

GEORGE MASON UNIVERSITY
College Health and Human Services
Department Global and Community Health

GCH 466
Nutrition and Weight Management

SYLLABUS – Spring 2008

SYLLABUS

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| Course Number: | GCH 466 |
| Course Title: | Nutrition and Weight Management |
| Class Schedule: | Monday 1:30 pm – 4:10 pm |
| Location: | Innovation Hall 205 |
| Placement in Curriculum: | May replace GCH 420 or GCH 421 in nutrition certificate or serve as a senior or graduate elective |
| Credits: | 3 credits |
| Faculty: | Susan E. Berkow, Ph.D., CNS |
| Office Hours: | By appointment (or telephone) |
| Office Location: | Robinson B 420 |
| Telephone: | (703) 660-6556 |
| Email: | susan@susanberkow.com ; sberkow@gmu.edu |
| Catalogue Description: | This course focuses on the physiological, emotional, genetic and societal/cultural factors that influence the relationship between eating and weight regulation |
| Course Objectives: | Upon completion of this course, the student will be able to: <ul style="list-style-type: none">• Explain hunger and satiety as they relate to the spectrum of disordered eating• Compare and assess the contribution of putative agents, including cultural and social influences, that impact the course of anorexia, bulimia and obesity• Understand the physiology and medical consequences of obesity with particular emphasis on special populations (children, ethnic or cultural subgroups)• Evaluate public health efforts, including nutritional and behavioral approaches, for the prevention and treatment of obesity• Design prevention and intervention strategies for the spectrum of disordered eating behaviors.• Synthesize and evaluate current research relating to the spectrum of eating disorders. |

Required Text: Eating Disorders: A Clinical Guide to Counseling and Treatment, Monika M. Woolsey, American Dietetic Association, 2002

Weight in American: Obesity, Eating Disorders, and Other Health Risks, Barbara Wexler, Thompson Gale, 2007

Eating Disorders and Obesity: A Comprehensive Handbook, Second Edition, Christopher G. Fairburn, Kelly D. Brownell, Eds. The Guilford Press, 2002

Recommended Resource: Diet Analysis Plus Version 7.0 for Windows

Course Requirements GCH 295 or other introductory nutrition course or permission of instructor

Course Evaluation Methods:

- Web-based popular magazine assignment
- BRFFS assignment – evaluation of state plans
- Quizzes
- Journal articles review
- Interview with nutrition professional
- Research and design of intervention strategy

Teaching Strategies: Lecture/discussion, Guest lectures, Student presentations, Case study analysis, scientific literature reviews, popular media reviews.

TOPICAL OUTLINE:

- Overview of course, objectives, expected learning outcomes, review of nutrition
- Classification of obesity, prevalence and demographics, social, cultural and economic influences, obesity in subpopulations.
- Genetic and biological influences on obesity: energy intake and body weight, body fat distribution
- Medical complications of obesity, health risks due to excess weight, morbidity and mortality
- Childhood obesity, prevalence and effects, prevention
- Intervention strategies: popular diets, behavioral approaches including exercise, pharmacological, bariatric surgery for morbid obesity
- Public health and obesity
- Classification and diagnosis of eating disorders; anorexia nervosa, bulimia, binge eating disorder
- Physiological and medical aspects of eating disorders

- Hunger and satiety in eating disorders
- Eating disorders in subpopulations –children, athletes, pregnancy
- Nutritional management of anorexia and bulimia
- Cognitive-behavioral therapy (guest speaker)
- Summation, evaluation – where do we go from here?

COURSE POINT DISTRIBUTION:

There are **500 total** points in this class, extra credit points will be available on each quiz.

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|----------------|-----------|
| 475-500 | A |
| 450-474 | A- |
| 435-449 | B+ |
| 415-434 | B |
| 400-414 | B- |
| 385-399 | C+ |
| 365-384 | C |
| 350-364 | C- |
| 325-349 | D |
| <324 | F |

READINGS:

You are expected to keep up with the assigned text reading. The chapters required for each lecture are listed in the syllabus.

ASSIGNMENTS:

Assignment 1 - MEDIA AND EATING DISORDERS -50 POINTS due 2/11

1. Review two popular magazines, one primarily for women and one for men, which promote messages of thinness and,
2. Review one internet site *promoting* eating disorders.
3. Summarize the messages of each magazine, internet site
 - a. Describe the different techniques employed, i.e., using popular models, promoting happiness, a better life, etc.
 - b. Are these techniques convincing/do they communicate their message effectively?
 - c. Are these messages dangerous? Why/why not?
 - d. Do you feel there should be any restraints on internet sites or what is published in magazines as related to body image and eating disorders? Explain
5. Hand in a copy of your articles (NOT the whole magazine!) Be sure to list the internet site and the date accessed.

The *total* paper must be three pages, double spaced, with 12-point font.

Be prepared to discuss your findings in class

Assignment 2 – POSITIVE BODY IMAGE AWARENESS WEEK, 25 points, due March 3rd (see handout)

Assignment 3 - IS OBESITY A DISEASE? 100 POINTS due 3/31

Critique two scientific publications from the following list of approved journals. One will be in support of the finding that obesity is *primarily* a disease, (biological) the other will support the position that obesity is *primarily* due to environmental causes (lack of exercise, over-eating, etc.). We know from our readings and class that obesity is multi-causal but the point of this exercise is to research articles on distant arms of the spectrum.

The articles must be related to **current** (within five years) research. You may look at the bibliographies of the chapters that we have studied to help select an article.

- *The American Journal of Clinical Nutrition*
- *Journal of the American Dietetic Association*
- *Nutrition Reviews*
- *Journal of Nutrition*
- *Scientific American*
- *Journal of the American Medical Association*
- *Lancet*
- *The New England Journal of Medicine*
- *International Journal Obesity*
- *Pediatric Nursing*

If you find an article that is from a journal not on this list, see me for approval. No popular journals (Time, Newsweek, etc.) are acceptable for this assignment. I suggest looking at several articles before making a selection. Be SURE you pick an article you understand and that lends itself to the assignment.

The total paper must be five pages, double spaced, with 12-point font. USE YOUR OWN WORDS! If article is not in your own words, you will be downgraded. You must turn in copies of the articles you critiqued in order to get credit.

Summary

1. Summarize each article **IN YOUR OWN WORDS**
 - a. purpose of research
 - b. methods
 - c. findings
 - d. conclusions
2. What are the credentials of the author(s)? What organization or institution is the author(s) affiliated with?

Critique

3. How well does the research presented in the article support the conclusions and recommendations in the article?
4. How does this article apply to what we have studied?
5. What did you learn from this article?
6. What would be a follow-up research question to this article?
7. Which article is more convincing/more science-based? **Fully** explain your answer to this question
8. *Be sure to use articles that you can understand – this may take some time and research!*

Assignment 4 - INTERVIEW AN EATING DISORDERS OR WEIGHT LOSS PROFESSIONAL – 75 POINTS (other than me!) due 4/21

You are to visit a treatment center or private office and interview the professional in-person. Some places to consider are Dominion Hospital – ED, Fairfax Hospital, ED, many private practitioners (check the net), Weight Watchers, TOPS, Jenny Craig, individual practitioners, look at the ADA website and find practitioners in your areas. These are suggestions – you may be as creative as you like in identifying individuals to interview!

- Name of person interviewed
- Background and education of professional
- Why did they enter this field?
- According to the professional, what are the important qualities in a professional providing direct treatment? Include personality characteristics, education, and experience. Should the counselor be in recovery (if ED) or, have lost weight and kept it off (if obesity treatment)?
- What is his/her theory of ED's and recovery? or
What is his/her approach to weight loss and maintenance?
- What are the elements of the treatment program at that setting or set by the individual professional in his/her private practice?
- What is the rate of recidivism of their clients? If they do not have records, ask why not.
- What is their rate of success? (see above)
- What are **your** impressions of the individual and his/her approach to treatment?

Write a 3-page double spaced 12 point-font summary of your findings in paragraph form. Be prepared to discuss in class.

Assignment 5 - GROUP RESEARCH PROJECT 175 POINTS due 5/5

Research **two** obesity prevention programs that are either identified in Chapter 10 of your text *Weight in America*, or any of the state BRFSS (Behavioral Risk Factor Surveillance System) programs that we have studied this semester or that can be found on line, paying particular attention to the following:

1. target group(s) – disease burden in population
2. goals of program
3. strategies to meet the goals

4. implementation
5. evaluation

Take notes on these programs as you will need these later.

Based on your **REVIEW OF THESE PROGRAMS AND WHAT YOU HAVE LEARNED THIS SEMESTER**, you will get into groups of three or four students and design a health promotion/intervention program targeting obesity prevention. You will include the following information in a paper (see below) and produce either a video or power point **ALONG WITH** a brochure that describes your plan and serves to recruit participants.

A 2-page outline describing the two programs that you have chosen to review, your target population, objectives and proposed strategies and method of evaluation along with the responsibilities of each student, will be due on 4/14. Hand in one paper per group.

To be described in a paper:

1. identify stakeholders (target group)
2. present data on disease burden of your population
 - a. factors contributing to obesity
 - b. health consequences of obesity
 - c. economic consequences of obesity (may be extrapolated from existing program data that you have reviewed)
 - d. existing efforts to control obesity
3. objectives of program
4. short- and long-range goals
5. implementation – list strategies for collaborative practices including:
 - a. build partnerships
 - b. strengthen existing partnerships
6. cost
7. evaluation: compare the strengths and weakness of your proposed plan with the two plans that you reviewed. Pay particular attention to numbers 3-6 above.

The video, power point or poster, along with the brochure, will be presented to the class – be prepared to discuss your plan and answer questions.

Your grade will be based on your paper and power point/ video, brochure and presentation in class. All members of the same group will get the same grade so it is up to you to share the work. If a member of the group is not present on the day you present, she/he will get a zero, even though they may have participated in the preparations. This time, you get to determine the length of your paper!

THREE QUIZZES, 25 points each, for A TOTAL OF 75 POINTS

These will be multiple choice and short answer, based on assigned readings, lectures, videos and guest speakers, given during class.

*****Plagiarism*****

Plagiarism of any type will result in an “F” on the assignment and can lead to failure in the class. If you have any questions about this, come see me.

ATTENDANCE:

Attendance (*including tardiness*) and class participation will be taken into account to evaluate your grade. For example, if you have missed any classes and/or have been late, or have not participated in class discussion, your grade will be downgraded from a B+. to a B.(etc) If you have a LEGITIMATE reason to miss class or be tardy, documented illness, family emergency, etc. please email me. **IF YOU ARE RUNNING MORE THAN 10 MINUTES LATE, YOU WILL NOT BE ALLOWED TO ENTER THE CLASSROOM, unless prior arrangement has been made.**

CELL PHONES AND PAGERS:

Please turn-off cell phones and pagers during lecture

LATE ASSIGNMENT POLICY:

I will accept assignments late, however, they will be docked 5% for each day late. I will NOT accept assignments any later than 2 weeks past the due date. You may email me your assignment however I must receive it *before* the start of class on the day it is due to be counted “on time”. I will not accept late assignments in my mailbox.

DATES OF NOTICE:

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| Last day to add classes – | Feb 5 |
| Last day to drop classes (no reimbursement) | Feb 22 |
| Spring break | March 10-18 |
| Last Day of Class | May 5 |
| Exams (we will not have a final exam) | May 7-14 |

STUDENTS WITH DISABILITIES

If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at 703/993-2474. All academic accommodations must be arranged through the DRC.

SCHEDULE – please note that this schedule is subject to change

| DATE | TOPIC | READINGS/ASSIGMENTS DUE |
|-------------|---|--|
| 1/28 | Overview of course, objectives, expected learning outcomes, review of nutrition | |
| 2/4 | Nutrition and nervous system function, the neuroendocrine basis of eating disorders | Woolsey, chapter 14, 1 Fairburn, chapter 48,49, |
| 2/11 | Feeding regulation: the hypothalamus, hunger and satiety in eating disorders | Woolsey, chapter 2, 3 Fairburn, chapters 1, 3, 50 |

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| | Discuss assignment 1 | Assignment 1: Media and Eating Disorders |
| 2/18 | I. Gastrointestinal influences on eating, II. Medical complications of eating disorders | Woolsey, chapters 4, 13 |
| 2/25 | Psychological aspects of eating disorders: Sociocultural influences, family dynamics, sexual abuse and dissociative disorders Video PPY (tentative) | Woolsey, chapters 6,7,8 In class- Quiz 1 |
| 3/3 | Nutritional therapy in eating disorders Cognitive therapy in eating disorders Video -Thin | Woolsey, chapter 15 Assignment 2: Positive Body Image Awareness Week |
| 3/17 | Part I. Overweight in America and abroad Is obesity a disease? Get into groups of 3-4 students to begin to think about your research project (see Assignment 5) | Wexler, chapter 1,2 Fairburn 4, 10,74, 75 84,86 |
| 3/24 | Part II Overweight in America and abroad Guest speaker Lisa Pawloski, Ph.D . Discuss assignment 2 | see readings above (3/17) Assignment 3: Is obesity a disease? |
| 3/31 | The influence of mental health and culture on Weight and eating disorders Video (tentative) PPY) | Wexler, chapter 3 In class Quiz 2 |
| 4/7 | Diet, nutrition and weight issues among children Work on research project | Wexler, chapter 4 Fairburn, chapters 77, 85 (review), 103 |
| 4/14 | Treatments for overweight and obesity: dietary, physical activity, drugs, surgery, other (guest speaker, Maureen Storey) | Wexler, chapters 5, 6 Fairburn chapters 14, 89 91, 96-99, 101, 102 Outline for research project (1 paper /group) |

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| 4/21 | Economics of overweight Political, social and legal issues of obesity Discuss Assignment 3 (Guest speaker Merle Goldberg, LCSW) | Wexler, chapters 7, 8 Fairburn 19, 20, 82 Assignment 4: Interview |
| 4/28 | Preventing overweight Diet and weight loss myths and controversies How <i>DO</i> Americans feel about their weight? | Wexler, chapters 9, (10 on your own), 11 Fairburn, chapters 93, 106, 109, 112 In class QUIZ 3 |
| 5/5 | Wrap-up, evaluation Presentations Where do we go from here? | Assignment 5: Presentation |