I. Instructors:

Dr. Megan McCrory 494-2631 mmccror@purdue.edu
Dr. Kim Buhman 496-6872 kbuhman@purdue.edu

II. Purpose:

(1) To provide a foundation in scientific concepts, biochemistry and physiology relevant to obesity, and to be able to apply these principles to public health and policy issues related to obesity.
(2) To explore, in depth, important and current issues in obesity, including behavioral and policy issues.
(3) To increase skills important to a career in nutrition science, e.g. critical thinking skills, reading and discussing current scientific literature, and scientific debate.

III. Schedule

In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor’s control. Ways to get information about changes in this course include first, the course web page (https://blackboard.purdue.edu/webct/urw/lc8056011.tp0/cobaltMainFrame.dowebct) or second, the instructors (see contact information above).

Aug 24  Course overview; Epidemiology and health implications of obesity; Principles of energy balance; Policy discussion
         Dr Megan McCrory
         Dept of Nutrition Science and Dept of Psychological Sciences, Purdue University

Aug 31  Intermediary metabolism; integration of metabolism across organs and tissues
         Dr Kimberly Buhman
         Dept of Nutrition Science, Purdue University
         and
         Genetics, epigenetics and nutritional programming
         Emily Arentson, PhD candidate, Dept of Nutrition Science, Purdue University

Sept 7   Endocrinology of obesity
         Dr Robert Considine
         Division of Endocrinology, Dept of Medicine, Indiana University School of Medicine

Sept 14  Eating behaviors, appetite and obesity
         Dr. Richard Mattes
         Dept of Nutrition Science, Purdue University
Sept 21   The brain and neurochemistry of obesity  
        Dr Susie Swithers  
        Dept of Psychological Sciences, Purdue University

Sept 21   Energy intake – measurement issues; popular diets/Biggest Loser  
*5:15-6:45p*  Dr Kevin Hall  
        Laboratory of Biological Modeling, National Institute of Diabetes and Digestive and Kidney Diseases

NOTE: IBRC symposium on Flavor and Feeding, Sept 21, 7pm – Sept 23 1:30pm Stewart Center 206 and 214, Purdue University

Sept 28   No class

NOTE: TOS meeting (Obesity2011), Sat Oct 1 8am to Wed Oct 5 noon  

Oct 5     Energy expenditure and obesity  
        Dr Wayne Campbell  
        Dept of Nutrition Science, Purdue University

*Oct 5 – **Debate 1 synopsis due***

Oct 12    Debate 1: Causes of Obesity  
                      Students

Oct 19    Anthropological and cultural aspects and influences on obesity  
        Dr. Sharon Williams  
        Dept of Anthropology, Purdue University

Oct 26    Economic aspects and influences on obesity  
        Dr Gerhard Glomm  
        Dept of Agricultural Economics, Indiana University, Bloomington

Nov 2     Social influences on obesity  
        Dr Melissa Franks  
        Dept of Human Development and Family Sciences, Purdue University

Nov 9     Pharmacological treatment of obesity; Role of drug industry in obesity management  
        Dr Gouqing Cao  
        Senior Research Advisor, Cardio Met Disease/Diabetic Complications Eli Lilly
Nov 16  Child obesity: special considerations  
    Dr Sibylle Kranz  
    Dept of Nutrition Science, Purdue University

Nov 23  Thanksgiving (11/24) - no class

Nov 30  Surgical management of obesity  
    Dr. R. Considine  
    Division of Endocrinology, Dept of Medicine, Indiana University School of Medicine  
    and  
    Dr Nana Gletsu  
    Dept of Nutrition Science, Purdue University

Nov 30 – **Debate 2 synopsis due**

Dec 7  **Debate 2:**  
    **Students**  
    Should chocolate milk be banned from public schools? (see below)

L.A. Becomes First Big School District To Ban Chocolate Milk  
by April Fulton  
- June 15, 2011

In the battle for nutrition bragging rights, Los Angeles has beat New York — at least when it comes to scratching chocolate milk and other less-healthful items from the school lunch menu.

Yesterday, the Los Angeles Unified School District voted 5-2 on a new dairy contract to remove flavored milk from school menus, the Los Angeles Times reports. The district also banned sodas and chicken nuggets recently in its battle against childhood obesity. "By the fall the district will be a national leader," Matthew Sharp, with California Food Policy Advocates, tells the Times.

But the question is, will kids reach for the plain stuff?

"We know that when flavored milk is taken out of the school, kids' milk consumption goes down," Ann Marie Krautheim, senior vice president of nutrition affairs for the National Dairy Council, told NPR's Jeff Brady when the group launched efforts to defend the sweet stuff from school assaults back in 2009.

Many people don't get the three servings of dairy the USDA recommends as it is, the industry notes.

And the market for chocolate milk is a big! More than half of all flavored milk is sold in schools, and it makes up about 4 percent of all U.S. milk sales, Brady reports.

Getting rid of chocolate milk may be popular with nutrition activists, but it won't likely be popular with the general public. The Consumerist blog surveyed people last year, and found that 75 percent said they think it should stay on the school menu, at least part of the time. [Copyright 2011 National Public Radio]
IV. Skills to be developed in this semester:
Read research articles
Critically evaluate research articles
Discuss the content of research articles
Read info supplied on current topics
Debate issues

V. Evaluation:

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<th>Points</th>
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<tr>
<td>Debate 1</td>
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<tr>
<td>Debate 2</td>
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<tr>
<td>Class participation</td>
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<td>Total</td>
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Participation:

Come to class ready to participate! Note that participation is nearly 1/3 of the course grade. The instructors will select all of the articles utilized in the course. The articles will be distributed in advance of the discussion period. All students will be expected to have read the article and be prepared to discuss the article in class. Participation in class includes (1) attendance and (2) contribution to questions and discussions in each class session. While voluntary participation will be appreciated, instructors will also call upon students for their answers/insights/opinions. Additionally, you will be called upon in class to answer questions if you do not participate on your own. Failure to actively participate will negatively influence your grade. The following guidelines will help you understand the level of participation that is required for each grade level:

- no participation = F
- participation only when called upon
  - response demonstrating a lack of understanding of the material = D
  - response provides only the minimum (correct) information = C
  - response provides insightful or thoughtful information = B
- voluntary participation
  - response provides minimum (correct) information = B
  - response provided insightful or thoughtful information = A

Debate: Your debate grade will be evaluated based on a combination of your group presentation and your individual performance. Assessments will include:

- Powerpoint style and effectiveness – group and individual
- Effective use of evidence – group and individual
- Effective argument - group
- Appropriateness and effectiveness of questions for opposing group(s) – group
- Individual participation in preparations (evaluated by group peers)
Debate Format

Debate/Discussion #1: What are the primary causes of the obesity epidemic?

Debate/Discussion #2: Should chocolate milk be banned from public schools?

Introduction:
The intention of this debate is for each group to establish a position, and support that position with evidence from selected literature and statistics. It is not intended to be a liturgy on all the information on the topic. Concerning evidence, remember that if available, evidence from randomized controlled trials is usually superior to that from observational studies. Further details on the debate will be provided in class but a brief description is provided below.

The Format for the Debate/Discussion will be as follows.
   i. Group 1 – Brief overview of issue, key general and specific facts to support the assigned position, results of a key study or two that support position. – 20-25 min
   ii. Moderator questions (professors) – 10 min
   iii. Questions from group 2, everyone – 10-15 min
   iv. Short break – 5-10 min
   v. Group 2 - Brief overview of issue, key general and specific facts to support the assigned position, results of a key study or two that support position. 20-25 min
   vi. Moderator questions (professors) – 10 min
   vii. Questions from group 1, everyone – 10-15 min
   viii. Debate/Discussion Position Synopsis
       1. 50 points
       2. *Due one week prior to the debate*
       3. 2-3 pages with references
       4. Indicate assigned position and key arguments for that position
       5. Indicate personal view and key arguments for that position
       6. Indicate the influence of the debate/discussion on your personal view and whether that view has changed & why.
NUTR590 Obesity Course: Assessment of Contributions to Debate/Discussion

Name ___________________________

Group ____________________________

Partners ___________________________

Date Presented _______________________

1. Description and evaluation of my contributions to the preparation of the oral presentation

2. Description and evaluation of my contributions during the oral presentation

3. Description and evaluation of my contributions to addressing questions after the oral presentation

4. Description and evaluation of other Contributions

5. Rate each participants contribution from your group to the preparation of your group’s presentation (0-100 rating system, <60 = fail, 60-70 = D, 70-80 = C, 80-90 = B, 90-100 = A)

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<thead>
<tr>
<th>Name</th>
<th>Contribution to the preparation of the oral presentation</th>
<th>Contributions during the oral presentation</th>
<th>Contributions to developing questions after the oral presentation</th>
<th>Contribution to addressing questions after the oral presentation</th>
<th>Overall Evaluation</th>
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Additional comments about contributions by other partners: