

Nutrition 203 – Introduction to Global Health

Instructors: Tanumihardjo, Nutritional Sciences
Pixley, Agronomy
Paskewitz, Entomology
Suri, Devika, Certificate in Global Health Advisor

Teaching assistants: Course email: NS203globalhealth@gmail.com (*Use this first! Due to the large number of students in the class, all e-mails should be addressed or copied to the generic course e-mail address. The TAs will read all e-mails and respond or direct them to instructors, as appropriate*)

Sowa, Maggie: msowa@wisc.edu

Mondloch, Stephanie: smondloch@wisc.edu

Time: 2:30-3:45 PM, Tuesdays and Thursdays, 125 Agricultural Hall

Drop-in hours: 1:30-2:30 PM, Thursday, 301 Agricultural Hall. The weekly drop-in hour will be hosted by Robin Mittenthal (for questions about the Certificate in Global Health) and Maggie Sowa or Stephanie Mondloch (for questions about 203); please come if you have questions or require extra assistance with course material, assignments, or the Certificate in Global Health. Other drop-in hours with Mr. Mittenthal are 9:00 AM-11:00 AM Tuesday and 10:00 AM-12:00 PM Wednesday, both in 272 Nutritional Sciences.

Text: *Global Health 101*, 2nd edition, 2012, by Richard Skolnik. The book is part of the Richard Riegelman series on Essential Public Health. The 3rd edition is also available, but a used 2nd edition is fine for the class this fall. Skolnik's book is available at the UW bookstore and some other area bookstores. A copy is also on reserve at both Steenbock Library and Ebling Library in the Health Sciences Learning Center. Students may also be interested in the free resources provided by the publisher on a companion web site: <http://www.jbpub.com/essentialpublichealth/skolnik/2e/>

Required readings on reserve in optional text: *Carotenoids and Human Health*; Tanumihardjo, S. A. Ed.; Springer Science and Business Media, New York, NY, 2013, but an electronic version is available here: <https://search.library.wisc.edu/catalog/9910205946502121>

Follow that link, then click "Online access/EBL" and navigate your way to the book

Grading Scheme: Total grade is based on 500 points

90.0 – 100%	A	≥450
85.0 – 89.99%	AB	425-449
77.0 – 84.99%	B	385-424
75.0 – 76.99%	BC	375-384
67.0 – 74.99%	C	335-374
55.0 – 66.99%	D	275-334
<54.99%	F	≤274

Assessments	Notes	Points
Exam 1 – Midterm		125
Exam 2 – Midterm		125
Exam 3 – Final exam	Not comprehensive; December 19, 2016, 7:25 PM	125
Writing assignment 1	One assignment will be assigned by each of the three lead instructors. Follow the instructions on the assignment carefully. Please use font size 12 of your choice for written essays. Late policy is 3 points off each week beginning from the time you miss the drop-box open window.	35
Writing assignment 2		35
Writing assignment 3		35

Nutrition 203 – Introduction to Global Health

Online quizzes	Approximately bi-weekly, quizzes will be available on Learn@UW for a specified time-frame. Quizzes will be based on lectures and reading assignments. No make-ups will be offered.	20
<i>Total grade out of 500 points</i>		<i>500</i>

Attendance: We expect students to attend all classes. Some lectures will not be posted at Learn@UW. See class policies at the end of the syllabus.

Learning objectives of this course: The course will be divided into four loosely intertwined sections including agriculture and health, nutrition and health, the burden and origins of disease, and policy as it relates to education, natural disasters and systems. 1) Students will appreciate links between agriculture, food, nutrition and health, including how agricultural technologies contribute to feeding and nourishing the world's population. 2) Students will understand how public health principles are applied to global health. 3) Students will understand the impacts of agricultural products on nutrition through availability, quality, and prevention. 4) Students will explain strategies to promote health and prevent disease: Focus on nutrition and strategies from multiple disciplines. 5) Students will be introduced to diseases of major global impact and metrics used to determine burdens of disease. 6) Students will appreciate the importance of ecology and the changing environment on issues related to epidemiology and management of disease. 7) Students will understand career opportunities that could contribute to improved global health.

Class Syllabus and Reading Assignments

	Date	Topic	Instructor/Chapter/ Outside Reading (OR)
1	September 6, 2016	<p>Perspectives: Why Study Global Health</p> <ul style="list-style-type: none"> --Critical concepts --Sustainable Development Goals --Career roles in Global Health --Determinants of Health <p>Tips for Success in 203</p>	<p>Tanumihardjo/Chapters 1 and 2 (Skolnik)</p> <p>Maggie Sowa and Stephanie Mondloch</p>
2	September 8, 2016	<p>World Health Systems</p> <ul style="list-style-type: none"> --United Nations --Development Banks and Agencies --World Health Organization (WHO) --Non-government Organizations <p>WHO internship example</p> <p>The Importance of Data in Public Health</p> <ul style="list-style-type: none"> – Statistics and epidemiology – Identifying public health trends and at-risk populations – Evidence-based public health 	<p>Tanumihardjo/Chapter 15 (Chapter 16 in 3rd edition) (Skolnik) and Chapter 20 <i>Carotenoids and Human Health</i></p> <p>Bryan Gannon Devika Suri</p>
3	September 13, 2016	<p>Wealth, agriculture, nutrition and health</p> <ul style="list-style-type: none"> --Wealth, nutrition and health --Wealth, education and health --Health, wealth and development --Water associated health risks 	<p>Pixley/Chapter 3 (Skolnik)</p>

Nutrition 203 – Introduction to Global Health

4	September 15, 2016	Health and the rise and fall of civilizations Agriculture and Health/Health risks and agricultural systems --Livestock-related illnesses --Food-borne diseases --Bangladesh and Arsenic --The demographic transition --The Green Revolution	Pixley/OR
5	September 20, 2016	Food for a Growing Population --How to feed 9 billion by 2050? --Impacts of climate change Agriculture, Food and Nutrition I --Agricultural research options --Plant breeding for food and nutrition --Biotechnologies	Pixley/OR
6	September 22, 2016	Agriculture, Food and Nutrition II / Agriculture and poverty alleviation --Biofortification --The role of agriculture in development --Real world examples of poverty alleviation through agricultural development --Philosophies of development --Sacks, Easterly and Yunnus in a nutshell	Pixley/Chapter 17 <i>Carotenoids and Human Health</i>
7	September 27, 2016	Perspectives on environmental global agriculture – Climate change – Sustainable agriculture – Environmental Health	Valentin Picasso Risso
8	September 29, 2016	EXAM 1: In class	
9	October 4, 2016	Nutrition: Macronutrients --Carbohydrates, Fat and Protein --Calcium	Tanumihardjo/Chapter 8 (Skolnik)
10	October 6, 2016	Nutrition: Micronutrients --Vitamin A, iron, iodine, zinc	Tanumihardjo/Chapters 15, 18 and 19 <i>Carotenoids and Human Health</i>
11	October 11, 2016	Folic Acid: Friend or Foe --Metabolism --Fortification --Biofortification Women and Children’s Health Issues --Determinants of women’s health --Causes of child death and illness --Mortality	Tanumihardjo/OR Devika Suri/ Chapters 9 and 10 (Skolnik)/Chapter 16 <i>Carotenoids and Human Health</i>

Nutrition 203 – Introduction to Global Health

12	October 13 2016	<p>The Obesity and Poverty Paradox</p> <p>--To understand the difference between food insecurity and hunger</p> <p>--To review research in the area of poverty and obesity</p> <p>--To understand the value of food in poverty that may affect body size</p> <p>Patient Care and Bariatric Surgery</p>	<p>Tanumihardjo/OR</p> <p>Samantha Schmaelzle, MS, RD</p>
13	October 18, 2016	<p>Primary Health Care across the Globe</p> <p>--Alma Ata to Now, More than Ever</p> <p>--Primary health care developments over 30 years</p> <p>--Primary care vs primary health care</p> <p>--Examples of primary health care oriented systems</p>	<p>Haq/Declaration of Alma Ata; World Health Report 2008 summary</p>
14	October 20, 2016	<p>When Food goes Bad</p> <p>--Fungal contamination: mycotoxins</p> <p>--Health impacts</p> <p>--Impediments to control</p>	<p>Keller/OR</p>
15	October 25, 2016	<p>Global Importance of Horticultural Crops</p> <p>-- Role of horticultural crops in global diets</p> <p>-- Economic contributions of horticultural crops</p> <p>-- Scientific bases for improving the nutritional quality of vegetables and fruits</p> <p>-- International agriculture commitment to horticultural crops</p>	<p>Phil Simon/Chapter 18 <i>Carotenoids and Human Health</i></p>
16	October 27, 2016	<p>Global Importance of Livestock and Animal Source Foods</p> <ul style="list-style-type: none"> – Global changes in demand for animal foods – Trends in global production as related to development and demographics – Role of livestock on resource poor farms in developing countries – Importance of livestock in alleviating poverty in rural areas of developing countries – Agriculture in an urbanizing world: why you should care about farming 	<p>Jess Reed, UW Professor Animal Sciences</p>
17	November 1, 2016	<p>Natural Disasters and Emergencies</p> <p>--Vulnerability for disasters</p> <p>--Consequences-health, housing, economic, environmental, psycho-social</p> <p>--Response options and organizations: clusters, IGOs, NGOs, CBOs</p>	<p>Webster and Kidd- Webster/Chapter 14 (Chapter 15 in 3rd edition) (Skolnik)</p>

Nutrition 203 – Introduction to Global Health

		<ul style="list-style-type: none"> --Prevention of outbreak of disease, epidemics --Recovery for development and health promotion 	
18	November 3, 2016	<p>Comparison of Health Care Systems across the Globe and Health Impacts</p> <ul style="list-style-type: none"> --Main functions of a health system --How health systems are organized --Health system influence on population health --Examples of health systems in low, middle, high income countries --Examples of health systems to displaced people (refugees and internally displaced) <p>Post online EXAM at Learn@UW</p>	Solheim/Chapter 5 (Skolnik) /Mahn Article
19	November 8, 2016	<p>Children’s Health and Well Being</p> <ul style="list-style-type: none"> -- Trends in mortality and morbidity -- Meeting the needs of highly vulnerable children --Health, human rights and the convention of the rights of the child 	Diprete-Brown/OR
20	November 10, 2016	<p>Communicable Diseases</p> <ul style="list-style-type: none"> --Introduction, Malaria <p>On line exam due at 11:55 PM</p>	Paskewitz/Chapter 11 (Chapter 12 in 3 rd edition) / (Skolnik)
21	November 15, 2016	<p>Communicable Diseases:</p> <ul style="list-style-type: none"> --HIV, Tuberculosis 	Ajay Sethi/Chapter 11 (Chapter 12 in 3 rd edition) / (Skolnik)
22	November 17, 2016	<p>Communicable Diseases: Neglected Tropical Disease</p> <ul style="list-style-type: none"> --The 13 NTDs --Sanitation and hygiene 	Paskewitz/OR
23	November 22, 2016	<p>Communicable Diseases: Emerging infectious disease</p> <ul style="list-style-type: none"> -- Zoonotic disease, invasions & genetic changes -- Zika, West Nile virus, Dengue, SARS, influenza, E. coli 	Paskewitz/OR
24	November 29, 2016	<p>Non-communicable Diseases</p> <ul style="list-style-type: none"> --CVD, Diabetes, Cancer --Mental Health 	Paskewitz/Chapter 12 (Chapter 13 in 3 rd edition) (Skolnik)
25	December 1, 2016	<p>Environmental Health</p> <ul style="list-style-type: none"> --Air and water pollution --Environmental toxins 	Kristen Malecki/OR
26	December 6, 2016	<p>Environment and Health</p> <ul style="list-style-type: none"> --Millennium Ecosystem assessment --Climate change --Land use change 	Paskewitz/OR

Nutrition 203 – Introduction to Global Health

27	December 8, 2016	The One Health Perspective: uniting human, animal and environmental health	Paskewitz/OR
28	December 13, 2016	Culture and Health --The culture concept --Cultural views of health --Culture, diet and nutrition --Achieving success in health promotion --Achieving universal food security	Loeffler/Chapter 6 (Skolnik)
29	December 15, 2016	Peace Corps Overview with presentations from former volunteers	Organized by Robin Mittenthal Course evaluations
	December 19, 2016	EXAM 3: Room will be announced Will follow final schedule at 7:25 PM	

Nutrition 203 – Introduction to Global Health

COURSE POLICIES

Attendance Policy: Attendance is expected in the lectures. Students are responsible for all information presented in the readings, course book, and lectures unless it is listed as optional. Students who request to be excused from a class must contact their TA in advance, and provide the reason (i.e., illness, religious observances, and academic or professional commitments).

Class Meeting Cancellation Notices: Occasionally, severe weather, illness, or other circumstances may require cancellation of a class meeting. If this is so, students will be informed via an email notice sent to the class email list. It will be the responsibility of each class member to ensure that they check the email that they used for their course registration for such a message.

Non-Discrimination Policy: The UW-Madison is committed to creating a dynamic, diverse and welcoming learning environment for all students and has a non-discrimination policy that reflects this philosophy. Disrespectful behaviors or comments addressed towards any group or individual, regardless of race/ethnicity, sexuality, gender, religion, ability, or any other difference is deemed unacceptable in this class, and will be addressed publicly by the professor.

Disability Reasonable Accommodation Policy: If you qualify for accommodations because of a disability, please submit a letter to the course director and TA that outlines your request in a manner that is timely and consistent with established university policies for making such a request so that your needs may be addressed. Policies for accommodating disabilities are available through the McBurney Disability Resource Center, 903 University Ave., 608-263-2741 (phone), 263-6393 (TTY), 265-2998 (Fax), mcburney@uwmadmail.services.wisc.edu. For additional information, please see <http://www.mcburney.wisc.edu/>

Religious Reasonable Accommodation Policy: Every effort shall be made to reasonably and fairly accommodate all students who, because of religious obligations, have conflicts with scheduled exams, assignments, or required attendance, provided advance notification of the conflict is given. Whenever possible, students should give at least one week advance notice to request special accommodation.

Student Honesty and Rules of Conduct: Academic honesty requires that the course work (e.g., quizzes, papers, exams) a student presents to an instructor honestly and accurately indicates the student's own academic efforts. See: http://pubs.wisc.edu/ug/geninfo_rules.htm

UWS 14 is the chapter of the University of Wisconsin System Administrative code that regulates academic misconduct. UW-Madison implements the rules defined in UWS 14 through our own "Student Academic Misconduct Campus Procedures." UWS 14.03 defines academic misconduct as follows:

"Academic misconduct is an act in which a student:

- (a) seeks to claim credit for the work or efforts of another without authorization or citation;
- (b) uses unauthorized materials or fabricated data in any academic exercise;
- (c) forges or falsifies academic documents or records;
- (d) intentionally impedes or damages the academic work of others;
- (e) engages in conduct aimed at making false representation of a student's academic performance;
- (f) assists other students in any of these acts."

If you are accused of misconduct, you may have questions and concerns about the process. If so, you should feel free to call Student Advocacy & Judicial Affairs (SAJA) in the Offices of the Dean of Students at (608) 263-5700 or send an email to dos@bascom.wisc.edu.