Notes on ANT100, Introduction to Anthropology

Tianyu Du

Since Sep 2017

Contents

1	\mathbf{Sep}	7 Course Descriptions	1	
	1.1	Tutorial		
	1.2	Intro		
2	Sep. 22 2017			
	2.1	Lecture Objectives		
	2.2	Modern Synthesis of Evolution		

1 Sep. 7 Course Descriptions

1.1 Tutorial

- Must attend. Attendance taken.
- Starts from Sep.18-22.
- Deadline for signing up: **Sep. 26**.
- Called **group** at blackboard.

1.2 Intro.

What's Anthropology? Holistic study of humans, *Homo Sapiens*, past and present that draws and builds upon knowledge from the social sciences, biological sciences, humanities and the natural sciences.

First Section: Evolutionary Anthropology

- 1. Historical development, mechanisms, and outcomes of biological evolution.
- 2. Diversity of life and the natural processes that produced diversity.
- 3. The **primate** fossil record, with a basic understanding of patterns and processes that evolved in the **hominin** branch.

- 4. The basic ecology, behaviour, and conservation biology of extant primates.
- 5. **Medical anthropology** How evolutionary anthropologists apply biological concepts in their research on human health, disease, and forensics.

Archaeology Lecture Topic Outline

- 1. Introduction to archaeology.
 - (a) ...
- 2. The archaeological record.
 - (a) What survives from the past and how can we interpret it.
 - (b) Fieldwork.
 - (c) Dating.
- 3. Analysis and interpretation.
 - (a) Archaeological data.
 - (b) Interpretation.
- 4. The earliest races of human behaviour. e.g. Stone Tools.
- 5. Origin and spread of modern humans. From African origins to entire globe.
- 6. From food production to early states.
 - (a) Origin of agriculture.
 - (b) Origin of urban, state-level society, civilization.

2 Sep. 22 2017

2.1 Lecture Objectives

- Genetic basis of inheritance and biological evolution.
- Population genetics.
- Natural selection.
- Adaptation

2.2 Modern Synthesis of Evolution

- $\bullet \ DNA \to RNA \to Protein$
- Microevolution.
- Macroevolution.

Genetics

- Somatic Cells. most cells in body, except sex cells
- Gametes. sex cells
- Cytoplasm. complex mix of membranes, molecules and tiny structures
- Nucleus.

Chromosomes Paired rod-shaped structures in cell nucleus containing DNA.

DNA (Deoxyribonucleic Acid) Storing genetic information. Four Bases of DNA:

- 1. Adenine(A)
- 2. Guanine(G)
- 3. Cytosine(C)
- 4. Thymine(T)

RNA()Ribonucleic Acid

- 1. Dictate synthesis of proteins that perform a wide variety of functions in body.
- 2. Regulate expression of other genes.
- 3. Work with structures in cell.

Proteins

DNA & Protein Production

- 1. (DNA) Replication.
- 2. Transcription.
- 3. Translation.