

**Wake Forest University**  
**Department of Counseling**  
**CNS 721: Research and Statistical Analysis in Counseling**  
**Fall 2017**  
**8:30 – 11:00 a.m. Mondays**  
**Location: Carswell 205**

**Instructor:** Seth Hayden, PhD, LPC (NC, VA), NCC, CCMHC, ACS  
**Office:** Carswell Hall 217  
**Office Hours:** Mondays from 3:00-5:00 (once a month is an all college faculty meeting and will adjust meeting time accordingly); Thursdays from 11:30-1:30; or by appointment  
**Phone:** 336-758-8624  
**E-mail:** [haydensc@wfu.edu](mailto:haydensc@wfu.edu)  
**Mail box:** Carswell 235

**Course Overview and Methods of Instruction:**

This course will provide you with an overview of research and statistical analysis in counseling. It will combine reading of the required text, journal articles and other selected publications, lectures, discussion, small group activities, and student presentations to help you learn and assimilate the key statistics and research principles necessary to successfully complete the Masters in Counseling program at Wake Forest University and practice as a professional mental health or school counselor. Enhancing your understanding of basic statistical concepts as well as methods for integrating research in counseling practice will be featured elements of this course.

**Course Content and CACREP Standards:**

This content of the course is designed to meet the Council for Accreditation of Counseling and Related Educational Programs (CACREP) standards from Section 2, Professional Identity (<http://www.cacrep.org/about-cacrep/2016-cacrep-standards/>) under subheading 7 entitled Assessment and Testing and the subheading 8 entitled Research and Program Evaluation. Your examination of this subject matter will involve information on research methods, statistical analysis, needs assessment, and program evaluation, including all of the following:

**Subheading 7: Assessment**

- g. statistical concepts, including scales of measurement, measures of central tendency, indices of variability, shapes and types of distributions, and correlations (2.F.7.g)
- h. reliability and validity in the use of assessments (2.F.7.h)

**Subheading 8: Research and Program Evaluation**

- a. the importance of research in advancing the counseling profession, including how to critique research to inform counseling practice (2.F.8.a)
- b. identification of evidence-based counseling practices (2.F.8.b)
- c. needs assessments (2.F.8.c)
- d. development of outcome measures for counseling programs (2.F.8.d)
- e. evaluation of counseling interventions and programs (2.F.8.e)
- f. qualitative, quantitative, and mixed research methods (2.F.8.f)
- g. designs used in research and program evaluation (2.F.8.g)
- h. statistical methods used in conducting research and program evaluation (2.F.8.h)
- i. analysis and use of data in counseling (2.F.8.i)

**Required Text:**

Erford, B. (2014). *Research and evaluation in counseling*. (2<sup>nd</sup> ed.). Stamford, CT: Cengage Learning.

**Supplemental Text**

Aron, A., Coups, E. J., & Aron, E. N. (2011). *Statistics for the behavioral and social sciences: A brief course* (5th ed.). Upper Saddle River, NJ: Prentice Hall.

**Email:**

So that we may stay in regular contact, it is important to know the typical manner in which information related to the class will be communicated. Correspondence and notices related to this course will be sent to your WFU email account or Sakai. In order to ensure you are aware of the happenings in and between classes, be sure to check these accounts on a regular basis (daily preferred) to receive notices related to the course.

**Sakai:**

The syllabus, updates, announcements, reading materials, and other materials related to the course will be made available through the Sakai application. Please make sure you have access to Sakai by the second week of classes. If you have any problems, contact The Bridge at the ZSR Library 336-758-4357 or help.wfu.edu.

**Student Responsibilities:**

This success of this course will depend largely on your active engagement with the instructor and your fellow aspiring counselors around the subject matter of research and statistical analysis in counseling. The class meetings will involve my imparting information as well as a significant amount of processing of the information conveyed in lectures, readings, etc. To ensure you understand what is expected of you, here are things you are responsible for during our time together in the course.

As a student taking this course, you are responsible for:

1. Regular class attendance and **active** participation in all classroom activities (discussions, presentations, exercises, etc.). Your attendance and active participation are critical to your own learning as well as the learning of your peers and the overall success of the course.
2. Completion of all required assignments and submission of completed assignments in accordance with established due dates.

**Accommodations/Disability Statement:**

Wake Forest University recognizes its responsibility for creating an institutional climate in which students with disabilities can thrive. In accordance with University policy, if you have a documented disability and require accommodations to obtain equal access in this course, please contact the instructor and the Learning Assistance Center (LAC) at the beginning of the semester. Students with disabilities must verify their eligibility through the LAC in 118 Reynolda Hall (336) 758-5929.

**Academic Integrity:**

Students are expected to complete all work for this course in compliance with the WFU honor code. If you are unfamiliar with this policy, you should consult the Judicial Affairs website at <http://www.wfu.edu/studentlife/judicial/students.html> in addition to the WFU Graduate School Honor Code found at <http://divinity.wfu.edu/files/2016/08/honor-code.pdf>. All work handed in for this course must be the student's own work. When writing or presenting about ideas that are not your own, you must properly cite the author(s). **Note:** Failure to give credit to other people for their ideas and work is plagiarism and is a violation of the WFU honor code and will result in a grade of 0 for that assignment along with other potential penalties.

**Student performance evaluation criteria:**

- **Class Participation and Attendance (15 points):** As indicated before in the syllabus, full realization of the potential for the course will depend largely on your active involvement in discussions, group activities, etc. With this in mind, class participation is required. Given that we only meet one day a week, regular attendance is necessary to ensure you are receiving the necessary information for the course. It is understood that life happens, therefore one absence will be excused without penalty. Every subsequent absence will result in a 2 point deduction in your final grade. Four or more absences may result in failure to receive credit for the course. Excessive tardiness and/or unprofessional behavior (e.g., use of unrelated technology such as cell phones and other handheld devices, your laptop computer for internet access, etc. during class) also will negatively impact your grade. In order to participate effectively, you should complete the assigned readings (and problems, if applicable) prior to class. Written assignments due on a given day should be turned in as paper copies (i.e., not electronic copies) on the day they are due at the beginning of class. Those submitted late will result in a half grade deduction for each day submitted past the due date. Please bring the required textbook and a basic calculator to class.

Computers and other technology used during our class meetings are to solely support your learning of the subject matter. Activities beyond enhancing your learning (social media, instant messenger, etc.) in class are not appropriate means for using cell phones, computers, and tablets. Being fully present and attending to the information shared in our class meeting is of critical importance both to your success in the course as well as in your understanding of research and statistical analysis within the field of counseling.

- **Protection of Human Subjects Certification (5 points)** – due Sept. 11 (Week 3): This assignment is designed to inform you about the rights and welfare of human participants in research. Complete the tutorial and online quizzes at [citiprogram.org](http://citiprogram.org). See Attachment 1 for instructions. Remember, you must turn in the printed certificate of completion as evidence of completing the assignment.
- **Multifaceted Research Project (65 total points)** – see below for due dates: This multifaceted project is designed to provide you with an in-depth research experience in which you will select a mental health disorder of your choice from the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (see Attachment 2), conduct a literature search and develop a reference list on your disorder, write a moderate-in-length literature review, present a synopsis of your review to the class using PowerPoint, and present a poster on your topic to 2<sup>nd</sup> year counseling graduate students and faculty.
  - **Research Project Ideas (5 points)** – due Sept. 4 (Week 2): Identify three mental health disorders from the DSM-5 (Appendix 2) that interest you. You have likely come into the program having been exposed to various mental health disorders; disorders that you may have experienced personally, or perhaps experienced by family members, friends, or coworkers. You will be spending a lot of time researching the disorder you choose, so it might be useful to choose something that is of personal and professional interest to you. Summarize the disorders you've chosen in a paper of 500 words or less. Briefly answer the following

questions *for each*: 1) What is the disorder that interests you; 2) Why is it interesting to you; 3) What are some subtopics within this area that you would like to explore (e.g., a certain counseling approach, individual counseling, group counseling, medications ... you don't have to be overly specific, rather, I want you to start thinking about the disorder more narrowly ... we'll discuss this more in class). This assignment will be discussed in detail on Aug. 28 (Week 1). Once you've turned in this assignment, I'll let you know ASAP which of the three disorders you'll be researching (note: I want each student to research a unique disorder).

- **Reference List (10 points)** – due Sept. 25 (Week 5): Conduct a literature search using PsycINFO and PubMed (both are required databases for your lit. review) (see Attachment 3 for helpful hints). Another database that may be useful is ERIC, especially if the disorder you choose is common to children or adolescents. Other databases discussed in class can also be used. Choose citations published from 2007-present. You will want to review the *abstracts* from at least 25 citations, however you must choose only 10-12 citations for the reference list you submit. The citations should include book chapters, review articles, and original research articles from peer-reviewed, professional journals from the fields of counseling (desirable for you to include counseling literature), psychology, social work, psychiatry, or similar professional disciplines. In addition, you should definitely use the DSM-5 as one of the books you cite (see bottom of Attachment 2 for proper citation of the DSM-5). We will spend much of week 2 demonstrating how to conduct a literature search. This assignment will be discussed in detail on Sept. 11 (Week 3).
- **Literature Review (20 points)** – due Oct. 9 (Week 7): Your literature review should be at least 10 pages and no more than 15 pages in length, with the following guidelines:
  - Use APA format (6<sup>th</sup> edition), Arial or Times New Roman font, size 11 or 12, double spaced, standard Microsoft Word document margins.
  - Page 1 should be the title page
  - Page 2 should be the abstract page (should not exceed one page). This is a summary of your literature review.
  - Pages 3 through 8-13 should contain the body of the paper, including an introduction that provides background information and discusses the significance of the disorder you're writing about (usually 1-2 pages), methods section to include the key words and search strategies you found most useful, databases that provided the most or best citations ... i.e., if someone else was going to do a literature review on this topic, what advice would you give them to conduct the most thorough search possible in the most efficient way? (up to 1 page), results section (5-10 pages, may be divided into subsections ... should include information from the DSM-5 on your disorder as well as other aspects of the disorder that you've summarized from your literature search), and discussion including recommendations for future research and study (usually 1-2 pages)
  - The last two pages should be for references, listed in APA format.

I will distribute an example of a literature review in class to help guide you. This assignment will be discussed in detail on Sept. 18 (Week 4).

- **Oral Presentation Part I – PowerPoint Presentation (15 points)** – due either Oct. 23 (Week 9), Oct. 30 (Week 10), or Nov. 6 (Week 11): The PowerPoint presentation must be 15 minutes in length (see guidelines below), *including* 2-3 minutes for questions at the end of the presentation. The content of your slides (maximum number 12 slides following the “one slide per minute” rule) will come from your literature review as described below:
  - Slide 1 should be the title slide
  - Slide 2 should provide some element of introductory/background information; why is this disorder significant?
  - Slide 4 should describe the methods of your literature review (e.g., key words or search terms, most common journal(s) cited, and anything else you think would help someone in the future conduct a literature review on the same topic)
  - Slides 5-8 should summarize the results (hint: you don’t need to discuss every aspect of your lit. review’s results section)
  - Slides 9-10 should summarize your discussion/conclusions (again, selected aspects are okay)
  - Slide 11 should reflect ideas and recommendations for future study and research
  - Slide 12 should have selected references

In addition, you must provide your classmates and me with a PowerPoint handout of your presentation (6 on 1 format, double sided copy). This assignment will be discussed in detail on Oct. 2 (Week 6).

- **Oral Presentation Part II – Poster Presentation (15 points)** – due Nov. 20: Using the content of your literature review and PowerPoint presentation, embellished with graphics of your choice, you will make a poster that will then be shared with 2<sup>nd</sup> year graduate students and the faculty in Carswell Atrium. Be prepared to provide a brief informal presentation of your poster (several minutes) and answer questions for students/faculty that view your poster. This assignment will be discussed in detail on Oct. 2 (Week 6).
- **Program Evaluation Case Study (15 points)** due Nov. 27 (week 14) – Respond to the questions below related to the following scenario:

Steve is in his first year as the school counselor at a local elementary school. After conducting a needs assessment and receiving feedback from teachers and administrators, he learns that there are a high number of discipline referrals resulting from off-task classroom behaviors among first grade boys. Steve has decided to implement a peer mentoring/reading program to connect the targeted first-graders with male role models in the fourth and fifth grades. The program will be implemented over the course of eight weeks with ten first grade boys being paired with ten fourth and fifth grade boys. The pairs will meet weekly for 20 minutes of reading time and positive social interaction. Steve expects that discipline referrals will decrease and on-task behaviors will increase as a result of the intervention.

- How specifically might Steve evaluate the peer mentoring/reading program?
- Is there a particular research method (e.g., experimental, survey) you might use to analyze the effectiveness of this program? If so, why?
- Briefly describe how you might conduct a needs assessment in a school setting. For example, how might you collect the data (e.g., surveys, checklist, interviews).
- What questions might you ask to gather data (list at least two questions) and from whom would you gather data?

Paper should be 2 to 2 ½ pages in length

- **Quiz 1 (Oct. 2 - Week 6) (15 points), Quiz 2 (Nov. 13 - Week 12) (15 point) and Final Exam (Dec. 4 - Week 15) (20 points):** Quizzes will consist of 15 questions each with a variety of question formats (e.g., fill in the blank, multiple choice, matching, etc.). The final exam will have between 50-100 multiple choice questions in the same format as National Counselor Exam (NCE). It will cover key terms and concepts related to research and statistics covered during the semester.

<b>Assignment</b>	<b>Point Potential</b>	<b>CACREP Standard</b>
Class Participation	15	Ongoing
Protection of Human Subjects Training	5	(2.F.8.a.j)
Multifaceted Research Project	---	(2.F.8.a.b.e.f.g.i.j)
Research Project Ideas	5	
Reference List	10	
Literature Review	20	
Oral Presentation Part I	15	
Oral Presentation Part II	15	
Program Evaluation Case Study	15	(2.F.8.c.e.g)
Quiz 1	15	(2.F.7.g; 2.F.8.a.f.g.h)
Quiz 2	15	(2.F.8.b.f.g.h.i)
Final Exam	20	(2.F.7.g.h; 2.F.8.a.b.c.f.g.h.j)
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Total Points Possible	150	
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**Grading Scale:**

A	139-150	C+	114-118
A-	134-138	C	108-113
B+	129-133	C-	104-107
B	123-128	F	< 104
B-	119-122		

**Schedule of Classes and Assignment**

<b>Date</b>	<b>Topics</b>	<b>Required Reading</b>	<b>Assignments Due</b>	<b>2016 CACREP Standards</b>
Aug. 28 Week 1	Welcome! Review of Syllabus Assignment discussion: Research Certification Assignment discussion: Research Project Idea Assignment discussion: Reference List <b>Small Group Discussion: Getting off on the Good Foot!</b>			Section 2, F, 8 (a)
Sept 4 Week 2	Lecture: The Nature of Research and Inquiry Assignment discussion: Research Certification	Erford Ch. 1 & 2	Turn in research project ideas	Section 2, F, 8 (a,b,e,f,j)
Sept 11 Week 3	In-class demonstration of PubMed/PsychInfo (Bring computer to class)  Assignment discussion: Research Project Idea Assignment discussion: Reference List Lecture: Locating Reviewing, and Writing Research, Outcome Research in Counseling	Erford Ch. 3 & 4	Turn in certificate of completion of Protection of Human Services training.	Section 2, F, 8 (b,e,f)
Sept 18 Week 4	Assignment Discussion: Literature Review Lecture: Qualitative Approaches to Research Proper Citation vs. Plagiarism <b>Visiting Speaker: Research in Practice Small Group Discussion: Resources for Research Project</b>	Erford Ch. 5 & 6		Section 2, F, 8 (a,e,f,g,i)
Sept 25 Week 5	Lecture: Quantitative Research Design in Counseling, Collecting Data	Erford Ch. 7 & 11  <b>Supplemental</b> Aron, Coups, & Aron Ch. 2 & 5	Turn in Reference List	Section 2, F, 8 (a,e,f,g,i)

Oct. 2 Week 6	<b>Quiz 1 – Basic Research Principles</b> (questions from Weeks 2-5) Lecture: Analyzing Data in Counseling Research and Evaluation Assignment Discussion: Oral Presentation, PowerPoint Handout, and Poster Formatting, Printing, and Display	Erford Ch. 12, 13, & 14		Section 2, F, 8 (e,h,i,j)
Oct. 9 Week 7	Lecture: Univariate Inferential Statistics  <b>Small Group Discussion: Sharing Findings with Colleagues</b>	Erford Ch. 16  <b>Supplemental</b> Aron, Coups, & Aron Ch. 4 & 8	Turn in Literature Review	Section 2, F, 8 (b,h,i,j)
Oct 16 Week 8	Lecture: Correlation and Regression	Erford Ch. 17  <b>Supplemental</b> Aron, Coups, & Aron Ch. 11		Section 2, F, 8 (b,f,g,h,i,j)
Oct. 23 Week 9	Oral Presentations (2) Lecture: Correlation and Regression and Catch Up, Nonparametric Tests of Statistical Inference	Erford Ch. 17 & 18	Oral presenters – provide PowerPoint handout for classmate and instructor	Section 2, F, 8 (a,b,f,g,h,i,j)
Oct. 30 Week 10	Oral Presentations (6) Lecture: Review and Catch-up	No readings	Oral presenters – provide PowerPoint handout for classmate and instructor	Section 2, F, 8 (a,b,f,g,i,j)
Nov. 6 Week 11	Oral Presentations (6) Lecture: Review and Catch-up	No readings	Oral presenters – provide PowerPoint handout for classmates and instructor	Section 2, F, 8 (a,b,f,g,i,j)
Nov. 13 Week 12	<b>Quiz 2 – Statistics</b> (questions from weeks 6-9) Lecture: Practical Counseling Research Approaches: Using Action Research and Single-Subject Research Designs	Erford Ch. 8  <b>Supplemental</b> Aron, Coups, & Aron Ch. 4 & 7		Section 2, F, 8 (g,h,i,j)

Nov. 20 Week 13	Lecture: Needs Assessment, Program Evaluation and Accountability Study Hints for Final Exam  <b>Poster displays/discussion for 2<sup>nd</sup> year students and faculty</b>	Erford Ch. 9 & 10  Astramovich & Coker Article	Set-up poster in Carswell Atrium at 3:45 p.m. -Provide handout of poster for classmates and faculty (4:15 p.m. to 4:45 p.m.).	Section 2, F, 8 (c,g,h,i,j)
Nov. 27 Week 14	Lecture: Wrap Up and Integration of Information  <b>Small Group Discussion: So What?</b>		Turn in Program Evaluation Case Study	Section 2, F, 8 (a,b,d,e,g,j)
Dec. 4 Week 15	<b>Comprehensive Final Exam</b> (Closed Book)			

**Emergency Contingency Plan:** The emergency contingency plan for this course is as follows: In the event that the University is closed for an emergency, students will be able and expected to keep up with their coursework, as all documents and materials will be made available online on the course website. It is suggested that all materials be downloaded. Student work will be submitted via email, and the instructor will be available through email, instant messaging, and Skype. If Internet access is limited, work can be submitted via snail mail, and access to the instructor's home address and telephone numbers will be provided. If there is a continued need to cancel class, the due dates for assignments may be pushed back.

In the event of a pandemic, we will use [Sakai](#) to complete the course. Please follow the list of assignments on the syllabus, and download assignments as soon as they are posted. If the internet is not operating, you can mail quizzes, legal issues write-ups, papers, and the final test to me at:

Seth Hayden  
Dept. of Counseling  
PO Box 7406  
Wake Forest University  
Winston-Salem, NC 27109

**Attachment 1: Instructions for Protection of Human Subjects Certification Assignment**

Due Sept. 11 (Week 3), this assignment is designed to inform you about the rights and welfare of human participants in research. Begin the tutorial and online quizzes by going to [citiprogram.org](http://citiprogram.org). Register as a new user. Follow these instructions:

- Step 1: Select “Register”, enter “Wake Forest University”
- Step 2: Enter name and e-mail address
- Step 3: Create a security question and answer
- Step 4: Enter your name
- Step 5: Enter your Wake Forest University email address
- Step 6: Answer “no” to question about CME/CEU credits
- Step 7: Answer “yes” or “no” depending on your preference, then submit
- Next: Complete information page required by Wake Forest University. Use your Wake Forest University email address, and select “Student Researcher – Graduate” for question about role in research. Submit.
- Next: Answer “Group 1” for the first question, “I have not previously completed an approved basic course” for the second question, and “Not at this time, thank you” for the third question. Submit.
- Next: Answer “No” to the next question.
- Next: At this time, you should come to a screen that has your name and ID# at the top. In the middle of the page, under the “My Courses” column, it should say “Group 1, Graduate Students, Faculty and Staff, Basic Course”. The very next column, “Status”, should say “Not started – Enter” in red letters. Click on “Enter”. Proceed with taking the “Required Modules” and then one of the “Elective Modules”.
- Last: As evidence of completion, turn in the printed certificate of completion at the beginning of class on Sept. 11

**Attachment 2: Selected DSM-5 Mental Health Diagnoses\***

Agoraphobia  
Alcohol Use/Abuse/Dependence/Intoxication/Withdrawal  
Amphetamine Use/Abuse/Dependence/Intoxication/Withdrawal  
Anorexia Nervosa  
Attention Deficit Hyperactivity Disorder  
Autistic Disorder  
Avoidant Personality Disorder  
Antisocial Personality Disorder  
Anxiolytic (Benzodiazepine) Use/Abuse/Dependence/Intoxication/Withdrawal  
Bipolar I Disorder  
Bipolar II Disorder  
Borderline Personality Disorder  
Bulimia Nervosa  
Cocaine Use/Abuse/Dependence/Intoxication/Withdrawal  
Conduct Disorder  
Delirium  
Dementia of the Alzheimer's Type  
Dementia Due to Creutzfeldt-Jakob Disease  
Dementia Due to Huntington's Disease  
Dissociative Identity Disorder  
Generalized Anxiety Disorder  
Insomnia  
Major Depressive Disorder  
Obsessive-Compulsive Disorder  
Obsessive-Compulsive Personality Disorder  
Opioid Use/Abuse/Dependence/Intoxication/Withdrawal  
Oppositional Defiant Disorder  
Panic Disorder  
Post-Traumatic Stress Disorder  
Schizotypal Personality Disorder  
Schizophrenia  
Sedative/Hypnotic/Anxiolytic (Benzodiazepine)  
Use/Abuse/Dependence/Intoxication/Withdrawal  
Tourette's Disorder

\*Modified from American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5<sup>th</sup> ed). Washington, DC: Author.

### **Attachment 3: Accessing the DSM – 5 and Literature Search Tips for PsycINFO and PubMed**

#### Accessing the DSM – 5 via the ZSR Library

1. Go to [zsr.wfu.edu/](http://zsr.wfu.edu/) and click on “Find” in the top-right corner of the page.
2. Click on “Databases”.
3. Click on “Find by Name” and enter “DSM” in the search field.
4. Click on “DSM 5 Library” option.
5. You will have several options on the top of the page. Click on “DSM – 5” on the top left of the options next to “Home”.
6. In terms of searching for various diagnosis, you will want to focus your attention on “Section II: Diagnostic Criteria and Codes”.

#### **Literature Search Strategies for PsycINFO:**

##### Search Terms

1. Go to [zsr.wfu.edu/](http://zsr.wfu.edu/) and click on “DATABASES” tab
2. Type in PsycINFO into keyword dialogue box, then click on PsycINFO, then click on Search.
3. Now click on PsycINFO. You will be prompted to sign in, which you should do. You will now be signed into PsycINFO.
4. Enter the mental health disorder that you wish to research then check the box that says “Suggest subject terms” (it is located just above dialogue box). Now click on the Search tab. You will now come to a thesaurus-like expansion of your mental health diagnosis. Write down 3-6 search terms that further describe the disorder you’ve chosen or different aspects of it. Click on each of these search terms to better define what you might want to research for your chosen mental health disorder. Try and come up with a final list of 3-6 search terms that you will employ in your literature search.

##### Literature (Citation) Search

1. Return to the PsychINFO homepage. Click on “Advanced Search”, located just under the dialogue boxes at the top of the page.
2. You will now need to select one, two, or three of your search terms in order to produce some research articles and other published documents on the mental health disorder you’ve chosen (a.k.a. citations). For example, if your disorder is depression, you could search “depression” or “depression and counseling” or “depression and suicide and counseling”. This is where you get into the art of doing literature searches ... how you combine terms makes a huge impact on the search outcome.
3. Place limits on your search, such as “Linked full text” and narrow the Publication Year from 2007 to 2017.
4. Your efforts should result in about 25 references. If you get more than this, either add additional search terms or narrow the Publication Year.
5. Click on the title of the citations that look interesting. Read the abstracts of about 25 citations. Choose a subset for your near-final reference list. Keep in mind you must also search PubMed for references, and between PsycINFO and PubMed, you should have 10-12 citations for your final reference list.
6. Be patient ... this is definitely a trial and error process for which practice makes perfect!

**Literature Search Strategies for PubMed** (note - PubMed does not have a search terms function like PsycINFO, so you'll go straight to the Literature Search):

Literature (Citation) Search

1. Go to [zsr.wfu.edu/](http://zsr.wfu.edu/) and click on "DATABASES" tab
2. Type in PubMed into keyword dialogue box, then click on MEDLINE - PubMed, then click on Search.
3. You may or may not be prompted to sign in (you may already be signed in from your PsycINFO search). Sign in if necessary.
4. Enter your desired search term(s) in the dialogue box. Do not click on the Search tab yet.
5. Just below dialogue box, click on Limits. Begin by searching for review articles for your mental health disorder. Set the following limits: Published in the Last - click on "10 Years"; Type of Article - click on "Review"; and Text Options - click on "Linked to Full Text". Now click on the Search tab.
6. Click on the title of the citation to read the abstract. If the abstract inclines you to get the full article, explore Full Text Options in the upper right hand side of the page. If you look to the right of the citation title, there will be related articles that you can click on, read the abstracts, and get the full article. Another way to get related articles is to hit the back arrow until you come to the page which listed the multiple citations for the key words you entered. Below the citation title you'll see the words "Related Articles". Click on this ... it will produce a new list that shows you what other research articles have listed the citation you're exploring.
7. Repeat the above process but remove the limit on the Type of Article (i.e., uncheck "Review"). This will give you a different array of citations related to your search terms.

Literature Review Assignment Rubric

Written Assignment Rubric				
Depth of Paper – 80%	Poor	Fair	Good	Excellent
<b>Purpose</b>	<ul style="list-style-type: none"> <li>The purpose and focus of the writing are not clear to the reader.</li> </ul>	<ul style="list-style-type: none"> <li>The writer's decisions about focus, organization, style, and content sometimes interfere with the purpose of the writing.</li> </ul>	<ul style="list-style-type: none"> <li>The writer has made good decisions about focus, organization, style, and content so as to achieve the purpose of the writing.</li> </ul>	<ul style="list-style-type: none"> <li>The writer's decision about focus, organization, style, and content fully elucidate the purpose and keep the purpose at the center of the discussion.</li> </ul>
<b>Development of Ideas</b>	<ul style="list-style-type: none"> <li>Most ideas unsupported, confusion between personal and external evidence, reasoning flawed.</li> </ul>	<ul style="list-style-type: none"> <li>Presents ideas in general terms, support for ideas is inconsistent, some distinctions need clarification, reasoning unclear.</li> </ul>	<ul style="list-style-type: none"> <li>Supports most ideas with effective examples, references, and details, makes key distinctions.</li> </ul>	<ul style="list-style-type: none"> <li>Explores ideas vigorously, supports points fully using a balance of subjective and objective evidence, makes useful distinctions.</li> </ul>
<b>References</b>	<ul style="list-style-type: none"> <li>References few in number or lacking in quality.</li> </ul>	<ul style="list-style-type: none"> <li>Less than desired number of references.</li> </ul>	<ul style="list-style-type: none"> <li>Adequate number of references with most sufficient in quality.</li> </ul>	<ul style="list-style-type: none"> <li>Adequate number of high quality references, evaluated, synthesized and used appropriately.</li> </ul>
Style of Paper – 10%	Poor	Fair	Good	Excellent
<b>Language</b>	<ul style="list-style-type: none"> <li>Employs words that are unclear, sentence structures inadequate for clarity.</li> <li>Errors are seriously distracting.</li> </ul>	<ul style="list-style-type: none"> <li>Word forms and sentence structures are adequate to convey basic meaning.</li> <li>Errors cause noticeable distraction.</li> </ul>	<ul style="list-style-type: none"> <li>Word forms are correct, sentence structure is effective.</li> <li>Presence of a few errors is not distracting.</li> </ul>	<ul style="list-style-type: none"> <li>Employs words with fluency, develops concise standard English sentences, and balances a variety of sentence structures effectively.</li> </ul>
<b>Logic &amp; Organization</b>	<ul style="list-style-type: none"> <li>Does not develop ideas cogently, uneven and ineffective overall organization.</li> </ul>	<ul style="list-style-type: none"> <li>Develops and organizes ideas in paragraphs that are not necessarily connected.</li> <li>Some overall organization, but some ideas seem illogical and/or unrelated.</li> </ul>	<ul style="list-style-type: none"> <li>Develops unified and coherent ideas within paragraphs with generally adequate transitions; clear overall organization relating most ideas together.</li> </ul>	<ul style="list-style-type: none"> <li>Develops ideas cogently, organizes them logically with paragraphs and connects them with effective transitions.</li> </ul>

	<ul style="list-style-type: none"> <li>• Unclear introduction or conclusion.</li> </ul>	<ul style="list-style-type: none"> <li>• Unfocused introduction or conclusion.</li> </ul>	<ul style="list-style-type: none"> <li>• Good introduction and conclusion.</li> <li>• Little digression.</li> </ul>	<ul style="list-style-type: none"> <li>• Clear and specific introduction and conclusion.</li> </ul>
<b>Mechanics of Paper – 10%</b>	<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Excellent</b>
<b>Spelling and Grammar</b>	<ul style="list-style-type: none"> <li>• Writing contains numerous errors in spelling and grammar which interfere with comprehension.</li> </ul>	<ul style="list-style-type: none"> <li>• Frequent errors in spelling and grammar distract the reader.</li> </ul>	<ul style="list-style-type: none"> <li>• While there may be minor errors, the writing follows normal conventions of spelling and grammar throughout and has been carefully proofread.</li> </ul>	<ul style="list-style-type: none"> <li>• The writing is essential error-free in terms of spelling and grammar.</li> </ul>
<b>Adherence to APA Style</b>	<ul style="list-style-type: none"> <li>• Little or no attempt to follow APA. Major errors.</li> </ul>	<ul style="list-style-type: none"> <li>• Some attempt to follow APA guidelines with minor errors.</li> </ul>	<ul style="list-style-type: none"> <li>• APA guidelines followed with very few minor errors.</li> </ul>	<ul style="list-style-type: none"> <li>• APA guidelines followed.</li> </ul>
<b>Comments:</b>				
			<b>Total Depth:</b>	
			<b>Total Style:</b>	
			<b>Total Mechanics:</b>	
			<b>Total Percentage:</b>	
			<b>TOTAL POINTS:</b>	

**Program Evaluation Case Study Rubric**

<b>Program Evaluation Case Study Rubric</b>				
<b>Content – 90%</b>	<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Excellent</b>
<b>Demonstration of Knowledge Regarding Program Evaluation and Needs Assessments</b>	<ul style="list-style-type: none"> <li>Not evident that information about program evaluations and needs assessments was understood and/or incorporated into their written response.</li> </ul>	<ul style="list-style-type: none"> <li>Assignment prompts are answered incompletely or superficially</li> </ul>	<ul style="list-style-type: none"> <li>All assignment prompts are answered but could be clearer and more detailed.</li> </ul>	<ul style="list-style-type: none"> <li>Assignment prompts answered thoroughly and demonstrate a firm understanding of program evaluation and needs assessment.</li> <li>Evident that course material related to the topic was understood and incorporated well into responses.</li> </ul>
<b>Mechanics and Organization – 10%</b>	<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Excellent</b>
<b>Mechanics and Organization</b>	<ul style="list-style-type: none"> <li>Written responses to prompts are unclear or poorly written.</li> <li>Errors are frequent or severe.</li> </ul>	<ul style="list-style-type: none"> <li>Written responses to prompts are generally clear but may not be graduate level.</li> <li>Multiple errors and/or patterns of errors are evident.</li> </ul>	<ul style="list-style-type: none"> <li>Written response to prompts are appropriate for graduate-level writing.</li> <li>Some errors are present.</li> </ul>	<ul style="list-style-type: none"> <li>Written responses to prompts are fluidly written and engaging.</li> <li>Few, if any, errors are present.</li> </ul>
<b>Comments:</b>				
				<b>Content:</b>
				<b>Mechanics and Organization:</b>
				<b>Total Percentage:</b>
				<b>TOTAL POINTS:</b>

CNS 721: Research/Statistics  
Oral PowerPoint Presentation of Literature Review Rubric

Presenter:

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Date: \_\_\_\_/\_\_\_\_/2017

Categories (points per category)

Required slides:

Title (1) \_\_\_\_\_

Background/significance (2) \_\_\_\_\_

Methods (1) \_\_\_\_\_

Results (2) \_\_\_\_\_

Discussion/Conclusions (2) \_\_\_\_\_

Future research (1) \_\_\_\_\_

References (1) \_\_\_\_\_

Quality of content covered in results slides (3) \_\_\_\_\_

Creative appearance of presentation (.5) \_\_\_\_\_

Readability of slides (1) \_\_\_\_\_

Stayed w/in time limits (.5) \_\_\_\_\_

Total score (out of 15) \_\_\_\_\_

CNS 721: Research/Statistics  
Poster Presentation of Literature Review Rubric

Presenter:

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Date: \_\_\_\_/\_\_\_\_/2017

Categories (points per category)

Readability of the poster (3) \_\_\_\_\_

Quality of content covered on the poster (7) \_\_\_\_\_

Professionalism in presenting the information (5) \_\_\_\_\_

Total score (out of 15) \_\_\_\_\_