From Ape to Madonna: The Evolution of Humankind **IDIS 217 Spring 2010**

Instructor: Dr. Frank T. Kuserk

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Office Hours: T, Th 2:30 PM-4:00 PM or by appointment

Classroom: 117 Pricilla Payne Hurd Academic Complex

MWF 4 (11:45 AM-12:35 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
- 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:

Baker, Catherine and James B. Miller (eds.). 2006. The Evolution Dialogues: Science, Christianity, and the Quest for Understanding. American Association for the Advancement of Science, Washington, DC (ISBN: 0-87168-709-7).

Boyd, Robert and Joan B. Silk. 2009. *How Humans Evolved* (5th edition). W.W. Norton & Co., New York (ISBN: 978-0-393-93271-3).

Grading:

The grading system is as follows:

A	=	93.0-100	C	=	73.0-76.9
A-	=	90.0-92.9	C-	=	70.0-72.9
$\mathbf{B}+$	=	87.0-89.9	D+	=	67.0-69.9
В	=	83.0-86.9	D	=	63.0-66.9
B-	=	80.0-82.9	D-	=	60.0-62.9
\mathbf{C} +	=	77.0-79.9	F	=	59.9 and below
Lectu	ıre Exa	100 points			
Lectu	ıre Exa	100 points			
Lectu	ıre Exa	100 points			
Perso	nal Re	100 points			
Discu	ission (100 points			
Class	Partici	50 points			
Class	Attend	50 points			
		600 points			

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

Paper:

Personal Reflection Due Friday, April 23. For this paper I am asking you to reflect upon your religious or spititual tradition and/or the religious/spititual tradition that you grew up in and to do some research into what this tradition says about the relationship between religious belief and science, especially as it pertains to evolution. In the paper you should reflect upon your experiences as you grew up and address how you feel about this issue today, after having taken this course.

> Demonstrating that you have done some research and are not just providing your opinions is the key to a successful paper. In addition to using print and Internet sources students in the past have interviewed their priest, minister or rabbi. Others have reported talking with their parents about this issue, some for the first time. Discussing one's religious beliefs can be a sensitive issue. My intent in giving you this assignment is not to criticize or judge your beliefs---I will not do that in grading this assignment. My purpose is to get you to critically think about this issue in order to get you to better reflect upon this subject.

> The paper is to be 3-4 pages, typed, single-spaced, size 12 font, 1" margins top/bottom and left/right. The paper must be at least three full pages and no more than four full pages (including references), single-spaced typed.

On this paper, you are encouraged to seek help from the Writing Center. Although short, the assignment asks you to think clearly and to write concisely about a given subject. Writing Center tutors can be very helpful in this process. You will also be expected to proofread the paper and use correct citations. Points will be deducted for grammar errors, spelling mistakes, incorrect citations, and failure to cite material. Seeking help from the Writing Center can only improve your work.

Class Attendance:

It is my experience that students who do poorly in this course are those who miss an excessive number of class meetings. I will be taking attendance each day. You will not be penalized for the first two unexcused absences. After that each absence will result in a lowering of your attendance grade by 2 points per day.

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.

Class Participation: Remember---Part of your grade for this course is based on your participation. Much of the course, unfortunately, consists of lectures. However, I encourage you to ask questions and respond to questions that I ask during class. There will be several opportunities for us to engage in prolonged discussions during the course---take advantage of them. It is your responsibility to make sure that I get to know who you are by actively participating in class!

Course Guidelines:

All assignments are expected to be handed in according to the due date on the syllabus. Late work will be penalized.

All students are expected to follow the principles of <u>academic honesty</u> as set out in the policies of Moravian College. See the Student Handbook for details. Any and all written work must be done in your own words (with the exception of direct quotations which are clearly indicated as such), and written work must include proper citations indicating the sources for any ideas, concepts, facts, or other information derived from others, whether or not you have restated it in your own words. Any cases of suspected cheating or plagiarism will be referred to the Academic Affairs Office. Academic dishonesty may result in a failing grade in the course.

In case of any crisis or emergency, or an extended absence from class, you must inform me directly, through Learning Services or the Academic Dean's Office.

Learning disability accommodations: students who wish to request accommodations in this class for support of learning disabilities should contact Learning Services (x1510). Accommodations cannot be provided until authorization is received from the appropriate disability support provider on campus.

These guidelines are intended for the benefit of the students as far as clarification

of my expectations for the course; however, in exceptional circumstances I reserve the right to exercise discretion in the application of these guidelines to individual cases or to refer a particular case to the Academic Dean if necessary.

Classroom Expectations:

Respect for others' answers and views.

Disruptive behavior during class will result in your dismissal from the class the first time, after that, disciplinary action will be taken.

Cell phones need to be turned to OFF and put away in a purse or bookbag during class. Use of cell phones in any way during class will result in dismissal from class and be counted as an absence.

Non-alcoholic drinks and non-odiferous snacks are allowed in class, other odiferous food is not.

If you arrive late, be respectful by not disrupting a class already in progress.

From Ape to Madonna: The Evolution of Humankind Class Schedule Spring 2010

Day &	& Date		Topic	Reading Chapters
M	Jan.	18	A Modern Creation Story2001: A Space Odyssey	
W		20	Discussion: 2001: A Space Odyssey	
F		22	NO CLASS	
M		25	Before Darwin	B&S-Ch. 1
				B&M-Prologue, Ch. 1, 2
W		27	The Darwinian Revolution	B&S-Ch. 1
				B&M-Ch. 3,5
F		29	The Darwinian Revolution	B&S-Ch. 1
				B&M-Ch. 3, 5
M	Feb.	01	Genetics	B&S-Ch. 2
W		03	The Modern Evolutionary Synthesis	B&S-Ch. 3
			• •	B&M-Ch. 7
F		05	The Modern Evolutionary Synthesis	B&S-Ch. 3
				B&M-Ch. 7
M		08	Speciation & Phylogeny	B&S-Ch. 4
W		10	Speciation & Phylogeny	B&S-Ch. 4
F		12	Time Fossils & Isotopes	TBD
			Charles Darwin's 201 st Birthday!	
M		15	Molecular Evolution	TBD
W		17	Molecular Evolution	TBD
\mathbf{F}		19	Exam 1	B&S-Ch. 1-4
				B&M-Prologue ,
				Ch. 1-3, 5, 7
M		22	Primate Diversity & Ecology	B&S-Ch. 5
W		24	Primate Mating Systems	B&S-Ch. 6
F		26	Primate Behavior & Cooperation	B&S-Ch. 7-8
M	Mar.	01	Early Primate Evolution	B&S-Ch. 9
W		03	The First Hominins	B&S-Ch. 10
F		05	The Australopithecines	B&S-Ch. 10, 11
M		08	NO CLASS: Spring Break	
W		10	NO CLASS: Spring Break	
F		12	NO CLASS: Spring Break	
M		15	The Rise of <i>Homo</i>	B&S-Ch. 12
W		17	Out of Africa I: <i>Homo erectus</i> and Archaic Humans	B&S-Ch. 12
\mathbf{F}		19	Exam 2	B&S-Ch. 5-12
M		22	The Origin of <i>Homo sapiens</i>	B&S-Ch. 13
W		24	Out of Africa II: Modern Humans	B&S-Ch. 13
F		26	The Spread of Modern Humans	B&S-Ch. 13
M		29	Modern Human Genetic Variation	B&S-Ch. 14

W F M	Apr.	31 02 05	Modern Human Genetic Variation NO CLASS: Easter Break NO CLASS: Easter Break	B&S-Ch. 14
W		07	Initial Responses to Darwin's Theory	B&M-Ch. 4
F		09	Social Impact of Evolutionary Ideas:	TBD
			Social Darwinism & Eugenics	
M		12	Social Impact of Evolutionary Ideas:	TBD
			Social Darwinism & Eugenics	
W		14	The Scopes Trial	TBD
F		16 Discussion: Inherit the Wind		
M		19	Atlatl Competition: MC Javelin Area ¹	
W		21	From Dayton to Dover:	
			What Should We Teach?	
F		23	From Dayton to Dover:	TBD
			What Should We Teach?	
M		26	Science, Evolution & Christian Faith	B&M-Ch. 7, 8, Epilogue
W		28	Science, Evolution & Christian Faith	B&M-Ch. 7, 8, Epilogue
F		30	Materialism and The Material Girl	, , 1

Final Exam: Thursday, May 6 @ 1:30PM

B&S-Ch. 13, 14 B&M-Ch. 4, 7, 8, Epilogue Additional TBD Material

¹ Rain Date: Monday, April 26