From Ape to Madonna:
The Evolution of Humankind
IDIS 217

Instructor:  Dr. Frank T. Kuserk
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Office Hours:  MWF 10:00 AM-11:00 AM or by appointment

Classroom:  335 Pricilla Payne Hurd Academic Complex
MWF 4 (11:30 AM-12:20 PM)

Course Description:  One of the most profound questions that human beings can ask of themselves has to be, "Where do we come from?" This course will deal with the historical and comparative bio-anthropology of our species, looking at humans as members of the animal kingdom, focusing on the attributes shared with our primate relatives, and exploring the origins of uniquely human attributes. Using the approaches of evolutionary biology, physical anthropology, and archaeology, this course traces human physical evolution and cultural development from its earliest beginning, more than five million years ago, to about 15,000 years ago, just before the beginnings of plant and animal domestication and the rise of complex societies. In addition, this course will pay special attention to the impact that evolutionary ideas have had on social, political, and legal issues in American life. *This course satisfies the Social Impact of Science (U1) requirement within the LinC curriculum.*

Course Objectives:  Upon completion of this course students will be able to demonstrate:

1) Knowledge of basic concepts of evolutionary biology, including the processes of genetic change, natural selection, and speciation
2) Awareness of the historical development of major evolutionary ideas, including Darwinism, the Modern Evolutionary Synthesis, and contemporary evolutionary theory
3) Understanding of the major scenarios of human evolution from origins to the present
4) Awareness of the impact that evolutionary ideas have had on the social, political, and legal history of the United States
5) Ability to distinguish between scientific and nonscientific theories, generate scientific arguments, and support them with appropriate examples or scientific justifications
6) Knowledge of and ability to apply the scientific process
7) Competence in writing and oral communication of scientific issues
8) Ability to integrate concepts within and among science and non-science disciplines
9) Understanding of the relevance of evolutionary biology to modern society
Required Texts:  


Grading:  
The grading system is as follows:

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Lecture Exam 1  100 points  
Lecture Exam 2  100 points  
Lecture Exam 3 (Final Exam)  100 points  
Personal Reflection Paper  100 points  
Discussion Questions & Class Participation  100 points  
500 points

It is within the instructor’s purview to apply qualitative judgment in determining grades for an assignment or for the course.

Class Attendance:  
It is my experience that students who do poorly in this course are those who miss an excessive number of class meetings. Remember—Part of your grade for this course is based on your participation. It is your responsibility to make sure that I get to know who you are by actively participating in class!

An absence on an examination day will require either prior permission or a suitable excuse from a physician, the Health Center or Dean of Students Office before a make-up is given.

Disability Accommodations:  
Students who wish to request accommodations in this class for a disability should contact Mr. Joe Kempfer, Assistant Director of Learning Services for Disability Support, 1307 Main Street (extension 1510). Accommodations cannot be provided until authorization is received from the office of Learning Services.
**Academic Honesty:** Moravian College’s policies on academic honesty and disruptive course related student behavior can be found in the Student Handbook. It is assumed that each of you has read and understands these policies and the consequences of violating them.
Course Schedule
Spring 2009

Week 1 (1/19 to 1/23): The Process of Evolution: Evolution in the air!

   A Modern Creation Story---2001: A Space Odyssey

   Lecture Notes 1: Before Darwin

   Readings:      Baker & Miller, Prologue, Chapters 1-2
                   Larson, Chapters 1-3

Week 2 (1/26 to 1/29): The Process of Evolution: Darwinism, Neo-Darwinism, and Modern Evolutionary Thought

   Lecture Notes 2: The Darwinian Revolution
   Lecture Notes 3: The Modern Evolutionary Synthesis

   Readings:      Baker & Miller, Chapters 3, 5
                   Larson, Chapters 4-5, 7, 10

Week 3 (2/2 to 2/6): The Scientific Background to Human Evolution: Fossils, Radiometric Dating & Biosystematics

   Lecture Notes 4: Time, Fossils & Isotopes

   Readings:      Baker & Miller, Chapter 7

Week 4 (2/9 to 2/13): The Scientific Background to Human Evolution: Molecular Biology

   Lecture Notes 5: Molecular Evolution

   CHARLES DARWIN’S 200TH BIRTHDAY
   THURSDAY, FEBRUARY 12

Week 5 (2/18 to 2/20): Our Primate Cousins

   Lecture Notes 6: Our Primate Heritage

   Reading:       Larson, Chapter 6
                   Zimmer, Chapters 1-2

EXAM 1: FRIDAY, FEBRUARY 20 (Material from Weeks 1-4)
Week 6 (2/23 to 2/27): Hominid Beginnings: Walking Upright

   Lecture Notes 7: The First Hominids
   Readings: Zimmer, Chapter 3

Week 7 (3/2 to 3/6): No class-Spring Break

Week 8 (3/9 to 3/13): The Australopithecines

   Lecture Notes 8: The Australopithecines
   Reading: Zimmer, Chapter 4

Week 9 (3/16 to 3/20): The Origin of Modern Humans-The Rise of Homo

   Lecture Notes 9: Stones & Bones
   Reading: Zimmer, Chapter 5-6

Week 10 (3/23 to 3/27): The Origin of Early Humans-Out of Africa

   Lecture Notes 10: Out of Africa
   Reading: Zimmer, Chapter 7

Week 11 (3/23 to 3/25): The Origin of Modern Humans

   Separating Hunters from Gatherers---Date to be announced
   Lecture Notes 11: Modern Humans
   Reading: Zimmer, Chapter 8

EXAM 2: FRIDAY, MARCH 27 (Material from Weeks 5-10)
Week 12 (3/30 TO 4/3): The Social Impact of Evolutionary Ideas

Lecture Notes 12: The Dark Side: Social Darwinism & Eugenics

Week 13 (4/6 to 4/8): The Social Impact of Evolutionary Ideas: The Scopes Trial

Lecture Notes 13: Monkey Trial

View and Discuss: *Inherit the Wind* (1960)

Readings: Larson, Chapter 9

No Class- Easter Break (Friday, April 9 & Monday, April 13)


Lecture 14: From Dayton to Dover---What Should We Teach?

Readings: Larson, Chapter 11


Personal Reflections on Science, Faith, and Human Origins

Materialism and *The Material Girl*

Readings: Baker & Miller, Chapter 8, Epilogue
          Larson, Chapter 12

**FINAL EXAM: DATE, TIME AND PLACE TO BE ANNOUNCED (Material from Weeks 11-15)**