GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
SCHOOL OF EDUCATION
EDUCATIONAL PSYCHOLOGY

COURSE	**PROFESSOR**
EDEP 820 001	**Name:** Seth Parsons, PhD
Teaching, Learning, and Cognition	**Office hours:** by appointment
3 credits, Fall 2019	**Office location:** Thompson 1405
Monday 4:30pm-7:10pm	**Office phone:** (703) 993-6559
Robinson Hall B103	**Email address:** sparson5@gmu.edu

COURSE DESCRIPTION
Focuses on foundational educational psychology theories including cognitive, social, and constructivist themes and their implications for improving instructional practices and learning at all developmental levels and content areas. *Prerequisite(s):* EDUC 800 and EDRS 810 or instructor permission.

LEARNER OUTCOMES
This course is designed to enable students to:
1. compare and contrast theories of learning and cognition
2. formulate practical bridges between research theories and classroom practice
3. integrate and synthesize research findings on teaching and learning
4. develop an awareness of belief systems that impede or enhance the teaching-learning process
5. display knowledge of the relationship between psychological inquiry and educational practices
6. develop an understanding of knowledge construction, learning pedagogy, and responsible professional practice in the contexts of education
7. develop and reinforce their critical thinking, oral, and writing skills
8. understand how students' cognitive, social, and emotional development affects instruction

RELATIONSHIP TO PROGRAM GOALS AND PROFESSIONAL ORGANIZATION

Educational Psychology Program Standards:
Standard 1: Knowledge of Cognition, Motivation, and Development. Candidates will demonstrate an understanding of principles and theories of learning, cognition, motivation, and development as they apply to a wide variety of contemporary learning contexts.

Standard 2: Application of Cognition, Motivation, and Development Knowledge. Candidates will use their knowledge, skills, and dispositions to apply principles and theories of learning, cognition, motivation, and development to analyze and develop instruction in applied settings.

Standard 3: Knowledge of Educational Research and Assessment. Candidates will demonstrate an understanding of the basic concepts, principles, techniques, approaches, and ethical issues involved in educational research.

Standard 4: Analysis, Critique, and Evaluation of Educational Research. Candidates will use their knowledge of quantitative and qualitative research methodology to critically read and evaluate quantitative and qualitative research articles.

Standard 6: Communication and Dissemination of Educational Research. Candidates will demonstrated critical thinking, oral presentation, technological, and writing skills as they are used in the profession. These include: a. Knowledge and use of APA style, b. Oral presentations, c. Poster presentations, d. Article abstracts, e. Research proposals, f. Literature reviews, and g. Technological skills.

American Psychological Association Learner Centered Principles:

Principle 1: The Nature of Learning Process
Principle 2: Goals of the Learning Process
Principle 3: Construction of Knowledge
Principle 4: Strategic Thinking
Principle 5: Thinking about Thinking
Principle 6: Context of Learning

Principle 7: Motivational and Emotional Influences on Learning
Principle 8: Intrinsic Motivation to Learn
Principle 9: Effects of Motivation on Effort
Principle 11: Social Influences on Learning
Principle 13: Learning and Diversity

American Psychological Association. (1997). *Learner-centered psychological principles: Guidelines for the teaching of educational psychology in teacher education programs*. Washington, DC: Author.

NATURE OF COURSE DELIVERY
This course will be taught using lectures, discussions, and small and large group activities. The course is technology-enhanced using Blackboard. Students are responsible for any information posted on the course site (https://mymason.gmu.edu/). For assistance with Blackboard students may email courses@gmu.edu, call (703) 993-3141, or go to Johnson Center Rm 311 (office hours: 8:30am-5pm).

Professional Dispositions: Students are expected to exhibit professional behaviors and dispositions at all times See https://cehd.gmu.edu/students/polices-procedures/

Core Values Commitment: The College of Education & Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles. http://cehd.gmu.edu/values/

GMU Policies and Resources for Students

Policies
- Students must adhere to the guidelines of the Mason Honor Code
  (see https://catalog.gmu.edu/policies/honor-code-system/).
- Students must follow the university policy for Responsible Use of Computing
  (see http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All

communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see http://ds.gmu.edu/).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources
- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or https://cehd.gmu.edu/aero/tk20. Questions or concerns regarding use of Blackboard should be directed to http://coursessupport.gmu.edu/.
- For information on student support resources on campus, see https://ctfe.gmu.edu/teaching/student-support-resources-on-campus
- For additional information on the College of Education and Human Development, please visit our website http://cehd.gmu.edu/.

Campus Resources:
- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or https://cehd.gmu.edu/aero/tk20. Questions or concerns regarding use of Blackboard should be directed to http://coursessupport.gmu.edu/.
- For information on student support resources on campus, see https://ctfe.gmu.edu/teaching/student-support-resources-on-campus

For additional information on the College of Education and Human Development, please visit our website https://cehd.gmu.edu/students/ .

REQUIRED TEXTS (available electronically through GMU library)

Harris, K. R., Graham, S., Urdan, T., McCormick. C. B., Sinatra, G., & Sweller, J. (Eds.). (2012). *APA educational psychology handbook, volume 1: Theories, constructs, and critical issues.* Washington, DC: APA.

Harris, K. R., Graham, S., Urdan, T., Graham, S., Royer, J. M., & Zeidner, M. (Eds.). (2012). *APA educational psychology handbook, volume 2: Individual differences and cultural and contextual factors.* Washington, DC: APA.

Harris, K. R., Graham, S., Urdan, T., Bus, A., G., Major, S. & Swanson, H. L. (Eds.). (2012). *APA educational psychology handbook, volume 3: Application to teaching and learning.* Washington, DC: APA.

Additional journal articles and book chapters will be made available through Blackboard.

COURSE ORGANIZATION AND ASSIGNMENTS
This course is designed to promote an understanding of topics central to educational psychology. Each week students will construct an evolving concept map and engage in a discussion of chapters from the *APA Educational Psychology Handbook*.

REQUIRED COURSE ACTIVITIES (80%)

Class Participation (15%)
Each student is expected to come to class on time and participate in class discussions and activities. Assigned readings are to be completed before class. Attendance, punctuality, preparation, and active contribution to small and large group activities are essential. These elements of behavior reflect the professional attitude implied in the course goals.

Concept Maps (15%)
Throughout the semester, students will construct an evolving concept map of the central concepts, constructs, and theorists from the readings. The map will provide a representation of each student's developing understanding of educational psychology. Students will be provided with a list of terms that are required to be included in their maps. Students may add additional terms as necessary. Students are encouraged to bring their concept maps to class.

Article Critique (10%)
Each student will prepare a critique of an empirical article assigned in the syllabus (indicated in the schedule with +). The critique should focus primarily on the identified article but also address how it relates to the assigned chapter and/or other class content. The last scheduled empirical article is October 21**.** Article Critique guidelines is provided in Appendix A.

Final Paper and Poster (30% Paper; 10% Poster Presentation; 40% Total)
Each student will write either a literature review or research proposal that focuses on an educational psychology topic.

Literature reviews should contain the following sections:
1. Introduction and overview of the topic
2. Research question(s)
3. Synthesis of the literature (with appropriate subheadings)
4. Limitations, conclusions, and implications

Research proposals should contain the following sections:
1. Problem Statement: What is the problem the study will look at and why it is important?
2. Research question(s)/hypotheses
3. Conceptual Framework: What theory underlies or shapes your research study? What is previous empirical work does your study build on?
4. Methodology: Participants, measures, procedures, design of the study, data analysis plan
5. Discussion: Potential results, limitations, and future research

Final papers will be submitted as a final term paper and will be presented in a poster session at the end of the semester. Final papers must adhere to the APA Publication Manual Guidelines.

As a means to provide support for each student's final paper, students are expected to turn in final paper components based on the following tentative timeline:

Paper format and topic; preliminary focus or research questions	Oct 7
Brief summaries of 5 empirical articles to be included in final paper	Oct 14
Progress update: Initial outline including research questions, method, data analysis plan	Oct 28
Class poster session	Dec 2
Final paper	Dec 13

STUDENT-SELECTED COURSE ACTIVITIES (20%)

Each student is to select additional activities commensurate with their academic level and career goals. Must get 20 additional points; points are in table below. Suggested student selected activities that will develop their competencies are listed below. Alternative activities can be suggested and negotiated with the professor. For Research and Foundational Knowledge Competencies, students are _strongly encouraged_ to collaborate with _one_ other student in the class. Students should indicate their student-selected course activities to the instructor by October 7.

Research Competencies
- o   Prepare a grant proposal*
- o   Prepare a proposal for a national or international conference (e.g., APA, AERA)*
- o   Write a second article critique**

Professional Competencies
- o   Prepare your academic vita*
- o   Join a professional organization that you are not currently a member of
- o   Communicate with a distinguished researcher in your interest area that you do not already know (also not at GMU)**
- o   Watch a video from the APA Division 15 video archive (http://apadiv15.org/video-archive/); after watching the video either prepare a) a brief written summary and reflection or b) a brief presentation to the class on the relevance of the video to your research interests and professional development)**

Foundational Knowledge Competencies
- o   Read and present on an original work by a theorist you have not read before (e.g., James, Piaget)**
- o   Read and present on an unassigned chapter from the _APA Educational Psychology Handbook_ (2012) or the _Handbook of Educational Psychology_ (2015)**

*Students should submit work early to allow for instructor feedback and revision.
**Students should communicate with the instructor about how to share selected competencies with the class.

Course Activities	
REQUIRED (80%)	**% of Final Grade**
Class Participation	15
Final Paper: Literature Review or Proposal	30
Poster	10
Concept Map	15
Article Critique for assigned empirical article	10
STUDENT-SELECTED* (20%) Indicate selection to instructor by October 10th	
Research Competencies	
Grant Proposal*	10
Conference Proposal*	10
Second Article Critique**	10
Professional Competencies	
Vita**	5
Professional organization	5
Communicate with researcher **	5
APA Division 15 video archive**	10
Foundational Knowledge Competencies	
Original work by a foundational theorist**	10
Additional H*andbook* chapter**	10
*****Additional suggestions and substitutions may be negotiated.*	

Each student's final grade for this class will be based on the following:

A	100 - 93		B-	82 - 80
A-	92 - 90		C	79 - 70
B+	89 - 88		F	< 70%
B	87 - 83			

Class date	Topic	Readings & Assignments due
8/26	Review syllabus Introduction and Overview	Pintrich (2000) Wentzel (2016)
9/2	**No Class – Labor Day**	
9/9	Educational Psychology: Past, Present, and Future—Who are we and where are we going? *Professional Competencies:* Academic Curriculum Vitae and Professional Organizations	Alexander et al. (Vol 1, Ch 1) Berliner (2006) Anderman (2016) webinar

9/16	Child, Adolescent, and Adult Development
	
	Research Competency: Reading Empirical Research
		Graham (2015)
		
		Read <u>one</u> of the following:
		  Childhood: <mark>TBD</mark>
		  Adolescence: Anderman (Vol 3, Ch 3)
		  Adulthood: Smith & Reio (2006)

9/23	Social Cognitive Theory
	
	Research Competency: Literature Reviews and Research Proposals
		Schunk (Vol 1, Ch 5)
		
		Read <u>one</u> of the following:
		  Usher & Pajares (2009)+
		  Butz & Usher (2015)+
		
		Read Final Paper Guidelines

9/30	Constructivism and Sociocultural Approaches	O'Donnell (Vol 1, Ch 3) Göncü & Gauvain (Vol 1, Ch 6) **<mark>TBD+</mark>** *Concept Map Submission #1*
10/7	Expertise and Intelligence	Nandagopal & Ericsson (Vol 1, Ch 10) Roberts & Lipnevich (Vol 2, Ch 2) Alexander et al. (2004)+ *Identify student-selected course activities* *Submit paper format and topic*
<mark>Tuesday 10/15</mark>	Metacognition and Learning	Dimmitt & McCormick (Vol 1, Ch 7) Duffy et al. (2009) Zepeda et al. (2015)+ *Submit summaries of 5 empirical articles to be included in final paper with references in APA*

10/21	Motivation and the Classroom Context	Read _one_ of the following JIGSAW: 　　Graham & Weiner (Vol 1, Ch 13) 　　Kaplan et al. (Vol 2, Ch 7) 　　Hulleman & Barron (2015) Guthrie et al. (2007)+
10/28	Assessment and Accountability _Professional Competency:_ PhD Program Portfolio System	Hosp (Vol 3, Ch 5) Elliott et al. (Vol 3, Ch 6) Review PhD program portfolio guidelines _Final paper progress update and outline_
11/4	**Online**	
11/11	Teaching and Learning in the Domains _Professional Competency:_ Academic Writing/APA/Word tips	Shulman & Quinlan (1996) Read _one_ of the following: 　　Reading: Kamil (Vol 3, Ch 8) 　　Writing: Rijaarsdam (Vol 3, Ch 9) 　　Mathematics: Carr (Vol 3, Ch 10) 　　Science: Sinatra & Chinn (Vol 3, Ch 11)
11/18	Instruction and Technology _Professional Competency:_ Poster discussion	Read _one_ of the following: 　　Moreno (Vol 3, Ch 18) 　　Graesser et al. (Vol 3, Ch 19) 　　Mishra et al. (2015)
11/25	Effective Teachers and Teaching Evidence-Based Practices Reflections on the Past, Present, and Future	Roehrig et al. (Vol 2, Ch 20) Cook et al. (Vol 1, Ch 17)
12/2	Conclusions and Poster Session	_Poster Session_ _Final Concept Map Submission_
12/13	Exam Period (Dec. 13th –20th)	_Final Paper due 12/13_

Appendix A
Article Critique Guidelines

Each student is required to prepare one critique of an empirical peer-reviewed article. Critiques are due the day the article is scheduled in the syllabus and should be emailed to the instructors.

CONTENT

      <u>Empirical Article</u>
1. The problem
2. The methodology (e.g., participants, measures, procedures, research design)
3. The findings/results
4. The authors' conclusion(s) (include implications or applications)
5. Your analysis and critique of the article (e.g., discuss the strengths and weaknesses of the methods, analyses, and conclusions)
6. Your perspective on the implications for research and or practice

FORMAT
    The critique should
- Include a cover page
- Be 3-5 pages (excluding cover and reference page), typed, double-spaced, and in APA format
- Include reference information on a separate sheet (APA format)

Appendix B
Foundational Knowledge Presentation and Discussion
(Possible Student-Selected Competency, 10%)

If students choose to read an original work, additional handbook chapter, or historic contributions chapter as one of their additional competencies, the content of the reading should be shared with the class. Students are expected to (1) read the selected work, (2) prepare an outline to distribute to the class, and (3) briefly share (i.e., approximately 10 minutes) their thoughts on the chapter and its connection to the course. Students are strongly encouraged to collaborate on this assignment.

The outline should be well organized, easy to read, and contain the following information:
- Student's name,
- Complete bibliographical information for the chapter in APA format,
- Summary of relevant ideas and information presented in the chapter.

With respect to formatting for the outline handout:
- A cover page is NOT necessary,
- Headings and subheadings are encouraged,
- Bullets may be used,
- Appropriate grammar and spelling should be used.

Additional chapters from *APA Educational Psychology Handbook* (2012) not assigned in the syllabus

Additional chapters from *Handbook of Educational Psychology, 3rd Edition* (2015) not assigned in the syllabus

Part I. Psychological Inquiry in Education

Chapter 1. Philosophical Perspectives on Mind, Nature, and Educational Psychology   *Eric Bredo*

Chapter 4. The Prospects and Limitations of Latent Variable Models in Educational Psychology
        Benjamin Nagengast and Ulrich Trautwein

Part II. Functional Processes for Learning

Chapter 5. Learning as Coordination: Cognitive Psychology and Education   *Daniel L. Schwartz and Robert Goldstone*

Chapter 6. Emotions and Emotion Regulation in Academic Settings   *Monique Boekaerts and Reinhard Pekrun*

Chapter 7. Motivation   *Lisa Linnenbrink-Garcia and Erika A. Patall*

Chapter 8. Volition   *Gabriele Oettingen, Jana Schrage, and Peter M. Gollwitzer*

Part III. Learner Readiness and Development

Chapter 9. Human Cognitive Abilities: Their Organization, Development, and Use   *Patrick C. Kyllonen*

Chapter 10. Cognition and Cognitive Disabilities   *H. Lee Swanson*

Chapter 11. Personal Capability Beliefs   *Ellen L. Usher*

Chapter 13. Beyond the Shadow: The Role of Personality and Temperament in Learning   *Arthur E. Poropat*

Chapter 14. Cultural, Racial/Ethnic, and Linguistic Diversity and Identity   *Na'ilah Suad Nasir, Stephanie J. Rowley, and William Perez*

Chapter 15. Language Development   *Alison L. Bailey, Anna Osipova, and Kimberly Reynolds Kelly*

Chapter 16. Character Education, Moral Education, and Moral-Character Education   *Cary J. Roseth*

Part IV. Building Knowledge and Subject Matter Expertise

Chapter 17. Literacy for Schooling: Two-Tiered Scaffolding for Learning and Teaching   *Ian A. G. Wilkinson and Janet S. Gaffney*

Chapter 18. Warm Change about Hot Topics: The Role of Motivation and Emotion in Attitude and Conceptual Change about Controversial Science Topics   *Gale M. Sinatra and Viviane Seyranian*

Chapter 19. Toward an Educational Psychology of Mathematics Education   *Jon R. Star and Bethany Rittle-Johnson*

Chapter 20. Functional Scientific Literacy: Seeing the Science within the Words and Across the Web   *Iris Tabak*

Chapter 21. Studying Historical Understanding   *Chauncey Monte-Sano and Abby Reisman*

Chapter 22. Civic Education   *Mario Carretero, Helen Haste, and Angela Bermudez*

Part V. The Learning and Task Environment

Chapter 23. Sociocultural Perspectives on Literacy and Learning   *David O'Brien and Theresa Rogers*

Chapter 24. Learning Environments In and Out of School   *Brigid Barron and Philip Bell*

Chapter 25. Networked Learning   *Gary Natriello*

Chapter 26. Collaborative Learning   *Cindy E. Hmelo-Silver and Clark A. Chinn*

Chapter 27. Black and Hispanic Students: Cultural Differences within the Context of Education   *Donna Y. Ford*

Chapter 28. Dialogic Instruction: A New Frontier   *Sherice N. Clarke, Lauren B. Resnick, and Carolyn Penstein Rosé*

Chapter 29. Assessment Illuminating Pathways to Learning   *Ellen B. Mandinach and Andrea A. Lash*
Chapter 30. Being a Teacher: Efficacy, Emotions, and Interpersonal Relationships in the Classroom
      Lynley H. Anderman and Robert M. Klassen