

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

**EDEP 550
Theories of Learning and Cognition
Fall 2011
West Hall 1001
Monday 4:30pm – 7:10pm**

PROFESSOR:

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COURSE DESCRIPTION

This course explores the theoretical perspectives on learning and cognition and the relation of these theories to the construction of learning environments, student motivation, classroom management, assessment, and the role of technology to support teaching and learning.

NATURE OF COURSE DELIVERY

This course is structured around readings, reflections on readings, class projects, technology activities, and writing assignments. This course will be taught using lectures, discussions, and small and large group activities.

STUDENT OUTCOMES

This course is designed to enable students to

- Demonstrate an understanding of principles and theories of learning and cognition related to biological, behavioral, cognitive, social learning, and information processing models of learning and memory.
- Develop an increased awareness of the ways in which theories of learning and cognition can be applied to instruction.
- Become familiar with aspects of contemporary issues in education related to the science of learning.
- Understand the relationship between a range of technologies and learning, critical thinking, and problem solving processes.
- Develop an appreciation for and understanding of the variance of developmental and learning needs of culturally diverse and exceptional learners.
- Demonstrate an understanding of how theoretical approaches to learning and cognition relate to classroom management, instruction, and assessment.
- Design instruction that is consistent with the developmental and learning needs of today's students.
- Develop and reinforce critical thinking, oral presentation, technological, and writing skills.

RELATIONSHIP TO PROGRAM GOALS AND PROFESSIONAL ORGANIZATION

The program goals are consistent with the following Learner-centered psychological principles (APA Division 15) outlined by the American Psychological Association Presidential Task Force in Education.

- 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 Affect
- Principle 10: Developmental Influences on Learning
- Principle 11: Social Influences on Learning
- Principle 12: Individual Differences on Learning
- Principle 13: Learning and Diversity
- Principle 14: Standards and Assessment

For more information please see:

American Psychological Association (1997). *Learner-centered psychological principles: A framework for school redesign and reform*. Retrieved August 24, 2005, from <http://www.apa.org>

COURSE MATERIALS

Required Text:

Driscoll, M. P. (2005). *Psychology of learning for instruction* (3rd ed.). Boston: Allyn & Bacon. [We will cover all or almost all of the topics in this book.]

Additional Required Readings:

There may be a few readings added to fill in information that is not available in the textbook. I will provide you with a list of those in advance of the weeks for which they are assigned.

COURSE REQUIREMENTS

A. Attendance and Participation (30 pts)

Because of the importance of lecture and classroom discussions to students' total learning experience, 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.

Three times during the semester (approximately every four weeks), you will be responsible for submitting to me, **at least 24 hours prior to class time**, a question arising from the reading for that week and one that you think will add to class discussion. I will collect all of the questions for each class and share them with the rest of the class. While the questions themselves will not be graded, fulfillment of the question submissions does influence the overall grade for participation.

Attendance, punctuality, preparation, and active contribution to small and large group activities are essential. This is especially important related to your work within the group to which you will belong during the semester. These elements of behavior reflect the professional attitude implied in the course goals and will account for 10% of the course grade. In the event you have to miss a class you should notify me in advance. (See rubric for attendance and participation in Appendix A).

B. Journals (40 pts--20 pts for each submission)

Each student is required to maintain a journal related to her or his reactions to the content of the course. For each class meeting (or weekly readings), you will comment on the meaning or potential meaning of the topic for you *personally and professionally*. We will discuss how to do this in class.

Twice during the semester, you will submit to me your journal entries to that point; these will come approximately the end of September and the middle of November. I will let you know a week in advance when I want to see your journals. I will read through them and provide timely feedback.

C. Group Project (30 pts)

Students will be placed in working groups of about 4-5 per group for the second half of the semester, based primarily on similarities in background and professional goals. Each group will develop a project that will consist of what I call an analysis of an instructional event from the perspectives of several learning theories. The instructional event may be of several different types: an actual classroom situation, written guides (such as instruction manuals), instructive television shows (such as "How Do They Do That?"), instructive videos from the internet, or other presentational formats and learning opportunities. We will discuss the project after we have covered a good portion of the materials for the course (probably around October 3).

Also, I'm leaving open the possibility of another kind of assignment that could contribute well to the groups' learning. This may be proposed by the group or I may work it out in collaboration with the class.

C. Case Analysis Writing Assignments (100 points, 50 points each)

Students will complete two case analysis writing assignments in which they will analyze real-life practical situations and apply or discuss the concepts discussed in class. The first case study analysis will cover material read or discussed in class through October 10. The second one will cover material covered during the second half of the course. The first assignment will be given out on Monday, October 10 and will be due by 5 p.m. on October 21. The second assignment will be given out on December 5 and will be due by 5 p.m. on December 12.

The mid-point case analysis serves as one of the performance based assessments for students in the master's program in educational psychology. Educational psychology faculty members use this as a way to determine if those students are progressing satisfactorily in the program.

Appendix B contains a rubric related to answers on this assessment.

Late Submissions

Assignments are due at the time and date indicated. Send assignments to me via an email attachment. If you are concerned about whether I received the attachment, I will gladly send you confirmation. Non-approved late submissions will be marked down by half a letter grade for each day that it is late.

Grading Scale for Course

A+ = 196 - 200	A = 186 - 195	A- = 180 - 185
B+ = 176 - 179	B = 166 - 175	B- = 160 - 165
C = 140 - 159	F < 140	

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS:

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:
 1. Presenting as one's own the words, the work, or the opinions of someone else without proper acknowledgment.
 2. 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/>].

PROPOSED CLASS SCHEDULE

Date	Topic	Readings	Other Assignments
Mon 8/29	Course Overview Key Issues Related to Learning	Driscoll, Chapter 1	
Mon 9/06	LABOR DAY HOLIDAY		
Mon 9/12	Behaviorism and Radical Behaviorism	Driscoll, Chapter 2	
Mon 9/19	Cognitive Information Processing	Driscoll, Chapter 3	
Mon 9/26	Meaningful Learning and Schema Theory	Driscoll, Chapter 4	
Mon 10/03	Situated Cognition	Driscoll, Chapter 5	<i>Initial Discussion of Group Projects</i>
Tue 10/11	Cognitive and Knowledge Development	Driscoll, Chapter 6	<i>Case Analysis Writing Assignments Given Out</i>
Mon 10/17	Case Analysis Writing Assignment Work Period—No class meeting		NOTE: Case study analyses are due by 5 p.m. Friday, October 21.
Mon 10/24	Interactional Theories of Cognitive Development	Driscoll, Chapter 7	
Mon 10.31	Biological Bases for Learning and Memory	Driscoll, Chapter 8	
Mon 11/07	Topic to Be Determined	Readings to Be Determined	
Mon 11/14	Motivation and Self-Regulation in Learning	Driscoll, Chapter 9	
Mon 11/21	Gagne's Theory of Instruction	Driscoll, Chapter 10	
Mon 11/28	Constructivism	Driscoll, Chapter 11	
Mon 12/05	Course wrap-up and reflections	Group Presentations	<i>Group Projects due by 4:30 pm</i>
Mon 12/12	EXAM WEEK No class meeting		Case analyses are due by 5 p.m. Monday, December 12

Appendix A Attendance & Participation Rubric (30 points)

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:

- a) Be punctual, present (in mind and body), and well prepared for class.
- b) 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.
- c) 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.
- d) Treat class activities, group discussions, and class discussions as important components of the course, showing respect for fellow classmates and the course material.
- e) Avoid using electronic devices for personal communication or other non-class-oriented purposes during class time.

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.

Appendix B

Rubric for Case-Study Analysis Assignments (50 points each)

Questions and sub-questions in the case-study analysis may have differing point values, ranging from 5 to 8 points. The value of each question is indicated at the end of each question on the case analysis. Elements for each question may be different, as well. Thus, this rubric indicates the range of potential answers in 4 basic categories.

The instructor will assign specific points based upon the completeness and accuracy of the answers. Since points on questions may not be easily divided by four, the instructor has some leeway in awarding full points. The following is a guide to responses and the relative value of types of responses.

The mid-point analysis is a performance based assessment (PBA) that is used by faculty in the program to determine if students in the master's program in educational psychology are making satisfactory progress toward their degrees.

Each answer to each question will be judged on *completeness and accuracy*.

Full Credit

Answer addresses every one of the elements required for the particular question. It is clearly explained and reveals the essential knowledge that is being queried in this question.

$\frac{3}{4}$ Credit

A key element of the question is not addressed or is incorrect. Explanations be minimally correct by may lack clarity of expression.

$\frac{1}{2}$ Credit

Two key elements of the question are not addressed or are incorrect. Writing may be clear but not sufficient to explain the response clearly.

$\frac{1}{4}$ Credit

The answer lacks a major understanding of the knowledge being queried. Responses may be minimal but incompletely or unclearly stated.