COLLEGE OF HUMANITIES AND SOCIAL SCIENCE

COURSE DESCRIPTION

DEPARTMENT/DIVISION: Family and Consumer Sciences

COURSE NUMBER/TITLE: FCS 167 Basic Nutrition (non-health-related majors)

INSTRUCTOR: Zaheer Ali Kirmani, Ph.D., L.D., R.D.
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COURSE OBJECTIVES:

This course is intended to introduce to the student the skills needed to analyze and promote sound nutritional practices to various segments of the community. Upon completion of this course the student should have acquired the ability to:

1. cite the major trends of nutrition in our society and their effects on various specific segments of our society.
2. effectively use the food pyramid to plan for optimal dietary effectiveness on an individual basis.
3. recognize techniques for combatting nutrition-related diseases in the American population.
4. recognize eating disorders in children and recommend effective resources for handling them.
5. recommend specific programs that could help the economically disadvantaged to acquire basic, well-balanced diets for family members.
6. use nutrition information correctly in the public school classroom.

OFFICE HOURS

Office hours have been posted in the course document section of black board. Additional meeting times by appointment.

STUDENTS WITH DISABILITIES POLICY:

It is the policy of Sam Houston State University that no otherwise qualified disabled individual shall, solely by reason of his/her handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic or Student Life program or activity. Disabled students may request help with academically related problems stemming from individual disabilities from their instructors, school/department chair, or by contacting the Chair of the Committee for Continuing Assistance for Disabled Students and Director of the
Counseling Center, Lee Drain Annex, or by calling (936) 294-1720. NOTE: No accommodation can be made until the student registers with the Counseling Center.

STUDENT ABSENCES ON RELIGIOUS HOLY DAYS POLICY:
Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed.

COURSE FORMAT:

This course will include a combination of lecture, reports from current news media, and reports of student projects. Course content emphasizes application of nutrition information to the elementary classroom and to personal use.

COURSE EVALUATION:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>4 Examinations</td>
<td>500</td>
<td>80%</td>
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<tr>
<td>1 Written Assignment</td>
<td>100</td>
<td>20%</td>
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Final assignment is due on Monday, 14th of July, 2008 in the classroom and late submission which starts immediately following the class time shall be down graded one grade per day.

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

COURSE OUTLINE:

UNIT I

1. The Art of Understanding Nutrition
   Nutrition and General Health
   a. Nutrition Myths and Practices
   b. The Food Pyramid
   The Nutrients in foods:
   a. Carbohydrates
   b. Fats and Oils
   c. Proteins and Amino Acids
d. Vitamins

e. Minerals

2. The Pursuit of an Ideal Diet
   The ABCs of Eating Healthy
   Nutrient Recommendations
     The Dietary Reference Intakes (DRI)
     The DRI for Nutrients
     The DRI for Energy
     Other Recommendations
   The Challenge of Dietary Guidelines
   MyPyramid as Diet Planning Tool
   Gaining Calorie Control
   More Tools for Dietary Planning

Unit II

1. The Carbohydrates: Sugar, Starch, and Fiber
   The Body’s Needs for Carbohydrates
   Carbohydrate Basics
   The simple Carbohydrates: Mono- and Di- Saccharides
   The Complex Carbohydrates: Starch and Fiber
   Carbohydrates in Foods
   The Health Effects of Carbohydrates
   Hyper and hypo glycemia
   Diabetes
   Sugar and Health

2. The Lipids: Fats and Oils
   A Primer on Fats
     Functions of Fats in the Body
     The Functions of Fats in the Foods
   A Closer View of Fats
     Saturated and Unsaturated Fats
     The Essential Fatty Acids
     Omega-6 and Omega-3 Fatty Acids
   Characteristics of Fats in Foods
   Phospholipids and Sterols
   How Body Handles Fat
   “Good” and “Bad” Cholesterol
   Fat in the Diet
   Trans Fat
   Fat Substitutes
UNIT III

1. The Proteins and Amino Acids
What Proteins are Made of?
   - Essential and Nonessential Amino acids
   - Proteins as Source of Life’s Variety
   - Denaturation of Proteins
The Functions of Proteins in body
How Body Handles Proteins?
Protein Quality
Recommended Protein Intake
Protein and Health
   - Protein and Energy Metabolism
   - Too Much Protein
   - Protein in Diet
   - The Vegetarian Diet

2. The Vitamins
Turning Back the Clock
The Two Classifications of Vitamins
Water-Soluble Vitamins
   - Thiamin
   - Riboflavin
   - Niacin
   - Vitamin B6
   - Folate
   - B Vitamins and Heart Disease
   - Vitamin B12
   - Pantothenic Acid Biotin
   - Vitamin C
Fat-Soluble Vitamins
   - Vitamin A
   - Vitamin D
   - Vitamin E
   - Vitamin K
Phytochemicals in Foods

Unit IV

1. Water
The Most Essential Nutrient
   - Water and Exercise
   - Water in the Diet
   - Keeping Water Safe
   - Bottled vs. tap water

2. The Major Minerals
Calcium
Phosphorous
Sulfur and Magnesium
Sodium, Potassium, and Chloride

3. The Trace Minerals
   Iron
   Zinc
   Fluoride
   Copper, Manganese, Chromium, Selenium, and Molybdenum
   Trace Minerals of Uncertain Status

4. Alcohol and Nutrition
   What is Alcohol?
   Absorption and Metabolism of Alcohol
   Alcohol and Its Effects on Nutrition
   Health Benefits and Risks
   Pros and Cons of Alcohol Consumption
   Alcohol Abuse or Alcoholism

Unit V

1. Weight Management
   A closer Look at Obesity
   Problems Associated with Weight
   What is A Healthful Weight?
      Body Weight versus Body Fat
      Measuring Body Fat
      Distribution of Body Fat
      Weighing for Health
   Energy Balance
      Basal Metabolism
      Voluntary Activities
      Total Energy Needs

SUGGESTED READINGS:


FCS 167: Basic Nutrition  
Dietary Assignment

1. Select two random days of the week.  
2. Record food consumed.  
3. Go to mypyramid.gov  
4. Enter your personal information.  
5. Compare what was recommended by mypyramid and what was missing or not missing in your food records.  
6. Write your comments.  
7. Submit printed materials from the website along with your written comments and the food record.  
8. Make a cover page  
9. Staple your papers together.  
10. Loose papers will not be accepted and penalty of late submission will apply.  
11. Your assignment will consist of a cover page, two sheets of food records, comments pages, and the print-out from mypyramid site.