

# PSYED 1007: Methods of Evidence-Based Practice

Fall Term 2020

Monday and Wednesday 9:00 -10:15 am

Somewhere in the World

INSTRUCTOR: Prof. Ming-Te Wang  
EMAIL: mtwang@pitt.edu  
OFFICE HOURS: By appointment—just email me.

## COURSE PURPOSE & OBJECTIVES

Claims of “what works,” “best practices,” and the “right” versus “wrong” way of doing things abound in educational and developmental psychology. But how do we know these claims are supported, or “evidence-based”? What exactly does “evidence-based practice” mean, and what are the methods used for determining it? This course aims to provide answers to these questions by way of an overview of various research methods germane to the field of applied developmental psychology.

Because the scope of the course is quite broad, it will not be possible to cover all of the details of the research methods that are currently being used. Nevertheless, by the end of the course, you should:

- Be a more informed consumer of research and information in your field by asking “why” questions and seeking to answer those questions through a process of scientific inquiry and exploration;
- Have a good awareness of the range of procedures that may be applied to different types of research studies;
- Have an understanding of and appreciation for the scientific method, specifically regarding the ability to select and implement proper research methods with regard to a given problem;
- Be able to use library resources to complete a basic literature review, highlight areas that need further study, conduct a simple research study, interpret results, and describe implications and future research directions;
- Be more reflective about yourself and your practice as a future professional

## COURSE FORMAT

Each course meeting will be a combination of lecture, seminar-style learning, hands-on workshop, and individual/group check-in meetings. Seminar-style includes whole and small group discussions, individual and small group activities, and individual reflection on content and learning. Individual/group check-in meeting provides one-on-one opportunities to work with the instructor and group members on smaller assignments and ask questions about the key concepts of the class materials or assignments. Given the length of the class meeting, there will be a 5-minute break about halfway through each session.

## COURSE TEXTS

**Required text:** *The Elements of Social Scientific Thinking* (11<sup>th</sup> ed.) by K. Hoover & T. Donovan

**Additional required readings:** There will be additional readings for the course, which will be posted on the class web site or sent to you over emails. If these materials are to be read prior to class, it will be indicated on the course syllabus.

## ASSIGNMENTS AND EVALUATION

This semester, we will be using a point system so that you may track your progress in the class. There are 100 available points for this class:

Summary of Assignments	Due Date	Points	Submit
Student Information & Research Interest Form (individual project)	Friday, August 21, 1 pm	5	Submit to Canvas
Reflection Paper (individual project)	Wednesday, September 16, 9:00 am	10	Submit to Canvas
Research Articles Summary Table (individual project)	Wednesday, September 23, 9:00 am	5	Submit to Canvas
Application Worksheet on Research Question, Key Variables, and Hypotheses (group project)	Wednesday, September 30, 9:00 am	5	Submit to Canvas
Mid-term Virtual Exam (individual project)	Wednesday, October 7	10	Submit to Canvas
Quantitative Research Paper (group project)	Wednesday, October 28, 9:00 am	20	Submit to Canvas
Qualitative Data and Research Questions (group project)	Wednesday, November 4, 9:00 am	10	Submit to Canvas
Research Paper Presentation (group project)	Monday, November 16, Wednesday, November 18	10	Submit to Canvas
Final Virtual Exam (individual project)	Wednesday, November 18	10	Submit to Canvas
Participation & Attendance		15	
<b>TOTAL</b>		<b>100 points</b>	

### **ACTIVE PARTICIPATION (1 POINT PER CLASS, 15 POINTS TOTAL)**

Active participation requires attendance, preparation (through readings and topical assignments), and willingness to contribute to in-class discussions in a variety of group configurations (pairs, small groups, entire class, etc.). Periodic in-class and online activities will contribute to this portion of your grade. In addition, each group will be assigned 2 weeks and asked to provide 2-3 discussion questions for facilitating the discussion during their assigned weeks. The discussion questions have to be sent to the instructor **by Sunday noon each week** so the instructor can disseminate the discussion questions to the whole class before Monday morning class.

Because active participation in group workshops is one of the primary means by which you will learn and apply the material in this course, attendance is critical. Loss of participation points will begin after the first full or partial absence, pending the circumstance. After one full or partial absence, the instructor reserves the right to request proof of reasoning for an absence in order for it to be excused.

Absences from class to observe a religious holiday, serve jury duty, or participate in required military service are exceptions to the above policy. If you anticipate being absent for any of these reasons, please make arrangements with me in advance and there will be no deduction in your grade.

Whenever it is possible, provide me advance notice of absences. An email message or phone call to someone who will be in class (instructor or student) is generally adequate to keep us from worrying about you. If you were unable to contact someone prior to the missed class, please contact a classmate as soon as possible afterwards to learn of any assignments or announcements. If you arrive late, please be sure to check with a classmate about any announcements you missed. You may ask classmates for their notes.

Finally, you are expected to come to class ready to engage in the material. Participating fully in discussions is impossible without completing assigned readings prior to class. If it becomes evident that students are not reading class materials, we will have weekly quizzes.

### **STUDENT INFORMATION & RESEARCH INTEREST FORM (5 POINTS)**

You will be required to complete one student information and research interest form. The information on this form will assist me in supporting you and your learning throughout the semester.

### **REFLECTION PAPER (10 POINTS)**

You will be required to write one 2-page (single-spaced) reflection paper based on a set of topics that will be provided in the first few weeks of class. In this reflection paper, you will engage in a critical analysis of your chosen topic (a list will be provided), and reflect upon a set of personal beliefs in reaction to a short self-assessment exercise.

### **WRITING ASSIGNMENTS**

For your major projects this term, you will join a small group of students based on shared interests. Each team will work together addressing a certain area of inquiry, working together in different capacities throughout the research process. Some of this work will take place in class, to make it easier for your group to meet.

#### **Summary of Research Articles Table (5 points)**

Reading and taking notes on research articles is the first step in writing a literature review. *Each student* is required to create a table that summarizes the five articles you read. Your summary table provides as evidence of your contributions to the group's research project for the quantitative paper.

- Your sources should not be the same as any of your group member's sources, so be sure to share information as you find it.
- You may or may not actually use your source in your final literature review, as you are still in the process of narrowing down your topic, but the source should be related to your topic in some way.
- Try to only include sources that have been published within the last 15 years. If there is a seminal piece of work that you need to include that is older, feel free to do so, but sources should be relevant to your topic and recent.

- Your table entries should provide enough detail to build the literature, but you should not repeat the entire article. Bulleted lists are fine. A sample will be provided in class.

### **Group Application Worksheet (5 points)**

Asking the right question is a critical step in research. This worksheet will help you to think about your research project more in-depth and these questions are critical to setting up a solid research project. As a group, you need to answer these questions and complete the worksheet together to the best of your ability.

### **Quantitative Research Group Paper (20 points)**

For this writing assignment, you as a group will complete a literature review that will serve the basis for selecting and forming a research question. After forming this research question, you will have the opportunity to practice creating an online survey for data collection. This paper will be completed as a group, must include at least 15 sources from peer-reviewed journals, and be written using formal academic language and APA style. There will be sufficient time for collaboration and guidance within class for this assignment, although you will need to coordinate outside of class time to complete this assignment properly. This paper will be a minimum of 6-7 pages (double-space) in length, excluding the references.

*You will present the results of your study in a brief, formal class presentation lasting no longer than 10 minutes on November 16 or 18.*

### **Qualitative Data and Research Questions (10 points)**

For this writing assignment, each group will investigate their own qualitative research question that pertains to the group's original line of inquiry. Because this paper will be on the same subject as the quantitative paper, a new literature review will not need to be written. Each group member will identify their own qualitative research questions, conduct focus groups or interviews with 2 participants (which may include your classmates), and transcribe the interviews. This paper has no page limit in length but it should include your qualitative research questions and transcripts. You will have the opportunity to practice analyzing the results and coding. There will be sufficient time for collaboration and guidance within class for this assignment, although you will need to work on this project outside of class time to complete the assignment properly.

### **MID-TERM EXAM (10 points)**

At the middle of the semester, you will receive instructions regarding a mid-term virtual written exam. For this exam, you will be able to draw upon work you have already learned. You will have 2 hours to complete this task, which makes it important to do your best work on assignments throughout the semester.

### **FINAL EXAM (10 points)**

At the end of the semester, you will receive instructions regarding a final virtual written exam. For this exam, you will be able to draw upon work you have already done throughout the semester. You will have 2 hours to complete this task, which makes it important to do your best work on assignments throughout the semester.

### **EXTRA CREDIT (10 points)**

Let's face it – we all make mistakes. This semester, you will be able to earn up to 10 extra credit points by writing a concise, well-written critique of an article with questionable research practices. The article may *not* be anything that we read or refer to throughout the course and does not need to be from a peer-reviewed source (i.e., it can be a newspaper article, editorial, etc.); however, you will need to provide enough information so that I can find the article to which you are referring. *You will NOT be reminded of this opportunity throughout the*

semester, and it does *NOT* appear on the course calendar. If you would like to take advantage of this extra credit opportunity, please email me by **11:59 pm on 11/11**.

### **Final Grades**

Based on the 100 possible points, grades will be assigned as follows\*:

<b>A+:</b> 96-100 points	<b>C:</b> 60-64 points
<b>A:</b> 90-95 points	<b>C-:</b> 55-59 points
<b>A-:</b> 85-89 points	<b>D+:</b> 50-54 points
<b>B+:</b> 80-84 points	<b>D:</b> 45-49 points
<b>B:</b> 75-79 points	<b>D-:</b> 40-44 points
<b>B-:</b> 70-74 points	<b>F:</b> <40 points
<b>C+:</b> 65-69 points	

\*The instructor reserves the right to adjust the grading scale in your favor depending on performance in the class.

**Note on grades:** In class, you will receive more explicit instructions for completing course assignments. Please ask if you have questions regarding how you will be evaluated in this course. I am happy to discuss your learning goals and progress toward those goals at any time, though the earlier in the semester the better. *Please note, however, that I will not discuss grades over email.* If you would like to speak about such matters, please come meet with me in person.

**Note on late assignments:** All assignments are expected on the due date and time provided to you. Unless prior arrangements have been made with me (at least 24 hours in advance), late submissions ***will not be accepted*** and will result in a grade of zero for that assignment.

### **PLEASE NOTE: HEALTH CONCERNS**

Please make sure to follow university procedures and guidelines about health and safety measures.

### **ACADEMIC INTEGRITY**

Students in this course will be expected to comply with the University of Pittsburgh's Policy on Academic Integrity. Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity. This may include, but is not limited to, the confiscation of the examination of any individual suspected of violating University Policy. Furthermore, no student may bring any unauthorized materials to an exam, including dictionaries and programmable calculators.

### **CLASSROOM RECORDING**

To ensure the free and open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use.

### **DEPARTMENTAL GRIEVANCE PROCEDURE**

The purpose of grievance procedures is to ensure the rights and responsibilities of faculty and students in their relationships with each other. When a student in PSYED believes that a faculty member has not met their obligations (as an instructor or in another capacity) as described in the Academic Integrity Guidelines, the student should follow the procedure described in the Guidelines by (1) first trying to resolve the matter with the faculty member directly; (2) then, if needed, attempting to resolve the matter through conversations with the Chair of the department, Dr. Tomas Farmer; (3) if needed, next talking to the associate dean of the student affairs; and (4) if needed, filing a written statement of charges with the school-level academic integrity officer.

## **A NOTE FOR STUDENTS WITH DISABILITIES**

If you have a disability that requires special testing accommodations or other classroom modifications, you need to notify the Disability Resources and Services and me no later than the 2nd week of the term. You are to provide documentation of your disability to determine the appropriateness of accommodations. To notify Disability Resources and Services, call 648-7890 (Voice or TTD) to schedule an appointment. The Office is located in 216 William Pitt Union.

## **ADDITIONAL RESOURCES**

As a class, we will likely be interested in a diverse array of topics and population groups. In this course, you will be given the space to explore your own interests, and we will also come together to discuss broader issues. As you clarify your own interests, it may be helpful to connect with particular professional organizations or interest groups that focus on the topic and/or population group in which you are most interested. Below are some websites for such groups that you may want to consult:

General Reference:

<http://www.apastyle.org/index.html> (APA Style Manual Home Page)

<http://owl.english.purdue.edu/owl/resource/560/01/> (APA Style Basics from OWL at Purdue)

<http://owl.english.purdue.edu/owl/> (Online Writing Lab at Purdue University – writing mechanics)

Research Organizations that study a wide range of ages, groups, and topics:

[www.aera.net](http://www.aera.net) (The American Educational Research Association)

[www.apa.org](http://www.apa.org) (The American Psychological Association)

[www.psychologicalscience.org](http://www.psychologicalscience.org) (The American Psychological Society)

[www.nasponline.org](http://www.nasponline.org) (The National Association of School Psychologists)

## **TECHNOLOGY**

You will need access to certain hardware, software, and Internet access. To access the course web site, go to <http://courseweb.pitt.edu> and log on using your Pitt ID and password. Alternatively, you can go to [www.my.pitt.edu](http://www.my.pitt.edu) and access the Course Web site there. For help logging onto the course, call 412-624-HELP. This help is available 24/7. The instructors cannot assist you with log-on problems. Computer failure and log-on problems are not approved excuses for missed work.

In order to succeed in this course, you need fast Internet access. Students with slow dial-up access spend unnecessary time and risk delayed assignments. The University has many fine computing labs available for extended hours for your use. Here is the website where you can locate the labs and their operating schedules:

<http://technology.pitt.edu/>

You will be reading, writing, and taking notes throughout this course. Please remember to save your work frequently and in a secure place. We recommend a good portable hard drive or cloud storage, not a flash drive. We also recommend that you adjust your settings for saving files in your word processing program so that your work saves often and your grammar and spelling receives a formal review (these are not automatic).

You will need to use Microsoft Office software (especially Word and PowerPoint readers) for this course. You need to be able to open Adobe PDF files. The software is in the labs on campus. In addition, the complete Microsoft Office suite is available free to full-time students. For more information on how to download your software, go to a University computing lab with your ID or go to <http://software.pitt.edu/> [For help with your id card, go to <http://www.pc.pitt.edu/card/photoid.html>

You will need e-mail for this course, and the University provides e-mail. For help accessing or forwarding your Pitt e-mail, go to one of the University computer labs with your ID card, or call 412-624-HELP. Here is the University's policy on e-mail, which we will follow: "Each student is issued a University e-mail address (username@pitt.edu) upon admittance. This e-mail address may be used by the University for official communication with students. Students are expected to read e-mail sent to this account on a regular basis. Failure to read and react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications. The University provides an e-mail forwarding service that allows students to read their e-mail via other service providers (e.g., Hotmail, AOL, and Yahoo). Students who choose to forward their e-mail from their pitt.edu address to another address do so at their own risk. If e-mail is lost as a result of forwarding, it does not absolve the student from responding to official communications sent to their University e-mail address."

## COURSE CALENDAR

**Topics to be covered may be subject to change.** After all, we may need more time on a topic than was planned. Any changes will be announced in class. It is your responsibility to attend class on time in order to keep yourself informed of any changes. Complete the readings prior to the class listed, so you are prepared to join the discussions.

Date	Topic/Readings	Assignments Due
Week 1 Wednesday, August 19	<b>Getting to Know Each Other: Developing Our Classroom Community</b> <b>Introduction to Course Material</b>  Course Syllabus	<b>Student Information &amp; Research Interest Form due by 8/21, 1pm</b> <b>Please submit it through CANVAS course website.</b>
Week 2 Monday, August 24  Wednesday, August 26	<b>What is ‘Evidence-Based’?</b> <b>Foundations of Critical Thinking</b>  Ch. 1 (pp. 1-10) in Hoover & Donovan text  Paul & Elder’s “Miniature Guide to Critical Thinking” (course website)	
Week 3 Monday, August 31  Wednesday, September 2	<b>Class Workshop I: Using Library Resources, Learning to Read Research Articles, and the Basics of Literature Reviews</b>  Sample Article, Activity, and Library worksheet (course website)  Discuss research summary table	
Week 4 Monday, September 7  Wednesday, September 9	<b>The Truth Is Out There?! An Evidence-Based Look at UFOs, ESP, and “Truth” in Personal Experience</b>  Ch. 3 (pp. 35-87) in Schick & Vaughn’s “How to Think about Weird Things” (course website)	<b>Keep working on your research summary table!</b>
Week 5 Monday, September 14  Wednesday, September 16	<b>The Scientific Method: Part I</b>  Ch. 2 & 3 (pp. 11-57) in Hoover & Donovan	<b>Reflection Paper Due Wednesday, September 16, 9:00 am</b>



<p>Week 6 Monday, September 21</p> <p>Wednesday, September 23</p>	<p><b>The Scientific Method: Part II</b></p> <p>Ch. 4 &amp; 5 in Hoover &amp; Donovan</p> <p>Videos (Email)</p>	<p><b>Research Summary Table due Wednesday, September 23, 9:00 am</b></p>
<p>Week 7 Monday, September 28</p> <p>Wednesday, September 30</p>	<p><b>Class Workshop II: Formulating Good Research Questions and Creating Surveys</b></p> <p>Ch. 9 (pp. 268-286 only) in Babbie’s “The Basics of Social Research”</p>	<p><b>Application Worksheet on Research Questions, Key Variables, and Hypotheses due Wednesday, September 30, 9:00 am</b></p> <p><b>Get your Qualtrics account and upload your draft questions!</b></p>
<p>Week 8 Monday, October 5</p> <p>Wednesday, October 7</p>	<p><b>Class Workshop III: Writing a Research Report and a Primer in APA Style</b></p> <p>The Basics of APA Style Tutorial <a href="https://apastyle.apa.org/learn/tutorials/basics-tutorial">https://apastyle.apa.org/learn/tutorials/basics-tutorial</a></p> <p>The APA Manual: The first (writing for the behavioral and social sciences) and second (manuscript structure and content) chapters</p>	<p><b>Mid-term Exam on Wednesday, October 7</b></p>
<p>Week 9 Monday, October 12</p>	<p><b>Quantitative Research Methods: Part I</b></p> <p>Castellan, C. M. (2010). Quantitative and qualitative research: A view for clarity. <i>International Journal of Education</i>, 2, 1-14.</p> <p>Sample quantitative research paper (TBA)</p>	
<p>Week 10 Monday, October 19</p> <p>Wednesday, October 21</p>	<p><b>Quantitative Research Methods: Part II</b></p> <p>Ch. 8 (pp. 245-267) in Babbie (course website)</p>	
<p>Week 11 Monday, October 26</p> <p>Wednesday, October 28</p>	<p><b>Qualitative Research Methods: Part I – Forming Research Questions and Collecting Data</b></p> <p>Ch. 9 (pp. 313-351) in Schutt’s “Investigating the Social World” (course website)</p>	<p><b>Quantitative Paper Due, Wednesday, October 28, 9:00 am</b></p>

	Yu, M. V., Johnson, H. E., Deutsch, N. L., & Varga, S. M. (2018). She calls me by my last name”: Exploring adolescent perceptions of positive teacher-student relationships. <i>Journal of Adolescent Research</i> , 33, 332-362.	
Week 12 Monday, November 2	<b>Qualitative Research Methods: Part II – Analyzing Data</b>	<b>Qualitative Data &amp; Research Question Due, Wednesday, November 4, 9am</b>
Wednesday, November 4	Ch. 9 (pp. 170-202) in Garbarino & Stott’s “What Children Can Tell Us” (course website)	
Week 13 Monday, November 9	Using Both Quantitative and Qualitative Methods	
Wednesday, November 11	Ch. 6 (pp. 118-135) in Hoover & Donovan	
Week 14 Monday, November 16	<b>Research Presentation</b>	<b>Final Exam on Wednesday, November 18</b>
Wednesday, November 18	FINAL EXAM	
Week 15 Monday, November 23		