Syllabus for

Evolution, Psychopathology, and Health
Psychology 450/650, section 11 (3 credit hours)

Instructor: Geoffrey Miller, Assistant Professor of Psychology
Where: Logan Hall 156, Psychology Department, UNM Main Campus
When: Fridays 9:30 am to noon, August 29 – December 12
(except for Oct 17 Fall Break and Nov 28 Thanksgiving Break)

Overview

This graduate seminar covers evolutionary and functionalist theories concerning specific mental illnesses, including the possible adaptive functions of some of their associated genetic risk factors, neurobiological bases, psychological manifestations, subjective experiences, and social implications.

The main topics in each successive week (after the initial week) will be:
1. Introduction to evolutionary psychopathology
2. History: Darwin & Freud
3. What is a mental illness? Harmful dysfunction and other definitions
4. Genetic variance underlying psychopathologies
5. Genetic covariance and comorbidity of psychopathologies
6. Depression
7. Psychoticism, bipolar, and creativity
8. Schizophrenia
9. Personality disorders and psychopathy
10. Eating disorders: Anorexia and obesity
11. Drug use and abuse
12. Placebo effects
13. Therapy implications

For each disorder, we will try to tease apart the ancestrally adaptive versus maladaptive aspects of the condition, and contrast how those aspects play out in ancestrally normal versus modern social environments. We will also consider practical implications of the theories and findings for diagnosis and treatment. The continuum between normal/adaptive and abnormal/pathological functioning will be emphasized, as will ways in which clinical psychological science can inform the study of normal human behavior, and vice-versa.

This course would be most appropriate for:
- graduate students in evolutionary, experimental, or clinical psychology,
- graduate students in biology or anthropology interested in mental health
- advanced undergraduates in psychology or allied biological or social sciences
- psychiatry students or residents
- any faculty interested in auditing the course

The course readings will require about 3 hours per week outside class, and will include recent journal papers and book chapters.

Grading will be based upon:
60%: one term paper. APA format, c. 5,000 words (20 pages double spaced): 20% for initial abstract and outline, 20% for rough draft, 20% for final draft, to be completed in successive months
40%: class participation and in-class critical analyses of readings 
no exams

What this course will not cover
The field of evolutionary psychopathology barely existed ten years ago, but has now grown so large that no single-semester course can cover all relevant topics or papers. This course focuses on the core psychopathologies that are most common, most severe, most theoretically interesting, and/or best researched from an evolutionary perspective. We will not cover:

· Childhood psychopathologies or early-onset disorders
· Mental retardation, degenerative brain diseases, neurocognitive disorders
· Phobias, anxieties
· Post-traumatic stress
· Somatoform, factitious, or dissociative disorders
· Sexual dysfunctions or paraphilias
· Sleep disorders
· Alcohol or tobacco addiction

If you are very interested in researching any of these topics for your term paper, please talk with me about that possibility, and I can direct you to some relevant readings.

Suggested prerequisites: To take this course, you should know something about evolutionary principles and something about psychopathology:
Evolutionary principles –I expect you have taken an undergraduate or graduate course in evolutionary biology, animal behavior, biological anthropology, or evolutionary psychology, such as UNM’s biology 300 (evolution), bio 365 (evolution of human sexuality), bio 455 (animal behavior), bio 465 (sociobiology & evolutionary ecology), anthro 150 (evolution & human emergence), anthro 350 (human biology), anthro 357 (human origins), anthro 360 (human behavioral ecology), anthro 363 (primate social behavior), anthro 367 (human origins & human nature), anthro 368 (modern hunter-gatherers), and/or psychology 342 (evolution, brain, & behavior).

If you have not taken such prerequisites but are strongly interested in this course, please try to catch up by reading a textbook such as:

Psychopathology –I expect you have taken an undergraduate or graduate course in abnormal psychology, such as UNM’s psychology courses 332 (abnormal behavior), 335L (clinical psychology lab), and/or 532 (psychopathology seminar). Other previous psychology courses that may be helpful would include: 105 (general psychology), 231 (human sexuality), 240 (brain & behavior), 331 (personality), 342 (evolution, brain, & behavior), and/or 434
behavior therapies).

If you have not taken such prerequisites but are strongly interested in this course, please try to catch up by reading a book such as:


If you have any concerns about your preparedness for this course, please talk with the instructor about what you have taken and how well you did.

**Instructors’ contact details:**

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gfmiller@unm.edu
http://www.unm.edu/~psych/faculty/gmiller.html

Office hours: Tuesdays, 2:00 pm to 3:45 pm, Logan Hall 160
If you can’t make office hours and you have a question, please call or email.

**Course mechanics**

We will meet once a week for two and a half hours, 9:30 am to noon. I expect punctuality – allow plenty of time for parking! There will be a 10-15 minute break about half way through each meeting. I will try to end class a few minutes before noon so you have time to get to the Friday noon PAL lectures if you wish. 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.

**Grading: depends on three kinds of work for this course**

- **60% of grade: one term paper.** APA format, c. 5,000 words (20 pages double spaced), methodologically oriented, including a critical assessment of a research literature and an outline of a possible study. Extra credit will be given for submitting the paper for publication to a reputable journal (e.g. as a theoretical note, literature review, etc.). The term paper is due in three stages weighted equally:
  - 20% for initial abstract and outline due October 3
  - 20% for rough draft due November 7
  - 20% for final draft due December 12 (last day of class)

- **40%: class participation and comments on the readings.** I expect regular attendance, knowledge of assigned readings, active participation and intellectual engagement, and well-prepared presentations concerning the readings.
  - no exams

**Details on the term paper**

The term paper determines 60% of your course grade. You can choose any
topic related to the course content and course readings. The final paper should be about
4,000 to 6,000 words, plus references. I care more about clarity, insight, research, and
the flow of argument than about length per se.

Please plan to submit the rough draft and the final draft in standard APA
(American Psychological Association) research paper format. This means computer-
printed, double-spaced, single-sided, in 12 point Arial (preferably) or Times Roman font,
with a proper title page, abstract, references, and page numbering. Consult the APA

For graduate students, my goal is for you to produce a paper that you could turn
around and submit to a decent journal as a review or commentary piece to improve your
C.V., and that you would be proud to submit in an application for a post-doc, tenure-track
job, or clinical internship.

You’ll get extra credit if you actually submit the term paper for publication in a
reputable journal. Please provide a copy of your submission cover letter.

To make sure that you are thinking, researching, and writing the paper on a
good schedule throughout the semester, I require the following:

1. October 3: Provisional Abstract/outline/bibliography due. A provisional topic
statement/abstract (one paragraph), provisional outline of paper (about a page), and
provisional bibliography.

   The bibliography should list about 10 to 20 references (not all from the syllabus
here!), that you have actually read, with brief notes about their relevance to your paper. In
the abstract, 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! This topic statement/outline will determine 20% of the course
grade. Late submissions will be penalized.

   After you submit this outline and bibliography, come to our office hours at least
once for my feedback. This is very important; I will try to make sure your paper looks
viable and will try to give you some useful suggestions and references

2. November 7: Rough draft due.

   This should be a full-length, APA format draft of your term paper – the sort of
thing you would submit as your final draft in most other courses. After I get this rough
draft, I will write comments and suggestions on it and return it to you as soon as I can.
This should allow you to submit a really good final draft, and I hope it will help you
improve your writing generally. This rough draft will determine 20% of the course
grade. Late submissions will be penalized.

3. December 12 (last day of class): Final draft due.

   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. The final draft will
determine 20% of your course grade. Late submissions will be penalized. I will try to
grade final drafts by the last days of exams.
Structure of the term paper: The ideal paper would include the following elements:
Title page: a decent, 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 the 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 purpose, critically, as it pertains to your topic.
Research proposal: ideally, towards the end of your paper, you could sketch out a new empirical way to resolve one or more of the issues you’ve raised in your paper. This could be a brief outline of an experiment, an observational method, a meta-analysis or re-analysis of existing data, or any other method you think would be appropriate. If your proposal is good and you’re still around UNM next semester, we could go ahead and do the work and publish it!
Bibliography: Only include things you’ve read. If you haven’t read them and have only seen them cited by others, then use the format (name, date; as cited in: name, date). If your bibliography includes good, relevant papers and books that I haven’t seen before, I will be impressed.

The assigned readings
Readings for each week will be copied by the instructor and distributed at least a week ahead of time to each student.

I have tried very hard to find recent, theoretically interesting journal papers and book chapters.

The readings have been arranged week by week according to a combination of theoretical issues addressed, and specific disorders discussed. Most weeks, there are about 40 to 50 pages of actual reading to be done (not counting references sections of the papers.) This should take about three hours. My intention is for you to have a deep, focused exposure to the state of the art in evolutionary psychopathology. Some of the readings are harder than others; some weeks require more reading than other weeks.

Please do not take this course if you cannot commit an average of three hours a week to the readings. The major educational benefits of the course depend on you doing the readings on time; otherwise, the class discussions will mean very little to you. I expect all of each week’s required readings to be completed well before class, so you have time to digest them, think about them, compare and contrast them, and prepare intelligent comments and questions about them. Last-minute reading on Tuesday night will not result in good comprehension or good in-class discussion.
Preparing notes on the assigned readings for each class

One week before each reading, I will ask for a student volunteer to prepare a one-page set of notes, comments, and questions concerning that reading. Please bring enough copies of your one-page analysis to distribute to everyone else in the class. Assume that the other students have read the paper fairly attentively, and want to know what you think of it. This analysis will serve to initiate class discussion of that reading.

I expect each student to volunteer for several such reading analyses throughout the semester. The quality of these analyses will form a substantial portion of your class participation grade.

The one-page analyses should have your name at the top, the date, and the APA-format reference for each reading as the header for your comments on that reading. Use numbered lists to identify your specific notes, comments, and questions under each reading. Please make at least three or four substantive comments on each reading – not simply summarizing the reading’s main points, but offering some sort of critical analysis of the reading’s ideas, or comparison to other readings, etc.

Key Dates and Course Schedule

Fall Semester key dates:
Classes begin: August 25, Monday
Labor day holiday: Sept 1, Monday
Registration ends: Sept 5, Friday
Last day to change grading options: Sept 19, Friday
Last day to drop course w/o grade: Oct 3, Friday
Fall Break holiday: Oct 16-17, Thursday, Friday
Last day to withdraw from course: Nov 14, Friday
Thanksgiving holiday: Nov 27-28, Thursday, Friday
Last day of classes: Dec 12, Friday
Final exams: Dec 15-19, Monday - Friday

Course schedule: List of assignments, readings, and topics for each class

No assignments before the first class
1: Aug 29 Friday  Introduction to the course

Read before class:
2: Sept 5 Friday  **Basic evolutionary psychopathology**

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Read:


3: Sept 12 Friday  **History: Darwin & Freud**

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Read:


4: Sept 19 Friday:  **What is a mental disorder? Harmful dysfunction and other definitions**

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Read:


For graduate students:

5: Sept 26 Friday  **Genetic variance underlying psychopathologies**

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Read:

For graduate students:

6: Oct 3 Friday  **Genetic covariance and comorbidity**

**Term paper: Abstract, outline, bibliography due**

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Read:
For graduate students:


7: Oct 10 Friday  **Depression**

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(no classes October 16 or 17: fall break)
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Read


For graduate students:


8: Oct 24 Friday  **Psychoticism, bipolar, and creativity**

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Read:


Shaner, A., Miller, G. F., & Mintz, J. (in press for *Schizophrenia Research*). Schizophrenia as one extreme of a sexually selected fitness indicator. [7 pp text]

For graduate students:


9: Oct 31 Friday  **Schizophrenia**
Read:  

For graduate students:  

10: Nov 7 Friday  
**Personality disorders and psychopathy**  
Term paper: rough draft due  

Read:  

For graduate students:  

11: Nov 14 Friday  
**Eating disorders: Anorexia and obesity**  

Read:  


For graduate students:


12: Nov 21 Friday  Drug use and abuse

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(no classes November 27 or 28: Thanksgiving holiday)

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Read:


13: Dec 5 Friday  Placebo effects

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Read:


For graduate students:
Suggested readings that may be relevant to term papers, organized by topic.

**Generally useful sources**

**Background readings on evolutionary psychology**
Explicit citations: 


**Introductory material on evolutionary psychopathology**


What is a “mental disorder”? Taxonomy issues


Wakefield, J. C. (2003). Reply to Houts, part 2. Dysfunction as a factual component of disorder. Behavior Research and Therapy, 41, 969-990. [Plus, see the previous 8 exchanges between Houts and Wakefield in the same journal going back to 1996, referenced in this article.]


**Darwin, Freud, self-deception, and psychodynamic mechanisms**


projection, displacement, undoing, isolation, sublimation, and denial. *Journal of Personality, 66*(6) (Special Issue: Defense mechanisms in contemporary personality research), 1081-1124.


**Individual differences, genetic variance, and evolution**


**Genetic covariance and comorbidity of psychopathologies**


**Fears, phobias, panic, anxieties, stress**


**Psychoticism, bipolar, and creativity**


**Schizophrenia**


**Depression**


Parker, G. (2000). Classifying depression: Should paradigms lost be regained?


**Emotions, evolution, and psychopathology**


Nesse, R. M. (1998). Emotional disorders in evolutionary perspective. *British Journal of Medical Psychology, 71*(4) (Special Issue: Evolutionary approaches to...
Personality disorders


**Psychopathy, crime, and aggression**


**The placebo effect**


**Drug use and abuse**


**Eating disorders: Anorexia and obesity**


Cordain, L. (2001). *The paleo diet: Lose weight and get healthy by eating the food you were designed to eat*. New York: John Wiley.


**Developmental psychopathology and evolution**


**Implications for clinical psychology practice**


**The future of clinical psychology practice**


