Sabbatical Report

Julie Campbell

2020-2021

Psychology Instructor

Moorpark College

I. Objective Summary: I completed a year-long (2020-2021) sabbatical with two primary objectives: 1) to refine and update my knowledge of Biological Psychology/Neuroscience and related subfields such as Cognitive Neuroscience, Social Neuroscience, and Affective Neuroscience; and 2) to establish relationships with researchers in the field of Psychology as well as related subfields such as Social Neuroscience and Affective Neuroscience at local four-year colleges so I can continue building research internship opportunities for Moorpark College students

II. Objective Rationale (See Appendix A: Sabbatical Proposal, pp. 9-21)

III. Sabbatical Tasks and Deliverables:

Task 1) Complete Biological Psychology course at local community college

1) Deliverable: Passing grade of C or better as verified by transcripts

1) Progress: In fall 2020, I successfully completed PSY 314 (Behavioral Neuroscience) through California State University, Channel Island. PSY 314 is a 4-unit class (three hours lecture & three hours laboratory per week). (See Appendix B: Unofficial CSUCI Transcripts, pp. 22-23)

Task 2) Meet with neuroscientists at Moorpark College as well as at local colleges on a regular basis. Meetings would involve 1) compiling a list of seminal works in neuroscience as well as more current research in the field; and 2) discussing the works/research in-depth as I am reading them. This would be similar to preparing for a comprehensive examination for a graduate level program.

2) Deliverable: Create electronic file of readings as well as a summary of each reading. The electronic file would be made available to all Psychology faculty on the Moorpark College Psychology Department's Canvas shell

2) Progress: Progress for Tasks 2 & 3 is combined. See Progress under Task 3.

Task 3) Whenever possible, visit local neuroscience labs so I can apply the knowledge gained through reading to a physical brain, neuron, etc.

2 & 3) Progress: I realized early in my sabbatical that I would not be able to meet with neuroscientists in person or visit neuroscience labs due to the COVID-19 pandemic. Furthermore, given that faculty were extremely busy converting their ongound classes to online ones, I did not feel comfortable asking neuroscientists at Moorpark College or any other school to meet with me on a regular basis, even virtually. Therefore, I enrolled in an upper division Behavioral Neuroscience class through California State University, Channel Islands, which includes three hours of lecture as well as three hours of lab each week. Labs were conducted virtually through *Lt, Lab Tutor Online* and covered:

1) The Autonomic Nervous System and heart rate control

2) Online histology (Students had the opportunity to examine neurons and glia as well as brain sections, spinal cord sections, etc.)

3) The relationship between changing concentrations of ions inside/ outside the neuron and resulting changes in the action potential (Students had the opportunity to conduct virtual experiments based on Hodgkin's and Huxley's classic work)

4) Emotional stimuli and the Autonomic Nervous System, electrodermal activity and temperature

5) Neuroanatomy (structures of the brain and their functions)

6) Stereotaxic surgery, cocaine's mechanism of action, and the role of dopamine in the nucleus accumbens in seeking vs. liking

7) Polygraph tests and analysis of Sympathetic Nervous System data sets

8) Analysis of electromyogram data sets and how to detect muscle fatigue in EMGs

9) Examination of visual system through size weight illusion

10) EEG recordings and patterns during waking and sleeping

11) Electrodermal response and classically conditioned

Sympathetic Nervous System responses

12) Neurotrophic hypothesis of depression and mechanisms of action of several drugs of abuse (Non-Lt, lab)

Task 4) Summarize recent empirical studies suitable for undergraduate students that utilize brain scanning techniques, so, if desired, other Moorpark College psychology instructors could integrate the study(ies) into their undergraduate psychology course(s)

4) Deliverable: Create electronic file of summarized empirical articles for Psychology faculty at Moorpark College**.** The electronic file would be made available to all Psychology faculty on the Moorpark College Psychology Department's Canvas shell

4) Progress: Instead of articles, a number of experienced Behavioral Neuroscience instructors recommended using videos (see sample videos below) when teaching about modern technology to study the brain. The following are a few of the recommended videos (I will share these videos on the Psychology Faculty Resources Canvas shell): 1) Lighting Up the Brain with Optogenetics on www.brainfacts.org; 2) 2-Minute Neuroscience: Functional Magnetic Resonance Imaging (fMRI); 3) Introduction to Psychology: Modern Ways of Studying the Brain by Khan Academy. Once my students have watched a video explaining a particular technology, I will have them analyze *summarized* studies using that particular technology. Then, students will be asked to identify the type of conclusions that can be drawn from that particular study (descriptive, correlational, or causal). The goal is to make it clear to students that the use of modern technology to study the brain can justify *differing* levels of conclusions, depending on the rigor of the research design that was utilized (I will share these handouts on the Psychology Faculty Resources Canvas shell)

Task 5) Research sub-fields in Biological Psychology/Neuroscience such as Cognitive Neuroscience; Developmental Cognitive Neuroscience; Affective Neuroscience; Social Neuroscience; and Clinical Neuroscience

5) Deliverable: Develop a handout that could be used in psychology classes as well as at career/transfer events for psychology majors, which summarizes the focus of different neuroscience sub-fields and lists four-year research universities with faculty that adhere to those particular sub-fields. An electronic version of the handout will be made available to all Psychology faculty on the Moorpark College Psychology Faculty Department's Canvas shell

5) Progress: See Appendix C: What is Behavioral Neuroscience? Handout, pp. 24-27

Objective 6) Meet with faculty from different psychology sub-fields conducting research at local four-year universities (e.g., CSUN, CSUCHI, CLU, UCLA, and UCSB) with the hopes of establishing a working relationship between those researchers and the Psychology Department at Moorpark College

6a) Deliverable: Create electronic file that lists the researchers and their respectiveresearch interests who are interested in partnering with Moorpark College to form research opportunities for Psychology students. The electronic file would be included in the Research Internship Manual for Moorpark College Psychologyinstructors

6a) Progress: Before reaching out to individual instructors, I contacted Psychology Department Chairs or their equivalents at local universities and college transfer centers (CSUN; CSUCI; UCLA; CLU). See contact details below:

CSUN

- Contacts: Dr. Jill Razani (Department Chair) and Dr. Jill Quilici (Associate Chair)
- Dr. Razani and Dr. Quilici were not aware that: 1) a substantial number of Moorpark College transfer students majoring in psychology are admitted to CSUN's Psychology Department; and 2) Moorpark College is a HIS (Hispanic Serving Institution)
- Dr. Razani and Dr. Quilici communicated that their faculty were at capacity mentoring CSUN students, so they would not be able to serve as professional contacts for Moorpark College Psychology research interns.
- Connection: Dr. Elise Fenn, CSUN, Psychology Faculty: Program Coordinator of CAPS (Community for Achievement in Psychological Sciences) program
    - In Spring 2021, Moorpark College Psychology students were able to become CAPS fellows in which they were assigned a CAPS Senior fellow who served as their peer mentor.
    - Dr. Fenn and I will be collaborating again this fall (2021) so more Moorpark College Psychology students can get involved with the CAPS program.

CSUCI

- Contact: Dr. Kimmy Kee-Rose (Department Chair)
- Dr. Kee-Rose described the details of the Psychology Transfer Learning Community (TLC) program at CSUCI, which is meant to help transfer students majoring in Psychology successfully transition.

- Dr. Kee-Rose and I brainstormed ways in which Moorpark College students could become more involved with psychological research at CSUCI, but she mentioned that she and other psychology faculty were extremely busy with CSUCI students.
- Dr. Kee-Rose (Department Chair) confirmed that starting in Spring 2022, the CSUCI Psychology department would work with 3-5 Moorpark College Psychology research interns. I developed and internship structure and timeline.
    - **See Appendix D: PSY M80: Moorpark College PREP (Psychological Research Exploration Program) Internship (Learning Objectives), pp. 28-31**
    - **See Appendix E: PSY M80: Moorpark College PREP (Psychological Research Exploration Program) Internship (Detailed Timeline), pp. 32-38**

UCLA

- Contact 1: CCCP (Center for Community College Partnerships) through UCLA Transfer Center: I called and sent email in February 2021 but did not hear back
- Contact 2: Moorpark College Alumni currently in psychology research labs at UCLA (Felicity Gutierrez and Kathleen Lamarque-Navarette)
    i. Students discussed internship either in person or via email with faculty advisors at UCLA. Professors either did not reply to the emails or communicated that at least at this point they do not have time to get involved with the internship program. After piloting the PREP internship at CSUCI, I will reach back out to the UCLA professors that expressed interest in collaborating in the future.

CLU

- Contact: Dr. Jodie Kokur (Professor of Psychology)
- Like the Department Chair at CSUN, Dr. Kokur communicated regretfully that their faculty were at capacity mentoring CLU students, so they would not be able to serve as professional contacts for Moorpark College Psychology research interns.
    a. In the meeting, Dr. Kokur informed me that they have

existing research programs such as SURFS (Summer Undergraduate Research Fellowships) that Moorpark College students transferring to CLU could get involved.

i. Dr. Kokur and I are going to hold an annual Bridging Moorpark College and CLU event in which Dr. Kokur will share with Moorpark College psychology faculty all of the programs, events, resources available to CLU psychology students

IV. Discoveries from Networking with Psychology Faculty at Local Universities

Discovery 1: After completing the Introduction to Behavioral Neuroscience course through CSUCI, I realized I thoroughly enjoy this topic and want to learn more.

Response to Discovery 1:

1a) Not only am I committed to including more behavioral neuroscience principles/findings into my current courses (Introduction to Psychology and Introduction to Behavioral Research Methods), I have decided to teach Introduction to Behavioral Neuroscience at Moorpark College in Fall 2021

1b) I joined the following online group: *Teaching Resources for Biological Psychology*, which allows me to network with Biological Psychology at two-year and four-year colleges across the nation

1c) I attended an online two-day Neuroscience Teaching Conference hosted by the Teaching Resources for Biological Psychology organization. This conference: 1) informed me of core concepts for undergraduate neuroscience students; 2) provided me with concrete ideas on how to help historically underrepresented groups succeed in STEM courses: 3) allowed me to network with instructors all over the world in which I got a number of assignments to help students understand particularly difficult behavioral neuroscience concepts; and 4) provided me with ideas on how I can include current neuroscience research into my class without overwhelming my students

1d) I now subscribe to Neuroscience News Science Magazine, a credible online science magazine, which allows me, on a regular basis, to read free research articles on behavioral neuroscience-related topics, which I will incorporate into my classes

Discovery 2: Our local universities have a number of established programs to help transfer students successfully transition and gain research opportunities. For example:

2a) CSUCI has TLC (Transfer Learning Community), a major focus of this program is to provide

transfer students with research and internship opportunities early in their transfer experience.

2b) CLU has SURF (Summer University Research Fellowship) in which CLU undergraduate students receive one-on-one research mentorship from a faculty member over the summer.

2c) CSUN has the CAPS (Community for Achievement in Psychological Sciences) program in which students are assigned to peer mentors (Senior Fellows) who can inform and direct students to departmental resources including research labs and faculty mentors

Response to Discovery 2: I will serve as a liaison between the Moorpark College Psychology program and the Psychology departments at CSUCI, CLU, CSUN

2a) The Career-Transfer Center does an excellent job in keeping Moorpark College students aware of what our local universities have to offer. However, students often talk to their instructors as well about their transfer plans. Therefore, it is important that Moorpark Psychology instructors also be aware of the opportunities available to our students so we can communicate them to our students when they come to us with questions

2b) Psychology faculty who serve as program directors at the local four-year universities are often willing to discuss the needs of Moorpark College transfer students and to take those needs into consideration when deciding on how to structure their programs in the future. Hopefully, this will increase the likelihood that Moorpark College transfer students will encounter programs that meet their needs when they start their four-year universities.

2c) Psychology faculty who serve as program directors at our local transfer schools may be willing to open their programs up to Moorpark College students even before they transfer to that school. For example, Dr. Elise Fenn has modified CAPS (Community for Advancement of the Psychological Sciences) so that Moorpark College students can be CAPS fellows if they are considering transferring to CSUN.

Discovery 3: The Psychology Departments at our local universities (CSUN, CSUCI, UCLA, CLU) have communicated that their faculty are at full capacity providing students in their own departments with research opportunities.

Response to Discovery 3:

3a) Even though CSUCI is willing to take on 3-5 Moorpark College interns, I have crafted an internship program (PREP: Psychological Research Exploration Program) (see Appendices D & E) that will provide Moorpark College students with the benefits of a research internship while requiring limited time and resources on behalf of the CSUCI psychology faculty. Hopefully, once this program is

established, faculty at other schools will see the feasibility and advantages of the program and decide to collaborate.

3b) As discussed in my sabbatical proposal (see Appendix A), there are well-established advantages to undergraduates having research opportunities. However, Moorpark College does not have an IRB, which limits our ability to conduct research on our campus, and research opportunities at our local four-year universities are extremely limited for community college students. Therefore, a substantial number of psychology students may get only limited hands-on research experience while at Moorpark College.

Given this, I decided to create the Research Proposal Project assignment (see Appendix F: Research Project Proposal Project Overview, pp. 39-44) that I will use in my Introduction to Behavioral Research Methods course and share with all the other instructors who teach the same course at Moorpark College. The purpose of this assignment is multi-fold, but a major emphasis is on helping students gain the knowledge and skills necessary to secure a research internship and/or research assistant position so that immediately upon transfer, or even the summer before they transfer, they will be able to successfully reach out to psychology faculty at four-year universities for one-on-one research mentorship opportunities.

Appendix A: Sabbatical Proposal

Sabbatical Proposal for Julie Campbell Full-Time Tenured Faculty- PsychologyNovember 1, 2019

Overview

The following is a Sabbatical Project Proposal for **Julie Campbell**, Psychology Instructor atMoorpark College. My last sabbatical was taken in Spring 2013.

I am proposing a year-long (2020-2021) sabbatical with two primary objectives, which are independent but do have a degree of overlap: 1) to refine and update my knowledge of BiologicalPsychology/Neuroscience and related subfields such as Cognitive Neuroscience, Social Neuroscience, and Affective Neuroscience and 2) to establish relationships with researchers in the field of Psychology as well as related subfields such as Social Neuroscience and Affective Neuroscience at local four-year colleges so I can continue building research internship opportunities for Moorpark College students.

Faculty Background/Rationale and Related Research

Objective 1: *Refine and update my knowledge of Biological Psychology/Neuroscience andrelated subfields such as Cognitive Neuroscience, Social Neuroscience, and Affective Neuroscience.*

I have been a full-time Psychology Instructor with Moorpark College since 2005-2006. I earnedmy MA in General-Experimental Psychology from California State University, Northridge (CSUN) in 2003 and my Ph.D. in Cognitive Psychology from the University of California, SantaBarbara (UCSB) in 2007.

Since I began studying Psychology in 1999, the field has shifted greatly, with greater focus and resources being devoted to the interplay between Biology and Psychology. With that being said,the idea of a relationship between these two fields is not new. In 1875, William James, whom many in the field consider the father of Psychology, taught one of Harvard University's first

courses in psychology, “The Relations between Physiology and Psychology” (Harvard University Website, 2018).

However, before brain imaging techniques became more readily available, our knowledge of the Biology/Psychology relationship came primarily from animal studies and the haphazard injuries incurred by human beings (Baars & Gage, 2013). Since the advent and more regular use of brain imaging techniques such as EEGs, PET scans, MRIs and fMRIs in psychological research, the field’s focus and investment in the relationship between Neuroscience and Psychology has exploded. In 1993, the number of published articles citing functional magnetic resonance imaging (fMRI) was fewer than 20. In 2003, that number was nearly 1800. (Berman, Jonides, & Nee, 2006). The more the field of Psychology learns about Neuroscience, the more the field asserts that all behaviors and mental processes are simultaneously biological (Myers, 2004).

Unfortunately, because fMRI technology was so new and therefore expensive, the University of California, Santa Barbara did not get an fMRI machine until a few years after I graduated with my Ph.D. Furthermore, since I was not a Psychology major as an undergraduate nor was my emphasis in graduate school Behavioral Neuroscience, I have never taken a class in Biological Psychology. This was not a concern until more recently due to the widespread use of brain imaging techniques in our understanding of behaviors and mental processes.

Since completing my degree, to stay current in my field, I have continued to read articles and books regarding psychological processes, especially sources with a strong emphasis in Neuroscience. Due to this, I am aware that many new sub-fields focused on the relationship between psychological processes and Neuroscience are continually developing and growing such as 1) Cognitive Neuroscience, which examines the biological processes and aspects that underlie cognition with a specific focus on the neural connections in the brain that are involved in mental processes; 2) Developmental Cognitive Neuroscience, which is devoted to understanding psychological processes and their neurological bases in the developing organism; 3) Affective Neuroscience, which examines the neural mechanisms of emotion; 4) Social Neuroscience, which examines the relationship between biological systems and social processes. Social Neuroscience uses biological concepts and methods to inform and refine theories of social

processes and behavior; and 5) Clinical Neuroscience, which focuses on the fundamental mechanisms that underlie diseases and disorders of the brain and central nervous system. Clinical Neuroscience seeks to develop new ways of diagnosing such disorders and of developing novel treatments.

The field of Psychology is in an exciting time. Many Psychological theories can now be tested empirically due to the advances in brain scanning techniques. Some in the field say that Psychology is experiencing now what the field of Biology experienced at the advent of the microscope or what Astronomy experienced at the advent of the telescope.

As our understanding of the relationship between biology and psychological processes increases, not only do psychologists teaching Behavioral Neuroscience need an understanding of Neuroscience but psychologists from all sub-fields as well. For example, to fully understand attachment, development, memory, emotion, psychological disorders, social processes (all topics discussed in an Introduction to Psychology class), the instructor must have a fairly extensive understanding of Neuroscience including the research methodology that Neuroscientists use to study the relationship between biology and psychological processes. This understanding allows psychologists to critically examine studies to ensure that claims made are justified based on the research methodology utilized. As important, it allows psychology instructors to empower their students with the tools necessary to critically evaluate claims based on brain scanning technology, which is extremely important given that Neuroscience claims are regularly being used as support for changes in psychological treatments, educational practices, and social policy.

Neuroscientists at Moorpark College have brought to the Psychology department's attention that it would be extremely beneficial if students had more of a framework in research methodology prior to taking Introduction to Behavioral Neuroscience (PSY M02) so they can spend less time on methodology and more time on content. This is such a consideration that the Psychology Department is seriously considering renumbering our Psychology courses so that Introduction to Behavioral Research Methods, currently PSY M06, will be changed from PSY M06 to PSY M02 and Introduction to Behavioral Neuroscience will be changed from PSY M02 to a higher course number than PSY M02 to encourage students to complete Introduction to Behavioral Research

Methods prior to enrolling in Introduction to Behavioral Neuroscience. Since I regularly teach Introduction to Behavioral Research Methods, strengthening my understanding of research methodology in Neuroscience will allow me to more effectively prepare students for Introduction to Behavioral Neuroscience.

In summary, since completing my graduate education, the field of Psychology is shifting increasingly to an emphasis on the relationship between Psychology and Neuroscience. Therefore,to stay current in my field, I feel that I must get a solid grasp on the basics of Neuroscience as well as on the current findings in this area.

To meet these goals, as part of my sabbatical, I will enroll in a three-unit undergraduate course in Biological Psychology at a local community college. For example, a local community college offers the following three-unit course: Biological Psychology: Course Description: Students are introduced to the scientific study of the physiological and neuroanatomical underpinnings of behavior and mental processes through discussion of research investigating core introductory psychology topics. Nature (genetics/biology) and nurture (life experiences/culture/evolution), nervous system structure, function and development, axonal and synaptic transmission, psychopharmacology, behavioral neuroscience and neuropsychological research methods, sensation, perception, consciousness, motivation, vision, sleep and biological rhythms, hormones and reproductive behavior, emotions and stress, ingestive behavior, learning, memory, communication, neurological as well as psychopathological disorders are discussed.

While developing a broad understanding of the field, I will also meet regularly with Neuroscientists at Moorpark College as well as with Neuroscientists at local four-year colleges such as CSUN to compile a reading list of seminal articles in the field of Neuroscience as well as more current articles that discuss in greater detail empirical studies pertaining to sub-fields of neuroscience such as Cognitive Neuroscience, Affective Neuroscience, and Social Neuroscience, etc.

Not only will having a more refined and updated knowledge base of Biological Psychology, Neuroscience, and related sub-fields help me to better teach my courses, but it will also allow me tomore effectively network with a wider range of psychologists including those in Neuroscience departments. This will enable me to expose students at Moorpark College to a wider range of contacts, which has an exciting potential to increase transfer success.

Objective 2: *Establish relationships with researchers in the field of psychology as well as related subfields such as Social Neuroscience and Affective Neuroscience at local four-year colleges so I can continue building research internship opportunities for Moorpark College students.*

Research overwhelming supports empirical research opportunities at the undergraduate level. It helps students while in their undergraduate programs, in their careers, and in graduate school. The Council on Undergraduate Research (2011) has identified many benefits to participating in undergraduate research including enhanced student learning, increased retention, increased enrollment in graduate education, and effective career preparation.

In 2014, the National Association of Colleges and Employers (NACE) surveyed hiring managers and asked them to indicate what skills they desired in 2015 graduates. The top five skills included the ability to: work in teams; make decisions; communicate with others; plan, organize and prioritize work; and obtain and process information (Adams, 2014), all skills reinforced by conducting empirical research.

Furthermore, undergraduate research facilitates mentoring relationships. When conducting research, undergraduates often work one-on-one with faculty mentors, allowing them to get individualized instruction which is so rare for most undergraduates at research institutions (Brown, 2013). This one-on-one attention has the potential to not only strengthen students' academic skills but also make students feel nurtured, a key component identified in promoting student success.

Because of the well-established advantages of undergraduate research opportunities, for many years, the Psychology Department at Moorpark College has included creating research opportunities for Moorpark College students as a primary goal in their program plans. However, because psychological research involves human participants, an IRB (Institutional Review Board) would need to be in place before conducting empirical research on this campus. Through much investigation among the faculty in the Psychology Department, the Department has realized that establishing and maintaining an IRB is extremely time consuming and labor intensive. Therefore, the Psychology Department has decided it would be more realistic for Moorpark College students to get research experience at local four-year institutions. Furthermore, interning with researchers at local four-year universities would allow Moorpark College students to establish relationships with professors at schools where they may transfer, allowing for a more successful transition to four-year schools.

The Psychology Department understands that setting up internship opportunities with local four-year institutions would be complex and time consuming, which is why I am seeking a sabbatical to accomplish this goal. I feel that I have the skill set to successfully set up research opportunities for Psychology students at Moorpark College. As previously mentioned, I have a MA in General-Experimental Psychology. While in graduate school, I taught upper-division research labs in the Psychology Department at UCSB, and as previously mentioned, I have taught Introduction to Behavioral Research Methods (PSY M06) at Moorpark College for over ten years. Finally, throughout my tenure at Moorpark College, I have mentored students in research endeavors whenever possible.

In 2017, I completed the Faculty Advisor Training through the Career Transfer Center at Moorpark College. In Spring 2018, a Moorpark College research analyst, who, fortunately, had collected a wealth of data with IRB approval at a four-year college prior to coming to Moorpark College, and I collaborated to create research internship opportunities for three students in my Honors Introduction to Psychology (PSY M01H) class. The research analyst functioned as the worksite supervisor and I as the faculty advisor. As part of the internship, the students generated novel hypotheses informed by an extensive literature review and ran statistical analyses to

determine the outcome of their predictions. I am happy to report that two of the three interns that semester went on to present their projects at the CC2PHD (Community College to Ph.D.) research conference hosted by UCLA.

Throughout the 2018-2019 academic year, the research analyst and I collaborated again to offer three more psychology students research internships. In spring 2019, two of the interns were selected to present their research projects at the annual Western Psychological Association conference in Pasadena, CA. Both of those interns have now successfully transferred to UCLA.

In fall 2019, the research analyst that I had collaborated with was offered a full-time teaching position and is no longer able to work with Moorpark College students. Regrettably, this semester, I had to inform eager students that research internships were not currently available.

In order to establish more research opportunities for Moorpark College students, throughout my sabbatical, I would 1) network with researchers at local four-year universities; 2) establish a pool of researchers at local four-year universities who would be interested in partnering with Moorpark College in establishing research internships for Moorpark College students in their research labs; and 3) establish a manual for potential Moorpark College faculty advisors as well as potential research supervisors at the local four year universities. The manual would include 1) a list of interested researchers at four-year institutions; 2) a how-to on becoming a faculty advisor through the Career Transfer Center at Moorpark College; 3) examples of student learning objectives/outcomes for research interns; 4) suggested ways in which Moorpark College interns could be involved in a research lab at four-year universities; and 5) examples of potential culminating internship projects.

Proposed Sabbatical Timeline:

August - December:

- **Complete Biological Psychology course at local community college**
    - Deliverable
        - Passing grade of C or better as verified by transcripts

- **Meet with neuroscientists at Moorpark College as well as at local colleges on a regular basis.** Meetings would involve 1) compiling a list of seminal works in neuroscience as well as more current research in the field and 2) discussing the works/research in-depth as I am reading them. **This would be similar to preparing for a comprehensive examination for a graduate level program.**
    - Deliverable:
        - 1) Create electronic file of readings as well as a summary of each reading
            - The electronic file would be made available to all Psychology faculty on the Moorpark College Psychology Department's Canvas shell
- **Summarize recent empirical studies suitable for undergraduate students that utilize brain scanning techniques, so, if desired, other Moorpark College psychology instructors could integrate the study(ies) into their undergraduate psychology course(s)**
    - Deliverable:
        - 1) Create electronic file of summarized empirical articles for Psychology faculty at Moorpark College
            - The electronic file would be made available to all Psychology faculty on the Moorpark College Psychology Department's Canvas shell
- **Whenever possible, visit local neuroscience labs so I can apply the knowledge gained through reading to a physical brain, neuron, etc.**
- **Research sub-fields in Biological Psychology/Neuroscience such as Cognitive Neuroscience; Developmental Cognitive Neuroscience; Affective Neuroscience; Social Neuroscience; and Clinical Neuroscience**
    - Deliverable:
        1) Develop a handout that could be used in psychology classes as well as at career/transfer events for psychology majors:
            1) summarizes the focus of the different sub-fields

2) list four-year research universities with faculty that adhere to the particular subfields

- An electronic version of the handout would be made available to all Psychology faculty on the Moorpark College Psychology Department's Canvas shell

January – May

- **Meet with faculty from different psychology sub-fields conducting research at local four-year universities (e.g., CSUN, CSUCHI, CLU, UCLA, and UCSB) with the hopes of establishing a working relationship between those researchers and the Psychology Department at Moorpark College.**
    - Deliverable:
        - 1) Create electronic file that lists the researchers and their respective research interests who are interested in partnering with Moorpark College to form research opportunities for Psychology students
            - The electronic file would be included in the Research Internship Manual for Moorpark College Psychology Instructors

- As previously discussed, I would establish a manual for potential Moorpark College faculty advisors as well as potential research supervisors at the local four-year universities. The manual would include 1) a list of interested researchers at four-year institutions; 2) a how-to on becoming a faculty advisor through the Career Transfer Center at Moorpark College; 3) examples of student learning objectives/outcomes for research interns; 4) suggested ways in which Moorpark College interns could be involved in a research lab at four-year universities; and
5) examples of potential culminating internship projects.

<u>Benefits to Sabbatical Recipient, Students, College, and District</u>

- Benefit to Sabbatical Recipient:

1) Since earning my Ph.D. over ten years ago, I have continued reading to keep current in the field of Psychology. However, as previously discussed, the field is rapidly changing and expanding. Being granted a year-long sabbatical would give me the time to update my

knowledge base of Neuroscience as it pertains to psychological processes, read primary sources in this area, and, potentially, see first-hand the current developments in research labs.

2) It would give me the opportunity to travel to local research intuitions to network with current researchers in Psychology as well as in related sub-fields such as Cognitive Neuroscienceand Affective Neuroscience to create potential research internship opportunities for Moorpark College students.

3) It would allow me to create a manual for a Research Internship Program for Psychology students in the hopes that it would encourage more Psychology faculty at Moorpark College as well as at four-year research institutions to function as advisors

- Benefit to Students, College and District:

Because the mission statements of Moorpark College and Ventura County Community College District are heavily student centered (see mission statements below), in the hopes of not being redundant, I will simultaneously discuss the potential benefits of this sabbatical project to Moorpark College students, Moorpark College, and the District. Fortunately, the benefits that students receive from this project will also serve to benefit the college and district by enabling them to meet their missions.

- **District Mission Statement**

  Ventura County Community College District provides **students**, in its diverse community, with access to comprehensive **quality educational opportunities** that support **student learning** and **student success**.

- **Moorpark College Mission Statement:**

  With a "**students first**" philosophy, Moorpark College empowers its diverse community of learners to complete their **goals** for **academic transfer**, basic skills, and career technical education.

- It would allow me, faculty in my department, and faculty across campus to better support student learning and student success thereby increasing the likelihood that students would complete their academic transfer goals:
  - 1) I would include Biological Psychology/Neuroscience information gleaned during my sabbatical into the curriculum of each of the psychology classes I currently teach 1) Introduction to Psychology, 2) Honors Introduction to Psychology and 3) Introduction to Behavioral Research Methods through

lecture material, handouts, and relevant empirical studies. This current information would allow students to be competitive when they transfer to four-year research universities.

- 2) I would also share the Biological Psychology/Neuroscience information gleaned from this sabbatical with colleagues in my department by creating an electronic file on our Psychology Department Canvas shell with any handouts produced or empirical studies summarized, allowing faculty across the department to update their knowledge base in the field
- 3) I would share Biological Psychology/Neuroscience information gleaned during my sabbatical with Moorpark College students not necessarily enrolled in a Psychology class but nonetheless interested in Psychology by creating a presentation for the Moorpark College Psychology Club for which I am currently the faculty advisor
- 4) If invited, I would be happy to do a flex presentation for faculty across campus based on the Biological Psychology/Neuroscience information gleaned from my sabbatical project
- 5) Networking and establishing relationships with researchers at local four-year universities while on sabbatical will allow me to create potential research opportunities for Moorpark College psychology students thereby making Moorpark College students more competitive when transferring.

Thank you for your time and consideration. Please let me know if you have questions or need further information.

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Appendix B: Unofficial CSUCI Transcripts

UNOFFICIAL FOR ADVISING

July 30, 2021
Page 1 of 1

California State University Channel Islands
One University Drive
Camarillo, CA 93012
United States

Name : Julie Campbell
Student ID: 003343164

Beginning of Postbaccalaureate Record

Fall 2020

Program: Postbaccalaureate Ext (Credit)
Plan: PB Extension (Credit) Major

Course		Description	UA	UG	UE	GR	GP
PSY	314	Behavioral Neuroscience	4.000	4.000	4.000	A+	16.000
Course Attributes:		Upper Division Lab Fee $15					
Instructor:		Barbara Thayer					

			UA	UG	UE	GP
Term GPA	4.000	Term Totals	4.000	4.000	4.000	16.000
Cumulative GPA	4.000	Cumulative Totals	4.000	4.000	4.000	16.000
CSUCI GPA	4.000	Cum Totals	4.000	4.000	4.000	16.000

In Fall 2020, the impact of the coronavirus pandemic (COVID-19) led to a decision to provide primarily remote and virtual learning, as well as temporary changes in university academic/grading policies.

Postbaccalaureate Career Totals

CSUCI GPA:	4.000	Cum Totals	4.000	4.000	4.000	16.000
Transfer Cum GPA		Transfer Totals	0.000	0.000	0.000	0.000
Cumulative GPA	4.000	Comb Totals	4.000	4.000	4.000	16.000

End of **UNOFFICIAL FOR ADVISING**

KEY: **UA** – Units Attempted **UE** – Units Earned **UG** – Units Graded **GR** – Grade **GP** – Grade Points **GPA** – Grade Point Average **UT** – Units Transferred

Appendix C: What is Behavioral Neuroscience? Handout

What is Behavioral Neuroscience?

Because the topic is so vast, neuroscience (the scientific study of the nervous system) is divided into subdisciplines. One subdiscipline, **behavioral neuroscience**, relates behavior to bodily processes. Behavioral neuroscience is also known as biological psychology or physiological psychology (Watson & Breedlove, 2021).

What Are Some Subfields of Neuroscience/Behavioral Neuroscience?

Affective Neuroscience: This subfield addresses the brain mechanisms underlying emotions. (APA Dictionary, 2020). **Featured Local Researcher Examining Affective Neuroscience Topics:** Hongbo Yu, UCSB: Dr. Yu combines behavioral experiments, neuroscience, and computational modeling to understand the relationship between emotion (e.g., guilt, gratitude) and morality and their neural representations. **Additional Local Researchers Examining Affective Neuroscience Topics:** Avi Adhikari, UCLA; Antonio Damasio, USC; Michael Fanselow, UCLA; Beatrice de Oca, CSUCI

Clinical Neuroscience: This subfield couples basic neuroscience data and the scientific method with such fields such as clinical psychology, psychiatry, and neurology in order to better understand the neural underpinnings of mental and nervous system disorders and to improve their diagnosis and treatment (APA Dictionary, 2020). **Featured Local Researcher Examining Clinical Neuroscience Topics:** Tod Kippin, UCSB: Examines the factors that lead to drug addiction and the impact of substance abuse on the brain. **Additional Local Researchers Examining Clinical Neuroscience Topics:** Katherine H. Karlsgodt, UCLA; Pamela Kennedy, UCLA; Gregory A. Miller, UCLA; Lara Ray, UCLA; Cindy Yee-Bradbury, UCLA

Cognitive Neuroscience: This subfield is concerned with specific neural mechanisms by which mental processes (e.g., memory, decision making,

etc.) occur in the brain and is grounded in such areas as experimental psychology, neurobiology, brain imaging techniques, physics, and mathematics (APA Dictionary, 2020). **Featured Local Researcher Examining Cognitive Neuroscience Topics:** Irving Biederman, USC: Dr. Biederman's core mission is to understand how we get mind from brain. He and his team concentrate on 1) how a scene, object, or face can be recognized in a fraction of a second, even when we have never encountered that image previously and 2) the neural basis of perceptual and cognitive pleasure, based on a gradient of opioid receptors in the same pathway by which image understanding is achieved. **Additional Local Researchers Examining Cognitive Neuroscience Topics:** Hanna Damasio, USC; Miguel Eckstein, UCSB; Barbara Knowlton, UCLA; Hakwan Lau, UCLA; Jesse Rissman, UCLA

Developmental Neuroscience: This subfield examines how the brain/larger nervous system grow and change, from conception through adulthood, enabling scientists to describe and understand a range of developmental disorders. It also offers clues about how and when neurological tissues regenerate. (https://www.medicalnewstoday.com/articles/248680) **Featured Local Researcher Examining Developmental Neuroscience Topics:** Adriana Galvan, UCLA: Dr. Adriana Galván's research focuses on characterizing neural mechanisms underlying adolescent behavior with the goal of informing policy (e.g. juvenile justice). Using a multimodal approach that combines brain imaging, task-based behavior, physiological assays, and daily diary methods, her current research addresses a number of questions including the following: 1) How do neurodevelopmental changes in cortical and striatal systems subserve characteristic adolescent behaviors, including decision making, reward sensitivity and risk-taking, and learning? and 2) How do neural changes differ between typically and atypically developing adolescents? **Additional Local Researcher Examining Developmental Neuroscience Topics** Darby Saxbe, USC

Social Cognitive Neuroscience: This subfield infuses social psychology with brain science methodology in the hopes of deciphering how the

brain controls cognitive processes (e.g., memory and attention) that influence social behaviors (e.g., stereotyping, attitudes, and self-control) (https://www.apa.org/monitor/jan02/frontier.html) **Featured Local Researcher Examining Social Cognitive Neuroscience:** Matthew Lieberman, UCLA: Dr. Lieberman's lab uses functional magnetic resonance imaging (fMRI) to examine the neural bases of social cognition and social experience. In particular, the lab examines the neural bases of social cognition, persuasion, emotion regulation, and social factors related to education. **Additional Local Researcher Examining Social Cognitive Neuroscience Topics:** Naomi Eisenberger, UCLA

Reference: Watson, N. V., & Breedlove, S. M (2021). *The mind's machine: Foundations of brain and behavior* (4 edition). Oxford University Press.

Appendix C: PSY M80

Moorpark College PREP (Psychological Research Exploration Program) Internship: Learning Objectives

PSY M80
Moorpark College PREP (Psychological Research Exploration Program) Internship
Spring 2022
Learning Objectives

Below are suggested learning objectives for the PREP internship. Please feel free to copy and paste these objectives onto the Learning Objective Agreement form.
The learning objectives are flexible if the modifications meet the goals of the internship and are satisfactory to the CSUCI professional contacts.
If you have questions about modifying the learning objectives, please feel free to contact Julie Campbell at jcampbell@vcccd.edu.

Objective #1:
What will I accomplish? I will identify topics of psychological research that interest me.
How will I accomplish? When? 1) I will investigate the research areas of psychology faculty at colleges/universities, identifying faculty members whose research interests are in line with mine. (To be completed by week 5 of internship).
Documentation of Objective (i.e., List, chart, journal, outline): Table and written reflection (see Handout 5 for more details)
How will it be evaluated and by whom? Moorpark College faculty advisor will review completed table and reflection

Objective #2:
What will I accomplish? I will develop skills to help me secure and succeed in future positions as a research intern or research assistant (RA) in the field of psychology
How will I accomplish? When?

- 2a) I will learn to search PsycARTICLES for empirical journal articles at APA workshop (to be completed by week 2 of internship)
- 2b) I will learn the basic structure/organization of APA-style empirical articles (to be completed by week 2 of internship)
- 2c) I will craft and send professional email to psychological researcher (to be completed by week 3 of internship
- 2d) I will send professional thank you email to psychological researcher (to be completed by week 9 of internship)
- 2e) I will explore different professional psychological organizations and the potential benefits of joining organizations of interest to me (to be completed by week 10 of internship)
- 2f) Craft/update a curriculum vitae (CV) (to be completed by week 10 of internship)

Documentation of Objective (i.e., List, chart, journal, outline)

- 2a) Signed attendance sheet from APA workshop
- 2b) Printed copy of empirical article from PsycARTICLES with different components of the article identified
- 2c) Printed copy of email to psychological researcher
- 2d) Printed copy of thank you email to psychological researcher

- 2e) Written description of professional psychological organizations of interest and potential benefits associated with joining those organizations

How will it be evaluated and by whom?

- 2a) APA workshop leader will sign attendance sheet, indicating intern completed workshop
- 2b) APA workshop leader will review empirical article to ensure specified components were properly identified
- 2c) Moorpark College faculty advisor will review printed copy of email to psychological researcher
- 2d) Moorpark College faculty advisor will review printed copy of thank you email to psychological researcher
- 2e) Moorpark College faculty advisor will review written description of professional psychological organizations as well as the potential benefits of joining those organizations

Objective #3:

What will I accomplish? I will gain first-hand exposure to psychological research and researchers

How will I accomplish? When?

- 3a) I will explore research interests of CSUCI professional contact (to be completed by week 3 of internship)
- 3b) I will analyze at least one empirical article assigned by my CSUCI professional contact (to be completed by week 9 of internship)
- 3c) I will visit/tour the research lab of my CSUCI professional contact (to be completed by week 7 of internship)
- 3d) I will interview my CSUCI professional contact to learn more about their career path (to be completed by week 9 of internship)
- 3c) I will attend a research talk (to be completed by week 10 of internship)

Documentation of Objective (i.e., List, chart, journal, outline): Table and written reflection (see Handout 5 for more details)

- 3a) Written description of research interests of CSUCI professional contact
- 3b) Written analysis of at least one empirical article assigned by CSUCI professional contact
- 3c) Written summary of research talk
- 3d) Written summary/reflection of lab visit (may contain pictures if granted permission)
- 3e) Written summary of interview responses

How will it be evaluated and by whom?

- 3a) Written description research interests of CSUCI professional contact will be reviewed by Moorpark College Faculty Advisor
- 3b) Written analysis of at least one empirical article assigned by CSUCI professional contact will be reviewed by Moorpark College Faculty Advisor

- 3c) Written summary of research talk will be reviewed by Moorpark College Faculty Advisor
- 3d) Written summary/reflection of lab visit will be reviewed by Moorpark College faculty advisor
- 3e) Written summary of interview responses will be reviewed by Moorpark College faculty advisor

Appendix E: PSY M80

Moorpark College PREP (Psychological Research Exploration Program) Internship Detailed Timeline

Moorpark College PREP (Psychological Research Exploration Program) Internship

Spring 2022

Detailed Timeline for Interns

***As well as the items listed in this timeline, be sure to complete all activities, assessments, etc. included in the Canvas course shell for PSY M80.**

	Handouts to Be Completed <u>Before</u> Attending a Meeting/Starting a Particular Handout	**Completion Date (See *Corresponding Dates* handout for calendar dates)**	**Estimated Time to Complete**
Application/Interview		Fall 2021	2.5 hours
***Attend Internship Course Orientation** (See Welcome Letter for date, time, and location)	None	Week 1 of internship	1.5 hours
***Email faculty advisor to schedule Faculty Advisor Meeting (FAM) #1** (See Welcome Letter for instructions)	None	Week 1 of internship	0.5 hour
***Faculty Advisor Meeting (FAM) #1:** (Review Learning Objectives & Intern Handouts; Discuss grading criteria; Schedule dates for FAM #2 & #3; Email CSUCI Professional Contact necessary	None	Week 2 of internship	1 hour

paperwork to be signed: Employer Acknowledgement Letter; Learning Objectives Agreement (see *Handout A* for instructions) **Date of FAM #1:**			
***Intern Handout 1** (*Reflection Journal*)	N/A	Weeks 2-11 of internship	~ 0.5 hour/wk (5.5 hours total)
***Intern Handout 2** (*APA Workshop: Learn to Search PsycARTICLES and Analyze an Empirical Journal Article*) (See Welcome Letter for date, time, and location)	None	Week 2 of internship	1.5 hours
***Intern Handout 3** (*My CSUCI Professional Contact's Research Interests*)	None	Weeks 2-3 of internship	1 hour
***Intern Handout 4** *(Email Your CSUCI Professional Contact: Introduction and Scheduling* (Lab Visit; Professional Development Interview; Mid-Semester Site Meeting) *	Intern Handouts 2 & 3	Week 3 of internship	0.5 hour

*__Intern Handout 5 (__*Exploring My Research Interests*)	Intern Handouts 2	Weeks 3-5 of internship	4 hours
***Intern Handout 6** (*Analyzing Article from CSUCI Professional Contact*) **(Please do not hesitate to meet with faculty advisor for assistance with this step)**	Intern Handouts 2 & 3	Weeks 3-6 of internship	**12 hours** **(Be prepared to spend a good amount of time on this handout)**
***Intern Handout 7** (*Attend a Research Talk*)	Intern Handouts 2, 3 & 5	Weeks 4-10 of internship	4 hours
<u>*Faculty Advisor Meeting (FAM) #2</u> - Review *Reflection Journal* including Intern Handouts 2-6 (& 7 if completed); share dates for CSUCI lab visit & Professional Development Interview; confirm dates for Mid-Semester Site meeting & FAM #3 **Date of FAM #2:**	***Reflection Journal* will be reviewed including *Intern Handouts 2-6* (and 7 if completed) by faculty advisor**	Weeks 4-7	1 hour
***Intern Handout 8**	Intern Handouts	Weeks 5-7	4 hours

(*CSUCI Lab Visit*) **Be sure to confirm dates for Professional Development Interview and Mid-Semester Site Meeting** **Date of CSUCI Lab Visit:**	3, 4, & (ideally 6)	(ideally) (Dates are flexible depending on CSUCI Professional Contact's schedule)	
***Intern Handout 9** (*Analyzing Reading 2 from CSUCI Professional Contact*) **(Please do not hesitate to meet with faculty advisor for assistance with this step)**	Intern Handouts 2, 3, 4, & 6	Weeks 5-9	**12 hours** **(Be prepared to spend a good amount of time on this handout)**
***Intern Handout 10** (*CSUCI Professional Development Interview & Questions* (Lab Visit/Readings))	Intern Handouts 2, 3, 4, 6, 8, & (ideally 9)	Weeks 5-9 (ideally) (Dates are flexible depending on CSUCI Professional Contact's schedule)	2 hours
***Intern Handout 11** (*Thank Your CSUCI Professional Contact*)	Intern Handouts 3, 4, 5, 6, 8, (ideally 9), & 10	Weeks 5-9	0.5 hours
***Intern Handout 12** (*Mid-Semester Site*	Intern Handouts 2, 3, 6,8, 9, 10, & 11	Weeks 6-10	0.5 hours

Visit) (via email) **Date of Mid-Semester Site Visit:**			
***Intern Handout 13** *(Professional Organizations for Psychologists)*	Intern Handouts 2, 3, 4, 5, 6, 7, 8, 9, & 10	Weeks 6-10	3 hours
*** Intern Handout 14** (*Completing Final Paperwork and Getting Signatures*) (Email CSUCI Professional Contact completed final paperwork for signatures: *Learning Objective Evaluation Professional Contact and Work Experience Internship Timesheet*))		Weeks 7-10	0.5 hours
*** Intern Handout 14** (*Curriculum Vitae*)	Intern Handouts 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, & 13	Week 10	2 hours
<u>*Faculty Advisor Meeting (FAM) # 3:</u> Review *Reflection Journal* including Handouts 7 (if not reviewed at FAM 2), 8, 9, 10, 11, 12, 13,14, & 15); complete *Work*		Weeks 10-12	1 hour

Experience Internship Learning Outcomes Evaluation Faculty Advisor together including discussing and issuing grade points; and faculty advisor signs *Work Experience Internship Timesheet* **Date of FAM #3:**			

***As well as the items listed in this timeline, be sure to complete all activities, assessments, etc. included in the Canvas course shell for PSY M80.**

Appendix F: Research Project Proposal Overview

Research Proposal Project

Project Overview

Due Date: See attached table: *Assignment Timeline and Point Breakdown*

Total Points Possible: 50 (see attached table *Assignment Timeline and Point Breakdown*)

Assignment Purpose: The purpose of this assignment is multi-fold:

Students will:

1) gain experience in how to research psychology faculty and their respective research interests at four-year colleges/universities.
2) become familiar with the research interests of psychology faculty members at a number of colleges (Hint: This could be extremely helpful if you decide to transfer).
3) search for empirical articles through PsyARTICLES or Google Scholar.
4) gain practice in analyzing an empirical article.
5) learn how to craft a professional email to faculty regarding research interests/questions.
6) learn how science progresses by generating a conceptual or conceptual-plus-extension research idea based on selected article as part of a small group.
7) have the opportunity, as part of a small group, to present research proposal to classmates.

This assignment will be completed in steps over the course of the semester, and you will be graded along the way. Some steps will be done in class as a group, and some will be done individually outside of class. Therefore, some points will be based on individual contributions while some will be based on a group effort. Therefore, group members can earn different grades on the project.

I do not expect you to meet with your group members outside of class, so it is critical you are in class for the scheduled group project sessions (see attached *Assignment Timeline and Point Breakdown* or *Syllabus Timeline* for group project dates). **If for an unforeseeable reason you must miss one of the class sessions devoted to the project, please email your group members as soon as possible so you they can update you on what the group did as well as what you have been assigned to do.**
(cont.)

Brief Description of Assignment Components

1) **Group Assignment (Handout 1)**
    a. Students will be assigned to small groups.
2) **Group Participation Form (Handout 2)**

   a. Students will assign each of their group members participation points throughout this project.
   b. Participation points will be based on how involved (participation, effort, quality of work, etc.) each group member is throughout the project.
   c. For each group member, the final participation score is based on an average participation score received from all group members.
   d. I ask that you not share the scores you are giving with your group members. (It is ok if group members give different scores to the same group member.)

3) **Psychology Faculty Research Selection: Individual (Handout 3)**
   a. Via college/university websites, as an individual, outside of class, each group member will review the research interests of psychology faculty at different universities/colleges. (I would plan to look at faculty from at least three schools.) (Hint: you might want to consider researching faculty at schools that you would consider for transfer.)
   b. Once you find a researcher that sounds interesting to you, via PsyARTICLES or Google Scholar, you will find a **journal article of an empirical study (preferably published within the last five years)** by that researcher to present to your group members at the next group project session. (Be sure the article has an abstract since that is what your group members will read to select a study for replication.)

4) Psychology Faculty Research Selection: Group (Handout 4)
   a. As a group, you will review the abstracts from each of the studies that your group members proposed.
   b. Then, your group will select one study as the basis for a conceptual replication or conceptual-plus-extension research proposal.

5) **Article Analysis: Individual (Handout 5):**
   a. As an individual, group members will read and complete an article analysis worksheet
   b. It is not required but you may work with other group members on this portion of the project outside of class.
   c. The individual analyses will be used by the group to complete the final group article analysis.
   d. Article analysis is challenging! Individual group members, please feel free to see your instructor with questions!

6) **Final Article Analysis: Group (Handout 6):**
   a. Group members will use the group members' individual article analyses to create the group article analysis.
   b. The group will have limited class time to complete the group analysis; therefore, the quality of the group analysis, which is what will be graded, is based on the strength of the article analyses completed by the individual group member outside of class.

7) Professional Email: Group (Handout 7)
   a. As a group, a professional email to the researcher of the selected article will be crafted.

8) Research Proposal: Individual (Handout 8)

a. Individual group members will complete a research proposal worksheet, identifying whether to propose a conceptual replication or a conceptual replication-plus-extension as well as describing the major features of the proposed study.
b. It is not required but you may work with other group members on this portion of the project outside of class.
c. The individual research proposals will be used by the group in the completion of the final research proposal worksheet.
d. Developing a research proposal is challenging! Individual group members, please feel free to see your instructor with questions!

9) Final Research Proposal: Group (Handout 9)

a. Using the research proposal ideas from individual group members, the group will complete a final research proposal worksheet, identifying whether they will propose a conceptual replication or a conceptual replication-plus-extension as well as describing the major features of the proposed study.
b. The group will have limited class time to complete the final research proposal; therefore, the quality of the final research proposal, which is what will be graded, is based on the strength of research proposals completed by the individual group member outside of class.

10) Presentation: Guidelines (Handout 10)

11) **Presentation: Getting Organized (Handout 11)**

a. Following the instructions specified on the Presentation Guidelines handout, groups will prepare a presentation for their classmates, highlighting the major features of their research proposal.

12) Group Presentation

a. During the final class session, following the Presentation Guidelines handout, groups will present their research proposal to their classmates.

13) Complete Group Participation form

a. On the day of the presentations, group members will complete their Group Participation Form based on the instructions provided in Handout 2.

Assignment Timeline and Point Breakdown

	Date Handout Distributed	In-Class Group Work Time	Date Due	Completed As:	Total Possible Points
Project Overview (1/2 class)	Week 2				

Group Assignment Handout 1 (1/2 class)	Week 2	Week 2	Week 2	Group	2.5 points
Group Participation Form Handout 2	Week 2	Each Scheduled Group Project Session	Due: Day of Presentation	Individual	2.5 points
Psychology Faculty Research Selection: Individual Handout 3 (0 class)	Week 2		Week 5	Individual	5 points
Psychology Faculty Research Selection: Group Handout 4 (1/2 class)	Week 2	Week 5	Week 5	Group	2.5 points
Article Analysis: Individual Handout 5 (0 class)	Week 2		Week 8	Individual	5 points
Final Article Analysis: Group Handout 6 (3/4 class)	Week 2	Week 8	Week 8	Group	5 points
Professional Email: Group Handout 7	Week 2	Week 8	Week 8	Group	2.5 points
Research Replication: Individual Handout 8	Week 2		Week 10	Individual	5 points
Final Research Replication: Group Handout 9 (1 class)	Week 2	Week 10: 1st draft Week 12: 2nd draft	Week 10: 1st draft Week 12: 2nd draft	Group	5 points
Presentation: Guidelines Handout 10	Week 2				

Presentation: Getting Organized Handout 11 (¼ class)	Week 2	Week 12	Week 12	Group	2.5 points
Presentation: Putting it Together (1/4 class)	Week 2	Week 14	Week 14	Group	5 points
Presentations (Final session)	Week 2		Final Exam Day	Group	2.5 points
Group Participation Score			Day of Presentation	Individual	5 points