

COURSE SYLLABUS

Course Title: *CHS M234/HS M255 Obesity, Physical Activity and Nutrition Seminar*

Instructors: Gail Harrison, PhD
UCLA Dept. Community Health Sciences, 36-081
X53738, x46601, gailh@ucla.edu

Antronette K. Yancey, MD, MPH
UCLA Dept. Health Services, 71-279B
x49284, ayancey@ucla.edu

Draft Date: 9/15/02

Course Offered: Fall Quarter

Day & Time: Thursdays, 12:00-3:00pm

Room: 41-235 CHS

FORMAT: 4-credit weekly seminar designed for intermediate or advanced graduate students and postdoctoral fellows. Provides an overview of the epidemiology, physiology, chronic disease implications, and current state of preventive and therapeutic interventions for obesity in adults and children, including public health policy approaches to healthy nutrition and physical activity promotion. Class sessions are combination lecture/discussion.

TARGET STUDENT ENROLLMENT: 10-20 intermediate or advanced graduate level students

PREREQUISITES: Graduate standing or permission of instructor.

GRADING:

- I. Proposal Oral Presentation (Students present to the class a brief [<10 minute] description of a research proposal they produce for an organization or setting with which they're familiar on a related subject of their choosing), (30%)
- II. Written Proposal (Students prepare a written presentation of the proposal introduced orally, with a maximum length of 20 pp), (60%)
- III. Class Participation reflecting command of main themes from readings, through class discussion and/or acquisition/sharing of materials in class, (10%)

READER: Available from Course Reader Material (310/443-3303). Other readings will be

supplied by the instructors.

COURSE SCHEDULE

Week 1 Introduction/Course Logistics (Drs. Harrison, Yancey)

9/26/02

- Dietz WH, Gortmaker SL. Preventing obesity in children and adolescents. *Ann Rev Public Health* 2001;22:337-353.
- French SA, Story M, Jeffery RW. Environmental influences on eating and physical activity. *Ann Rev Public Health* 2001;22:309-335.
- Kumanyika S. Minisymposium on obesity: overview and some strategic considerations. *Ann Rev Public Health* 2001;22:293-308.
- Seidell JC. The current epidemic of obesity (Ch. 2). In: *Physical Activity and Obesity*. C Bouchard (ed). Champaign, IL: Human Kinetics Publishers, Inc., 2000.

Week 2 Global Epidemiology of Obesity (Dr. Harrison)

10/3/02

- Bray GA. Overweight, mortality and morbidity. In: *Physical Activity and Obesity* (Ch. 3)
- Colditz GA, Mariani A. The cost of obesity and sedentarism in the U.S. In: *Physical Activity and Obesity* (Ch. 4)
- Egger G, Swinburn B. An "ecological" approach to the obesity pandemic. *BMJ* 1997;315:477-480.
- Global prevalence and secular trends in obesity (Ch. 3). *Obesity: Preventing and Managing the Global Epidemic*. Geneva: WHO, 1997.
- Gardner G, Halwell B. *Overfed and Underfed: the Global Epidemic of Malnutrition*. Washington, D.C.: Worldwatch Institute, 2000.
- National Heart, Lung and Blood Institute. Overweight and obesity: background (Ch. 2). In: *Clinical Guidelines on the Identification, Evaluation and Treatment of Overweight and Obesity in Adults: The Evidence Report*. Bethesda, MD: NHLBI, 1998.

Week 3 Basic Biology of Obesity; Physiology of Digestion (Drs. Go, Harris)

10/10/02

- Commuzzi AG, Allison DB. The search for human obesity genes. *Science* 1998;280:1374-1377.
- Ramsay TG. Fat cells. *Endocrinology & Metabolism Clinics of N America* 1996;25(4):847-870.
- Salbe AD, Ravussin E. The determinants of obesity. In: *Physical Activity and Obesity* (Ch. 5)
- Woods SC, Seeley DP, Schwartz MW. Signals that regulate food intake and energy homeostasis. *Science* 1998;280:1378-1383.

Week 4 Why Do We Move or Not Move? (Drs. McCarthy, Yancey)

10/17/02

Gutin B, Barbeau P. Physical activity and body composition in children and adolescents. In: *Physical Activity and Obesity* (Ch. 11).
Prentice AM, Jebb SA. Physical activity level and weight control in adults. In: *Physical Activity and Obesity* (Ch. 12).
American Journal of Preventive Medicine supplement, “Innovative Approaches to Understanding and Influencing Physical Activity” excerpt (to be distributed)

Week 5 **Why Do We Eat the Foods We Eat? (Drs. Harrison, Leslie)**
10/24/02

One-page abstract of research proposals due

Freedman MR, King J and Kennedy E. Popular Diets: A Scientific Review. *Obesity Research* 9, Supplement 1, March 2001 (pp. 1-40S).

Week 6 **Pediatric Obesity: Development and Preventive Intervention (Drs. Harrison, Yancey)**
10/31/02

Physical activity and nutrition in children and youth: an overview of obesity prevention. *Prev Med* 2000;31:Supplement.
Sallis JF, McKenzie TL, Lewis M, Marshall S, Rosengard P. Effects of health-related physical education on academic achievement: Project SPARK. *Res Q Exerc Sport* 1999;70(2):127-134.
Troiano RP, Flegal KM. Overweight children and adolescents: description, epidemiology and demographics. *Pediatrics* 1998;101(3, Supplement):518-524.
Waterland RA, Garza C. Potential mechanisms of metabolic imprinting that lead to chronic disease. *Am J Clin Nutr* 1999;69(2):179-197.

Week 7 **Adult Obesity: Development and Preventive Intervention (Drs. Harrison, Yancey)**
11/7/02

Baker CW, Brownell KD. Physical activity and maintenance of weight loss: physiological and psychological mechanisms. In: *Physical Activity and Obesity* (Ch. 16)
Jeffery R, Epstein L, Wilson G et al. Long-term maintenance of weight loss: current status. *Health Psychology* 2000;19(1, Suppl.):5-16.
Kumanyika S, Bowen D, Rolls B et al. Maintenance of dietary behavior change. *Health Psychology* 2000;19(1, Suppl.):42-56.
Marcus B, Forsyth L, Stone E et al. (2000), Physical activity behavior change: issues in adoption and maintenance. *Health Psychology* 19(1, Suppl.):32-41.
Taylor W, Baranowski T. & Young D. Physical activity interventions in low-income, ethnic minority, and populations with disability. *Am J Prev Med* 1998;15(4):334-343.

Week 8 **Student Proposal Concept Presentations**
11/14/02

Week 9 **Medical and Surgical Approaches to Obesity Treatment (Dr. Heber)**
11/21/02

National Heart, Lung and Blood Institute. Examination of randomized trial evidence: why treat overweight and obesity? What treatments are effective? (Ch. 3) In: *Clinical Guidelines on the Identification, Evaluation and Treatment of Overweight and Obesity in Adults: The Evidence Report*. Bethesda, MD: NHLBI, 1998.

Obesity Research review of pharmacologic Rx's excerpt (to be distributed)

Week 10 **Thanksgiving Day Holiday**
11/28/02

Week 11 **Organizational Practice and Legislative Policy Approaches to Obesity**
12/05/02 **Prevention and Control (Dr. Yancey)**

Full Research Proposals Due

- ACT Writing Group. Effects of physical activity counseling in primary care: the Activity Counseling Trial: a randomized controlled trial. *JAMA* 2001;286:677-687.
- Dishman R, Oldenburg B, O'Neal H, Shephard R. Worksite physical activity interventions. *Am J Prev Med* 1998;15(4):344-361.
- Koplan J, Dietz W. Caloric imbalance and public health policy (editorial). *JAMA* 1999;282(16):1579-1582.
- Swinburn B, Egger, G, Raza F. Dissecting obesogenic environments: the development and application of a framework for identifying and prioritizing environmental interventions for obesity. *Prev Med* 1999;29:563-570.
- Wilcox S, Parra-Medina D, Thompson-Robinson M, Will J. Nutrition and physical activity interventions to reduce cardiovascular disease risk in health care settings: a quantitative review with a focus on women. *Nutr Rev* 2001;59:197-214.
- Yancey A, Miles O, Jordan A. Organizational characteristics facilitating initiation and institutionalization of physical activity programs in a multi-ethnic, urban community. *Journal of Health Education* 1999;30(2):S-44-S-51.

GUEST LECTURERS (selected from the following list as available):

V. L. W. Go, MD (Professor, Department of Medicine, UCLA School of Medicine)
Diane Harris, PhD (Researcher, Department of Medicine, UCLA School of Medicine/UCLA

Center for Human Nutrition)

David Heber, MD, PhD (Professor, Department of Medicine, UCLA School of Medicine and
Department of Community Health Sciences, UCLA School of Public Health)

Joanne Leslie, ScD (Adjunct Associate Professor, Department of Community Health Sciences,
UCLA School of Public Health)

William McCarthy, PhD (Adjunct Associate Professor, Department of Psychology, UCLA
College of Letters and Sciences)