

**Rochester Institute of Technology
Rochester, New York**

COLLEGE of Liberal Arts
Department of School Psychology

COURSE: 0527-702-01

- 1.0 Title:** Psychology of Teaching and Learning **Term:** 20072
Credit Hours: 4
Prerequisite(s): Matriculation in the School Psychology Program, or permission from the instructor
Corequisite(s): none
Course proposed by: Suzanne Graney, Ph.D.

- 2.0 Course information:**
Wednesday 4:00 – 5:50 p.m. Building 01-Room 3335
Thursday 12:00-1:50 p.m. Building 07-Room 1560

	Contact hours	Maximum students/section
Classroom	4	20
Lab		
Studio		
Other		

Quarter(s) offered (check)
_____ Fall Winter _____ Spring _____ Summer

Students required to take this course:
All graduate students in the School Psychology Program are required to take this course.

Students who might elect to take the course:
Any graduate level student interested in learning more about the teaching and learning process.

3.0 Goals of the course

3.1 Students will demonstrate an understanding of the processes involved in effective classroom instruction. This includes a study of contemporary and historic theories of learning.

3.2 Students will demonstrate an understanding of student characteristics that account for diversity in learners and be able to articulate a model of how students learn.

3.3 Students will demonstrate an understanding of disorders typically encountered by school support personnel, including school psychologists, special education teachers,

reading and math specialists, occupational therapists, physical therapists, and speech/language pathologists.

3.4 Students will review teaching practices as they relate to current research on teacher effectiveness. This review will include current brain research and its implications for students' learning and engagement.

3.5 Students will understand the key elements of a balanced reading approach.

3.6 Students will evaluate current math instruction in light of teaching-for-understanding principles, such as practices that develop both conceptual and procedural knowledge.

3.7 Students will be able to identify stumbling blocks to effective learning.

4.0 Course description

Most referrals to school psychologists involve some sort of learning problem, yet most of us know little about the causes of school learning. What variables affect school learning? Are some influences more important than others? Which of these influences are alterable and therefore available as interventions to improve learning? What classroom strategies work best? We will examine theories of school learning and the basic psychological principles that apply to teaching and learning. This will be accomplished through the examination of the role of teachers, which includes their responsibility for teaching curriculum, classroom management, and the social and emotional growth of students. In addition, emphasis will be placed on obtaining an understanding of learning disorders, including diagnosis and intervention strategies. It is hoped that through an increased understanding of the teaching and learning process, school psychologists will be more effective as consultants as they attempt to improve the learning process, especially for learners with special needs.

5.0 Required Texts

5.1 Marzano, R. J., Pickering, D. J., & Pollack, J. E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Alexandria, VA: ASCD.

5.2 Thomas, A., & Grimes, J. (2002). *Best practices in school psychology IV*. Washington, D.C.: NASP.

5.3 List of Supplemental Readings

5.5.1 Carnine, D. (1994). Introduction to the mini-series: Diverse learners and prevailing, emerging, and research-based educational approaches and their tools. *School Psychology Review*, 23, 341-350.

5.5.2 Shinn, M. R., & McConnell, S. (1994). Improving general education instruction: Relevance to school psychologists. *School Psychology Review*, 23, 351-371.

5.5.3 Baker, S. K., Kameenui, E. J., Simmons, D. C., & Stahl, S. A. (1994). Beginning reading: Educational tools for diverse learners. *School Psychology Review*, 23, 372-391.

5.5.4 Stein, M., Dixon, R. C., & Isaacson, S. (1994). Effective writing instruction for diverse learners. *School Psychology Review*, 23, 392-405.

5.5.5 Carnine, D., Jones, E. D., & Dixon, R. C. (1994). Mathematics: Educational tools for diverse learners. *School Psychology Review*, 23, 406-427.

5.5.6 Carnine, D., Miller, S., Dean, R., & Zigmond, N. (1994). Social studies: Educational tools for diverse learners. *School Psychology Review*, 23, 428-441.

5.5.7 Grossen, B., Romance, N. R., & Vitale, M. R. (1994). Science: Educational tools for diverse learners. *School Psychology Review*, 23, 442-463.

6.0 Topics (outline):

Date	Topics	Assignments and Readings
12/5	Course Introduction Reflections on Learning	Carnine (1994)
12/6	Applying psychology to teaching	Marzano Ch. 1 and 2 Get video for next class
12/12	Influences on School Learning Overview of Learning Theories	Marzano Ch. 3 and 4
12/13	Effect Size Videos illustrating good teaching Student Presentation: Skinnerian Operant Conditioning	Shinn & McConnell (1994) Supplemental Readings
12/19	Structure of the Cognitive System, Learning and Memory	Marzano Ch, 5 and 6
12/20	Beginning Reading for diverse learners Student Presentation: Bloom's Taxonomy	Baker et al. (1994) Supplemental Readings

1/9	Teaching with the Brain in Mind	Marzano Ch. 7 and 8
1/10	Written expression instruction Student Presentation: Bruner's Discovery Learning theory	Stein et al. (1994)
1/16	Mathematics instruction for diverse learners	Marzano Ch. 9 and 10 Carnine et al. (1994)
1/17	Student Presentation: Vygotsky Recap of learning theories	Supplemental Readings
1/23	Motivating the learner, reinforcing effort and providing recognition	Marzano Ch. 11, 12, and afterword
1/24	Social Studies instruction for Diverse Learners Student Presentation #1 on disorder/ intervention	Carnine et al. (1994) Supplemental Readings
1/30	Teaching for self-regulation, creativity, and tolerance (habits of mind)	
1/31	Science Instruction for Diverse Learners Student Presentation #2 on disorder/intervention	Grossen et al. (1994) Supplemental readings
2/6	NASP (online activities, no class)	
2/7	NASP (online activities, no class)	
2/13	Educational Reforms/Initiatives	Independent research (guidelines to be handed out in class)
2/14	Student Presentations #3 and 4 on disorder/intervention	Supplemental readings
2/20	Analyzing lesson plans	
2/21	Student Presentations #5 and 6 on disorder/intervention	Supplemental readings
2/27	Final Exam	

** The instructor reserves the right to modify the course schedule or reading assignments as needed to meet course objectives

7.0 Intended learning outcomes and associated assessment methods of those outcomes

Course Requirements:

1. **Intervention Research Paper:** Each student will research a common psychoeducational dysfunction/learning disorder. The report should define the problem and typical presentation and symptoms, highlight the prevalence rates, and describe, contrast and critique at least two widely-recognized intervention strategies for this problem. Your critique may include both statistical and analytical information, but be sure to go beyond your own opinion and cite references. You may choose a dysfunction/disorder from areas typically addressed by school support personnel.

You may choose a topic that two or three other students in the class are doing. In fact, you are encouraged to do this, but the paper you write must be your own research. You may find it helpful to identify a student in your practicum site with the same disorder for illustrative purposes. Papers should be between 6 and 8 pages long. The paper will be evaluated for inclusion of relevant research, references to informed expert opinion, and the quality of the writing, as well as the synthesis and analysis of information. Final editions of the paper will be copied and distributed to the class.

Possible dysfunctions/disorders to explore include, but are not limited to:

Central auditory processing	Spelling disability
Dyspraxia (apraxia)	Pragmatic language delays
Receptive language disorder	Expressive language disorder
Dyslexia	Dysgraphia
Anomia	Nonverbal learning disabilities
Agnosia	Sensory Integration Disorder
Gross-motor dysfunction	Fine-motor dysfunction

Due date: January 24, 2008

2. **Presentation of a Disorder/Dysfunction to the class:** In groups of two or three, you will present the information learned about the disorder you researched to the class. Be sure to give special attention to intervention strategies. Engage your classmates in a discussion of the issues related to the disorder. The presentation will be graded on the basis of how well the group engages their peers in discussion and dialogue, and how well they disseminate important features and intervention strategies. All students within the group will share the grade assigned.

Sign up for presentation dates.

- 3. Presentation of a learning theory:** Bigge and Shermis (2004) discuss eleven theories that pertain to classroom learning. We will concentrate on four: Skinner’s operant conditioning; Bruner’s discovery learning, Vygotsky’s theory of learning, and the ubiquitous Bloom’s taxonomy. Your assignment is to get together in groups of four or five to do a presentation on one of those four theories. The presentation should last for at least sixty minutes and should be done in the style of the theorist. Address what you consider to be more important about the theory. Feel free to engage the audience in simulation, dialogue, and role play, and use any teaching techniques that you feel will “grab” the audience and help them understand key aspects of that particular learning theory. It is expected that you will assign your classmates reading material that supports your presentation. You do not need to prepare a written report; your grade will be based on the quality of your presentation. During the first class you will sign up for the theory you want to present – first come, first serve. The due date for each presentation is listed on the course calendar. All students within the group will share the grade assigned.

Sign up for presentation dates.

- 4. Class Participation:** You are expected to keep up with the assigned readings, and to demonstrate your developing knowledge by participating in class discussions, arriving to class on time, asking thoughtful questions, and contributing to the overall learning process. In our interactions and discussions I like to see that you are thinking, not just memorizing. In addition to applying concepts from the readings, I would like you to speculate about the implications of these concepts, and ask whatever questions occur to you. Be prepared to go out on a limb and speculate about answers to questions raised by others, to extend or challenge the implications proposed. You will be evaluated on the frequency and quality of your participation.

Grading:

Grades will be weighted as follows:

Intervention Research Paper	25%
Presentation of Disorder/Dysfunction	20%
Learning Theory Presentation	25%
Participation	15%
Final Exam	15%

All assignments are due on the date indicated. If there are extenuating circumstances which prevent you from submitting your work on time, you must arrange this with the instructor prior to the class in which the work is due. In all other cases, grades will be lowered on overdue work.

8.0 Program or general education goals supported by this course

The main goals of this course correspond to the following NASP competencies:

- 8.1 Diversity Awareness and Sensitive Service Delivery:**

School psychologists must have the ability to recognize when, where, and how issues of diversity are manifest and operating within a wide variety of levels, to adapt their practices in response to the needs of those being served, and to become aware of their own personal world views and biases. School psychologists must use this recognition and knowledge to help schools effectively embrace and address issues of diversity.

8.2 Systems-based Service Delivery:

School psychologists must understand how systems work, and must use this understanding to help organize schools and classrooms in ways that promote learning and prevent problems. School psychologists must provide leadership in developing schools as safe, civil, caring, inviting places where there is a sense of community, respect, and high expectations of excellence for all. School psychologists must also realize that interventions become more effective when parents and other primary caregivers are partners in intervention design and implementation.

8.3 Enhancing the Development of Cognitive and Academic Skills:

School psychologists must participate in the development of challenging, but achievable, cognitive and academic goals for all students, and must recognize the need to adjust expectations and avenues of assessment for individual students. School psychologists must also be able to apply learning theory and cognitive strategies to the instructional process, to communicate these effective strategies to students, parents, and other school personnel, and to help monitor the integrity of interventions and instructional practices.

9.0 Other relevant information

10.0 Supplemental information

Students with Disabilities: The Rehabilitation Act of 1973, reaffirmed by the 1992 Americans with Disabilities Act (ADA), was created to protect the rights of the disabled population. Anyone in this class who has a disability or any other situation or problem that requires special accommodations should let me know as soon as possible, not after the first project/exam/etc. We will discuss the necessary accommodations. There are resources on campus that you should know about as well. Please see me after class or during office hours.