use due diligence to use only sources that are reputable. Include definitions, explanations, background information as appropriate to your topic to support your answer/solution.]

DISCUSSION: [This section is where you present your argument(s) for or against your initial question/topic of this paper. Include your assessment of the relevant reference data. Explain how this data was meaningful to you in your specific situation. Explain why you found the data to be credible, or not credible, and how you determined that to be. "Think critically!"]

CONCLUSION: [Include in this section a conclusion or summary statement that identifies your answer and solution to the problem you specified in the introductory problem statement.]

BIBLIOGRAPHY: [You can use the citation/referencing system that you use

in your English papers. Just be certain to be consistent in your use.]

The oral presentation consists of presenting your topic to the class. Time goals are 10 to 15 minutes in length.

[Some students may elect to prepare a PowerPoint/MindMap/Prezi to use with their oral presentation. This is strictly optional, not required.]

EVALUATION

STUDENT Evaluation of student performance is based on the following criteria:

Grades are based on scores earned on the course assignments. The total number of points offered in the course (anticipate 1000 points) will vary depending on the actual number of assignments implemented.

Student progress is available on Canvas.

Point distribution is anticipated as follows:

Critical Thinking Questions: (10 points per assignment)

Case Studies: (20 points per case study)

Presentation (50 points)

F

GRADING SCALE The grading scale is based on the following distribution:

90-100% -Α

80-89% -В

70-79% -C

60-69% -D

<60%

SCHEDULE

TENTATIVE Published in Canvas.

ATTENDANCE Attendance is monitored. Because this class meets on a weekly basis, missing a 3-1/2 hour session is a significant problem.

> The student is responsible for all lecture materials, assignments, and announcements made in class and posted on eCompanion.

Now that BMCC has the "Zoom" technology, the class is recorded and the link will be posted on the day following the class session.

REFERENCES It is expected that each student will become more observant and critical of

nutrition information that is available in the news media, the popular press, advertisements and the like. Although these are not considered primary sources of nutrition information, the student should learn to critique or evaluate these sources of information in light of the content of this course, and, as appropriate, by referencing standard nutrition textbooks, physiology textbooks and referred journals dealing with nutrition.

DISABILITY

Blue Mountain Community College is committed to providing inclusive **STATEMENT** learning environments. Please notify us if there are aspects of the course that result in disability-related barriers to your participation. For assistance with disability accommodations, please contact the Health and Wellness Resource Center at 541-278-5965, TDD 541-278-2174 or email disabilityservices@bluecc.edu.

HONOR CODE It is expected that all students will uphold the spirit and intent of the BMCC Code of Academic Honesty as identified the Student Handbook. As determined on a case-by-case basis, appropriate administrative action will be taken.

FN 255 NUTRITION SPRING-2017 (BMCC-M-F/Baker/Hermiston/Boardman) TENTATIVE SCHEDULE

This is a tentative schedule of topics with videos interspersed. As a topic is completed, the next topic will be started and continued into the next class period.

Due dates and times for topics, videos, quizzes, case studies and study guide questions will be posted in the "Weekly Announcements" section of Canvas. Check there for the current status of the schedule.

Code	Topic Title	Assignments
ID	00 ODICINIC Dediction 4 Netrition 1 Discourse	D Discos Inter force Vermont
00	00-ORIGINS: Pathway to Nutritional Discovery	☐ Please Introduce Yourself
		CS-00 Working with Appendix H
		☐ CTQ-00-01 Your Personal Beginnings with Nutrition
01	01-NUTRITION: Some Art, Some Science	☐ CTQ-00-02 A Contemporary Issue of Concern☐ CS-01 What is it About Nutrition?
01	01-NOTRITION: Some Art, Some Science	☐ CTQ-01-01 Factors of Food Choices
		☐ CTQ-01-01 Factors of Food Choices
		☐ CTQ-01-02 What is a Nutricity
		☐ CTQ-01-03 Nutrition Research ☐ CTQ-01-04 Components of Nutritional Assessment
02	02-WHAT's FOR LUNCH: How Not to Make	☐ CS-02 Nutrient Density of Foods
02	Plans	☐ CTQ-02-01 Dietary Planning Considerations
	1 ians	☐ CTQ-02-01 Dictary Flamming Considerations
		☐ CTQ-02-03 Nutrition Facts Label Data
		☐ CTQ-02-04 Difficulty in Achieving Dietary Guidelines
03	03-ALIMENTARY CANAL: Theme Park	☐ CS-03 Digestion, Absorption and Transport
0.5	Extraordinaire	☐ CTQ-03-01 Mouth and Food Assimilation
		☐ CTQ-03-02 pH Factors in Digestion
		☐ CTQ-03-03 Nutrient Interactions and Bioavailability
		☐ CTQ-03-04 Role of Gut Microflora
04	04-CARBOHYDRATES: The Sickly Sweet	☐ CS-04 Caloric Evaluation Calculations – 3 Day
		Dietary Analysis
		☐ CTQ-04-01 Lactose Intolerance
		☐ CTQ-04-02 Food Components Promoting Weight
		Gain
		☐ CTQ-04-03 Metabolic Fates of Glucose
		☐ CTQ-04-04 Fiber Role in Digestion and Absorption
05	05-LIPIDS: The Good, The Bad, The Ugly	☐ CS-05 Manipulating Carbs and Fats
		☐ CTQ-05-01 Omega Fatty Acids
		☐ CTQ-05-02 Hydrogenation of Fatty Acids
		☐ CTQ-05-03 Lipoproteins
		☐ CTQ-05-04 Reduced Fat Foods
		☐ PP-01 Presentation Topic
06	06-PROTEINS: Structures and Functions of Life	☐ CS-06 Protein Comparison
1		☐ CTQ-06-01 Protein Structure
1		☐ CTQ-06-02 Enzymes and Hormones
1		☐ CTQ-06-03 Amino Acid Utilization
		☐ CTQ-06-04 Protein Quality
07	07 ENIED CW META DOLLOW	☐ CTQ-06-05 Protein Complexity
07	07-ENERGY METABOLISM	CS-07 Alcoholism
		☐ CTQ-07-01 Metabolism Definition

		☐ CTQ-07-02 Aerobic Metabolism
		☐ CTQ-07-03 Metabolic Substrates
		☐ CTQ-07-04 Sources of Glucose
		☐ CTQ-07-05 Roles of Liver Metabolism
08	08-ENERGY BALANCE and BODY	☐ CS-08 Body Composition and Metabolism
	COMPOSITION: Its Biology, Not Physics	☐ CTQ-08-01 Energy Balance
		☐ CTQ-08-02 Hunger and Appetite
		☐ CTQ-08-03 BMI
		☐ CTQ-08-04 Central Obesity
		☐ CTQ-08-05 Basal Metabolic Rate
09	09-WEIGHT MANAGEMENT: Nature vs	☐ CS-09 What is Your Sugar IQ?
	Nurture	☐ CTQ-09-01 Lipoprotein Lipase
		☐ CTQ-09-02 Role of Physical Activity
		☐ CTQ-09-03 Metabolic Syndrome and Body Comp
		☐ CTQ-09-04 Underweight
10/11	10/11 WATER and FAT SOLUBLE VITAMINS:	☐ CS-10 Supplement Evaluations
	The Singing Vitalenes	☐ CS-11 Antioxidants
		□ CTQ-10-01 Pellagra
		☐ CTQ-10-02 Vitamin Bioavailability
		☐ CTQ-10-03 Vitamin and B-Complex Roles
		☐ CTQ-10-04 Folate
		☐ CTQ-11-01 Vitamin Precursors
		☐ CTQ-11-02 Vitamin D
		☐ CTQ-11-03 Vitamin E
		☐ CTQ-11-04 Vitamin K
12/13	12/13 WATER and MINERALS: The Sea Within	☐ CS-12 Fluid and Calcium for a Young Athlete
		☐ CS-13 Your Personal Philosophy of Nutrition
		□ CTQ-12-01 Water Loss
		☐ CTQ-12-02 Mineral Bioavailability
		☐ CTQ-12-03 Mineral Classification
		☐ CTQ-12-04 Calcium
		☐ CTQ-13-01 Mineral Homeostasis
		☐ CTQ-13-02 Mineral Interactions
		☐ CTQ-13-03 Iron Deficiency
		☐ CTQ-13-04 Goiter
		☐ PP-01 Oral Presentation Topic Submission
		☐ PP-02 Oral Presentation

The following controversial videos will be shown in class. For each, there is a worksheet to collect your notes, and a space for you to write your assessment of the video.

"SuperSize Me"	□ VID-Supersize Me
Atkins: BBC Story about Low Carb Diet	□ VID-ATKINS
"Fat Head"	□ VID-Fat Head
"Sugar: The Bitter Truth"	☐ VID-Sugar:Bitter Truth
Depending on time, the follow may be included, but	
without a written assessment	
In Defense of Food	
The Paleo Diet Explained	
"Fed Up"	