Psychology4696, Section 006, CRN 9930, Credit Hours: 3.0 – Spring 2021 Capstone in Psychology (Executive Function in Children's Learning and Development)

Class Time/location: 3:00 – 3:50PM, MWF, Weiss Hall 642

Instructor: Isabelle Chang, Ph.D.

Office: Weiss Hall Room 522

Email: <u>isabelle.chang@temple.edu</u>

Office Hours: Tuesday and Thursday: 12:00 – 1:30pm

I am available to help you succeed in this course. Office hours will be held in Weiss Hall, Room 522. Contact by e-mail is preferable. When contacting me, please use "Psych4696_006" in the subject line and remember to include your name in the email, and please allow 24-48 hours for a response to your questions or concerns. You are also encouraged to approach me at the end of class with questions or to make an appointment to discuss your questions or concerns.

Required Texts: (journal papers listed in pages 10 – 12) [All journal papers can be downloaded from Temple

library or Google Scholar.]

Prerequisites:

Students in this course must be psychology majors in their senior year with a valid Temple email address and access to Canvas. You must inform the instructor immediately if you do not meet these basic requirements.

Course Description: This course is designed as an upper-level undergraduate, writing-intensive course that looks into children's executive function (EF) (working memory, cognitive flexibility, inhibitory control, and attentional focus) as it influences their social skills, and school achievement. EF skills are the mental processes that enable us to plan, focus attention, remember instructions, and juggle multiple tasks successfully. Therefore, EF skills are crucial for learning and development. Students taking this course will be provided with an analysis of current research in EF. Critical thinking about course material and directions for future research will also be stressed. An emphasis on synthesis and application makes this capstone particularly useful for students planning graduate work in psychology or students unsure of the direction they would like to take in psychology. Each student will conduct a mini research project and test a hypothesis (or hypotheses) using data from the Early Childhood Longitudinal Study Class of 2010-11 (ECLS-K: 2011).

Learning Objectives (Integration of Knowledge)

The main objective of this capstone course is to facilitate your integration of the skills and knowledge learned systematically during your stay at Temple for the last three and half years. The course is focused on (1) refreshing what you have been taught in class by reviewing journal papers and leading seminar discussions. (2) Conducting an original study by testing your hypothesis on the Early Childhood Longitudinal Study, Kindergarten Class of 2010-11 (ECLS-K: 2011). The integrated skills and knowledge will include the theory, research methodologies, quantitative analysis, leading and participating in seminar discussions, and communication skills. The ultimate objective of the course is to enable you to transfer or apply your skills to a challenging work environment or graduate program.

Specific Goals:

By the end of this course, you will demonstrate skills necessary to:

- G1) Lead an effective discussion.
 - a) Review research papers in how children's executive function skills influence their social skills and school achievement.
 - b) Facilitate students interacting with one another using the conference format in which students can respond to each other's comments.

- G2) Develop and formulate research questions and hypotheses.
 - a) State the problem that I am examining.
 - b) Define the topic and the focus of the study.
- G3) Perform background research.
 - a) Introduce the topic of my research.
 - b) Discuss relevant prior research.
- G4) Perform the data collection procedures and instruments.
 - a) Describe participant selection (e.g., multistage sampling).
 - b) Explain the assessment procedures and how scores were estimated (e.g., using item response theory).
- G5) Test hypotheses.
 - a) Manipulate and analyze large scale data.
 - b) Select the appropriate statistical techniques to test my hypothesis.
- G6) Interpret the statistical results.
 - a) Understand and accurately report the statistical output.
 - b) Build tables and figures to represent the results.
- G7) Discuss findings.
 - a) Explain the results based on my own interpretation of the findings.
 - b) Acknowledge any study limitations (e.g., what the results cannot inform us).
- G8) Communicate the results (written).
 - a) Compose a formal report of my research to include the introduction section, purpose of the study, literature review, methodology, findings and interpretations, conclusions, and implications.
 - b) Demonstrate improvement based upon feedback and suggestions supplied by me and/or my partner in class to improve my own work.
- G9) Present the findings of my study to my classmates and the instructor (oral).
 - a) Organize a set of PowerPoint slides depicting each stage of my research.
 - b) Know my project thoroughly so that I will not rely on merely reading the slides. (Notes are acceptable.)
 - c) Exercise professional speaking and presentation skills for this capstone session.

COURSE POLICIES

Your attendance is necessary and class discussion is essential. To demonstrate that you have critically read the assigned material and thought about its implications, you should come to class prepared to express reasoned views, to ask questions about material that is unclear, to apply/relate the material to current events and other course issues, and to comment/critique on the empirical studies and methodological issues.

Class Participation

If you find it difficult to get a word in or are not used to participating and public speaking, please contact me and make me aware of your concerns. If you tend to talk a lot, remember to give others a chance. Don't simply dismiss viewpoints that conflict with your own. Respect and listen to what others have to say. Both quality and quantity are of crucial importance in seminar discussions. A useful comment goes beyond mere agreement or disagreement or simple expression of personal views:

- it reflects a consideration of issues addressed in assigned readings and previous class discussions
- it offers a unique, but relevant, perspective
- it contributes to moving the discussion and analysis forward
- it builds on other comments
- it transcends the "I feel" syndrome.

Controversial value issues have no universally agreed-upon "right" or "wrong" answers. Rather, they require informed discussion. The views you express in class or papers do **not** affect your grade. Feel free to say what you really think and to disagree with the articles, and with other students. However, a goal of this course is to improve your ability to present defensible positions. Thus, you must support your views thoughtfully, demonstrating that you understand the readings and the issues.

Assignments and Deadlines

- 1. **Journal Paper Presentation** every one of you will take a turn leading the class discussion on the assigned readings. You may use PowerPoint and utilize any multimedia you find relevant to the topics. Please upload your PowerPoint slide **link** to **share** with your classmates and me to "Journal Paper Presentation" in "Discussions." Due on the date scheduled for discussion (20 points).
- 2. **Reaction Paper** comments/reactions/reflections to the assigned article consist of five (5) pages. Due on the date scheduled for discussion. (25 points)
- 3. **Research Paper** A research paper is required (8–10 pages), due on **Monday**, **April 12**th, **2021**. All writing assignments should be in strict APA format. (50 points)
- 4. **Research Project Presentation** Share the findings from your research paper with your classmates. You can include an audiovisual aid in your presentation (e.g., PowerPoint slides, or short videos). Please upload your PowerPoint slide **link** to **share** with your classmates and me to "Research Project Presentation" in "Discussions." (20 points)
- 5. **Reflection** A nine-item reflection form in a Word document can be downloaded from Canvas. Respond to the prompts, save it, and upload it to Canvas. **Due 11:59PM, Sunday, April 18**th (10 points)
- 6. **Participation in Discussions**: Please reply to **at least five** of your classmates' journal paper presentations throughout the semester. In addition, please reply to **at least five** of your classmate's research project presentations. (20 points, 2 points each) [See rubric in "Discussions"]
- 7. **Meet and Greet**: Welcome to the course! [Details in "Discussions"] (10 points)

| Summary of Assignments | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--|
| Meet and Greet (in "Discussions") (10 points) [first week] | | |
| Reflection (10 points) [Due Sun, April 18] | | |
| Journal Paper Presentation | Research Project Presentation | |
| 1) PowerPoint slide link (share) in | PowerPoint slide link (share) in | |
| "Discussions" (20 points) | "Discussions" (20 points) | |
| Specific Goals: G1 and G9 | | |
| 2) 5-page short paper (25 points) | 2) 8 – 10-page long paper [Due Mon, April 12] (50 points) | |
| Specific Goals: G1 and G8 | Specific Goals: G1 through G8 | |
| Reply to at least five of your classmates' presentations throughout the semester (10 points) | Reply to at least five of your classmates' presentations throughout the semester (10 points) | |
| Specific Goals: G1 and G9 | | |
| Except for the completed term paper (i.e., the long paper), you will receive your grades with comments and/or suggestions in point annotations on Canvas for all other assignments within one week of the due date. | | |

Every one of you will create a mini research project and test the hypothesis (or hypotheses). Data drawn from the Early Childhood Longitudinal Study, Kindergarten Class of 2010-11 (ECLS-K: 2011) public-use file by the National Center for Education Statistics will be provided. I will test hypotheses with you individually using SPSS via Zoom and email the output in pdf to you. You are encouraged to submit your research projects to the Symposium for Undergraduate Research and Creativity (formerly TURF-CreWS). Over the last five years, more than 20 students from this Capstone course have presented their research papers at TURF.

Given the independent study nature of this course, your research topics will most likely be different from each other; therefore, I will be instructing you individually to complete this assignment. Every Sunday, I will send a

Google Docs appointment sign-up sheet to invite you to select time slots that work for you. We can discuss how to present the paper, lead the seminar, organize the PowerPoint slides, and search short videos related to the topic. In addition, we can discuss your topic, search existent research papers related to your topic, test hypotheses, interpret the statistical output, and build tables and figures to present your findings. I will help you with every stage of your project individually. I am particularly interested in the way you can combine your use of outside sources with your own personal insights about the topic.

An example of this project can be downloaded from the Temple Library.

Chang, I. (2020). Influences of executive function, language comprehension, and fluency on young children's reading comprehension. *Journal of Early Childhood Research*, *18*(1), 44-57. DOI:10.1177/1476718X19875768 https://doi.org/10.1177/1476718X19875768

The steps to completion of this project are as follows:

| Time | Task |
|-----------------------------|-----------------------------------------------------------------------------------------------|
| rime | i ask |
| Week of 02/01 | Find a journal article of interest to you. Know the difference between a journal article |
| | and an article in a trade magazine or newspaper. |
| | |
| Special Goal | G1 |
| Week of 02/08 | Find a second journal article. Make sure that this article describes the authors' own |
| | research. Know the difference between a peer-reviewed journal and others, between |
| | original research and a review of research or opinion piece. |
| Special Goal | G1 |
| Week of 02/15 | Find six (6) recent (2015 or later) articles on your question. At least five of these |
| | articles must describe the authors' original research and must be published in a peer- |
| | reviewed journal. Government publications (e.g., NCES reports) will be accepted. It |
| | is possible that one article (the sixth) be a review of research or opinion piece, but |
| | this sixth article also must be published in a peer-reviewed journal. |
| Crecific Cool | C4 |
| Specific Goal Week of 02/22 | G1 Write a simple and specific question that you intend to answer through this research. |
| VVEER OI UZ/ZZ | Provide an alphabetical listing of the references (alphabetize by last name of first |
| | author) for your studies. Select a statistical technique (e.g., <i>t</i> -test, correlation, |
| | ANOVA,etc.) that you intend to utilize on hypothesis testing. |
| | |
| | Stage_1: research question(s) and references due 11:59pm, Sun, 02/28 (5 points) |
| Specific Goal | G2 |
| Week of 03/01 | Write an introduction (about 3 pages) consisting of three (3) components: (Do not |
| | label as "Introduction." Title of paper goes at the top of the page—not bold) |
| | An introduction to the problem under study |
| | 2. A review of relevant previous research, which cites works that are pertinent to |
| | the issue but not works of marginal or peripheral significance |
| | 3. The purpose and rationale for the study |
| | Stage 2: Introduction due 11:59pm, Sun, 03/07 (5 points) |
| | ouge (openie) |
| Specific Goal | G3 |
| Week of 03/08 | Write the method section of your paper describing exactly how the study was |
| | conducted, describing detail that readers could replicate the study (about $1\frac{1}{2} - 2$ |
| | pages), including: |
| | 1. A description of the participants (e.g., ages, gender, ethnicity, any special |
| | characteristics) and how they were recruited |

| | i age 3 |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Any testing materials used (e.g., a particular test or inventory) Each step in the execution of the research (e.g., the groups used, instruction given to the participants, and specific control features in the design) |
| | Stage_3: Method due 11:59pm, Sun, 03/14 (5 points) |
| Specific Goals | G4 and G5 |
| Week of 03/15 | Write the results section of your paper (about 2 page) summarizing: |
| | 1. The data collected and the type of statistic(s) used to analyze the data |
| | 2. The results of the statistical tests used are reported with respect to the |
| | variables measured and/or manipulated |
| | 3. A description of the results only, NOT an explanation of the results4. Tables and graphs or figures |
| | Stage_4: Results, SPSS output, tables, figures/graphs/charts due 11:59pm, Sun, 03/21 (5 points) |
| Specific Goal | G6 |
| Week of 03/22 | Write the discussion and conclusion sections of your paper (about 2 pages) |
| | including: |
| | 1. Evaluation and interpretation of the results |
| | A restatement of the predictions of the study and stating whether or not the predictions were supported |
| | 3. A discussion of the relationship between and the results and past research |
| | and theories |
| | 4. Criticisms of the study (e.g., possible confounds) and implications for future |
| | research |
| | Stage_5: Discussion and conclusion due 11:59pm, Sun, 03/28 (5 points) |
| Specific Goal | G7 |
| Week of 03/29 | Write an abstract (150 words) describing: |
| | The problem under investigation and the purpose of the study |
| | 2. The participants and general methodology |
| | 3. The findings, including statistical significance levels4. The conclusions and implications or applications of the study |
| | 4. The conclusions and implications of applications of the study |
| | Draft Due 11:59pm, Sun, 04/04 |
| | Stage_6: Draft due Sun, 04/04 (5 points). Find a partner to edit your draft. The |
| | draft should include the instructor's feedback from the previous five assignments, |
| | which can be found on Canvas. You will (1) email your partner your draft and (2) |
| | upload your draft to Canvas before 11:59pm, Sun, 04/04. |
| Specific Goal | G8 |
| Week of 04/05 | Stage 7: (1) upload your partner's draft with your comments to Canvas and (2) |
| | email your partner's paper with your feedback back to him/her (5 points) Due |
| | 11:59pm, Fri, 04/09 |
| | Please make sure to mark the author's name and reviewer's name on the |
| | paper. |
| | Refine your paper considering the suggestions of your classmates . |
| | Reporting and writing should follow APA style. |
| | 2. The paper title (with no more than 120 characters) should be entered with |
| | proper capitalization at the top of the first page: Make sure that the first letter |

of each appropriate word is capitalized. An abstract of 150 words should also be on the first page.*

- 3. Use 1-inch margins on all four sides.
- 4. 11-pt Arial font (or 12-pt Times New Roman) and double-spacing is required.
- 5. Graphics and tables are encouraged.
- 6. Include reference lists

Grand Finale!! **Paper Due 11:59pm, Mon, 04/12**

[If you would like to publish this paper in a journal, please contact me. I might be able to help. You are also encouraged to submit your paper to Symposium for Undergraduate Research and Creativity. The 2021 Symposium will be held online April 14-15. The submission form is now OPEN and due February 12. https://www.temple.edu/vpus/research/symposiumapp.html]

Specific Goal

G8

*Your term papers should follow a fairly standard organization, which includes the following sections and features.

- Abstract a concise summary at the beginning of the paper describing the problem under investigation and the purpose of the study; the participants and general methodology; the findings, including statistical significance levels; and the conclusions and implications or applications of the study.
- 2. **Introduction** an overview of the problem studied in the research; relevant theories and a brief of reviews previous research that bears on the problem citing shortcomings in previous research that necessitate the present study. This review of the current state of knowledge on the topic usually progresses to a specific and precise statement regarding the hypotheses under investigation.
- 3. **Method** provides a thorough description of the research methods used in the study including information on the subjects used, how they were obtained, any testing materials used (e.g., a particular test/inventory, each step in the execution of the research (e.g., the groups used, instructions given to the participants), and the data collection techniques employed. (For more information on ECLS-K: 2011, go to https://nces.ed.gov/pubs2019/2019051.pdf
- 4. **Results** the data obtained in the study are reported in the results section including statistical analyses, figures, tables, and graphs. This section does **NOT** include any inferences based on the data as such conclusions are supposed to follow in the next section.
- 5. **Discussion** state the conclusions drawn by you through interpretation and evaluation of the data. Implications for theory and factual knowledge in the discipline should be discussed. Conclusions should be qualified carefully, and any limitations in the study should be acknowledged. Suggestions for future research on the issue may be included.
- 6. **References** consist of an alphabetical listing of the references (alphabetize by last name of first author) for your studies cited. Using an APA format include the DOI for all works that have one.

Temple Resources:

The Writing Center

All students are encouraged to consider visiting the Temple University Writing Center to receive one-on-one writing instruction.

Temple University Writing Center:

Tuttleman Learning Center, Room 201; (215) 204-0702 www.temple.edu/writingctr/

Paley Library

The library offers online resources and individual instruction to help you search for empirical studies and research papers in Psychology. You are encouraged to review the online Research Guides in Psychology at this website: guides.temple.edu/cat.php?search_cat=Psychology&mode=profile_search and/or contact Rick Lezenby (rlfile@temple.edu) in the library for help.

Canvas Course Website

To succeed in this class, you should access the course website regularly. I have set up a Canvas website for the course; if you are formally enrolled in the course, you should have access to this site. Please contact me as soon as possible if you are unable to access the site. The Canvas site will also be used to post announcements, discussion boards, and additional readings. You can access the site by typing "canvas.temple.edu" into your web browser, or you can access it through TUPortal.

Psych4696_006/Capstone in Psychology should be listed as one of your courses; just click to enter the site.

Grading

Your final grade will consist of one term paper (50 points), seven stages of research projects (35 points), reaction paper (25 points), journal paper presentation (20 points), presentation of your own research project (20 points), participation in discussions (20 points), a reflection form (10 points), and a meet and greet (10 points). Course grade percentages will be calculated by dividing the points earned by the total points offered in the course (190).

$$Percentage = \frac{Paper_L + Paper_S + Present_{JP} + Stages + Present_{Proj} + Partici + Reflect + Meet}{190}$$

| Course Grade Components | | |
|-------------------------------|-----|--|
| Research Paper (Long) | 50 | |
| Seven stages of projects | 35 | |
| Reaction Paper (Short) | 25 | |
| Journal Paper Presentation | 20 | |
| Research Project Presentation | 20 | |
| Reflection | 10 | |
| Participation in Discussions | 20 | |
| Meet and Greet | 10 | |
| TOTAL POINTS | 190 | |

Final letter grades for the course will be assigned based on the percentage ranges below.

| Grading System | | | | | |
|----------------|---------------|----|---------------|----|-----------------|
| Α | 92.50 - 100.0 | B- | 80.00 - 82.49 | D+ | 67.50 - 69.99 |
| A- | 90.00 - 92.49 | C+ | 77.50 - 79.99 | D | 62.50 - 67.49 |
| B+ | 87.50 - 89.99 | С | 72.50 - 77.49 | D- | 60.00 - 62.49 |
| В | 82.50 - 87.49 | C- | 70.00 - 72.49 | F | 59.99 and lower |

Class Policies & Etiquette (italicized text is official TU policy language)

Disabilities Statement: Any student who has a need for accommodation based on the impact of a disability should contact me privately to discuss the specific situation as soon as possible. Contact Disability Resources and Services at 215-204-1280 in 100 Ritter Annex to coordinate reasonable accommodations for students with documented disabilities.

Statement on Academic Freedom: Freedom to teach and freedom to learn are inseparable facets of academic freedom. The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02) which can be accessed through the following link: https://secretary.temple.edu/sites/secretary/files/policies/03.70.12.pdf

Academic Honesty (https://bulletin.temple.edu/undergraduate/about-temple-university/student-responsibilities/#academichonesty)

The Temple University community believes strongly in academic honesty and integrity. Essential to intellectual growth and the university's core educational mission is the development of independent thought and respect for the thoughts of others. Academic honesty fosters this independence and respect. Academic dishonesty undermines the university's mission and purpose and devalues the work

of all members of the Temple community. Every member of the university community is responsible for upholding the highest standards of academic honesty at all times. Students, as members of the community, are responsible for adhering to the principles of academic honesty and integrity.

Plagiarism includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling or distribution of term papers or other academic materials. Normally, all work done for courses — papers, examinations, homework exercises, laboratory reports, oral presentations — is expected to be the individual effort of the student presenting the work. Any assistance must be reported to the instructor. If the work has entailed consulting other resources — journals, books, or other media — these resources must be cited in a manner appropriate to the course. It is the instructor's responsibility to indicate the appropriate manner of citation. Everything used from other sources — suggestions for organization of ideas, ideas themselves, or actual language — must be cited. Failure to cite borrowed material constitutes plagiarism. Undocumented use of materials from the World Wide Web is plagiarism.

Cheating includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) use of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; (3) the acquisition, without permission, of tests or other academic material belonging to a member of the university faculty or staff; (4) engaging in any behavior specifically prohibited by a faculty member in the course syllabus, assignment, or class discussion; (5) or otherwise engaging in behavior that gives the student an unfair academic advantage including, but not limited to, fabrication of data or sources, resubmitting work already submitted for another academic requirement without prior authorization, or other similar behavior.

Refer to the Student Conduct Code (policy # 03.70.12) for more specific definitions of cheating and plagiarism.

The penalty for academic dishonesty can vary from receiving a reprimand and a failing grade for a particular assignment, to a failing grade in the course, to suspension or expulsion from the university. The penalty varies with the nature of the offense, the individual instructor, the department, the school or college, and the Office of Student Conduct and Community Standards.

Students who believe that they have been unfairly accused may appeal through the school or college's academic grievance procedure. For more information see https://bulletin.temple.edu/undergraduate/about-temple-university/student-rights/#grievances.

Policy on Religious Holidays: If you will be observing any religious holidays this semester which will prevent you from attending a regularly scheduled class or interfere with fulfilling any course requirement, I will offer you an opportunity to make up the class or course requirement if you make arrangements by informing me of the dates of your religious holidays within two weeks of the beginning of the semester (or three days before any holidays which fall within the first two weeks of class).

Incomplete Coursework: (policy # 02.10.13) https://bulletin.temple.edu/undergraduate/academic-policies/incomplete-coursework/

An instructor will file an "I" (Incomplete) only if the student has completed the majority of the work of the course at a passing level, and only for reasons beyond the student's control.

An instructor may file an "I" when a student has not completed the work of a course by the time grades must be submitted, but has completed the majority of the work at a passing level and has a written agreement with the instructor and the department regarding completion of the work, including the nature of the work to be completed, the means by which the final grade will be determined, and the date by which the work must be completed. The completion date may be no later than one year from the end of the semester in which the student took the course. The agreement shall also specify a default grade to be received if the work is not

completed by the date indicated. One copy of the agreement shall be retained by the instructor, one shall be given to the student, and one shall be filed with the department office or, in colleges or schools without departments, the Dean's office.

When reporting the grade of "I" for a student, the instructor shall also file a report of the default grade in the electronic grading system. If the instructor does not change the grade of "I", pursuant to the agreement with the student, by the end of one year from the time the grade of "I" was awarded, the appropriate University official shall automatically change the grade of "I" to the reported default grade, and the default grade shall appear on the transcript and be used for all other grading purposes as the actual grade received in the course.

Faculty advisors and staff advisors have the option of not permitting a student to register for an "overload" if the student is carrying one or more active incomplete courses, or for a "full load" if the student is carrying two or more active incompletes.

Controversial and Personal Subject Matter

The material covered in the readings, lectures, and discussions in this course may be considered controversial by some students. Our purpose in this class is to explore challenging subject matter and consider multiple perspectives and arguments. Students are expected to contribute to the course, and expected to listen to the instructor and classmates with respect. You are free to disagree, respectfully, with views expressed in class or in assigned readings. Please refrain from discussing confidential or personal experiences of psychological disorders in class. If you are interested in presenting such information, you are required to do so in a way that protects the identity of yourself or the person you are discussing. Students seeking psychological services are referred to the Temple University Psychological Services Center: 1509 Cecil B Moore Ave. E.C.E.C. Building, Room 420; phone: (215) 204-7100 or Tuttleman Counseling Services: 1700 N. Broad St., 2nd floor; phone: (215) 204-7276.

Psychology Post Test Requirement

All capstone students are required to take a 56-item multiple-choice test available online at https://www.surveymonkey.com/s/PsychPostTest. Please take the exam sometime in April, before the last day of classes. It will take no more than 1-hour to complete the test. The test is used by the Psychology Department to evaluate how well students learn about Psychology during their education at Temple. This test is not graded and your score on the test will not affect your grade in any way. You will be given credit simply for having taken and completed the test. In order to get credit for the test, you need to type your name in the spaces before the test questions and click on the name of your capstone instructor/course in the space provided.

Course Schedule

| Day | Date | Readings |
|-----|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wed | 01/20 | Syllabus; Course Overview; Assignments Research Paper Structure |
| Fri | 01/22 | https://developingchild.harvard.edu/science/key-concepts/executive-function/ Executive Function & Self-Regulation https://www.youtube.com/watch?v=BLtQaRrDsC4 Resisting the marshmallow and the success of self-control https://www.youtube.com/watch?v=cPn3UOt1lxw How to Become More Disciplined** |
| Mon | 01/25 | ECLS-K: 2011 manual https://nces.ed.gov/pubs2019/2019051.pdf User's Manual for the ECLS-K:2011 Kindergarten–Fifth Grade Data File and Electronic Codebook, Public Version https://www.youtube.com/watch?v=-H14NNUYwVc Helping Toddlers Regulate Emotions |

Page **10** of **12**

| 1 . | ı ı | Page |
|-----|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wed | 01/27 | https://www.youtube.com/watch?v=zQdw89rj2HM Executive Functions Skills: Foster with Partner-time Play ECLS-K: 2011 manual |
| Fri | 01/29 | Swanson, H. L., & Kong, J. E. (2017). Working Memory and Reading Is There Evidence for an Executive Processing Deficit? In Meltzer, L. (Ed.) <i>Executive function in education, second edition: from theory to practice</i> , Chapter 9, pp. 218 – 239. Retrieved from https://ebookcentral.proquest.com (Student A) |
| Mon | 02/01 | McClelland, M. M., & Cameron, C. E. (2018). Developing together: The role of executive function and motor skills in children's early academic lives. <i>Early Childhood Research Quarterly</i> , 46(1), 142-151 https://doi.org/10.1016/j.ecresq.2018.03.014 (Student B) |
| Wed | 02/03 | Ishihara, T., Sugasawa, S., Matsuda, Y., & Mizuno, M. (2017). Improved executive functions in 6–12-year-old children following cognitively engaging tennis lessons. Journal of sports sciences, 35(20), 2014-2020. https://doi.org/10.1080/02640414.2016.1250939 (Student C) |
| Fri | 02/05 | Baker, J. G., Leddy, J. J., Hinds, A. L., Haider, M. N., Shucard, J., Sharma, T., & Willer, B. S. (2018). An exploratory study of mild cognitive impairment of retired professional contact sport athletes. <i>The Journal of head trauma rehabilitation</i> , <i>33</i> (5), E16-E23. DOI: 10.1097/HTR.000000000000000000000000000000000000 |
| Mon | 02/08 | John, T. S., Dawson, G., & Estes, A. (2018). Brief Report: Executive Function as a Predictor of Academic Achievement in School-Aged Children with ASD. <i>Journal of autism and developmental disorders</i> , <i>48</i> (1), 276-283. https://doi.org/10.1007/s1080 (Student E) |
| Wed | 02/10 | Steinberg, J., & Roditi, B.N. (2017). The Strategic Math Classroom How Executive Function Impacts Math Learning. In Meltzer, L. (Ed.) <i>Executive function in education, second edition: from theory to practice</i> , Chapter 11, pp. 300 – 325. Retrieved from https://ebookcentral.proquest.com (Student F) |
| Fri | 02/12 | Begolli, K. N., Richland, L. E., Jaeggi, S. M., Lyons, E. M., Klostermann, E. C., & Matlen, B. J. (2018). Executive function in learning mathematics by comparison: incorporating everyday classrooms into the science of learning. <i>Thinking & Reasoning</i> , 24(2), 280-313. https://doi.org/10.1080/13546783.2018.1429306 (Student G) |
| Mon | 02/15 | D'Souza, A. A., Moradzadeh, L., & Wiseheart, M. (2018). Musical training, bilingualism, and executive function: working memory and inhibitory control. Cognitive Research: Principles and Implications, 3(1), 11. https://doi.org/10.1186/s41235-018-0095-6 (Student H) |
| Wed | 02/17 | Kieffer, M. J., & Christodoulou, J. A. (2020). Automaticity and Control: How Do Executive Functions and Reading Fluency Interact in Predicting Reading Comprehension? Reading Research Quarterly, 55(1), 147-166. https://doi.org/10.1002/rrq.289 (Student I) |
| Fri | 02/19 | Fujioka, T., Dawson, D. R., Wright, R., Honjo, K., Chen, J. L., Chen, J. J., & Ross, B. (2018). The effects of music-supported therapy on motor, cognitive, and |

| | | Page |
|-----|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | psychosocial functions in chronic stroke. <i>Annals of the New York Academy of Sciences</i> . https://doi.org/10.1111/nyas.13706 (Student J) |
| Mon | 02/22 | Brock, L. L., Murrah, W. M., Cottone, E. A., Mashburn, A. J., & Grissmer, D. W. (2018). An after-school intervention targeting executive function and visuospatial skills also improves classroom behavior. <i>International Journal of Behavioral Development</i> , 42(5), 474-484. https://doi.org/10.1177/0165025417738057 (Student K) |
| Wed | 02/24 | Artukoglu, B. B., & Bloch, M. H. (2018). Can omega-3 fatty acids improve executive functioning? Will this reduce ADHD and depression? <i>Journal of Child Psychology and Psychiatry</i> , <i>59</i> (6), 615-617. https://doi.org/10.1111/jcpp.12932 (Student L) |
| Fri | 02/26 | Holochwost, S. J., Propper, C. B., Wolf, D. P., Willoughby, M. T., Fisher, K. R., Kolacz, J., & Jaffee, S. R. (2017). Music education, academic achievement, and executive functions. <i>Psychology of Aesthetics, Creativity, and the Arts</i> , <i>11</i> (2), 147. http://dx.doi.org/10.1037/aca0000112 (Student M) |
| Mon | 03/01 | Habibi, A., Damasio, A., Ilari, B., Elliott Sachs, M., & Damasio, H. (2018). Music training and child development: a review of recent findings from a longitudinal study. <i>Annals of the New York Academy of Sciences</i> . https://doi.org/10.1111/nyas.13606 (Student N) |
| Wed | 03/03 | Stålnacke, J., Lundequist, A., Böhm, B., Forssberg, H., & Smedler, A. C. (2019). A longitudinal model of executive function development from birth through adolescence in children born very or extremely preterm. Child Neuropsychology, 25(3), 318-335. https://www.tandfonline.com/doi/pdf/10.1080/09297049.2018.1477928?needAccess-true (Student O) |
| Fri | 03/05 | Perone, S., Plebanek, D. J., Lorenz, M. G., Spencer, J. P., & Samuelson, L. K. (2019). Empirical Tests of a Brain-Based Model of Executive Function Development. Child development, 90(1), 210-226. https://srcd.onlinelibrary.wiley.com/doi/epdf/10.1111/cdev.12885; https://doi.org/10.1111/cdev.12885 (Student P) |
| Mon | 03/08 | Pugliese, C. E., Anthony, L. G., Strang, J. F., Dudley, K., Wallace, G. L., Naiman, D. Q., & Kenworthy, L. (2016). Longitudinal examination of adaptive behavior in autism spectrum disorders: Influence of executive function. <i>Journal of Autism and Developmental Disorders</i> , <i>46</i> (2), 467-477. doi:10.1007/s10803-015-2584-5 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4726475/pdf/nihms-721926.pdf (Student Q) |
| Wed | 03/10 | Nesbitt, K. T., Fuhs, M. W., & Farran, D. C. (2019). Stability and instability in the codevelopment of mathematics, executive function skills, and visual-motor integration from prekindergarten to first grade. <i>Early Childhood Research Quarterly</i> , <i>46</i> , 262-274. https://doi.org/10.1016/j.ecresq.2018.02.003 (Student R) |
| Fri | 03/12 | Project Presentation (Student A) |
| Mon | 03/15 | Project Presentation (Student B) |
| Wed | 03/17 | Project Presentation (Student C) |
| | | l. |

| | | Page |
|-----|-------|----------------------------------------------------------------------|
| Fri | 03/19 | Project Presentation (Student D) |
| Mon | 03/22 | Project Presentation (Student E) |
| Wed | 03/24 | Wellness Day (no classes held) |
| Fri | 03/26 | Project Presentation (Student F) |
| Mon | 03/29 | Project Presentation (Student G) |
| Wed | 03/31 | Project Presentation (Student H) |
| Fri | 04/02 | Project presentation (Student I) |
| Mon | 04/05 | Project presentation (Student J) |
| Wed | 04/07 | Project presentation (Student K) |
| Fri | 04/09 | Project Presentation (Student L) |
| Mon | 04/12 | Project presentation (Student M) Research Paper Due |
| Wed | 04/14 | Project presentation (Student N) |
| Fri | 04/16 | Project presentation (Student O) Reflection Due, 11:59PM, Sun, 04/18 |
| Mon | 04/19 | Project presentation (Student P) |
| Wed | 04/21 | Project presentation (Student Q) |
| Fri | 04/23 | Project presentation (Student R) |
| Mon | 04/26 | Course evaluation, graduation celebration |

^{***}Respect others, love learning, and accept personal responsibility***