

PSY 474: Special Topics in Psychology Genetic and Developmental Disorders

Spring 2016

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Office Hours: MWF 9am-11am

Class Location & Times: Flipse 536; Monday, Wednesday, Friday 11:15 am – 12:05 pm

Prerequisites: The standard 400-level prerequisites apply to this class – 2.5 PSY GPA and 15 PSY credits, including PSY 290 and PSY 291 or 292. No other prior knowledge is assumed.

Description of Course from the Bulletin: A special topics course exploring diagnostic, etiological, and intervention issues in genetic and developmental disorders.

Course Description: This course will be concerned with diagnostic, etiological, and intervention issues in genetic and developmental disorders with a particular emphasis on the current state-of-the-science with regard to empirically supported concepts. The course will present information that will allow students a greater understanding of specific disorders and strategies for understanding developmental problems. Current research will be placed within a contemporary context that seeks to integrate educational, psychological and biomedical disciplines. The course includes a community service component that will afford students an opportunity to have direct experience with individuals with genetic and/or developmental disorders.

Student Learning Outcomes: By the end of this course, students will be able to:

1. **Knowledge of Psychology as a Scientific Discipline**
 - a. Describe and identify central and associated diagnostic features of various genetic and developmental disorders.
 - b. Understand aspects of psychological theory in the context of the treatment of genetic and development disorders.
2. **Written Communication Skills**
 - a. In a condensed fashion, summarize the research design, findings, and implications of a research article.
 - b. Integrate course content into a written reaction paper related to a community-based fieldwork experience.
3. **Research & Quantitative Skills**
 - a. Evaluate existing research on the etiology of genetic and developmental disorders.
 - b. Evaluate research on the evidence-based treatments of genetic and developmental disorders across the lifespan.

Attendance, Holy Days, and Make-Up Policies

Attendance Policy: Highly recommended as much of the central content for this course will be provided to you in our dynamic classroom environment. Active class participation is also strongly encouraged and highly valued. While this is a lecture course, active interaction and discussion are encouraged and appreciated. **Attendance at small group meetings is mandatory.** Students must attend their assigned group. These meetings will NOT be rescheduled for any individual student unless there is a compelling reason (see Policy on Make-Up Exams/Assignments below).

Religious Holy Day Policy: The University of Miami, although a secular institution, is determined to accommodate those students who wish to observe religious holy days. Classes missed due to observances of religious holy days will count as excused absences only if you provide written notice of your intended absence(s) to me no later than the end of the first three meetings of our class. The ways in which missed tests, quizzes and other assignments can be made up after you return to class will be provided at a later date.

Policy on Make-up Exams/Assignments: If you are very sick or have a last-minute emergency (i.e., you or an immediate family member is hospitalized; attending a funeral), contact me as soon as possible to set up alternative plans to make up the exam/assignment. In those situations, you will need to provide documentation that you were unable to take the exam as originally scheduled (i.e., copy of plane tickets, physician records, etc.).

University of Miami Student Honor Code

All forms of scholastic dishonesty are prohibited, whether related to a written or oral examination, a thesis, term paper, mode of creative expression, computer-based work, or other academic undertaking. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, and violating the professional ethics of research projects. Moreover, students are expected to warn fellow students who do not appear to be observing proper ethical standards and to report violations of this Code. In determining what constitutes academic dishonesty, a student should be guided by the purposes of the Student Honor Code, common sense, and information provided by the instructor. All undergraduate students are responsible for reading, understanding, and upholding this Code. For the purposes of this class, please be especially careful to guard against plagiarism, defined by UM as “representing the words or ideas of someone else as your own. Examples include, but are not limited to, failing to properly cite direct quotes and failing to give credit for someone else's ideas.” *Please be sure to use quotes whenever you use parts of sentence from articles!*

Americans with Disabilities Act (ADA)

The ADA is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the instructor and the Office of Disability Services at (305) 284-2374 at the beginning of the semester. Students must present Professor Letters (from ODS) a minimum of two weeks prior to the desired use of the accommodation.

Course Requirements and Grading (5 Components):

1. **Exams:** THREE exams consisting of multiple choice and true/false questions. Please note that all 3 exams will be counted in your final grade. 100 points each.

2. **Group Meeting:** Small group meetings will occur on Fridays. Students will be assigned a group number and a meeting date. Groups will meet in our classroom one time each and will discuss, in small group format, issues related to the course. **You must attend the group you are assigned.** If you miss your group, you will lose the full 20 points for this assignment.

Group Assignments:

Group 1: Last name beginning with A-E

Group 2: Last name beginning with F-J

Group 3: Last name beginning with K-L

Group 4: Last name beginning with M-R

Group 5: Last name beginning with S-Z

3. **Experiential Learning Activity:** Each student will be required to participate in a community service activity where they will have direct exposure to individuals with developmental disabilities. Students may access these opportunities independently (e.g., volunteer work they are already doing) or via campus based groups (e.g., UM FunDay) or in consultation with Dr. Alessandri who works closely with many community-based agencies serving this population. **Activities must be completed by April 15th.**

4. **Experiential Learning Activity Impact Paper:** Students will be required to write a 5-page paper describing their learning activity and the impact the activity had on them. Papers should be well-written, utilize APA format, and should integrate course lectures and relevant outside sources (3-5 references). Papers will be evaluated on content and style (i.e., grammar, punctuation, spelling, etc.). **Papers are due one week following activity.** Late papers will be deducted 5 points per day.

5. **Research Article Summary:** You are required to write TWO single-spaced summaries of research articles assigned for the course (see list below). The summaries should cover three major topics:

- a) What was the purpose of the article (i.e., what question(s) did it seek to answer?)
- b) What are the implications of the article or research findings?
- c) What are the limitations of the article in your opinion?

You will need to read the article carefully and provide a thoughtful and well-written response. You can choose to pick any two readings to write your responses

Summary of Course Components and Maximum Points:

Component	Total Number of Assignments	Total Maximum Points
1. Exams	3	300 (100 each)
2. Group Meeting	1	10
3. Experiential Learning Activity	1	30
4. Experiential Learning Paper	1	20
5. Research Article Summaries	2	40 (20 each)
Total	8	400

Course Grading Scale (% of 400 Total Points):

A+ 98 - 100	B+ 88 - 89	C+ 78 - 79	D+ 68 - 69	F < 60
A 93 - 97	B 83 - 87	C 73 - 77	D 63 - 67	
A- 90 - 92	B- 80 - 82	C- 70 - 72	D- 60 - 62	

Final Grades:

Final letter grades will be based on the above scale. No final grades will be lower than that indicated by the total number of points earned. Furthermore, in order to obtain a certain grade, you must earn no less than the minimum average stated (e.g., an average of 92.90 would earn a course grade of A- not A; a minimum average of 93 is required for an A). *A high level of meaningful participation and an active commitment to enhancing the class discussions through insightful comments and questions may, in some cases, result in a borderline grade being raised.*

Schedule of Course Topics and Required Readings:

Below is a tentative schedule of topics to be covered in class and what reading you should do *before* each class. It is possible that some modifications will need to be made to the schedule as we go on (e.g., to allow for interesting conversations that run over); however; so you can plan ahead, **THE DATES OF THE TESTS WILL NOT BE CHANGED.** Instead, the content of the tests will be modified so as to only include the material we have covered.

DATE	Lecture Topic	Readings
Monday, January 11 th	Introduction to the Course: Syllabus review, class policies, course assignments and expectations	
Wednesday, January 13 th	Introductory Concepts in Genetic and Developmental Disorders	

Friday, January 15 th	NO CLASS – Consider fieldwork placement opportunities	
Monday, January 18 th	NO CLASS – MLK HOLIDAY	
Wednesday, January 20 th	Overview of Causal Influences on Genetic and Developmental Disorders Fetal Alcohol Syndrome	
Friday, January 22 nd	Group 1	
Monday, January 25 th	General Overview of Genetic Factors	
Wednesday, January 27 th	Down Syndrome	<i>Readings 1 & 2</i>
Friday, January 29 th	NO CLASS – time for fieldwork	
Monday, February 1 st	Fragile X Syndrome	<i>Readings 3 & 4</i>
Wednesday, February 3 rd	Fragile X Syndrome	
Friday, February 5 th	Group 2	
Monday, February 8 th	<i>Guest Speaker</i>	
Wednesday, February 10 th	Autism Spectrum Disorder	<i>Reading 5 & 6</i>
Friday, February 12 th	Group 3	
Monday, February 15 th	Autism Spectrum Disorder cont.	
Wednesday, February 17 th	<i>Guest Speaker</i>	<i>Reading 7</i>
Friday, February 19th	Exam 1	
Monday, February 22 nd	Epilepsy	<i>Readings 8 & 9</i>
Wednesday, February 24 th	Cerebral Palsy	<i>Reading 10</i>
Friday, February 26 th	Group 4	
Monday, February 29 th	Angelman Syndrome	<i>Readings 11 & 12</i>

Wednesday, March 2 nd	<i>Guest Speaker</i>	
Friday, March 4 th	Group 5	
Monday, March 7 th	NO CLASS – SPRING BREAK	
Wednesday, March 9 th	NO CLASS – SPRING BREAK	
Friday, March 11 th	NO CLASS – SPRING BREAK	
Monday, March 14 th	Congenital Rubella Syndrome Cornelia de Lange Syndrome Cri du Chat Syndrome	<i>Reading 13</i>
Wednesday, March 16 th	Williams Syndrome Lesch Nyhan Syndrome	<i>Reading 14</i>
Friday, March 18 th	<i>Exam 2</i>	
Monday, March 21 st	Tuberous Sclerosis Complex PKU Prader Willi Syndrome	<i>Reading 15 & 16</i>
Wednesday, March 23 rd	Overview of Assessment Concepts	
Friday, March 25 th	<i>Guest Speaker</i>	
Monday, March 28 th	Overview of Diagnostic Concepts: DSM 5	
Wednesday, March 30 th	<i>Guest Speaker</i>	
Friday, April 1 st	NO CLASS – time for fieldwork	
Monday, April 4 th	Overview of Interventions Concepts	
Wednesday, April 6 th	<i>Guest Speaker</i>	
Friday, April 8 th	NO CLASS – time for fieldwork	
Monday, April 11 th	Applied Behavioral Analysis	
Wednesday, April 13 th	<i>Guest Speaker</i>	

Friday, April 15 th	NO CLASS – final day to complete fieldwork	
Monday, April 18 th	Special Education Laws and Concepts	
Wednesday, April 20 th	Transition to Adulthood	
Friday, April 22 nd	<i>Guest Speaker</i>	
Wednesday, April 27 th	<i>Exam 3</i>	11:00 am – 1:30 pm

Required and Recommended Readings:

This is an upper level special topics course. As such, I have assembled a list of scientific journal articles related to a number of the topics we will be discussing. These are current, state-of-the-science articles that will give you a deeper understanding of the material covered in lectures. ***But don't panic!*** I don't expect complete mastery of all the content in these very sophisticated papers. But you are required to read through them and become better informed of the material we will be discussing in class. You can access these papers by clicking on the links on the last page of this syllabus.

Reading List:

Down Syndrome

1. <http://www.sciencedirect.com/science/article/pii/S014067360312987X>
2. <http://www.sciencedirect.com/science/article/pii/S0387760404001457>

Fragile X Syndrome:

3. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2888470/>
4. <http://www.sciencedirect.com/science/article/pii/S0028390812005758>

Autism Spectrum Disorder:

5. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3547539/>
6. <http://www.nature.com/gim/journal/v13/n4/full/gim9201151a.html>

Family Adaptation and Coping

7. <http://link.springer.com/article/10.1007/s10803-015-2362-4>

Epilepsy and ASD:

8. <http://www.sciencedirect.com/science/article/pii/S0387760410001178>
9. <http://www.sciencedirect.com/science/article/pii/S0387760410001269>

Cerebral Palsy

10. <http://www.sciencedirect.com/science/article/pii/S1474442211701764>

Angelman Syndrome

11. <http://www.nature.com/gim/journal/v12/n7/full/gim201062a.html>
12. <http://onlinelibrary.wiley.com/doi/10.1111/j.1528-1167.2009.02311.x/full>

Cornelia de Lange Syndrome

13. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1868009/>

Williams Syndrome

14. <http://onlinelibrary.wiley.com/doi/10.1002/1098-2779%282000%296:2%3C148::AID-MRDD10%3E3.0.CO;2-T/pdf>

Tuberous Sclerosis

15. <http://www.sciencedirect.com/science/article/pii/S0887899412000628>

Prader Willi Syndrome

16. <http://www.nature.com/gim/journal/v14/n1/full/gim0b013e31822bead0a.html>

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