

# INTERNATIONAL HEALTH (INTH)

## **INTH 301. Fundamentals of Global Health. 3 Units.**

This course seeks to integrate the multiple perspectives and objectives in global health by investigating how the disciplines of Biology, Medicine, Anthropology, Nursing, Mathematics, Engineering analyze and approach the same set of international health problems. Students will develop a shared vocabulary with which to understand these various perspectives from within their own discipline. The focus sites will emphasize issues related to the health consequences of development projects, emergency response to a health care crisis and diseases of development in presence of underdevelopment. Offered as INTH 301 and INTH 401. Prereq: Junior or senior.

## **INTH 315. Water Security and Social Justice in Brazil. 3 Units.**

CWRU, through the Center for Global Health and Diseases, has had projects, student exchanges and courses with institutions in Brazil and especially with the state of Bahia for over 30 years. In that time, personal and professional relationships have been developed with branches of the Ministry of Health (Oswaldo Cruz Foundation, the Municipal and State Health Departments), the Federal University of Bahia, and the Bahiana School of Medicine and Public Health. Brazil is the second largest country in the Western Hemisphere and the 7th or 8th largest economy in the world. There are more people who speak Portuguese in South America than Spanish. Despite newly discovered oil, enormous natural and human resources, development in Brazil has been uneven with the Northeast remaining the least developed. The Northeastern state of Bahia ranked 22nd out of 27 states on the UN's Index of Human Development (<http://www.pnud.org.br/IDH/DH.aspx#> and <http://www.atlasbrasil.org.br/2013/pt/home/>). The State capital, Salvador, ranks 14th out of 20 major metropolitan regions and is one site for this study abroad program. The second site, the rural town of Ubaíra, is ranked 4590 out of 5565 municipalities. Even with large social inequities and health care disparities, the Brazilian government and society have produced remarkable social policies, have shown a willingness to implement these policies and have the resources to significantly improve the lives of its most impoverished citizens. Critical basic infrastructure for health and development is water. Its consumption is essential; it is a mechanism for waste disposal, industry and agriculture are dependent on its supply. The problem of water quantity and quality are common all human societies (witness the drought in California and the burning Cuyahoga). Individuals from all walks of life will need to assess issues of water at some time, from doctors, engineers, urban planners, lawyers and politicians. In Brazil the issues of water are more exposed and easier to examine on different scales than in the U.S. The problem also resides within a social, health care, and political context that compares well and at the same time contrasts sharply with that of the USA. As a student in this course, you will gain first-hand knowledge of the social and public health challenges regarding water security in Brazil. Through field experiences in the capital city of Salvador and the rural town of Ubaíra, you will immerse yourself in interdisciplinary perspectives on the public health, scientific, political, and bioethical dimensions of water security in Brazil. This immersive experience will be facilitated by faculty from the CWRU Dept. of Bioethics and the Center for Global Health and Diseases, the Brazilian Ministry of Health, the Federal University of Bahia, the Bahiana School of Medicine and Public Health, and Brazilian graduate student participants. Offered as: INTH 315, INTH 415, BETH 315H, and BETH 415H. Counts as a CAS Global & Cultural Diversity course.

## **INTH 401. Fundamentals of Global Health. 3 Units.**

This course seeks to integrate the multiple perspectives and objectives in global health by investigating how the disciplines of Biology, Medicine, Anthropology, Nursing, Mathematics, Engineering analyze and approach the same set of international health problems. Students will develop a shared vocabulary with which to understand these various perspectives from within their own discipline. The focus sites will emphasize issues related to the health consequences of development projects, emergency response to a health care crisis and diseases of development in presence of underdevelopment. Offered as INTH 301 and INTH 401. Prereq: Graduate student.

## **INTH 415. Water Security and Social Justice in Brazil. 3 Units.**

CWRU, through the Center for Global Health and Diseases, has had projects, student exchanges and courses with institutions in Brazil and especially with the state of Bahia for over 30 years. In that time, personal and professional relationships have been developed with branches of the Ministry of Health (Oswaldo Cruz Foundation, the Municipal and State Health Departments), the Federal University of Bahia, and the Bahiana School of Medicine and Public Health. Brazil is the second largest country in the Western Hemisphere and the 7th or 8th largest economy in the world. There are more people who speak Portuguese in South America than Spanish. Despite newly discovered oil, enormous natural and human resources, development in Brazil has been uneven with the Northeast remaining the least developed. The Northeastern state of Bahia ranked 22nd out of 27 states on the UN's Index of Human Development (<http://www.pnud.org.br/IDH/DH.aspx#> and <http://www.atlasbrasil.org.br/2013/pt/home/>). The State capital, Salvador, ranks 14th out of 20 major metropolitan regions and is one site for this study abroad program. The second site, the rural town of Ubaíra, is ranked 4590 out of 5565 municipalities. Even with large social inequities and health care disparities, the Brazilian government and society have produced remarkable social policies, have shown a willingness to implement these policies and have the resources to significantly improve the lives of its most impoverished citizens. Critical basic infrastructure for health and development is water. Its consumption is essential; it is a mechanism for waste disposal, industry and agriculture are dependent on its supply. The problem of water quantity and quality are common all human societies (witness the drought in California and the burning Cuyahoga). Individuals from all walks of life will need to assess issues of water at some time, from doctors, engineers, urban planners, lawyers and politicians. In Brazil the issues of water are more exposed and easier to examine on different scales than in the U.S. The problem also resides within a social, health care, and political context that compares well and at the same time contrasts sharply with that of the USA. As a student in this course, you will gain first-hand knowledge of the social and public health challenges regarding water security in Brazil. Through field experiences in the capital city of Salvador and the rural town of Ubaíra, you will immerse yourself in interdisciplinary perspectives on the public health, scientific, political, and bioethical dimensions of water security in Brazil. This immersive experience will be facilitated by faculty from the CWRU Dept. of Bioethics and the Center for Global Health and Diseases, the Brazilian Ministry of Health, the Federal University of Bahia, the Bahiana School of Medicine and Public Health, and Brazilian graduate student participants. Offered as: INTH 315, INTH 415, BETH 315H, and BETH 415H. Counts as a CAS Global & Cultural Diversity course.

**INTH 484. Global Health Epidemiology. 1 - 3 Units.**

This course provides a rigorous problem-centered training in the epidemiology, prevention, treatment, and control of infectious diseases and, more generally, global health. This is an advanced epidemiology that embraces an active learning environment. Students are expected to invest time out of the classroom reading and working with classmates. Classes will be conducted with discussions, debates, group projects, and group presentations. By taking this course, students will develop a framework for interpreting, assessing, and performing epidemiologic research on issues of global importance. The course will be divided into three modules: 1) Global Health Epidemiology 2) Helminth Epidemiology, and 3) Epidemiology of Disease Elimination. Each module is worth 1 credit hour and may be taken separately. Each module will have a separate project and/or exam. The final exam time will be used for group presentations and panel discussion. Active class participation is required through discussions, case studies, and group projects. Offered as PQHS 484, INTH 484, and MPHP 484.

**INTH 551. World Health Seminar. 1 Unit.**

This seminar series examines a broad range of topics related to infectious disease research in international settings. Areas of interest are certain to include epidemiology, bioethics, medical anthropology, pathogenesis, drug resistance, vector biology, cell and molecular biology, vaccine development, diagnosis, and socio-cultural factors contributing to or compromising effective health care delivery in endemic countries. Additionally we will discuss intellectual property policies on global access to medical innovations. Topics will also include neglected diseases and the interactions between these diseases with HIV and malaria infections. Speakers will include a diverse group of regional faculty and post-doctoral trainees, as well as visiting colleagues from around the world. Students will be asked to read a journal article written by the speaker and then discuss this article with the speaker after their seminar.