## Psychology 709-301: Transdiagnostic Processes in Psychopathology

Fall 2018 Thu. 1:30 – 4:30 Goddard Laboratories, Room 102

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## Overview

Psychopathology has traditionally been organized according to clinical syndromes which, despite some utility, have been argued to thwart scientific progress through their heterogeneity, comorbidity, and overlapping features. In recent years, an alternative approach has been gaining momentum in the field. Rather than focusing on syndromes, psychologists increasingly are studying—and treating—basic processes that cut across traditional mental disorder categories. This course explores psychopathology at the level of these processes. We will examine fundamental disruptions in human emotion, cognition, behavior, and interaction that underlie symptoms of mental illness. We will consider how disruptions in these processes are being defined and measured, what methods have been (and could be) used to study them, and how findings from basic research on these mechanisms may be translated into improved interventions. The focus is on rigorously evaluating transdiagnostic models of psychopathology and their implications for theory, research, and treatment. You will be challenged not only to become familiar with the transdiagnostic approach, but to critique its strengths and limitations and apply it to your own research.

#### **Goals of the Course**

This course is designed to achieve three goals:

Goal 1: Broaden your views of psychopathology beyond the diagnostic categories included in the prevailing classification of mental disorders, the DSM-5. You will be asked to think about psychopathology in new ways, to explore fundamental mechanisms of abnormal functioning, and to consider essential features that unite mental disorders as well as features that distinguish them. The aim is to develop, through these experiences, a more nuanced and sophisticated understanding of abnormal behavior.

Goal 2: Invite you to critically evaluate the transdiagnostic approach and its implications for theory, research, and practice. "Transdiagnostic" has become a buzzword in mental health, and many psychologists have enthusiastically embraced the transdiagnostic approach without a close scrutiny of its advantages and disadvantages. To gain a more informed perspective, you will be asked to critique existing studies, probe unchallenged assumptions, and grapple with open questions. The aim is to prepare you to contribute meaningfully to a dialogue that is rapidly changing the landscape of the field.

Goal 3: Facilitate your application of transdiagnostic concepts and principles to your own research. Transdiagnostic processes are attracting increasing attention in psychopathology journals and guiding funding priorities at the National Institute of Mental Health (NIMH). You will be encouraged to consider how these processes might inform and enhance your research program. The aim is to help

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you identify promising new research questions, measures, and methods that may emerge from taking a transdiagnostic perspective, and to think concretely about how that work could be carried out.

# **Required Readings**

All readings will be available electronically on the course Canvas website (https://canvas.upenn.edu) under the link for Files. Readings will be posted as they become available. Please read the assigned readings before the designated class and come prepared to discuss, critique, and debate this material.

### **Class Format**

The success of this course depends heavily on the engagement and participation of all members of the class. The problems that we will be considering are among the most challenging in the field, and genuine progress will require critical thinking and creative solutions. Consequently, this course will follow a seminar format in which student discussion and debate play a central role. Active questioning and open-minded dialogue will help us all to better appreciate and develop increasingly sophisticated views about these complex issues. I look forward to sharing my enthusiasm for this subject matter with you and to revisiting and revising my own views through our class discussions.

#### **Course Outline**

A *tentative* list of dates and topics appears at the end of this syllabus. These may change, so please check the course Canvas website for updates throughout the semester.

### **Evaluation**

Class Participation. Given the importance of your regular and active participation in class, both for your learning and for the overall success of the course, a portion of your grade will be based on participation. Your participation grade will be determined jointly by (a) your contributions to class discussions throughout the semester and (b) your efforts in preparing for and leading a portion of the discussion during one class period. As discussion leader, you will be asked to lead the class in discussing that day's empirical reading during the final hour of class. Class participation will constitute 20% of your course grade.

**Reflection Questions.** You will be asked to write a brief reflection question in response to each reading. These questions will serve two purposes. First, they will encourage active reading, prompting you to reflect on important ideas and findings as you read. Second, they will ensure that we each come to class with questions, reactions, and ideas to serve as a jumping-off point for discussions. Questions can take many forms, including: (a) probing: delving deeper into a key point raised by the reading, (b) challenging: challenging an assumption or critiquing evidence presented in the reading, (c) inquiring: noting a topic that you found especially important and identifying an aspect that you are curious to learn more about, or (d) extending: speculating about connections to other themes we have discussed or about promising directions for future work. *Please bring a printed copy of your reflection questions to each class*, and be prepared to raise your questions during the class discussion. These questions will collectively constitute 20% of your course grade.

*Grant Proposal.* You will be asked to write a final paper that applies principles and constructs from the NIMH Research Domain Criteria (RDoC) initiative to an area of psychopathology that holds particular interest for you. The paper will take the form of a grant proposal modeled after the Research Strategy section of an R03 (Small Grant) application. Using the three required headings of

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Significance, Innovation, and Approach, you will propose one study based on the RDoC framework. This assignment will give you the chance to apply concepts learned throughout the semester to a concrete research problem, and to consider how you would handle key theoretical and practical decisions for which there is limited precedence in the age of RDoC. The research that you propose may take one of two forms:

- 1. A study involving secondary analyses of an existing dataset, as in the currently active RDoC Funding Opportunity Announcement titled: "Secondary Data Analyses to Explore NIMH Research Domain Criteria" (https://grants.nih.gov/grants/guide/pa-files/PAR-17-158.html)
- 2. A study involving original data collection, as in the expired Funding Opportunity Announcement titled: "Dimensional Approaches to Research Classification in Psychiatric Disorders" (https://grants.nih.gov/grants/guide/rfa-files/RFA-MH-16-510.html#sthash.r2AlNryI.dpuf)

Please e-mail me a brief description of your grant idea by Sep. 27 so that I may provide feedback on your proposed topic and ensure that topics do not overlap across students. The final grant proposal should be e-mailed to me by 12 pm on Dec. 14. It should conform to NIMH guidelines for an R03 Research Strategy section (i.e., maximum of 6 single-spaced pages, excluding references; see Canvas for form page and additional instructions). The grant proposal will constitute 45% of your course grade.

**Presentation.** You will be asked to give an *in-class presentation on Nov. 29* that summarizes the background and methods of your proposed grant project. Your presentation will introduce the class to the gaps in knowledge that your project seeks to address, the advantages of a transdiagnostic approach for filling these gaps, and the rationale for the methodological decisions that you made. Taking the role of a grant review panel, your classmates will provide you with feedback that you can then use to strengthen your written proposal before submitting it. The presentation will constitute 15% of your course grade.

## **Additional Course Information**

Course Announcements. Announcements and other course information will be posted periodically on the Canvas website for this course or e-mailed to you through Canvas. Please check Canvas and your e-mail regularly to ensure that these announcements reach you promptly.

*Disability Accommodations*. If you have a disability and are in need of reasonable accommodation in this course, please speak with me and contact Student Disabilities Services early in the semester.

Academic Integrity. You are responsible for knowing and adhering to the university's Code of Academic Integrity (see <a href="https://catalog.upenn.edu/pennbook/code-of-academic-integrity/">https://catalog.upenn.edu/pennbook/code-of-academic-integrity/</a>). Please review the Code and ask me if you have any questions about my expectations or about how the guidelines apply to this course.

*Feedback*. I am committed to making this course as informative, stimulating, and enjoyable as I can. If there are ways in which we can tailor the course to align more closely with the interests of our class, or if the course is not meeting your expectations or goals, please let me know as soon as possible. The number of relevant topics far exceeds what we can cover in this course, and your feedback will help me focus our inquiry in directions that are most valuable to you.

# TENTATIVE COURSE OUTLINE

Date	Topics	Discussion Leaders/ Assignments
Aug. 30	Limitations of syndromal classification and the need for an alternative approach	
Sep. 6	The transdiagnostic perspective	
Sep. 13	Emotion I Fear vs. Anxiety Threat processing	Simone
Sep. 20	Emotion II Approach vs. Anhedonia Reward processing	Erica
Sep. 27	Emotion III Arousal Regulation	Anika Grant idea due
Oct. 4	NO CLASS – Fall Break	
Oct. 11	Cognition I Attention Perception	Rivka
Oct. 18	Cognition II Cognitive control Working memory	Betsy
Oct. 25	Behavior Avoidance Impulsivity	Anna, Colin
Nov. 1	Social processes Empathy Attachment	Leah
Nov. 8	Transdiagnostic approaches to etiology	
Nov. 15	Transdiagnostic approaches to treatment	
Nov. 22	NO CLASS – Thanksgiving	g Break
Nov. 29	Student presentations and feedback	Presentation due
Dec. 6	Unresolved questions and future directions	
Dec. 14	NO CLASS – Finals Period	Grant Proposal due by noon