

TCED 6933 - Brain Based Teaching and Learning

Fall 2026 Syllabus, Section A03, CRN 44276,

Credit hours: 3

Instructor

M Kathleen Cripe

Email: mlcripe@ysu.edu

Public Instructor Information

Instructor Title: Full Professor/Chair

Instructor Professional Qualifications: Ph.D. Curriculum & Instruction, Science Education (Akron University, 2009); M.S. Analytical Chemistry (Youngstown State University, 1996); B.S. Chemistry, Biology, Physics (Youngstown State University, 1986)

Instructor Office Location: Beehgly Hall, Room 1006

Instructor Office Phone: (330) 941 - 3517

Course Description

6933. Brain Based Teaching and Learning . This course is a critical appraisal of learning and teaching. Each learner constructs his/her brain as learning occurs. Teachers reconsider their practices in light of the science of learning research provided by education, neuroscience and socio-psychology. Course may be offered onsite, online, or as a combination of both. Prereq.: Admission to School of Graduate Studies and Research. 3 s.h.

Course Readings

Group	Title	Author	ISBN
Required	The Art of Changing the Brain	Zull, James E	

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Course Calendar and Topics

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Module 1: Brain Basics		
8/31	Module 2: Constructivism		
9/7	Module 3: Multiple Intelligence Theory		
9/14	Module 4: Cambourne's Conditions		
9/21	Module 5: Universal Design for Learning & Gender Differences		
9/28	Module 6: 21st Century Learning & John Hattie's Research -		
10/5	Module 7: Physical Activity & Music Integration		

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.