

# The Evolution of Religiosity and Human Coalitionary Psychology

***Syllabus, beta version: 27 August 2012***

Fall Semester 2012, 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, please!***

Biology, BIOL 419, section 009 (3 credit hours), CRN # 45302  
Biology, BIOL 519, section 009 (3 credit hours), CRN # 45303  
Religious Studies, RELG 447, section 001 (3 credit hours) CRN # 42824

Instructor: Dr. Paul J. Watson  
Classroom: Castetter Hall - room 107  
When: Monday & Friday 1300 to 1430  
Office: Castetter room 110  
Email: [pwatson@unm.edu](mailto:pwatson@unm.edu)  
Phone: 681-3391 (cell); 277-3505 (office)  
Office Hours: Monday 10:00 to 12:30 and Friday 10:00 to 12:30, or by appointment.

**Class Website:** [http://biology.unm.edu/Biology/pwatson/public\\_html/RS%202011.html](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 legitimately 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 and 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 discussed with the aid of "point lists" written by students during their readings (see material on point lists, below); these chapter discussions 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 having to do with each chapter. In addition to covering our topic very broadly, the text provides a great source of references for your term papers (see below), 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 as it pertains to religiosity and consciousness.

## **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 open many classes with some opening remarks, but we will quickly get into chapter discussions based on questions and point lists. I'll try to hold off on "lecturing" until the class has completed a productive discussion of each text chapter. Then I may hold forth for a while in lecture mode before we move on to the next chapter 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 an introduction or review (depending on your background) of the basic and mid-level Darwinian theory applicable to understanding 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; one copy will be on reserve):

**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 concentrated hours a week outside class to do the readings and formulate your weekly point lists (see below). You'll see that readings start heavy and lighten up as it comes time to complete your term paper.

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 point lists, **before that class meeting**. Those are the readings that you will be called upon to discuss during that day's meeting.

For example, for week two of class, "Reading: Bulbulia: Chapters 1-6. (pp. 23-72; 38 pp. of actual reading) and Recommended reading: Buss: Chapter 5: "*Controversial Issues In Evolutionary Psychology*," by Edward Hagen (pp. 145-171; 27 pp.)," all are to be read **before** the August 27th class meeting and the point list already written and submitted.

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

[http://www.biology.edu/biology/pwatson/public\\_html/pjw\\_cv.htm](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. A great seminar requires a great group. ***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:
  - 40% attendance, spontaneous verbal participation in class, and verbal responses when called upon to share an item on your point lists.
  - 30% 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, arrival on time, knowledge of assigned readings, active participation, intellectual engagement, and thoughtful points. If you miss classes regularly, you will be dropped from the course, after fair warning.

Conversing with me during office hours can help make up for missed point lists or other forms of light participation. I also advise you to talk with me about term paper topics if we do not cover your questions and ideas adequately in class.

## **6. Point Lists**

**Beginning August 27<sup>th</sup>, before every Monday’s meeting, every student should email an MS Word (.doc format) “point-list,” to [pwatson@unm.edu](mailto:pwatson@unm.edu).**

**A point list is a set of discussion points consisting of your thoughts, questions, and critical or favorable comments about, or inspired by, the assigned readings. Some points can also cover other course material. Each point list covers reading and thinking you do during the week immediately preceding the Monday due date. Make sure your point lists provide strong evidence that you are reading the textbook.**

**Keep a copy of each point list for yourself to refer to in class. I shall call on you in class at regular intervals to talk about a point from your lists to help propel the class discussions and make sure everyone participates. *I also expect students to push for class or office-hour discussion of the points on their list of most interest to themselves, even if I do not happen to call on you to cover such a point.***

***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. Although you will get verbal feedback in class from me on your point lists, *I often comment extensively in writing too. 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; 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 having 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 27<sup>th</sup>, our third class meeting.**

### **7. Term paper or Research Proposal**

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 (3<sup>rd</sup> edition).*
- 3) *Handbook of the Psychology of Religion and Spirituality.*
- 4) *Psychology of Religion: Classic and Contemporary (2<sup>nd</sup> edition).*

**Due September 24<sup>th</sup>:** 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 29<sup>th</sup>**: revised title, abstract, and bibliography, and a detailed outline. This will determine 5% 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 12<sup>th</sup>**: final paper. This will determine 20% 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

- 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: "(original author name, date; as *cited in*: citing author name, date, and full citation of referring source)". If your bibliography includes good, relevant papers and books that I haven't seen before, I will be impressed, maybe titillated.
- **A NOTE ON PLAGIARISM:** Make sure you know what plagiarism is. If you represent, even implicitly, that ideas or writings of others are your own, that is plagiarism. Re-wording something without citing the source of the idea is still plagiarism. I'm pretty good at detecting plagiarism. If you plagiarize, you will almost certainly get a zero on your term paper, and thus you could also easily fail the course.

## **8. 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 discussed. I accept late point lists only in the case of medical or family emergencies.***

### ***Week one***

I try to start right in on the first day with introduction to key concepts and definitions. Do not miss the first day of class.

There are seven items to be read for week one. I will TRY to 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 20<sup>th</sup>. 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 our third class, Monday August 27<sup>th</sup>.**

### ***Reading***

(1) Read this recent introduction to the science of the animal behavior by Tom Seeley and Paul W. Sherman. This excellent paper will help orient you to the kind of reasoning and research "evolutionary behavioral ecology" entails, which provides the basis for our "evolutionary psychological" 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 2<sup>nd</sup> class meeting (Friday, August 24<sup>th</sup>), 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. 20 Purpose, organization, and spirit of the course. Brief overview of syllabus. Introductions and a listing of YOUR biggest current questions about religiosity. Definitions of religion, religiosity, religiousness, and spirituality for this course. Scientific reductionism. Computationalism: a conceptual foundation of evolutionary psychology. Levels of analysis. Origins and functions of religion, religiousness, religiosity, and spirituality; *come prepared to offer ones you like or believe in.*

Aug. 24 Adaptation and the basic mechanism of natural selection. Darwin's "Utilitarian Doctrine." Individual vs. Group Selection. Intro: Implications of having a naturally selected mind. Discuss paper: "Analytic Thinking Promotes Religious Disbelief." "The Switch / The Mystery Instinct," A basic religiosity adaptation? *A voluntary exercise in self-observation for outside of class.*

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### **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. 27 **First point list due, via email attachment, before class today!** Have a point list copy in front of you, always. Discuss Bulbulia chapters 1-4. *Discussion of self-observation class exercise.*

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, belief, subjectivity, and "The Switch" or "Mystery Instinct."

Aug. 31 Discuss Bulbulia chapters 5 & 6.

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**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. 3            Labor Day – **NO CLASS.**

Sept. 7            Discuss Bulbulia chapters 7-10. Questions on the Edelman model of brain organization and the functional role of subjectivity in human life.

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**Week four**

**Reading**

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

Sept. 10          Discuss Bulbulia chapters 11 & 12.

Sept. 14          Discuss Bulbulia chapters 13-17.

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**Week five**

**Reading**

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

Sept. 17          Discuss Bulbulia chapters 18-20.

Sept. 21          Discuss Bulbulia chapters 21-24.

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**Week six**

**Provisional Term Paper Abstract and Bibliography due, via email, Sept 24<sup>th</sup>**

**Reading**

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

Sept. 24          Discuss Bulbulia chapters 25-26.

Sept. 28          Discuss Bulbulia chapters 27-29.

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**Week seven**

***Reading***

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

Oct. 1 Religious Discuss Bulbulia chapters 30-32.

Oct. 5 Discuss Bulbulia chapters 33-35.

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**Week eight**

***Reading***

**Bulbulia: No readings this week from the textbook.**

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

Oct. 8 Discuss Kurzban and Neuberg reading. Discuss basic student questions still open.

Oct. 12 Fall Break – **No Class**

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**Week nine**

***Reading***

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

Oct. 15 Discuss Bulbulia chapters 36 & 37.

Oct. 19 Discuss Bulbulia chapter 38.

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**Week ten**

***Reading***

**Bulbulia: No readings this week from the textbook.**

Oct. 22 Students explain their intended term paper topics to class and receive feedback part 1.

Oct. 26 Students explain their intended term paper topics to class and receive feedback part 2.

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**Week eleven**

**Revised term paper abstract, outline, and bibliography due, before class, October 29<sup>th</sup>**

***Reading***

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

Oct. 29 Discuss Bulbulia chapters 39 & 40.

Nov. 2 Discuss Bulbulia chapters 41 & 42.

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**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.5 Religion and Willpower I.

Nov. 9 Religion and Willpower II.

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**Week thirteen**

***Reading***

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

Nov. 12 Discuss Bulbulia chapters 43 & 44.

Nov. 16 Discuss Bulbulia chapters 45 & 46.

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**Week fourteen**

***Reading***

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

Nov. 19 Discuss Bulbulia chapters 47 & 48.

Nov. 23 Thanksgiving Break – **No Class**

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**Week fifteen**

***Reading***

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

Nov. 26 Discuss Bulbulia chapters 49 & 50. Course synthesis and student questions.

Nov. 30 Synthesis and student questions.

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**Week sixteen**

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

Dec. 3 Student oral summaries of term papers or proposals I. Discuss student questions still open.

Dec. 7 Student oral summaries of term papers or proposals II. Discuss student questions still open .

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### **Finals week**

***Office hours available all week, by appointment!***

Dec. 10 - 14. No final exam or class meetings.

**Final paper due by December 12<sup>th</sup>, 5:00 pm,  
via email to [pwatson@unm.edu](mailto:pwatson@unm.edu) , in PC compatible doc, or pdf format).**

### **9. 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 (3<sup>d</sup> 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 (2<sup>nd</sup> 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* (4<sup>th</sup> 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* (3<sup>rd</sup> Ed.). London: Blackwell.

Animal Behavior

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

Strier, K. B. (2002). *Primate behavioral ecology* (2<sup>nd</sup> 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* (3<sup>rd</sup> 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: Guilford 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* (2<sup>nd</sup> Ed.). (2000). New York: Guilford Press.
- Voland, 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* (2<sup>nd</sup> Ed.). Cambridge U. Press.
- Plomin, R., DeFries, J. C., McClearn, G. E., & McGuffin, P. (2003). *Behavior genetics* (4<sup>th</sup> 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](http://biology.unm.edu/Biology/pwatson/public_html/dp1.htm)**