OVERVIEW: PUBLIC HEALTH NUTRITION

Public health nutrition addresses ways to improve the food choices, dietary intake, and nutritional status of diverse population groups. It differs from dietetics in two critically important ways. It focuses on populations at the level of communities, regions, or nations rather than on individuals in clinical settings, and it also focuses on improving environmental more than on individual determinants of dietary intake. Its core methods involve (a) assessing nutritional problems and needs, (b) determining the environmental or “ecological” causes of those problems and needs, (c) identifying intervention points, (d) developing policies and programs to intervene at those points, (e) implementing the policies or conducting the programs, and (f) evaluating the effectiveness of the policies or programs. This course mainly covers (a) through (d); it touches briefly on (e) and (f).

DESCRIPTION: This course is an introduction to the concepts, principles, and scope of practice of public health nutrition. It emphasizes the distinction between population-based and individual-based approaches to prevention and alleviation of diet-related conditions, as well as the societal, economic, environmental, and institutional determinants of food intake and nutritional status. It introduces the elements of nutrition policies and programs for improving the nutrition and health status of diverse population groups, and for overcoming barriers to their implementation.

COURSE OBJECTIVES

1. Define the scope of practice of public health nutrition.
2. Distinguish population-based approaches to nutrition intervention from methods that focus on changing the behavior of individuals.
3. Identify the principal biological, cultural, socioeconomic, and nutritional determinants of diet-related disease risks among diverse population groups, and describe how such determinants affect food intake, health status, and the effectiveness of nutrition interventions.
4. Identify the causes and consequences of the “nutrition transition” from conditions of undernutrition to those of overnutrition in developing countries.
5. Identify the principal food safety problems in industrialized and developing countries and public health approaches to ensuring the safety of the food supply.
6. Describe the principal public health policies and programs designed to address food insecurity, hunger, and nutritional deficiencies, and those designed to address conditions of overnutrition and diet-related chronic disease among diverse population groups.
7. Describe public health policy needs, goals, and approaches to nutrition intervention in diverse populations, barriers to policies, and methods to advocate for policies to improve the nutritional status of diverse population groups.
COURSE MANAGEMENT
The course will run on the NYU Blackboard system: course handouts, announcements, correspondence, and other class matters are online. To access the site, you must have--and use--an NYU e-mail address and password. You activate your account by going to http://start.nyu.edu. Set up your ID and password; then go to http://home.nyu.edu. Click on Academics, then Classes, then the course name. You should check the site at least once a week—and definitely on the day before class—to obtain updated course information. For help: http://www.nyu.edu/its/faq/blackboard.

EVALUATION AND GRADING
Attendance, participation 15%
Safety net project 20%
Intervention project 65%
Grading is based on breadth and depth of research; cogency of argument; adherence to format; quality of the work; consistency with reality; readability; and other such matters.

EXPECTATIONS
• Inform instructor in advance by e-mail if you are not going to be in class.
• Class begins on time: arrive on time.
• Inform instructor in advance if you need to leave early.
• Turn off all cell phones and electronic devices; if you forget, turn it off or leave the class.
• Request a class break if you think one is needed.
• Complete assigned work on time; there will be penalties for late work.
• Plan ahead: no incomplete grades are given (except in dire, documented emergency).
• Check Blackboard regularly for messages regarding class assignments and scheduling.
• Your voice matters: participate!

REQUIRED READING
• Wansink, B. Mindless Eating: Why We Eat More Than We Think. Bantam, 2006 (available at NYU bookstore after mid-September)
• Simon, M. Appetite for Profit: How the Food Industry Undermines Our Health and How to Fight Back. Nation Books, 2006 (available in NYU bookstore after late October)
• Selected readings from journals, books, and government documents. These are listed below and either are posted on Blackboard (see Course Documents), or are online. Additional readings may be assigned as the class progresses, based on current events as reported in newspapers, magazines, newsletters, and journals.
• In-depth reading for class assignments.
RESOURCES

PUBLIC HEALTH AT NYU: The NYU Public Health Alliance is a joint project of Steinhardt and Wagner public health and public policy students: subscribe to the listserve and receive announcements of lectures and other activities at public-health-association@forums.nyu.edu

WEBSITES

*American Public Health Association (APHA) www.apha.org
*Public Health Association of NYC (PHANYC) www.phanyc.org
*Center for Science in the Public Interest (CSPI) www.cspinet.org
National agricultural library www.nutrition.gov
Centers for Disease Control and Prevention (CDC) www.cdc.gov
National Center for Health Statistics, CDC www.cdc.gov/nchs
Food and Nutrition Service, USDA www.fns.usda.gov/fns
Center for Nutrition Policy & Promotion, USDA www.usda.gov/cnpp
Food & Drug Administration http://vm.cfsan.fda.gov/
Institute of Medicine, Food & Nutrition Board: www.iom.edu/iomhome.nsf/Pages/Food+and+Nutrition+Board

* These organizations welcome student members, have student (or low) membership rates, and publish information about public health nutrition.

WRITING RESEARCH TERM PAPERS

Resources for writers: dictionaries, guides to English usage (Strunk & White), quotations, online at www.bartleby.com.

Reference citation style: most nutrition and health journals follow variations of the Uniform Requirements for Biomedical Journals. See instructions at www.icmje.org. Each journal has its own variation of the basic reference style, but all follow Uniform Requirements. See, for example:

Am J Public Health www.ajph.org Click on Instructions to Authors
Am J Clin Nutr www.ajcn.org Click on Author Services
J Am Diet Assoc www.eatright.org/journal Click on Guidelines for Authors
J Nutr www.nutrition.org Click on Author's Guide

Uniform Requirements require standard abbreviations for journals. See: http://library.caltech.edu/reference/abbreviations.

WRITTEN WORK

All work must be typed, double-spaced, on one side of paper leaving one-inch margins, clearly marked with your name, titled with the issue you are discussing, and presented in a readable font (if you are using anything smaller than 12-point, you must clear it with the instructor). Number pages. Do not exceed page limits. Write your work carefully. Use grammar and spell checks.
THE SAFETY NET PROJECT

Because so much of Gibney et al, Public Health Nutrition, describes international problems and methods for dealing with them, most of the additional reading in this course focuses on uniquely American issues and actions. Advocates for the American poor increasingly complain about the weakening of the “safety net” for low-income women and children (the groups most vulnerable to problems related to undernutrition). For this project, which should be done in groups of 2 to 4 people, you are to research and identify the principal elements of the nutrition safety net for American women and children—programs that either provide food or provide the means to obtain food—and to evaluate its overall adequacy.

One way too think about this project is to ask: “If I were an unmarried, unemployed mother of two children under the age of 5 living in New York City without a bank account, car, or health insurance (but housed in some way), what kinds of resources are available to help me survive and feed my children?” [In the course of your research, you might ask whether any such women exist in America and, if so, how many in New York City and nationally.]

This project requires you (or your team) to read widely about food assistance and welfare programs, to summarize the relevant features of the most significant of these programs in a Table, and to provide an analysis of the strengths and weaknesses of the “net” as a whole and of the overall adequacy of these programs for meeting the nutritional needs of low-income women and children. If New York City’s safety net differs in any important way from the national scene, you should also take that difference into consideration.

You will present the results of your research in a short paper of no more than 3 double-spaced pages of text. The summary table and reference list can be attached as additional pages.

Your paper should follow the format indicated above and should include:

• Title page with list of “authors”
• Your analysis and evaluation of the adequacy of the safety net – no more than 3 double-spaced pages
• A Table that summarizes programs comprising the safety net and their most relevant features (and their strengths and weaknesses)
• A list of print and electronic references consulted, presented in a standard citation format

Your analysis should be supported by the data you present in the Table. You may argue that the net is adequate, inadequate, or something in between but whatever position you take should be based on evidence presented in the Table. Grading will be based on comprehensiveness and depth of research, relevance and consistency of the information presented, cogency of argument, clarity of presentation, and adherence to format. All members of the team will receive the same grade.

Due dates: October 2, team list. October 30, paper due.
THE INTERVENTION PROJECT

As public health nutrition professionals, you will be confronted with any number of challenges in identifying the needs of groups with which you are working, developing programs to meet those needs, overcoming barriers to implementing those programs, and determining whether the programs have done what they were supposed to do. Needs assessment and program planning, implementation, and evaluation constitute the core of public health nutrition practice at any level—agency, community, national, or international—so no matter what you end up doing professionally, you will need skills and experience in these areas.

This assignment requires you to tackle a problem in public health nutrition as if you were going to try to do something about it. What can you—as an individual or working with an established group—do to address a public health nutrition problem. You will choose a problem of interest; document the nature, severity, extent, and consequences of that problem; describe the environmental determinants of the problem; and design an “ecological” public health approach to preventing the problem.

To successfully complete this assignment, you will need to read widely and deeply about the problem you choose and about the kinds of programs that have been used—successfully or not—to address it or similar problems. You will need to be realistic about what can and cannot be accomplished and about the resources that will be needed to make your intervention succeed. Within expected constraints, your paper should attempt to answer the question: how can you, personally, working as an individual or as part of a group, make real progress in addressing the problem from a public health perspective.

You will present the results of your research in a short paper—no more than 5 pages (tables, figures, references can be attached as extra pages)—following a standard format for presentation, reference citation, and references.

Your paper should include:
- Title page (it should state the public health nutrition problem your paper discusses)
- Introduction: overview of problem and origins and where discussion is headed (~1 page)
- Discussion and analysis of nature, severity, extent, and consequences of that problem, and its environmental origins (~2-3 pages)
- Discussion and analysis of your suggested intervention (~1-2 pages)
- References cited in text (keyed to text citations)
- Ecological diagram specific to your topic
- Outline of steps needed to achieve your proposed intervention
- Additional Tables, Figures, or other attachments, as needed

Grading will be based on extent and depth of research, depth of understanding of the problem chosen, relevance of the intervention for addressing the problem, depth of analysis, clarity of presentation, and adherence to format. You will do this project on your own, but the intervention you suggest may involve joining a group or getting a group involved.

Paper due: December 18
# PUBLIC HEALTH NUTRITION CLASS SCHEDULE: OVERVIEW

<table>
<thead>
<tr>
<th>CLASS</th>
<th>DATE</th>
<th>TOPIC</th>
<th>ASSIGNMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>September 11</td>
<td>Introduction: Course overview</td>
<td>Reading list</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public health nutrition tools (for assessing food and nutrition problems and their causes)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>September 18</td>
<td>Defining the scope and practice of public health nutrition</td>
<td>Reading list</td>
</tr>
<tr>
<td>3</td>
<td>September 25</td>
<td>Assessing the nutritional status of individuals and populations: diets and activity levels</td>
<td>Reading list</td>
</tr>
<tr>
<td>4</td>
<td>October 2</td>
<td>Identifying public health problems and strategies</td>
<td>Reading list</td>
</tr>
<tr>
<td></td>
<td>October 9</td>
<td>Columbus Day Holiday</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>October 16</td>
<td>Setting dietary goals and guidelines for individuals and populations</td>
<td>Reading list</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public health nutrition problems (and program and policy approaches to solving them)</td>
<td>DUE: Intervention project topic and preliminary description</td>
</tr>
<tr>
<td>6</td>
<td>October 23</td>
<td>Improving the safety of the food supply</td>
<td>Reading list</td>
</tr>
<tr>
<td>7</td>
<td>October 30</td>
<td>Identifying influences and determinants of food choice</td>
<td>Reading list</td>
</tr>
<tr>
<td>8</td>
<td>November 6</td>
<td>Addressing diet-related conditions of undernutrition</td>
<td>Reading list</td>
</tr>
<tr>
<td>9</td>
<td>November 13</td>
<td>Guest Lecture: Michele Simon Advocating for public health policies</td>
<td>Reading list</td>
</tr>
<tr>
<td>10</td>
<td>November 20</td>
<td>Improving the nutritional status of women and children</td>
<td>Reading list</td>
</tr>
<tr>
<td>11</td>
<td>November 27</td>
<td>Addressing the nutrition transition to conditions of overnutrition</td>
<td>Reading list</td>
</tr>
<tr>
<td>12</td>
<td>December 4</td>
<td>Addressing obesity and its consequences</td>
<td>Reading list</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public health nutrition programs (and how to make them work)</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>December 11</td>
<td>Developing and implementing policies for public health nutrition</td>
<td>Reading list</td>
</tr>
<tr>
<td>14</td>
<td>December 18</td>
<td>To be arranged</td>
<td>DUE: Intervention project</td>
</tr>
</tbody>
</table>
NUTRITION IN PUBLIC HEALTH, FALL 2006: READINGS

Week 1: September 11
Introduction: Course overview

Week 2: September 18
Defining the scope and practice of public health nutrition
- Gibney et al, chapter 1

Week 3: September 25
Assessing the nutritional status of individuals and populations: diets and activity levels
- Gibney et al, chapters 2 (pages 26-34, 57-65), 3, and 4
- Browse the USDA Food Services Research Group website, with special attention to “What We Eat in America” website, “Overview.” Start at: [http://www.ars.usda.gov/Main/site_main.htm?modecode=12-35-50-00]
- USDA food “consumption” website: [http://www.ers.usda.gov/data/foodconsumption/]

Week 4: October 2
Identifying public health problems and strategies
- Gibney et al, Chapters 5 and 6

Note: October 9 is Columbus Day holiday
Week 5: October 16

Setting dietary goals and guidelines for individuals and populations

- Press accounts of the Institute of Medicine’s report on fish risks and balances
- Gibney et al: Chapter 7
- Dietary Reference Intakes: [http://lab.nap.edu/nap-cgi/discover.cgi?term=dietary+reference+intakes&restric=NAP&GO.x=24&GO.y=18](http://lab.nap.edu/nap-cgi/discover.cgi?term=dietary+reference+intakes&restric=NAP&GO.x=24&GO.y=18); click on the book covers to find downloadable PDF summaries; read the ones on calcium, potassium, and carbohydrate (sugars).
- MyPyramid brochure: Steps to a Healthier You, 2006 (on Blackboard)

Week 6: October 23

Improving the safety of the food supply

- The USDA food safety website: [www.usda.gov/wps/portal/lut/p/_s.7_0_A/7_0_1OB?navid=FOOD_SAFETY&parentnav=FOOD_NUTRITION&navtype=RT](http://www.usda.gov/wps/portal/lut/p/_s.7_0_A/7_0_1OB?navid=FOOD_SAFETY&parentnav=FOOD_NUTRITION&navtype=RT). Explore. Look for consumer information, statistics, and recall information.
- The FDA food safety website: [www.cfsan.fda.gov/list.html](http://www.cfsan.fda.gov/list.html). Browse the links to Foodborne Illness, HACCP, Imports, Food Defense and Terrorism (click on Alerts). Be sure to look at Recalls at [www.fda.gov/opacom/7alerts.html](http://www.fda.gov/opacom/7alerts.html).
- Center for Science in the Public Interest food safety advocacy information is at [www.cspinet.org/foodsafety/index.html](http://www.cspinet.org/foodsafety/index.html). Click on the link to *Outbreak Alert!* and browse that report.
**Week 7: October 30**  
**Identifying influences and determinants of food choice**  
- Gibney et al, Chapter 8  

**Week 8: November 6**  
**Addressing diet-related conditions of undernutrition**  
- Gibney et al, chapters 10-13  

**Week 9: November 13**  
**Guest Lecture: Michele Simon** (see her blog at [www.informedeating.org/blog](http://www.informedeating.org/blog))  
**Advocating for public health policies**  

**Week 10: November 20**  
**Improving the nutritional status of women and children**  
- Gibney et al, chapters 15-18  
- Neuberger Z, Greenstein R. WIC-only stores and competitive pricing in the WIC program, May 17, 2004 at [http://www.cbpp.org/5-17-04wic.htm](http://www.cbpp.org/5-17-04wic.htm).  
Week 11: November 27

Addressing the nutrition transition to conditions of overnutrition

- Gibney et al, chapter 9, 19, 20, 21.

Week 12: December 4

Addressing obesity and its consequences

- Gibney et al #14,19,20

Week 13: December 11

Developing and implementing policies for public health nutrition

- Gibney et al #21,22 (scan)
- CDC programs to address obesity: [www.cdc.gov/nccdphp/dnpa/obesity](http://www.cdc.gov/nccdphp/dnpa/obesity). Look at definitions, trends, and recommendations.

Week 14: December 18

To be arranged (no reading assignment)