## **Environment and Disease** ANG 6930

Professor Willie Baber 392-6646

Department of Anthropology
Turlington, B-133
Office hours: Tuesday, 11:30 –1:00

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Thursday 10:30 – 12:00

#### Course description:

Case studies are used to examine how human biology, culture, and environment influence patterns of health and disease over time. The time frame for all case studies involves recent history or present-day health issues, in particular HIV/AIDS. However, the specific cases are examined within an ecological framework by exploring patterns of environment and disease in biohistory, i.e., the evolution of human biology, society, environmental impact and ways of living.

#### Course objectives:

Through the use of case studies, this course is an application of the ecosystem concept to contemporary challenges to human health and disease, as suggested in the concluding remarks in Ecosystem Concept in Ecology, by Frank Golley: "It is not clear to me where ecology ends and the study of ethics of nature begins, nor is it clear to me where biological ecology ends and human ecology begins. These divisions become less and less useful. Clearly, the ecosystem, for some at least, has provided a basis for moving beyond strictly scientific questions to deeper questions of how humans should live with each other and the environment" (Golley, Ecosystem Concept in Ecology, p. 205).

#### Texts:

- 1. Tony McMichael, Human Frontiers, Environment and Disease, Cambridge University Press (2001).
- 2. Margaret Humphreys, Malaria, The Johns Hopkins University Press (2001).
- 3. Paul Farmer, AIDS and Accusation, University of California Press (1992).
- 4. Stewart Wolf and John G Bruhn, The Power of Clan, Transaction Publishers (1998).
- 5. Paul Farmer, Pathologies of Power, University of California Press (2003).
- 6. Frank Benjamin Golley, Ecosystem Concept in Ecology, Yale University Press (1993)

### Requirements and evaluation:

You are expected to write six 10-page papers approximately every two weeks in which you demonstrate your command of text material in addressing questions that I will provide. These papers will be graded on a 10-point scale reflecting my assessment of the quality of your essays, including your command of the texts through insights that you provide and will share with others. This sharing with others is important, so you will be graded on participation, which involves class attendance, preparation for class, and contributions to class discussions. Grades will be determined by achieving the corresponding percentage of total points assigned as follows: 90% = A, 80% = B, 70% = C). Each week of class sessions is worth 5 points, for a total of 60 points, beginning January 17th and ending April 20. You must attend the last session of class in order to evaluate the course, and to share your concluding essays.

Six essays	60 points
Attendance, participation, and preparation	60 points
Total	120 points

#### Classroom Accommodation:

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide the documentation to the Instructor when requesting accommodation.

#### Jan 10/12 *Orientation*

Tuesday/Thursday discussion format

*First Essay:* Introduce yourself in an essay in which you describe your evolving research interests in relationship to your first impressions of the texts, based on the introductory information in them. Due: January 17th

- 1) Jan 17/19 Note: you are expected to do the reading in advance of class. For example, read the following for discussion next week (Jan 17/19)
  - 1. Tony McMichael, <u>Human Frontiers, Environment and Disease</u>: preface
  - 2. Margaret Humphreys, Malaria, introduction
  - 3. Paul Farmer, AIDS and Accusation, introduction
  - 4. Stewart Wolf and John G Bruhn, The Power of Clan, Preface & introduction
  - 5. Paul Farmer, Pathologies of Power, introduction
  - 6. Frank Benjamin Golley, Ecosystem Concept in Ecology, preface & introduction

## Case #1: <u>Malaria: Poverty, Race, and Public Health in the United States</u> (Humphreys)

- (2) Jan 24/26
- 1. McMichael, chapter 1: Disease patterns in human biohistory
- 2. McMichael, chapter 2: Human biology: the pleistocene inheritance
- 3. Humphreys, Malaria

Second Essay, questions TBA, due Feb. 2

### (3)Jan31/Feb2 Natural selection and the synthetic theory of evolution

- 1. Ricardo Ventura Santos, "Indigenous Peoples, Changing Social and Political Landscapes, and Human Genetics in Amazonia, in <u>Genetic Nature/Culture</u> (edited by Alan H. Goodman, Deborah Health, M. Susan Lindee), University of California Press (2003).
- 2. Humphreys, Malaria, continued.
- 3. A. Baer, "One Hand Clapping: Malaria in Borneo, Past and Present (in reader).

### Case #2 AIDS and Accusation: Haiti and the Geography of Blame (Paul Farmer)

- (4) Feb 7/9 Ethnohistory, Ethnography, and HIV/AIDS in Haiti
  - 1. McMichael, chapter 3: adapting to diversity: climate, food and infection
  - 2. Farmer, AIDS
  - 3. Troy Duster, "Buried Alive: The Concept of Race in Science" (reader)
- (5) Feb 14/16 1. McMichael, chapter 4: infectious disease: humans and microbes coevolving 2. Farmer, AIDS

- 3. Catharina Svanbor-Eden and Bruce R. Levin, "Infectious Disease and Natural Selection in Human Populations: A Critical Reexamination" (reader). *Third Essay, questions TBA, due Feb. 23*
- (6) Feb 21/23 McMichael, chapter 5: the third Horseman: food, farming and families Farmer, AIDS
- Case #3 The Power of Clan: The Influence of Human Relationships on Heart Disease (Wolf and Bruhn).
- (7)Feb28/M2 1. McMichael, chapter 6: the industrial era: the fifth horseman?
  2. Wolf and Bruhn, <u>The Power of Clan</u>
  3. "Is Culture Responsible for the Spread of Ethnically Related Disease
  - 3. "Is Culture Responsible for the Spread of Ethnically Related Disease?" (Jared Diamond and Josie Glasiusz)
- (8) March 7/9 1. McMichael, chapter 7: longer lives and lower birth rates 2. Wolf and Bruhn, The Power of Clan, continued.

  Fourth Essay, questions TBA, due March 23

Spring Break: March 13-March 17

Theoretical perspectives, part I: Structural Violence, Health and Human Rights, Pathologies of Power (Paul Farmer)

(9) March 21/23 1. McMichael, chapter 8: modern affluence: lands of milk and honey 2. Farmer, <u>Pathologies of Power</u>

Note: Pathologies of Power contains additional case material.

#### SfAA Meeting, March 28-April 2

- (10) April 4/6
   1. McMichael, chapter 9: cities, social environments and synapses
   2. Farmer, <u>Pathologies of Power</u>
   Fifth Essay, questions TBA, due April 13
- (11)April11/13 1. McMichael, chapter 10: global environmental change 2. Farmer, Pathologies of Power

# Theoretical perspectives, part II: The History of the Ecosystem Concept in Ecology (Golley)

- (12)April18/20 1. McMichael, chapter 11: health and disease: an ecological perspective 2. McMichael, chapter 12: Footprints to the future
  - 3. Golley, Ecosystem Concept in Ecology

Sixth Essay, question TBA, due April 25

April 25 Last day of class: course evaluation.