

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

**EDEP 820 (001)
Teaching, Learning, and Cognition**

Fall 2012
Wednesday 4:30pm-7:10pm
Thompson Hall L013

PROFESSOR

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COURSE DESCRIPTION

This course 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.

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 (<http://courses.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).

REQUIRED TEXT

(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, US: American Psychological Association.

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

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, US: American Psychological Association.

STRONGLY RECOMMENDED TEXT

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

OPTIONAL TEXT

Zimmerman, B. J., & Schunk, D. H. (Eds.). (2003). *Educational psychology: A century of contributions*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

LEARNER OUTCOMES

Students will be able to

- compare and contrast theories of learning and cognition
- formulate practical bridges between research theories and classroom practice
- integrate and synthesize research findings on teaching and learning
- develop an awareness of belief systems that impede or enhance the teaching-learning process
- display knowledge of the relationship between psychological inquiry and educational practices

- develop an understanding of knowledge construction, learning pedagogy, and responsible professional practice in the contexts of education
- develop and reinforce their critical thinking, oral, and writing skills
- 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

For more information please see:

American Psychological Association (1997). *Learner-Centered Psychological Principles: Guidelines for the Teaching of Educational Psychology in Teacher Education Programs.*

Retrieved October 14, 2002 from <http://www.apa.org>



COURSE REQUIREMENTS

Each student is expected to:

1. Read assigned materials for the course before coming to class.
2. Present/discuss assigned chapters/articles in class
3. Participate in classroom activities that reflect critical reading of materials
4. Complete class assignments and activities
5. Write a research paper and present in a poster session
6. Attend each class session

COURSE ORGANIZATION AND EVALUATION

This course is designed to promote an understanding of topics central to the study of educational psychology. To this end, each week students will construct an evolving concept map and engage in a discussion of a designated educational psychology theme based on chapters from the APA Handbook of Educational Psychology. In addition to reading the chapters indicated in the course schedule, each student will be responsible for preparation related to one chapter, assigned by the professor. For the assigned chapter students are expected to 1) identify and post terms for others to use in their concept maps and 2) post two thought questions for others to think about while reading the chapter. Each student is also responsible for reading *one* additional peer-reviewed empirical study or conceptual/theoretical article that is central to an assigned handbook chapter. For the article, students are expected to 1) identify an article central to the chapter, 2) post copies of the article on Blackboard by Tuesday at 12 noon, 2) write an article abstract for their assigned topics, and 3) interject their knowledge of the readings during class discussion. Additionally, each student is expected to complete a set of activities commensurate with his or her academic level and career goals.

Required Course Activities (80%)

Class Participation (10%)

Each student is expected to come to class on time and participate in class discussions and activities. Additionally, 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. In the event students miss a class, the professor should be notified, preferably in advance, and the student is responsible for any assignments and materials passed out or discussed that day. (See rubric for attendance and participation in Appendix A).

Concept Maps (20%)

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 student's developing understanding of educational psychology as a field. Students will be provided with a list of terms that are required to be included in their maps. Terms will be posted on Blackboard at least one week before the assigned reading. Students may add additional terms if they feel it is necessary. Students are encouraged to bring their concept maps to class. The concept maps will be evaluated at three points in the semester.

Assigned Chapter Preparation (5%)

Each student will be assigned one Handbook chapter. For the assigned chapter students are expected to 1) identify and post terms for others to use in their concept maps and 2) post two thought questions for others to think about while reading the chapter. Students are expected to email this information to the professor two weeks before the scheduled date for the topic/reading (and revise if necessary) and to post the information for all students to Blackboard at least one week before the scheduled date for the topic/reading. If two or more students are assigned chapters for the same evening, students are strongly encouraged to collaborate on the selection of concept map terms.

Article Abstract (10%)

Students are expected to read *one* article that is central to their assigned handbook chapter. The article can be empirical or conceptual/theoretical but should be related to and expand upon the information presented in the assigned chapter(s). Students are encouraged to communicate with the instructor about which article to select. Students are expected to (1) post a copy of the article on Blackboard by **Tuesday at 12 noon**, (2) write an article

abstract for their assigned topic, and (3) interject their knowledge of the reading and the handbook chapter during class discussion. The abstract should focus primarily on the additional reading but also address how it relates to the assigned chapter or other class content. Abstracts are due on the **day the topic is scheduled in the syllabus** and should be posted to Blackboard by **noon Wednesday**. Abstract guidelines and rubric are provided in Appendix B.

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. Discussion of the literature (with appropriate subheadings)
3. 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
4. Methodology: Participants, measures, procedures, design of the research 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. Additional guidelines and rubrics for the final paper and poster presentation will be provided.

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 3 rd
Progress update: Initial outline including method/data analysis plan	Nov 7 th
Poster contents	Dec 3 rd (9am)
Class poster session	Dec 5 rd
Final paper	Dec 12 th (4:30pm)

Student-Selected Course Activities (15%)

Each student is to select additional activities commensurate with their academic level and career goals. 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.

Research Competencies

- Prepare a grant proposal*
- Prepare a proposal for submission to a national or international conference (APA, AERA, EARLI)*
- Write a second article abstract**

Professional Competencies (select at least 1)

- Prepare your academic vita*
- Join a professional organization (post selection on Blackboard with brief discussion of why the organization was selected and how it related to your professional goals)
- Communicate with a distinguished researcher in your interest area that you do not already know (also not at GMU)**

Foundational Knowledge Competencies (see rubric in Appendix C)

- Read an original work by a foundational theorist you have not read before (e.g., James, Piaget)**
- Read an unassigned chapter from the *Handbook***
- Read a chapter from *Educational psychology: A century of contributions* **

*Students are encouraged to submit work early to allow for instructor feedback and revision.

**Students should communicate with the instructor about how to share selected competencies.

The following table outlines the required and suggested student-selected activities and their contribution to each student's final grade.

Course Activities		
REQUIRED*** (85%)	% of Final Grade	Student Selections
Class Participation	10	10
Assigned Chapter Preparation	5	5
Research Competencies		
Final Paper: Literature Review or Proposal	30	30
Poster	10	10
Foundation Knowledge Competencies		
Concept Map	20	20
Article Abstract	10	10
STUDENT-SELECTED*** (15%)		
Research Competencies		
Grant Proposal	10	
Conference Proposal	10	
Second Article Abstract	10	
Professional Competencies (select at least 1)		
Vita	5	
Professional organization	5	
Communicate with researcher	5	
Foundational Knowledge Competencies		
Original work by a foundational theorist	10	
Additional <i>Handbook</i> chapter	10	
Historic Contributions Chapter/Reading	10	
<i>***Additional suggestions and substitutions may be negotiated.</i>		

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

A+ = 98 – 100%	A = 93 – 97.99%	A- = 90 – 92.99%
B+ = 88 – 89.99%	B = 83 – 87.99%	B- = 80 – 82.99%
C = 70 – 79.99%	F < 70%	

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT

Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].

Please note that:

- “Plagiarism encompasses the following:
 - Presenting as one's own the words, the work, or the opinions of someone else without proper acknowledgment.
 - Borrowing the sequence of ideas, the arrangement of material, or the pattern of thought of someone else without proper acknowledgment.”
(from Mason Honor Code online at <http://mason.gmu.edu/~montecin/plagiarism.htm>)
- Paraphrasing involves taking someone else's ideas and putting them in your own words. When you paraphrase, you need to cite the source.
- When material is copied word for word from a source, it is a direct quotation. You must use quotation marks (or block indent the text) and cite the source.
- Electronic tools (e.g., SafeAssign) may be used to detect plagiarism if necessary.
- Plagiarism and other forms of academic misconduct are treated seriously and may result in disciplinary actions.

- Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <http://ods.gmu.edu/>].
- Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301gen.html>].
- Students are responsible for the content of university communications sent to their George Mason University 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 must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- Students are expected to exhibit professional behaviors and dispositions at all times.

Campus Resources

- The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <http://caps.gmu.edu/>].
- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See <http://writingcenter.gmu.edu/>].
- For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See <http://gse.gmu.edu/>].

ADDITIONAL CLASS POLICIES

Paper Format

Papers not following this format may be automatically reduced by up to a letter grade.

- 1 inch margins on all sides, double-spaced, 12-point Times New Roman font.
- Separate title page including the following: title, name, date, professor, course number.
- Formatted in APA style and proofread for spelling, grammar, and clarity errors.

Students are encouraged to print on both sides of paper or to use recycled paper.

Late Assignments

Assignments are due at the start of class on the assigned due date. If an assignment must be turned in late or outside of class, students may give the assignment to me in person or leave the assignment in my faculty mailbox (West Room 2108). If an assignment is left in my mailbox, send an email to indicate that it is there. **DO NOT** slide assignments under my office door and **DO NOT** send them to me via email without prior agreement. Assignments submitted this way will not be accepted or graded and will be considered missing. Late assignments will be marked down by half a letter grade for each day the assignment is late.

Electronic Device Use in Class

During class time, please refrain from checking email or conducting activities on the computer, cell phone or other electronic device that are not directly related to the class session.

Class Environment

Help to foster a positive learning environment by respecting the opinions and contributions of others. Also, cell phones should be turned off or put on silent mode so as to not affect the learning of those around you.

EDEP 820: Tentative Course Schedule

DATE	TOPIC	READINGS & ASSIGNMENTS
Aug 29	Review syllabus Introduction and Overview	TBD (provided in class)
Sept 5	Educational Psychology: A Historical Overview	Alexander et al. (Vol 1, Ch 1) Read <i>one</i> of the following: ‡ Berliner (2006) Calfée (2006)
Sep 12	Cognition, Learning, and Knowledge Theories I: Social Cognitive Theory and Information Processing	Schunk (Vol 1, Ch 5) Mayer (Vol 1, Ch 4)
Sep 19	Cognition, Learning, and Knowledge Theories II: Constructivism and Sociocultural Approaches	O'Donnell (Vol 1, Ch 3) Göncü & Gauvain (Vol 1, Ch 6)
Sep 26	Expertise and Intelligence	Nandagopal & Ericsson (Vol 1, Ch 10) Roberts & Lipnevich (Vol 2, Ch 2)
Oct 3	Student and Teacher Knowledge and Beliefs	Read <i>two</i> of the following: ‡ Hofer & Bendixen (Vol 1, Ch 9) Vosniadou & Mason (Vol 2, Ch 9) Fives & Buehl (Vol 2, Ch 19) <i>Submit paper format and topic</i>
Oct 10	Motivation and the Classroom Context	Read <i>two</i> of the following: ‡ Graham & Weiner (Vol 1, Ch 13) Kaplan et al. (Vol 2, Ch 7) Shernoff (Vol 2, Ch 8)
Oct 17	Effective Classrooms and Effective Teachers	Patrick et al. (Vol 2, Ch 18) Roehrig et al. (Vol 2, Ch 20)
Oct 24	Technology and Instruction	Moreno (Vol 3, Ch 18) Graesser et al. (Vol 3, Ch 19)
Oct 31	Child, Adolescent, and Adult Development	Chapters TBD based on student input <i>Final paper outline</i>
Nov 7	Teaching and Learning in the Domains	Shulman & Quinlan (1996) Additional chapters TBD based on student input

Nov 14	Research Methodology and Evidence-Based Practices	Kulikowich & Sedransk (Vol 1, Ch 2) Cook et al. (Vol 1, Ch 17)
Nov 21	No Class/Thanksgiving	
Nov 28	Assessment and Accountability	Hosp (Vol 3, Ch 5) Elliott et al. (Vol 3, Ch 6)
Dec 5	Conclusions	<i>Poster Session</i> <i>Poster materials due 12/3 9am</i>
Dec 12		<i>Final Paper due</i>

‡Indicate chapters selected on the appropriate Blackboard Discussion board.

Appendix A

Attendance & Participation Rubric (10%)

Student participation is imperative to student learning and a successful class. The following rubric outlines how student participation scores will be determined in this course. All students are expected to demonstrate specific characteristics and actions throughout the semester. The quality and quantity of these actions will determine the points assigned for participation.

Students are expected to:

- Be punctual, present (in mind and body), and well prepared for class.
- Participate fully in class activities and assignments – take an active part in small and large group discussions (without dominating the conversations) and pay attention to class lectures.
- Make insightful comments, which are informed by required readings and demonstrate reflection on those readings. Specifically, students should come to class with questions, comments, and thoughts on the current readings.
- Treat class activities, group discussions, and class discussions as important components of the course, showing respect for fellow classmates and the course material.

Each of these criteria will be assessed on a 5-point scale.

- 5 = Student *consistently* demonstrated the criterion throughout the semester.
- 4 = Student *frequently* demonstrated the criterion throughout the semester.
- 3 = Student *intermittently* demonstrated the criterion throughout the semester.
- 2 = Student *rarely* demonstrated the criterion throughout the semester.
- 1 = Student *did not* demonstrate the criterion throughout the semester.

Your participation grade will be calculated as the sum of points for each criterion.

Criterion	Score
a)	
b)	
c)	
d)	
TOTAL	_____

Appendix B

Article Abstract Guidelines and Rubric (10%)

Each student is required to prepare one abstract of a peer-reviewed article related to their assigned handbook chapter. Abstracts are due the day the handbook chapter is scheduled in the syllabus. Abstracts should be posted on Blackboard by noon the day the handbook chapter is scheduled.

CONTENT

Theoretical/Review Article

1. The topic
2. The purpose, thesis, or organizing construct and the scope (comprehensive or selective) of the article
3. The sources used (e. g. , personal observation, published literature)
4. The conclusion(s) (include implications or applications)
5. Your critique (impressions) and discussion of implications

Empirical Article

1. The problem
2. The experimental method (methodology)
3. The findings/results
4. The conclusion(s) (include implications or applications)
5. Your critique (impression) and discussion of implications

FORMAT

The abstract should

- Include a cover page
- Be 3-6 pages (excluding cover and reference page), typed, double-spaced, and in APA format
- Include reference information on a separate sheet (APA format)

ARTICLE ABSTRACT RUBRIC

Criteria	Outstanding (3)	Competent (2)	Minimal (1)	Unsatisfactory (0)
Summary <i>Summarize important aspects of article</i>	Provides a clear and complete summary of the article including all necessary components.	Summary of the article is mostly complete but lacks some components, clarity, or understanding.	Summary of the article is somewhat incomplete and/or unclear with multiple misunderstandings.	Summary of the article is absent.
Analysis <i>Analyze and critique specific aspects of article (e.g., theory, methods, analysis, discussion)</i>	Gives a complete analysis of the article, relating specific examples to justify critique.	Analysis may be somewhat limited or includes few examples to justify critique.	Analysis is limited and/or lacks examples to justify critique.	Gives no analysis of study and lacks examples to justify critique.
Implications <i>Discuss implications for the article for research or practice</i>	Relates article to personal situation and or course content with clear implications for practice and research.	Implications for practice and research are somewhat general, lacking connection, or in need of elaboration.	Implications are general, lack specific connection to practice and/or research, and/or are inappropriate.	Draws no implications for practice or research.
	Outstanding (1)	Competent (.75)	Minimal (.50)	Unsatisfactory (.25)
APA Style <i>Use APA style and formatting</i>	Uses concise, coherent, well-organized writing with correct APA style.	Writes with some lack of clarity and/or inconsistent APA style with some errors.	Writes with a lack of clarity and coherence, many errors, or incorrect APA style.	Writes with little clarity or coherence, many errors, and/or no use of APA style.

TOTAL = _____

Grade Allocation		
	Point Range	
	Plus	Standard
A	10	8-9
B	7	5-6
C		4
F		≤ 3

Appendix C

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

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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., approx 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.

Handout (8 pts)				
CONTENT	4	3	2	1
Summary	Summarized key ideas well with an appropriate amount of detail	Summarized key ideas well with few misunderstandings or instances where more (or less) information was needed	Summarized key ideas but there were several misunderstandings and/or instances where additional information was needed	Summary of was incomplete and/or contained numerous misunderstandings
FORMAT	2		1	0
Organization	Well organized and easy of read		Additional polishing needed	Disorganized and difficult to read
Technical (e.g., spelling) and APA errors	None present		Few	Numerous

Class Presentation/Discussion (2 pts)			
	2	1	0
Presentation and Discussion	Articulate, relayed appropriate information, and well executed with effective use of time; appropriately responded to question and comments	Overall, articulate, relayed appropriate information, well executed with effective use of time, appropriately responded to question and comments but lacking in one to two areas	Relayed incomplete or inappropriate information, ideas could have been more clearly stated, presentation was poorly executed, and/or available time was not used well, responses were limited or few substantive comments were offered

Recommended chapters from *Educational Psychology: A Century of Contributions*
Edited by Barry J. Zimmerman and Dale H. Schunk

The Founding Period: 1890 to 1920

William James
Alfred Binet
John Dewey
E. L. Thorndike
Lewis M. Terman
Maria Montessori

The Rise to Prominence: 1920 to 1960

Lev Vygotsky
B. F. Skinner
Jean Piaget
Lee J. Cronbach
Robert Mills Gagne

Educational Psychology in the Modern Era: 1960 to Present

Benjamin S. Bloom
N. L. Gage
Jerome Bruner
Albert Bandura
Ann L. Brown

Other potential researchers not included in the text:

Paul Pintrich
Jere Brophy
Michael Pressley