

Brain Health 411

Professor Tracey J. Shors, Ph.D.

MTh 10:20 in SEC 216

The course is an upper level course in Psychology, with an emphasis on topics related to the neuroscientific and psychological study of brain health. In addition to scientific papers, students will read several books related to the covered topics. Students will construct essays, participate in class discussions and complete standard exams. Lectures will cover the following topics:

INTRODUCTION TO BRAIN HEALTH (according to Shors)

- How learning maintains brain health (September 9)
- Mental and Physical (MAP) Training (September 12 and 16)
- (First essay assigned on September 16, due on September 30)

STRESS AND BRAIN HEALTH

- The stress response
- Stressful life experience and its effects on brain health
- The stress of sexual trauma and abuse
- The stress of maternal deprivation
- The stress of poverty and homelessness

ENHANCING BRAIN HEALTH

- Exercise for cognitive enhancement and stress reduction
- Mental training for cognitive enhancement
- Meditation for cognitive enhancement and stress reduction
- Maternal and paternal interactions with brain development and health
- Psychotropic medications – do they help or hinder brain health?

CLASSES IN NOVEMBER AND DECEMBER:

- Lecture: What does it mean to be different?
- Discussion: Anatomy of an Epidemic (second essay)
- Discussion: Far from the Tree (third essay)

Exams:

- First midterm (October 28)
- Second midterm will be given during the scheduled final exam period.

Books:

- The Human Brain, Rita Carter, DK Publisher, 2009, ISBN: 978-0-7566-5441-2
- Anatomy of an Epidemic, Robert Whitaker, Crown Publishers, 2010
- Far from the Tree, Andrew Solomon, 2012

Examination and Grading: The testing will consist of both written essays (3) and standard objective testing with examinations (2). Each student will be expected to demonstrate proficiency in his or her communication skills by the end of the course.