

**GRAYS HARBOR COLLEGE**  
**SYLLABUS**  
**NUTR 101-HUMAN NUTRITION**  
**5 CREDITS**  
**MOHAMMAD IBRAHIM**

**CONTACT INFORMATION**

- Instructor: Mohammad Ibrahim
- Office: 318 E
- Office Hours: MTWThF. See the attached office hour schedule
- Phone: (360) 538-4178, 1-800-562-4830 ext. 4178
- E-mail: mibrahim@ghc.ctc.edu
- Lecture Hours: Daily 11 am to 11:50 am Room No. 317

**COURSE DESCRIPTION**

A study of the structure, function, and metabolism of nutrients and their role in preventing diseases related to nutrient deficiencies in healthy people. Analysis of food labels and diet planning. This course is intended for science, non-science, and health sciences students. 5 lecture hours. Satisfy specified elective requirement for the AA degree.

**TEXTBOOK**

Rolfes, Pinna, and Whitney. 2007. Understanding Normal and Clinical Nutrition. Seventh Edition. Thomson Wadsworth. United States. 903 pp. ISBN 0534622089

**PREREQUISITES**

Grade C or better in BIOL 100, BIOL 160, or instructor permission.

**OUTCOMES**

By the completion of this course students will develop abilities in the area of disciplinary learning, literacy, critical thinking, social and personal responsibility and using resources.

**1. Disciplinary Learning (DSA rating 4)**

- Develop scientific approach to distinguish between the reliable and unreliable nutritional information
- Know the chemical composition of major classes of nutrients
- Understand the role of nutrition in maintaining health and prevention of nutrient related deficiencies
- Use food labels, food guide pyramid, and exchange lists to develop diet plans

**2. Literacy (DSA rating 2)**

- Read the assigned topics, handouts, class activities, and develop appropriate answers and write responses
- List key terms and vocabulary at the end of every chapter and define them appropriately in your own words
- Describe the process, chemical reactions, and methods related to nutrition in your own words

**3. Critical Thinking (DSA rating 3)**

- Identify the sources of six classes of nutrients
- Describe the role of the parts of digestive system in digestion of food
- Analyze dietary information on food labels
- Develop diet plans using nutrition standards and guidelines

- Describe the structure, function, and metabolism of carbohydrates, lipids, and proteins
- Explain the importance of minerals, vitamins, and water in the daily diet
- Evaluate how various foods help maintain normal body function and prevent disease
- Demonstrate knowledge of weight control and food consumption
- Relate food safety issues and food-borne illnesses

#### 4. Social and Personal Responsibility (DSA rating 1)

- Respect the food preferences and eating habits of a diverse society.
- List the most common nutrient deficiencies found in various population groups
- Make health choices to avoid under or over nutrition.
- Practice safety measure to prevent food poisoning and food born illnesses

#### 5. Using resources (DSA rating 2)

- Develop a presentation on a special topic and present it to the class
- Develop food label for a food product from the information provided by FDA and USDA available on the web

### METHODS OF TEACHING

I use lectures, videos, project, term paper and presentation to teach this course. I encourage you to read the book, lecture notes, and handout material before the lecture and other activities. I welcome course related questions and like you to share subject related information in the class.

- **Lecture**

I use Microsoft PowerPoint, videos, transparencies, and blackboard to deliver the lectures. I recommend that student cover lecture material, textbook, and online notes, before the lecture.

- **Videos**

I show videos on special topics through out the course. The selected videos contain information and examples from the daily life to simplify the concepts in human nutrition.

- **PowerPoint Presentation**

See the methods of assessment and guidelines for presentation at the end of the syllabus

### VIII. METHODS OF ASSESSMENT

I use several methods to assess the outcomes of this course. The assessment process includes the traditional way of testing and collaborative learning through group projects and presentation. It includes the following:

- **Tests 300 Points**

There are three test in this course. Each quiz will have 50 questions and is worth 100 points. The time, date, and location of the quizzes are given below, unless stated otherwise. The format of the quizzes will include multiple choice, matching word, and yes or no questions. The test material will come from the **TEXTBOOK, LECTURE NOTES, AND THE LECTURES.**

#### TEST SCHEDULE

TEST 1: Date, time, and location will be specified here

TEST 2: Date, time, and location will be specified here

TEST 3: Date, time, and location will be specified here

- **Comprehensive Final Exam 200 Points**

There is one final comprehensive exam in this course. It will have 100 questions worth 200 points. The exam will be given as specified on the quarterly schedule. The format of the test will include multiple choice, matching word, and yes or no questions. The test material will come from the **TEXTBOOK, LECTURE NOTES, AND THE LECTURES. Do not ask for early or late final exam.**

- **Presentation 100 Points**

Each student will prepare a 10-15 minutes PowerPoint presentation on a topic related to human nutrition and deliver it to the class in the last week of this quarter. The guidelines for the presentation will be discussed in the class. For more information, follow the guidelines for preparing the PowerPoint presentation, at the end of the syllabus. The topics will be given or chosen by the students in the middle of the first week of class. The due date will be announced in the second week of the class.

## HOLIDAYS

- Holyday schedule will be included here

## LESSON PLAN

<u>#</u>	<u>Topics</u>	<u>Chapter</u>
1	Food Choices, Nutrients in Foods and the Body, The energy-yielding nutrients	1
2	Energy, calories, and kilocalories, Vitamins, Minerals, Water	1
3	The Science of Nutrition,	1
4	Dietary Reference Intakes	1
5	Principles and Guidelines, Food Group Plans	2
6	Exchange Lists, The Ingredient List, Serving Sizes, Nutrition Facts	2
7	The Daily Values (DV), Nutrient Claims	2
8	Health Claims, Structure function claims, Consumer Education	2
9	Digestion, Absorption	3
10	Vascular system, Lymphatic system	3
11	Regulation of Digestion and Absorption	3
12	Gastrointestinal Hormones and Nerve Pathways	3
13	Common Digestive Problems	3

### Test 1 Cover the above chapters

<u>#</u>	<u>Topics</u>	<u>Chapter</u>
15	The Chemist's View of Carbohydrates	4
16	The Simple and Complex Carbohydrates	4
17	Digestion and Absorption of Carbohydrates, Glucose in the Body	4
18	Health Effects and Recommended Intakes of Sugar, Starch and Fiber	4

19	The Chemist's View of Fatty Acids and Triglycerides	5
20	The Chemist's View of Phospholipids and Sterols	5
21	Digestion Absorption and transport of lipids	5
22	Lipids in the Body, Health Effects and Recommended Intakes of Lipids	5
23	The Chemist's View of Proteins: Amino Acids	6
24	Digestion and Absorption of proteins	6
25	Proteins in the body	6
26	Protein in Foods	6
27	Health Effects and Recommended Intakes of Protein	6

**Test 2 Cover the above chapters**

#	<u>Topics</u> <u>Chapter</u>	
29	Chemical Reactions in the Body, Breaking Down Nutrients for Energy	7
30	Glucose, glycolysis, anaerobic and aerobic respiration	7
31	Amino Acids, Deamination Keto acid, Ammonia, Transamination, urea	7
32	The TCA cycle, Electron Transport Chain, The Body's Energy Budget	7
33	Energy Balance, Energy In, Energy out	8
34	Body Weight, Body Composition and Health	8
35	Defining Healthy Body Weight, Body Fat and Its Distribution	8
36	Health Risks Associated with Body Weight and Body Fat	8
37	The Vitamins-An Overview, The B Vitamin	10
38	Thiamin, Riboflavin, Niacin, Biotin, Pantothenic Acid	10
39	Vitamin B6, Folat, Vitamin B12	10
40	The B Vitamins,	10
41	Vitamin C	10

**Test 3 Cover the above chapters**

<b>#</b>	<b>Topics</b>	<b>Chapter</b>
43	Vitamin A and Beta-Carotene	11
44	Roles in the Body, Vitamin A Deficiency	11
45	Vitamin D, Roles in the Body, Vitamin D Deficiency	11
46	Vitamin E, Vitamin K	11
47	Water and the Body Fluids, The Minerals—An Overview	12
48	Sodium, Chloride, Potassium, Calcium	12
49	Phosphorus, Magnesium, Sulfur	12
50	Highlight: Osteoporosis and Calcium	12
51	The Trace Minerals-An Overview	13
52	Iron	13
53	Zinc	13
54	Iodine	13
55	Selenium, Fluoride	13

**Comprehensive Final Exam Cover all the chapters**

**GRADING SCALE:**

Use the following grading scale to calculate your grades

<b>%</b>	<b>GPA</b>	<b>GRADE</b>	<b>%</b>	<b>GPA</b>	<b>GRADE</b>
100.00	4.00	A	76.40	2.40	C+
92.00	4.00	A	76.00	2.40	C+
91.60	4.00	A	75.60	2.40	C+
91.20	3.90	A-	75.20	2.30	C+
90.80	3.90	A-	74.80	2.30	C+
90.40	3.80	A-	74.40	2.20	C
90.00	3.80	A-	74.00	2.20	C
89.60	3.80	A-	73.60	2.20	C
89.20	3.70	A-	73.20	2.10	C
88.80	3.70	A-	72.80	2.10	C
88.40	3.60	B+	72.40	2.10	C
88.00	3.60	B+	72.00	2.00	C
87.60	3.60	B+	71.60	2.00	C
87.20	3.50	B+	71.20	1.90	C-
86.80	3.50	B+	70.80	1.90	C-
86.40	3.40	B+	70.40	1.80	C-
86.00	3.40	B+	70.00	1.80	C-
85.60	3.40	B+	69.60	1.80	C-
85.20	3.30	B+	69.20	1.70	C-
84.80	3.30	B+	68.80	1.70	C-
84.40	3.20	B	68.40	1.60	D+
84.00	3.20	B	68.00	1.60	D+
83.60	3.20	B	67.60	1.60	D+
83.20	3.10	B	67.20	1.50	D+
82.80	3.10	B	66.80	1.50	D+
82.40	3.00	B	66.40	1.40	D+
82.00	3.00	B	66.00	1.40	D+
81.60	3.00	B	65.60	1.40	D+
81.20	2.90	B-	65.20	1.30	D+
80.80	2.90	B-	64.80	1.30	D+
80.40	2.80	B-	64.40	1.20	D
80.00	2.80	B-	64.00	1.20	D
79.60	2.80	B-	63.60	1.20	D
79.20	2.70	B-	63.20	1.10	D
78.80	2.70	B-	62.80	1.10	D
78.40	2.60	C+	62.40	1.00	D
78.00	2.60	C+	62.00	1.00	D
77.60	2.60	C+	61.60	1.00	D
77.20	2.50	C+	61.20	0.90	F
76.80	2.50	C+	60.80	0.90	F

## **POLICIES**

- **Expectations from Student**

1. Come to the class on time and stay for the entire period.
2. Do not whisper or talk to one another when lecture is in progress.
3. Do not pack your bags before the class is over.
4. Turn off the cellular phone/ pager during the class.
5. Do not do homework for other classes in this class.
6. Read the handouts, syllabus, exam dates, and the due date.

- **American Disability Act**

Any individual who has a documented disability, which might interfere with his or her ability to fully participate in the class, may be eligible for accommodations. Feel free to contact the Disability Support Services program located in the Student Services, Room 119. Any information regarding disability will be kept confidential.

- **Attendance**

Attendance is key to your success in this class. I expect student to arrive early and attend classes regularly. It is not part of the grades but will be reported to the administration if a student misses classes regularly. I will pass the attendance sheet in the class and it is your responsibility to sign it.

- **Academic dishonesty**

Academic dishonesty, as mentioned and described in the G.H. College General Catalog 2007-2008, would not be tolerated. Cheating on quizzes, exams, assignment or copying someone else's work will receive failing grade.

## **XIII. GUIDE LINES FOR POWERPOINT PRESENTATION**

Collect information about your topic from the library/internet

Prepare an outline of the information

The next step is how to use the Microsoft PowerPoint program to make a presentation

### **I recommend:**

- Go to the library media center and make an appointment with Anna Patrick. She will give you some guidelines.
- Make an appointment with me and I will walk you through the whole process.
- Get help from one of your class fellow who knows how to use Microsoft PowerPoint.
- Go to the computer lab and ask the computer lab attendant for help.
- Go to the World Wide Web and type power point tutorial in the address bar and hit enter.
- Search for the PowerPoint tutorial with step-by-step instructions on the world wide web

### **Once you know (or if you already know) how to use Microsoft PowerPoint program do the following:**

- On the first slide put the title of your presentation, your name (group names)
- On the second slide, include the summary of your presentation
- Use 32 size font for titles and 30-size font for the subtitles on each slide.
- Choose a background color and font color that is easy to see.
- Print the summary of your presentation and give it to the audience before the presentation.
- If you like to scan a picture etc. and like to include it in your presentation, go to the media center in the library, or talk to me.
- Include a clip art, picture, and diagram in your presentation.
- Save your presentation to a floppy disc or email it to me for editing.

### Rubrics for PowerPoint Presentation

Student name \_\_\_\_\_ Date \_\_\_\_\_ Course \_\_\_\_\_ Score \_\_\_\_\_

Activity	Exemplary	Proficient	Some what proficient	Incomplete	Score
Title slide	6 points Contain title, date, name(s), course #, teachers name	4 points Missing one of the item except title or name	2 points Missing two of the item except title or name	0 points Missing three of the item except title or name	
Summary slide	6 points All slides represented	4 points 1-2 slide not represented	2 points 3-4 slide not represented	0 points More than 4 slides not represented	
Introduction	6 points Introduction is clearly stated and represent the overall title or topic; with question or goal	4 points Introduction is clearly stated and relates to the topic or title	2 points Introduction is somewhat related to the topic or title and not appealing to the audience	0 points Introduction poorly represents the topic or title and has no relevancy to the audience	
Grammar	6 points No spelling, grammar, capitalization or punctuation errors	4 points 1-2 errors	2 points 2-3 errors	0 points Full of errors	
Text, background, graphics, sound, animations	6 points Text is large seen with ease against the background; graphics, sound and animation enhances the clarification of complex ideas or concepts	4 points Text is large seen with ease but does not stand out from the background color; graphics, sound and animation enhances the helps the audience in understanding the information	2 points Some text is too large in relation to other and not seen with ease against the background; graphics, sound, animation does not enhance the clarification of ideas and concepts	0 points Text is difficult to read, graphics, sound or animations not properly done or absent	
Organization	6 points Student was well prepared, researched the topic well and	4 points Student was prepared somewhat researched the	2 points Student was somewhat prepared and presented some	0 points Student was not well prepared and there was no sequence that	

	presented information in a logical and interesting manner	topic and presented the information in a sequence that audience can follow	of the information that audience can follow	audience can follow	
Eye contact	6 points Student engage the audience, made eye contact and seldom return to the computer screen	4 points Student somewhat engaged the audience, maintained eye contact and often returned to computer screen to read the notes	2 points Student did not engage the audience, occasionally made eye contact and read mostly from the notes	0 points Student did not make eye contact and read the notes the entire time.	
Voice	6 points Clear voice, correct pronunciation of terms, audience can hear easily	4 points Clear voice, correct pronunciation of most terms, most audience can hear easily	2 points Low voice, incorrectly pronunciation of most terms, difficulty hearing	0 points Mumbling voice, incorrect pronunciation, audience in the back could not hear	
Subject knowledge	6 points Student know the subject well, answered all the questions with explanation, examples and elaboration	4 points Student know the subject well, answered most questions with explanation, examples and elaboration	2 points Student does not know enough about the subject, answered some questions little or no explanation, examples and elaboration	0 points Student does not know the subject and cannot answer any question	