### **FIRST-YEAR SEMINAR REAPPROVAL FORM** UNIVERSITY OF MARY WASHINGTON

<b>COURSE TITLE:</b>	THE HUMAN ANIMAL		
<b>SUBMITTED BY:</b>	Andrew Dolby	DATE:	11/14/14

**<u>RATIONALE.</u>** Include short statement addressing how this course meets the <u>FSEM's basic components and</u> new student learning outcomes (see FSEM call above).

This course will meet the FSEM's student learning outcomes by requiring students to synthesize scientific literature from multiple sources to form and articulate evidence-based arguments. It will emphasize critical thinking and skill-building over specific academic content. Multiple writing assignments with opportunities for revision will develop students' written communication and argumentation skills. The "Blog Project" will provide students with opportunities to critically evaluate each other's written arguments and to apply technology to augment writing with visual and acoustic media. Additionally, since blogs will be publically accessible, the assignment will reinforce awareness of the consequences of plagiarism. Both reflective class discussion and a formal speaking assignment will develop students' oral communication skills. Class visits to the library, speaking center, and writing center will be included in the course schedule. Furthermore, students will be required to visit both the writing and speaking centers on their own for consultation on assignments.

**<u>SYLLABUS</u>**. Attach a course syllabus.

<u>SUBMIT</u> this form and attached syllabus <u>electronically as one document</u> to Dave Stahlman (<u>wdstahlm@umw.edu</u>). All submissions **must** be in electronic form.

# FSEM 100Q – First Year Seminar - Fall 2015

## The Human Animal

**Time:** MWF 10:00 - 10:50

Room: DUPN 209

Professor: Andrew S. Dolby Office: Jepson 431 Phone: 654-1420 Email: adolby@umw.edu Office Hours: 11:00-11:50 MWF 9:30-10:30 TR (or by appointment!)

**Course Description:** This course will explore recent theory that addresses the evolution of human nature and distinguishing biological attributes of the human life cycle. Using comparisons with other animals, we will address current hypotheses relating to the biological basis for human cooperation and conflict, reproductive decision-making, display and maintenance of social status, and responses to fear and risk. Through discussion of primary scientific research, writing assignments, class discussion, and a formal oral presentation, students will need to synthesize ideas and communicate their own interpretation of each subject addressed. To provide the theoretical framework necessary to pursue this topic, students will first study the hypothetico-deductive scientific method, Darwinian evolutionary theory, and current theories that attempt to explain the biological origins of our uniquely human life history characteristics.

### Here are some of the specific questions we'll address:

- When did humans become human?
- How and why does our life-cycle differ from other animals?
- Why do we sometimes respond irrationally to risk?
- Why does it feel good to cooperate, and why do we enjoy watching cheaters "get what they deserve?"
- What is the basis for mate attraction?
- Why do celebrities, athletes, and political leaders fascinate us?
- Can biology explain Ferraris, 8,000 sq-ft homes, and diamonds?

Course Objectives: Upon completion of this course, students will:

- Understand current theory relating to human origins and the biological evolution of human behavior.
- Understand Darwinian evolution, and in particular, natural selection
- Better appreciate and be able to apply the scientific method
- Utilize a variety of research techniques to retrieve information efficiently, evaluate retrieved information, and synthesize information effectively to support their messages or arguments;
- Improve development and organization of written arguments;
- Demonstrate the ability to edit and revise in the writing process;

- Apply the basic theories and principles of oral communication; and
- Communicate effectively in a variety of settings, including public speaking and group discussion.

**Grading:** Your grade for this course will be based upon class participation, writing assignments, and one oral presentation, the content of which will be researched and delivered in small teams. For some class discussions, pairs of students will be assigned to serve as discussion leaders for course reading assignments.

20%	Participation in class discussion
15%	2 short response, in-class writing assignments
25%	2 take-home writing assigments
25%	Blog project
15%	Oral presentation

# I will deduct one-half of one grade from your final course letter grade if you do not visit <u>both</u> the writing and speaking centers at least once during the semester for consultation.

**Class Participation:** Class participation is crucial to your grade and to the success of the course in general. I will continuously maintain records of your contributions to discussion of readings. I will also evaluate your responses to your classmates' presentations. You can't receive a satisfactory participation grade if you don't attend class and participate!

**Statement from the Office of Disabilities Services:** "The Office of Disability Services has been designated by the University as the primary office to guide, counsel, and assist students with disabilities. If you already receive services through the Office of Disability Services and require accommodations for this class, make an appointment with me as soon as possible to discuss your approved accommodation needs. Please bring your accommodation letter with you to the appointment. I will hold any information you share with me in the strictest confidence unless you give me permission to do otherwise.

If you have not contacted the Office of Disability Services and need accommodations, (note taking assistance, extended time for tests, etc.), I will be happy to refer you. The office will require appropriate documentation of disability. Their phone number is 540-654-1266."

DATES:		Specific Activities
August	24	Introduction
	26	Reading and discussion: Alves. et al. 2003
	28	Simpson library science resources overview: Ms. Christine Glancy
Aug/Sept	31	Lecture: Evidence and mechanisms of evolution
	2	Tour of the Writing Center
	4	Reading and discussion: Barton et al., pgs. 727-740
September	7	Reading and discussion: Wong
	9	Reading and discussion: Pollard
	11	Tour of the Speaking Center

	14	Video: Monkey in the Mirror	
	16	Reading and discussion: Rosenberg and Trevathan; Lahdenperä et al.	
	18	Reading and discussion: Diamond, pgs. 110-121	
	21	Reading and discussion: Brownlee, Ananthaswamy	
	23	Reading and discussion: Beaver et al.	
	25	Lecture: Animal Tool Use; Reading and discussion: Breuer et al.	
Sept/Oct	28	Reading and discussion: Weinberger; Diamond, pgs. 168-179	
_	30	Reading and discussion: Diamond, pgs. 192-204.	
	2	UMWBlogs Tutorial	
October	5	Reading and discussion: Leonard	
	7	Reading and discussion: Kluger (2006)	
	9	Lecture: Review of animal mating tactics	
	12	FALL BREAK	
	14	Reading and discussion: Diamond, pgs. 67-84	
	16	Guest speaker: Dr. Timothy Crippen	
	19	Reading and discussion: Rhodes	
	21	Reading and discussion: Ramsey et al.	
	23	Reading and discussion: Havlicek; Deaner et al.	
	26	Lecture: Evolutionary pathways to cooperation	
	28	Reading and discussion: de Waal (2005)	
	30	Reading and discussion: Kluger (2007) Guest: Dr. David Rettinger	
November	2	Reading and discussion: Diamond, pgs. 276-309	
	4	Reading and discussion: de Waal, pgs. 1-39	
	6	Reading and discussion: de Waal, pgs. 41-84	
	9	Reading and discussion: de Waal, pgs. 85-125	
	11	Reading and discussion: de Waal, pgs. 127-168	
	13	Reading and discussion: de Waal, pgs. 169-214 (blog project due)	
	16	Reading and discussion: de Waal, pgs. 215-237	
	18	Student presentations	
	20	Student presentations	
	23	Student presentations	
	25-27	THANKSGIVING	
Nov/Dec	30	Student presentations	
	2	Student presentations	
	4	Conclusions	

### Reading List [List will be updated for Fall 2015]:

Alves D. W., et al. 2003. Effect of lunar cycle on temporal variation in cardiopulmonary arrest in seven emergency departments during 11 years. *European Journal of Emergency Medicine* 10:226-229.

Ananthawarmy, A. 2002. Under the Skin. New Scientist. 34-37.

Barton, N. H., et al. 2007. *Evolution*. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York.

Beaver, K.M., DeLisi, M., Vaughn, M.G., Barnes, J.C. 2009. Monoamine oxidase A genotype is

associated with gang membership and weapon use. Comprehensive Psychiatry.

Breuer, T. et. a. 2005. First observation of tool use in wild gorillas. PloS Biology. 3:2041-2043.

- Brownlee, C. 2005. Code of many colors: can researchers see race in the genome. *Science News*.
- Deaner, R.O., et al. 2005. Monkeys pay per view: adaptive valuation of social images by rhesus macaques. *Current Biology*. 15:543-548.
- de Waal, F.B.M. 2005. How animals do business. Scientific American. 73-79.
- de Waal, F.B.M. 2005. Our Inner Ape. Riverhead Books, New York.
- Diamond, J. 1992. *The Third Chimpanzee: The Evolution and Future of the Human Animal.* HarperCollins. New York, NY.
- Havlicek, J., Roberts, S.C., and Fleg, J. 2005. Women's preference for dominant male odour: effects of menstrual cycle and relationship status. *Biol. Letters*. 1:256-259.
- Kluger, J. 2006. Why we worry about the wrong things; the psychology of risk. *Time*. 64-71.

Kluger, J. 2007. What makes us moral. Time. 54-60.

- Lahdenperä et al. 2004. Fitness benefits of prolonged post-reproductive lifespan in women. *Nature*. 428:178-181.
- Leonard, W.R. 2002. Food for thought. Scientific American. 287:106-15.
- Pollard, K.S. 2009. What makes us human. Scientific American. 44-49.
- Ramsey, J.L., Langlois, J.H., Hoss, R.A., Rubenstein, A.J., Griffin, A.M. 2004. Origins of a stereotype: categorization of facial attractiveness by 6-month-old infants. *Developmental Science* 7:201-211.
- Rhodes, G. 2006. The evolutionary psychology of facial beauty. Ann Rev Psych. 57:199-226.
- Rosenberg, K. R. and W. R. Trevathan. The evolution of human birth. *Scientific American*. 80-85.

Weinberger, N.M. 2005. Music and the brain. Scientific American. 89-95.

Wong, K. 2006. Lucy's baby. Scientific American. 78-85.

#### **Blog Project Instructions**

1) Using a comparative analysis between humans and other animals, explain current hypotheses that attempt to explain your chosen aspect of human biology from an evolutionary point of view. **Cite examples and supporting data where appropriate.** 

-Thoroughly explain your topic; provide enough background so that

readers can understand the issue

-Compare the behavior or biological feature to those observed in other animals.

- If applicable, discuss competing hypotheses proposed to explain your topic.

2) Critically evaluate the scientific evidence for hypotheses relating to your topic.

-Do any weaknesses exist in the data?

-Are effect sizes biologically relevant?

-Do more experiments need to be carried out?

3) Provide your own analysis of how a biological approach to understanding your topic might benefit society.

4) Use at least 10 sources, five of which must be primary scientific papers.

5) Your text must be at least 1,500 words in length.

6) Use scientific format for citing sources (imbed the author(s) last name(s) and year of publication within your text). If you use an electronic source, make your citation a link to the source's URL.

Examples of citing sources within the text of your paper:

According to Davis and Jones (2006), early humans with fewer teeth were less able to chew their food and were therefore less reproductively successful.

Early humans with fewer teeth were less able to chew their food and were therefore less reproductively successful (Davis and Jones 2006). How to format your sources within the "literature cited" section of your paper:

Davis, A. P. and J. R. Jones. 2006. Dentition and reproductive success: fossil evidence for positive selective pressure on tooth number in early Quaternary hominids. *Journal of Dental Paleontology*. 25:106-113.

7) Feel free to use images, YouTube videos, etc., but credit all sources!

8) Have fun!

### **Ideas for blog projects:**

Intelligence Tool use Language and speech Music Diet Dominance Fear and responses to risk Unique human life-cycle features (menopause, cryptic ovulation) Mate choice (pheromones, symmetry, genetic compatibility, etc.) Monogamy Cooperation and social justice