FN 225 Nutrition Syllabus

COURSE FN 225 Nutrition

YEAR - QTR 2016-FALL (BMCC-M-F/Baker/Boardman)

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 8:45 PM Room: See published Course Schedule
- **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 scanned/photographed assignment as a pdf, jpg, or png file into the appropriate assignment on Canvas.

If you use a smart phone or tablet to record your assignments, please adhere to the following guidelines.

- 6. Orient your camera to portrait or landscape mode to correspond to the layout of the hardcopy page.
- 7. Attempt to capture as large of an image as possible.
- 8. Make certain the lighting is bright enough and no shadows so that the image is usable.
- Make certain the contrast of your pen/pencil is sufficient that the result is readable. (check this before sending and retake if necessary).
- 10. Avoid having the hard copy "curl up" or be distorted in anyway that makes reading your assignment difficult or impossible.
- 11. Because you are submitting the image file into a Canvas drop box, each assignment must be its own collection of one or more images for that assignment. Multiple images for one assignment is fine.

These can be collected and submitted as one transmission into the related assignment in Canvas.

12. Give the file your image generates the name of your assignment (i.e. CTQ-04-03 pg 1). (This will keep your assignments in logical order on your computer and makes it possible for you to find things again.)

If you use a scanner to capture your assignments.

- 13. Because you are submitting the scanned file into a Canvas drop box, each assignment must be its own pdf file (multiple pages for one assignment is fine). However, DO NOT submit a batch of different assignments in one big pdf as they cannot be separated out for each individual assignment in Canvas.
- 14. Be certain that the contrast of your pen/pencil is sufficient to make a clear readable copy.
- 15. Name the pdf file with the assignment code number (CTQ-04-01). This will help you identify your assignments on your computer and keep track of things.
- 16. Upload the file to the appropriate Canvas assignment.

The DUE DATE for each assignment is listed in the calendar section of Canvas. In general, the due date is the week following the presentation of that topic in class. Because the timing of the topics will vary somewhat, some due dates may be changed to a later date, but never to an earlier date.

Assignments turned in after the published due date will have ½ point deducted per week late up to a total of 2 points deduction for tardiness.

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. To be

most effective, the student should complete this assignment in his/her handwriting.

- 17. 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.
- 18. The second step is to write in the key words or prompts associated with the notes in the keyword/cue word column.
- 19. 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 of the question.

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 hand written calculations or response.

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. Most importantly, there is a requirement for your hand written assessment of this video with respect to the nutrition information message it is portraying.

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. If you elect to use a MindMap or Prezi, this will need to be coordinated in advance with me as there are technological issues that must be addressed to be able to share it over the Zoom system.]

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

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 eCompanion.

Point distribution is anticipated as follows: Critical Thinking Questions: (10 points per assignment) Case Studies: (20 points per case study) Presentation (50 points)

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

90-100% -	А
80-89% -	В
70-79% -	С
60-69% -	D
<60%	F

Revised: 19 SEP 2016

TENTATIVE Included at the end of this syllabus. **SCHEDULE**

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 available on Canvas.

- **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 FALL-2016 (BMCC-M-F/Baker/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, case studies and study guide questions will be posted in the "Calendar" section of Canvas. Check there for the current status of the schedule and due dates.

Code	Topic Title	Assignments
ID		
00	00-ORIGINS: Pathway to Nutritional Discovery	 Please Introduce Yourself CS-01 What is it About Nutrition?
		CTQ-00-01 Your Personal Beginnings with Nutrition
		□ CTQ-00-02 A Contemporary Issue of Concern
01	01-NUTRITION: Some Art, Some Science	□ CS-00 Working with Appendix H
01		□ CTQ-01-01 Factors of Food Choices
		□ CTQ-01-02 What Is a Nutrient?
		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
	Plans	CTQ-02-01 Dietary Planning Considerations
		CTQ-02-02 Dietary Guidelines Influence
		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
	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
05	05-LIFIDS. The Good, The Bad, The Ogly	CTQ-05-01 Omega Fatty Acids
		CTQ-05-01 Onlega 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
		CTQ-06-01 Protein Structure
		□ CTQ-06-02 Enzymes and Hormones
		CTQ-06-03 Amino Acid Utilization
		□ CTQ-06-04 Protein Quality
		CTQ-06-05 Protein Complexity
07	07-ENERGY METABOLISM	CS-07 Alcoholism
		□ CTQ-07-01 Metabolism Definition

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08 08-ENERGY BALANCE and BODY COMPOSITION: Its Biology, Not Physics □ CTQ-07-05 Roles of Liver Metabolism □ CTQ-08-01 Energy Balance □ 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 □ CTQ-09-01 Lipoprotein Lipase □ CTQ-09-03 Metabolic Syndrome and Body Comp
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□ CTQ-09-02 Role of Physical Activity □ CTQ-09-03 Metabolic Syndrome and Body Comp
□ 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
□ 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

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"	