

The Evolution of Religiosity and Human Coalitionary Psychology

Syllabus version: 14 August 2011

Fall Semester 2011, University of New Mexico, Albuquerque, NM, USA

**Lecture / Discussion schedule is subject to revision.
Schedules of readings, point lists, and paper deadlines will not change.
Read this syllabus before the first class, please!**

Biology, BIOL 419, section 012 (3 credit hours), CRN # 42356
Biology, BIOL 519, section 012 (3 credit hours), CRN # 42357
Religious Studies, RELG 347, section 012 (3 credit hours) CRN # 42359

Instructor: Dr. Paul J. Watson
Classroom: Castetter Hall - room 107
When: Monday & Friday 1300 to 1430
Office: Castetter room 110
Email: pwatson@unm.edu
Phone: 681-3391 (cell); 277-3505 (office)
Office Hours: Monday 1030 to 1230 and Friday 1030 to 1230, or by appointment.

Class Website: http://biology.unm.edu/Biology/pwatson/public_html/RS%202011.html

1. Overview

“In the distant future I see open fields for far more important researches. Psychology will be based on a new foundation, that of the necessary acquirement of each mental power and capacity by gradation. Light will be thrown on the origin of man and his history.”
(Charles Darwin, *On the Origin of Species*, 1859, p.488)

“Is it not reasonable to anticipate that our understanding of the human mind would be aided greatly by knowing the purpose for which it was designed?”
(George C. Williams, *Adaptation and Natural Selection*, 1966, p.16)

The “Evolution of Religiosity” is an advanced undergraduate and graduate-level course taught in a hybrid lecture and discussion format. It is rooted in the tradition of modern evolutionary behavioral ecology and open to students in Psychology, Anthropology, and Biology. The course is equally open to students in the Religious Studies Program and other humanities or social science disciplines that traditionally have produced secular academic descriptions and analyses of religious behavior and experience. I look forward to a mixed enrollment including dedicated, thoughtful, questioning students from many backgrounds; this will enrich our discussions.

This course requires active participation. Questions and observations during lectures and discussion portions of each meeting always are encouraged. Your regular involvement in conversation will be facilitated by the instructor calling on individuals for input *ad libitum* during class. Participation also will be brought about through student team presentation of textbook

chapters, presentation and elaboration of selections from written 1-2 page “point lists” handed in electronically (via email attachment) by the beginning of each Monday’s class (more below). Students will write a term paper or research proposal whose stepwise development will be closely scheduled across the semester and which each student will explain to the class at various stages.

The aim of the course is to impart a rich mixture of competing and complementary theory and empirical results relating to the understanding and study of religiosity, and its cross-cultural consequence, religion, as a *natural* phenomenon. Lectures and discussions will heuristically apply evolutionary principles to derive empirically testable hypotheses and predictions regarding the natural selection pressures that may have shaped human religiosity. Thus, the course will offer a respectful, yet sober and strictly materialist analysis of all aspects of religious behavior and experience from the point of view of modern Darwinian theory and two of its main subfields: evolutionary psychology and human behavioral ecology.

Essential background in basic and mid-level Darwinian theories of will be provided mainly in context, that is, while dealing with the aspects of religious psychology and human social cognition and behavior that these theories offer to explain. Multiple, adaptationist (i.e. functionalist), by-product (epiphenomenally functional and non-functional), memetic, and hybrid hypotheses of religiosity will be covered. The role that human religious proclivities or instincts play in the dynamics of coalitions, social commitment, and within and between group processes of moral deliberation will be emphasized, as well as the potential significance of religiosity in everything from evading disease to the generation of the willpower to undertake projects entailing short-term sacrifice but expected long-term payoffs.

The instructor is not a Evangelical Atheist. Skeptical agnosticism is the furthest a scientist can distance himself from belief in the existence of the supernatural forces, a core tenet of any religion, because their reality is not scientifically testable (at least currently, or perhaps by definition). Moreover, Darwinism is not some alternative religion: no religion commands its members to go out and do everything possible to falsify or find evidence against its most basic teachings and assumptions in the name of promoting a more firmly verified, more objective view of reality.

So, the materialist evolutionary focus of the course is not designed to dissuade students of their religious views. Indirectly however, it will cause any thinking student to ponder the source(s) of their religious or spiritual views and, indeed, their very nature. It will also cause many non-religious students to question innate and learned assumptions about how their thoughts and emotions operate and “who they really are.” In some ways, our study of religiosity is an avenue for the study of the nature of mind and consciousness itself.

I must emphasize that by providing cogent, rigorously materialist, bio-culturally reasoned analyses of religion, this course will open major and potentially disquieting questions for many students, both religious and non-religious, about the reasons and sources of their beliefs, behaviors, and perhaps their dearest most sacred personal experiences. As instructor, I hope the course does the same for me, again. I also hope that any disillusionments individuals experience will be compensated for by enriched self-understanding. We do not understand ourselves well; this is our design. We both over- and underestimate ourselves. Only humans can be dissatisfied with their subjectivity and intersubjectivity. Only humans can hope to notice it, and desire to correct it, when their minds veer from reality. The course has many complementary goals, but one is to give you a fresh and, I would say, more Human appreciation of yourself.

Students will not take class time advocating or opposing untestable belief or faith-based supernatural views of reality, as these do not logically compete with scientific perspectives. The class will be a safe and stimulating place to share one's experiences regarding religious thought patterns and emotions. Such experiences are real. Anyone who seeks to disrupt this educationally important sharing process and scientifically principled analyses of personal experiences or views will be dropped from the course.

Over the course of the semester we will read one recent text in full: *The Evolution of Religion: Studies, Theories, & Critiques* (2008). The book contains 50 succinct chapters, each of which will be presented by teams of two students chosen by the instructor during the first week of class; these presentations begin on the Monday of the third week of class. All students must read every chapter and, before the chapter is discussed in class, should have written at least one point on their weekly "point list" (see below) having to do with each chapter. In addition to covering our topic very broadly, the text will provide a great source of references for your term papers, along with other resources I'll make available on reserve at Centennial Science Library.

We also will read selected chapters from, *The Handbook of Evolutionary Psychology* (2005), edited by renowned evolutionary psychologist David M. Buss, as well as some recent empirical papers from the primary literature (obtained via instructor e-mail or the course web site). There will be some recommended readings from Buss and other sources for those with a hunger to reach a broader understanding of the field of human evolutionary psychology.

2. Course mechanics

We meet twice a week for one and a half hours. I expect punctuality and very regular attendance. Missing coverage of a key concept can handicap you for the rest of the semester.

I may open many classes with some opening remarks, but we will quickly get into chapter discussions led by student pairs. I'll try to hold off on "lecturing" until the class has completed a productive discussion of each chapter. Then I may hold forth for a while in lecture mode before we move on to the next student-led chapter presentation / discussion.

When I get into lecture mode sometimes it will be planned and sometimes it will be in response to textbook chapter contents or student remarks or questions. To a large extent I'll be prompted by the textbook chapters and your point lists in choosing the topic of "lectures." All my lecturing is "open," in that students can feel free to raise hands and offer questions or comments that focus on the current topic. I like to be challenged. A questioning atmosphere helps inspire me and makes me a more effective teacher. Active multi-way conversation is the best way to learn. Your inputs help me know whether I'm reaching you personally, as well as the class in general. You get brownie points toward your grade for thoughtfully amplifying or extending my points, critiquing them, or just asking for clarifications.

It is important that disciplined active exchange amongst us all is established early and remain consistent. If you get lost or start traveling down an incorrect conceptual path at the beginning or middle of the class, you'll never fully understand the material. It will be less likely to gel. The schedule of lectures are given, roughly, for each class meeting in the course schedule section, below.

During each meeting, have a copy of your "point list" (see section 6, below) for that week in front of you. It will help you fashion input for chapter discussions. You can also use them to

help you formulate questions and comments for later in the class meeting that do not necessarily have much to do with the chapters for that day. Then we'll dive into the second half of each meeting, consisting of discussion focused primarily on the content of student-written "point lists." Students construct these while doing the week's assigned readings or pondering class material outside of class. These lists are to be emailed to me before the beginning of each MONDAY meeting. Late lists will not be accepted, except for medical or family emergency reasons. Of course, spur-of-moment questions also are encouraged during discussions.

Taken together, I hope the semester will provide a thorough survey of this fast growing sub-field of evolutionary psychology, as well as providing an introduction or review (depending on your background) of the basic and mid-level Darwinian theory applicable to the understanding of human mental and emotional life.

Human coalitional psychology will permeate the course, sometimes explicitly, but always at least implicitly. One of the questions that the Darwinian perspective always encourages one to ask about living organisms and their behavior - get used to this - is what are the costs and benefits of any structure or activity? Everything has both costs and benefits. These are always interesting to identify, along with the contextual factors that typically make them higher or lower, leading to selection for contingent expression of many traits, including cognitive and behavioral traits. To survive generations of natural selection, major features of organisms must have net benefits that, on average, over-compensate individuals for inevitable associated costs. Since humans are so completely dependent on coalition partners for their survival and reproduction, we always can ask a costs-and-benefits questions about how any aspect of religious psychology or behavior affects the building and maintenance of an individual's relational or coalitional matrix, and its competitive power relative to other coalitions.

If you have to miss a class for any reason, please let me know by email as soon as you know you'll be absent. *Unexplained absences will reduce your grade*. The course readings, mostly consisting of chapters from the two textbooks, will require about 3 - 5 hours per week outside class.

I enjoy meeting with students. Whether you feel confused, angry, ecstatic, or even just mildly intellectually inspired, please feel free to schedule a meeting with me in my Castetter Hall office (room 110) if you'd like to like to discuss something related to the course.

Students with Disabilities

In accordance with University Policy 2310 and the Americans with Disabilities Act, any student who, due to a disability, may require special arrangements in order to meet course requirements should contact the instructor as soon as possible to make necessary accommodations. It is the responsibility of the student to request accommodation for individual learning needs. For further information, contact the Accessibility Resource Center at 277-3506.

3. Readings

One Required Textbook (available at UNM bookstore or online):

Bulbulia, J., Sosis, R., Harris, E., Genet, R. Genet, C, and Wyman, K. 2008. The Evolution of Religion: Studies, Theories, & Critiques. Collins Foundation Press, Santa Margarita, CA.

Chapter handouts from:

Buss, David M. (Ed.). (2005). *The handbook of evolutionary psychology*. New York: Wiley. (furnished as PDF files via download from our class website, e-mail, or spending about \$100 to get the actual hardback from Amazon, etc). It is a great and important multi-authored book.

Each week we will read and discuss material from the main Bulbulia et al. text. I expect you'll need about three to five hours a week outside class to do the readings and formulate your weekly point lists (see below).

Look at the Course Schedule (section 8, below). Readings that are listed just above a particular class meeting's date are to be *completed*, along with their associated points-list, *before that class meeting*. That's the reading that will be discussed during that day's meeting. For example, **Bulbulia: Chapter 1: "Introduction"** (pp. 1-7; 6.5 pp); **12: "Cognitive Foundations in the Development of a Religious Mind"** (pp. 181-193; 11 pp); **16: "Cognitive Foundations of Religiosity"** (pp. 229-241.; 11 pp), all are to be read before the August 30th class meeting.

The average weekly reading assignment is about 40+ pages, but the pages are dense. They must be read carefully; they cannot productively be skimmed. *The course's educational benefits depend a lot on you completing the readings on time, so you can follow and participate in the class discussion*. If you don't read them, you won't learn nearly as much; if you do read them attentively, you'll learn and contribute a lot!

I would like all of each week's required readings to be completed well before class, so you have time to digest them, ponder them, relate them to your own experience, and prepare substantive comments and questions about them for class, including your written point lists.

4. Instructor

Paul J. Watson, Research Faculty, Dept. of Biology, UNM.
Ph.D. Cornell University, 1988, followed by NSF-funded postdoctoral fellowships at UNM Biology with Randy Thornhill (1988-1989) and Oxford University, Department of Zoology, with William D. Hamilton (1989-1991).

Department of Biology, Castetter Hall room 110A, University of New Mexico, Albuquerque (505) 277-3505 (office); (505) 681-3391 (cell - a more reliable contact than office, except during office hours!)

pwatson@unm.edu (I check email every day or two.)

http://www.biology.edu/biology/pwatson/public_html/pjw_cv.htm

Office hours: Monday 1030 - 1230 and Friday 1030 - 1230, or by e-mail or cell appointment (681-3391), Castetter Hall, Room 110.

5. Grading

Seminars provide training in thinking actively about a topic, sharing insights and questions, and *collaborating* with colleagues to better understand and evaluate theoretical issues and empirical studies. *Participation, various forms of it, will count for 70% of your grade!*

The final course grade will depend on two parts:

- 1) 70% attendance and participation:
 - 35% attendance, spontaneous verbal participation in class, and your planned textbook chapter presentations.
 - 35% quality and quantity of written **point lists**.
- 2) 30% term paper or research proposal.

There are no exams given in this course, but point lists (see below) are a form of weekly “quiz,” and your final paper should reflect a good understanding of our discussions and readings as well as additional references specific to your paper.

I expect very regular attendance, knowledge of assigned readings, active participation, intellectual engagement, and thoughtful points.

6. Point Lists **35% of course grade**

Before every Monday’s meeting, every student should electronically submit a “point-list,” that is, a set of discussion points, thoughts, questions, or comments about the assigned readings and other course material for that whole week. Keep a copy of each for yourself too, to refer to in class. I will select points from students’ lists, as necessary, to help propel the class discussions, but I also expect students to push for their point to be addressed even if I do not happen to choose it on my own.

Important: point lists must NOT review the readings. Instead, they should articulate your thoughts, reactions, and questions in response to the readings, or some aspect of recent class discussion. Please make about **six** substantive, succinct reasonably independent points per list, each one offering some sort of critical analysis of or challenge to an idea from the readings, comparisons amongst readings, lectures, discussions, or a question that came to you while pondering course content, broadly construed. I’m big on *pondering*. I can tell if your doing it or not. *I often comment extensively in writing, personally to you, in response to items on your point list. Thus point lists provide a major way for you and I to interact even if a point does not get covered in class.*

Every point list should be, electronically submitted via email attachment (doc, docx, or PDF format); I prefer the old MS Word doc format, and it must be a PC-compatible file.

Each point list should be 1 - 2 pages in length, with 1.5 line-spacing, and in 11 point Arial font. At the top should be your name, the date of submission, and the textbook chapter(s) covered by your points. You can, of course, have some points on each list that have to do with lecture material, discussion or your own special interests.

When you have completed a point list, I encourage you to highlight the one point on it that YOU most want to have covered in class! Point lists will be a major mechanism for facilitating discussion of text chapters and other course material. Although I will give lectures of varying length to supplement, critique, or amplify the ideas expressed in the textbook and other readings, I will do little straight lecturing on the texts. It is crucial for your grade and class content that everyone takes point lists seriously!

Your first point list is due before class on Monday August 29th, our third class meeting.

7. Chapter Presentations **(an important component of your 35% participation score)**

In your assigned chapter presentations, which will be spread somewhat evenly throughout the semester, you begin by reviewing the author's main points briefly. The review should be very focused and succinct, because we are assuming that *everyone in class has read the chapter*. Then, most important, you generate a productive 10-20 minute class discussion by amplifying and/or challenging and/or asking for classmates' help in understanding the author's thesis. For the most part, I, the instructor, will wait until the class is done conversing before interjecting any "lecture" points I want to make in relation to the chapter content. How long I will go on speaking during the end of any given chapter discussion is anyone's guess.

8. Term paper or Research Proposal **(30% of course grade)**

All students will write one term paper or research proposal. Development of the paper will entail three successive stages. The final version of the paper should be concise, about 10 pages 1.5 spaced (approximately 3,000-4000 words). But, it should be intellectually sophisticated, conceptually and methodologically oriented, including a critical assessment of the most relevant recent and classical research literature, and an outline of a possible study that conveys how you would choose to dig deeper into the subject empirically. Term papers will differ from research proposals in that the former will emphasize literature review, synthesis, and the detailing of new hypotheses or perspectives on the chosen phenomenon. Proposals include some of the same material in abbreviated form, but devote more space to the details of methods you would use to test a well focused hypothesis.

You can choose any topic related to the course content and readings. To make sure that you are thinking, researching, and writing the paper on a good schedule throughout the semester, the project is due in three stages. Late work will be penalized. After each stage is turned in, I will write comments and suggestions on it, which you should use in revising your term paper for the next stage.

Religion References (for short-term borrowing to help in developing term paper ideas)

- 1) *Measures of Religiosity*.
- 2) *The Psychology of Religion* (3rd edition).
- 3) *Handbook of the Psychology of Religion and Spirituality*.
- 4) *Psychology of Religion: Classic and Contemporary* (2nd edition).

Due September 23rd: provisional title, abstract (one paragraph), and bibliography (about 8 references). This will determine 5% of your final course grade. The provisional abstract should just let me know what you think you'll probably write about. If you change your mind, no problem, just tell me in an email later. But I want you to have some topic in mind by this date. Pick a topic that you feel passionate about – you'll have to live with it for several months! The bibliography should list about 10 references in standard APA reference format (see *APA Publication Manual*). They should be things that you have actually read (and, not all just chapters from the textbook!), with brief notes about their relevance to your paper. (A good note for a reference would be "This meta-analysis reviews 38 papers showing generally small positive relationships between the regularity of attendance at church services and the ability to hold on to stock market investments for longer time periods." A bad note would be "Reviews facial attractiveness and religious behavior" (too vague).

Due October 28th: revised title, abstract, and bibliography, and a detailed outline. This will determine 10% of your final course grade. The title, abstract, and bibliography should take into account my feedback concerning your previous submission. The revised abstract should be clearer, better focused, and take stronger stands on your paper's key issues. The annotated bibliography should now list about 20 APA-format references that you have actually read, with good notes for each on their relevance to the paper. The detailed outline should be a couple of pages long, clearly showing the project's planned structure, major points, and flow of argument. Each outline entry should be a clear, detailed, specific statement (e.g. "Evidence from 5 studies showing short-term boosts in testosterone following male participation in painful religious rituals, whether or not they are observed by attractive female group members"), not just a short, vague phrase (e.g. "religious behavior affects testosterone").

Due December 15th: final paper. This will determine 15% of your final course grade, however failure to hand in a final paper will result in a grade of "incomplete" for the course. It should be in standard APA research paper format. This means computer-printed, double-spaced, single-sided, in 11 point Arial (preferably), with a proper title page, abstract, references, and page numbering. The main text (excluding abstract and bibliography) should be very concise – about 3,000 words long (10 pages double spaced). I care more about clarity, insight, research, and the flow of argument than about length. This should be a highly polished document in correct format with no spelling or grammatical errors. It should represent the culmination of three months of research, thinking, and writing about a topic that passionately interests you. I will try to grade final drafts by the last day of exams.

The final paper MUST include these elements:

- Title page: a descriptive, memorable title, and all other information required for APA format
- Abstract page: a concise, punchy abstract that interests the reader in your paper
- Introduction: Start with a bang. Pose the problem that interests you, and how you'll approach it. Say where you stand, and why the reader should care. Be specific and clear; mix the theoretical and methodological level of discourse with real-life examples and issues; know when to be funny and when to be serious.
- Body of a *term paper*: depending on what you're writing about, this could include a literature review, a series of arguments, an overview of relevant ideas and research from a related area or field, a series of methodological analyses, criticism, and suggestions, or anything that advances your points. If you include literature reviews, don't do generic overviews – review the literature with a clear and stated purpose, and review it critically, as it pertains to your topic. A term paper could also incorporate a brief outline of an experiment, an observational method, a meta-analysis or insightful re-analysis of existing data.
- If you are doing a *research proposal* instead of a term paper, then beginning near the middle your paper you should sketch an empirical way to resolve one or more of the issues or hypotheses you've raised in the first part of the paper. In a research proposal, alternative hypotheses and their testable predictions have to be especially clear, the literature review relatively brief, and you must *fully detail methods* as would be appropriate for a proposal to the UNM Human Subjects Committee. A model or two of an HSC proposal will be provided in electronic format.
- Literature Cited: Only include items you've actually read. If you haven't read a paper directly, but have seen it cited and described by others, then use this citation format:

- A NOTE ON PLAGIARISM: Make sure you know what plagiarism is. I'm pretty good at detecting it. If you plagiarize, you will almost certainly get a zero on your term paper, and thus you could also easily fail the course.

9. Course Schedule

Keep up with the weekly readings and point lists. They must be completed before the Monday of the week they are scheduled to be presented and discussed.

Week one

There are seven items to be read for week one. I will e-mail them to you, and *they are also downloadable from the class web site*. Three readings should be done **before** our first class meeting on Monday, August 22nd. Outrageous, I know.

NOTE: No written point list is due for week one. The first point list should be submitted via email attachment before the beginning of class Monday August 29th.

Reading

(1) Read this recent introduction to the science of the evolutionary behavioral ecology by Tom Seeley and Paul W. Sherman. This excellent paper will help orient you to the kind of reasoning and research that provides the basis for our analyses of human mental life and behavior.

(2) Pascal Boyer's 2003 paper entitled, "Religious thought and behavior as by-products of brain function," from *TRENDS in Cognitive Sciences* v. 7(3), pp.119-124. The Boyer paper will briefly introduce you to the currently dominant epiphenomenalist or cognitive byproduct school of thought regarding religiosity, made famous by Boyer's important and humbly titled book, "Religion Explained" (2001).

(3) Three short introductory sections of our textbook (8 pp. total: "Note from the Publisher," "Preface: Bringing the *Evolution of Religion* into Being," and "Introduction: Religion in Eden.")

Read the three above-listed items now!

Come to the first class meeting with comments and questions and let the discussion begin!

Before the 2nd class meeting (Friday, August 26th), read the following four items: [35 pp. total]. Item #7, "The evolution of morality," from the Buss "Handbook of Evolutionary Psychology," is important as a basis for helping us all get on the same wavelength concerning the basic questions like, "If I'm purely a product of natural selection, then what makes me want to be good?"

- Buss:** (4) **Foreword**, by Steven Pinker (pp. xi-xvi; **6 pp**);
 (5) **Introduction**, by David Buss (pp. xxiii-xxv; **3 pp**);
 (6) **Afterword**, by Richard Dawkins (pp. 975-979; **4 pp**);
 (7) **Chapter 26: "The Evolution of Morality,"** by Dennis Krebs (pp. 747-768; **22 pp**).

- Aug. 22 Purpose, organization, and spirit of the course. Remarks on scientific reductionism. Adaptation and natural selection. Computationalism: a conceptual foundation of evolutionary psychology. "Levels of analysis." Exaptations and by-products versus adaptations. Definitions of religion, religiousness, religiosity, and spirituality; *come prepared to offer ones you like or believe in*. A tentative catalog of pan-human instincts that contribute to religiosity.
- Aug. 26 Implications of having a naturally selected mind; Darwin's utilitarian doctrine is a very deep rabbit hole (we will return to this topic many times from various angles). Revisit mechanism of natural selection, and the essence of the kind of minds it can build. Gerald Edelman's model of brain development and organization: (a) "neuronal group selection theory," (b) the "dynamic core" as the neural correlate of consciousness (c) the relationship between the dynamic core and limbic-based "value systems" - possible implications for consciousness and belief. *A voluntary exercise in self-observation for outside of class.*

Week two

Reading

Bulbulia: Chapters 1-6. (pp. 23-72; **38 pp. of actual reading**)

Recommended reading

Buss: Chapter 5: "Controversial Issues In Evolutionary Psychology," by Edward Hagen (pp. 145-171; 27 pp).

- Aug. 29 **First point list due, via email attachment, before class today!** Present and discuss Bulbulia chapters 1-4. *Discussion of self-observation class exercise.*

- Sept. 2 Present and discuss Bulbulia chapters 5 & 6. "Hamilton's rule," and the evolution of nepotism, reciprocal altruism, indirect reciprocity and punishing behavior. Multi-currency contractual reciprocity as the foundation of human social life. The nature of morality and the science of well-being; questioning the "is-ought (naturalistic) fallacy." The relationship between selfishness and altruism in evolutionary biology.

Week three

Reading

Bulbulia: Chapters 7-10. (pp. 73-100; **21 pp**)

Recommended reading

Buss: Chapter 1: "Conceptual Foundations Of Evolutionary Psychology," by John Tooby and Leda Cosmides (pp. 5-63; 59 pp); this is a dense chapter and you may need to spread your reading of across several weeks.

Investing in a serious read of this chapter will advance your understanding of evolutionary psychology greatly. Tooby and Cosmides are two of the field's principal founders. There is a light reading load in Bulbulia this week to encourage you to tackle this recommended chapter.

- Sept. 5 Labor Day – **NO CLASS.**
- Sept. 9 Present and discuss Bulbulia chapters 7-10.

Week four

Reading
Bulbulia: Chapters 11-17. (pp. 103-150; **38 pp**)

- Sept. 12 Present and discuss Bulbulia chapters 11 & 12.
- Sept. 16 Present and discuss Bulbulia chapters 13-17.

Week five

Provisional Term Paper Abstract and Bibliography due, via email, Sept 23rd

Reading
Bulbulia: Chapters 18-24. (pp. 153-207; **43 pp**)

S&P: Chapter 3: “Changing the question” (pp. 37-54; 18 pp) &
Chapter 4: “In the Beginning: Ancestor Worship” (pp. 55-70; 16 pp).

- Sept. 19 Present and discuss Bulbulia chapters 18-20.
- Sept. 23 Present and discuss Bulbulia chapters 21-24.

Week six

Reading
Bulbulia: Chapters 25-29. (pp. 211-245; **29 pp**)

- Sept. 26 Present and discuss Bulbulia chapters 25-26.
- Sept. 30 Present and discuss Bulbulia chapters 27-29.

Week seven

Reading
Bulbulia: Chapters 30-35. (pp. 249-292; **30 pp**)

- Oct. 3 Religious Present and discuss Bulbulia chapters 30-32.
- Oct. 7 Present and discuss Bulbulia chapters 33-35.

Week eight

Reading

Bulbulia: No readings this week from textbook.

Buss: Chapter 22: “Managing ingroup and outgroup relationships,” by Rob Kurzban and Steve Neuberg (pp. 653-669; **17 pp**).

Oct. 10 Discuss Kurzban and Neuberg reading. Catch up.

Oct. 14 Fall Break – **No Class**

Week nine

Reading

Bulbulia: Chapters 36-38. (pp. 295-317; **16 pp**).

Oct. 17 Present and discuss Bulbulia chapters 36 & 37.

Oct. 21 Present and discuss Bulbulia chapter 38. Extended commitment theories part 1: Self-stigmatization to prevent social buyouts and protect private information or intellectual property.

Week ten

Revised term paper abstract, outline, and bibliography due, before class, October 28th

Reading

Bulbulia: No readings this week from the textbook.

Oct. 24 Extended commitment theories part 2: Self-stigmatization to prevent social buyouts and protect private information or intellectual property.

Oct. 28 Students explain their intended term paper topics to class and receive feedback part 1.

Week eleven

Reading

Bulbulia: Chapters 39-42. (pp. 319-346; **24 pp**)

Oct. 31 Present and discuss Bulbulia chapters 39 & 40. Students explain their intended term paper topics to class and receive feedback part 2.

Nov. 4 Present and discuss Bulbulia chapters 41 & 42.

Week twelve

Reading [17+ pp total]

George Ainslie's article from the journal, Behavioral and Brain Sciences: "*Precis: Breakdown of Will.*" (Article will be e-mailed to class.) Everyone also read two or more of the follow-up commentaries and be ready to review and comment on them in class.

Nov.7 Religion and Willpower I.

Nov. 11 Religion and Willpower II.

Week thirteen

Reading

Bulbulia: Chapters 43-46. (pp 349-377; **23 pp**)

Nov. 14 Present and discuss Bulbulia chapters 43 & 44.

Nov. 18 Present and discuss Bulbulia chapters 45 & 46.

Week fourteen

Reading

Bulbulia: Chapter 47 & 48. (pp. 379-392; **12 pp**).

Nov. 21 Present and discuss Bulbulia chapters 47 & 48. Review and refinement of the religiosity's potential to yield cognitive enhancements, greater personal and group willpower, social commitment and conformity, rule memorization, leader choice, creativity, health and anxiety relief, morale / optimistic biases, cheater detection, efficient decision-making, and adaptive self-deception.

Nov. 25 Thanksgiving Break – **No Class**

Week fifteen

Reading

Bulbulia: Chapter 49 & 50. (pp. 393-406; **12 pp**).

Nov. 28 Present and discuss Bulbulia chapters 49 & 50. Course synthesis and student questions.

Dec. 2 Synthesis and student questions.

Week sixteen

Reading: Maximize readings for your term paper. No assigned readings.

Dec. 5 Student oral summaries of term papers or proposals I

Dec. 9 Student oral summaries of term papers or proposals II.

Finals week

Dec. 12 - 16. No final exam or class meetings. Office hours available all week, by appointment!

Final paper due, via email to pwatson@unm.edu (in PC compatible doc, docx, or pdf format), by December 15th, 5:00 pm.

10. Recommended Further Reading

Religion / Religiosity References, ON RESERVE, some evolutionary some not. All available for YOU at the Centennial Library Reserve Desk; these should help you with your final paper along with a few papers from the primary (journal) literature. These are my personal books, please take care of them and do not remove them from the library; they should be on 2-hour within-library reserve.

Atran, S. 2002. *In Gods We Trust: The Evolutionary Landscape of Religion*. Oxford University Press, Evolution and Cognition Series. **A former text for this course.**

Volland, Eckart, and Schiefenhövel, Wulf. 2009. *The Biological Evolution Of Religious Mind And Behavior*. Berlin: Springer-Verlag. **A former text for this course.**

Steadman, L.B. & Palmer, C.T. 2008. *The Supernatural and Natural Selection: The Evolution of Religion*. Paradigm Publishers, Studies in Comparative Social Science Series. **A former text for this course.**

Bulbulia, J. et al. 2008. *The Evolution of Religion: Studies, Theories, & Critiques*. Collins Foundation Press. **Text for current Fall 2011 version of the course.**

Rossano, M.J. 2010. *Supernatural Selection: How Religion Evolved*. Oxford University Press. **An insightful well-written functionalist analysis of religiosity.**

Hill, P.C. & Hood, R.W. 1999. *Measures of Religiosity*. Religious Education Press. **A collection of instruments for measuring people's religiosity.**

Spilka, B. et al. *The Psychology of Religion (3rd edition)*. 2003. **A wide ranging reference; provides knowledge and ideas for research questions which the social sciences have provided unsatisfactory or incomplete answers.**

Paloutzian, R.F. & Park, C.L. *Handbook of the Psychology of Religion and Spirituality*. 2005. **A wide ranging reference book; provides knowledge and ideas for research questions which the social sciences have provided unsatisfactory or incomplete answers.**

Wulff, D.M. *Psychology of Religion: Classic and Contemporary (2nd edition)*. 1997. John Wiley & Sons. **A wide ranging text; provides knowledge and ideas for research questions which the social sciences have provided unsatisfactory or incomplete answers.**

Evolution of Religion:

Boyer, Pascal. 2001. *Religion Explained*. **A former text for this course; mostly covers the cognitive, epiphenomenalist (non-adaptive) perspective extremely well.**

Kirkpatrick, Lee, A. 2005. *Attachment, Evolution, and the Psychology of Religion*. **Uses attachment theory, which have some good grounding in evolutionary reasoning, to explain religious instincts.**

Dennett, Daniel C. 2006. *Breaking the Spell: Religion as a Natural Phenomenon*. A plea to the religious community to get behind the scientific analysis of religion. Well written. Dennett himself is largely a proponent of the memetic view of the cultural evolution of religion.

Dawkins, Richard. 2006. *The God Delusion*. A well written but quite ideological rant against religion, largely from a memetic point of view. Although Dawkins knows and has admitted that skeptical agnosticism is the only scientifically defensible position concerning the supernatural, this book probably represents a good example of "evangelical atheism." See also two interesting books by Christopher Hitchens: *god is not Great: How Religion Poisons Everything*, & *the Portable Atheist*, both published in 2007.

Wilson, David Sloan. 2002. *Darwin's Cathedral: Evolution, Religion, and the Nature of Society*. Primarily a group selectionist view of the evolution of religion, by group selection's single most articulate and indefatigable proponent.

Journal Papers, see these journals:

Behavioral and Brain Sciences

Evolution and Human Behavior

Evolutionary Anthropology

Evolutionary Psychology

Human Nature

Intelligence

Proceedings of the Royal Society of London Series B: Biological Sciences

Trends in Ecology and Evolution

Key Popular Books by Prominent Authors

David Buss: *The Evolution of Desire. The Dangerous Passion. The Murderer Next Door.*

Richard Dawkins: *The Selfish gene. The Extended Phenotype. The Blind Watchmaker. Climbing Mount Improbable. A Devil's Chaplain. The Ancestor's Tale. Unweaving the Rainbow.*

Daniel Dennett: *The Intentional Stance. Consciousness Explained. Darwin's Dangerous Idea. Freedom Evolves. Breaking the Spell.*

Richard Wright: *The Moral Animal.*

Steven Pinker: *The Language Instinct. How the Mind Works. The Blank Slate. Words and Rules. The Stuff of Thought.*

Matt Ridley: *The Red Queen. The Origins of Virtue. Genome. The Agile Gene.*

David Sloan Wilson: *Unto Others. Darwin's Cathedral. Evolution for Everyone.*

Evolution

Boyd, R., & Silk, J. (2005) *How humans evolved* (4th Ed.). New York: Norton.

Cronin, H. (1991). *The ant and the peacock: Altruism and sexual selection from Darwin to today.* Cambridge U. Press.

Lewin, B. (2005). *Essential Genes.* New York: Prentice-Hall.

Ridley, Mark (2001). *The cooperative gene: How Mendel's demon explains the evolution of complex beings.* New York: Free Press.

Ridley, Mark (2003). *Evolution* (3rd Ed.). London: Blackwell.

Animal Behavior

Alcock, A. (2005). *Animal behavior: An evolutionary approach.* (9th Ed.). Sunderland, MA: Sinauer.

Strier, K. B. (2002). *Primate behavioral ecology* (2nd Ed.). New York: Allyn & Bacon.

Evolutionary Psychology and Human Nature

Alexander, R.D. (1987). *The Biology of Moral Systems.* NY: Gruyter. **A classic.**

Trivers, Robert. *Social Evolution.* 1985. **A classic.**

Buss, D. *Evolutionary Psychology: The New Science of the Mind* (3rd Edition). 2008. Pearson, Allyn, and Bacon.

Betzig, L. (Ed.). (1997). *Human nature: A critical reader.* Oxford U. Press.

Dunbar, R., & Barrett, L. (Eds.). (2007). *Oxford handbook of evolutionary psychology.* NY: Oxford U. Press.

Gangestad, S. W., & Simpson, J. R. (Eds.). (2007). *The evolution of mind.* NY: Guildford Press.

Gaulin, S.J.C. 2001. *Psychology: An Evolutionary Approach.* Prentice Hall.

Nesse, R.M. (Ed.) (2001) *Evolution and the capacity for commitment.* Vol. 3 in the Russell Sage Foundation Series On Trust. NY: Russell Sage Foundation.

Platek, S. M., Keenan, J. P., & Shackelford, T. K. (Eds.). (2006). *Evolutionary cognitive neuroscience.* Cambridge, MA: MIT Press.

Campbell, A. (2002). *A mind of her own: The evolutionary psychology of women.* NY: Oxford U. Press.

Sexual Selection and Mating

Dixson, A. F. (1998). *Primate sexuality: Comparative studies of the prosimians, monkeys, apes, and human beings.* Oxford U. Press.

Geher, G., & Miller, G. F. (Eds.). (2007). *Mating intelligence: Sex, relationships, and the mind's reproductive system.* Mahwah, NJ: Erlbaum.

Judson, O. (2002). *Dr. Tatiana's sex advice to all creation*. NY: Owl Books.
Miller, G. F. (2000). *The mating mind: How sexual choice shaped the evolution of human nature*. New York: Doubleday.

Emotion, Aesthetics

Evans, D., & Cruse, P. (2004). *Emotion, evolution, and rationality*. Oxford, UK: Oxford U. Press.
Lewis, M. & Haviland-Jones, J. M. (Eds.). *Handbook of emotions* (2nd Ed.). (2000). New York: Guilford Press.
Volland, E., & Grammer, K. (Eds.). (2003). *Evolutionary aesthetics*. Berlin: Springer.
Ramachandran, V.S. (2005) *A Brief tour of human consciousness*. NY: PI Press.

Individual Differences

Deary, I. J. (2001). *Intelligence: A very short introduction*. Oxford, UK: Oxford U. Press.
Hare, R. D. (1993). *Without conscience: The disturbing world of the psychopaths among us*. NY: Guilford Press.
Matthews, G., Deary, I. J., & Whiteman, M. C. (2004). *Personality traits* (2nd Ed.). Cambridge U. Press.
Plomin, R., DeFries, J. C., McClearn, G. E., & McGuffin, P. (2003). *Behavior genetics* (4th Ed.). New York: Worth Publishers.

Selfhood

Metzinger, T. (2003). *Being No One: The self-model theory of subjectivity*. Cambridge: A Bradford Book, The MIT Press.
Suzuki, Sunryu. (1970). *Zen Mind, Beginner's Mind*. NY & Tokyo: Weatherhill.
Wegner, D.M. (2002). *The Illusion of Conscious Will*. Cambridge: Balford Book, The MIT Press.

Mental Illness

Baron-Cohen, S. (Ed.), (1997). *The maladapted mind: Classic readings in evolutionary psychopathology*. Hove, UK: Psychology Press.
Evans, D. (2003). *Placebo: The belief effect*. New York: HarperCollins.
McGuire, M. T., & Troisi, A. (1998). *Darwinian psychiatry*.
Keedwell, P. (2008). *How sadness survived: The evolutionary basis of depression*. Radcliff Publishing LTD, Abingdon. UK.
Nesse, R., & Williams, G. (1996). *Why we get sick: The new science of Darwinian medicine*. New York: Vintage.
Nettle, D. (2001). *Strong imagination: Madness, creativity and human nature*. Oxford, UK: Oxford U. Press.

For evolutionary perspectives on depression, visit my web site at:

http://biology.unm.edu/Biology/pwatson/public_html/dp1.htm