

COURSE TITLE: TEACHING THE TEEN BRAIN (Closed for New Registrations)

WA CLOCK HRS: 30

NO. OF CREDITS: 3 QUARTER CREDITS
[semester equivalent = 2.00 credits]

OREGON PDUs: 30

PENNSYLVANIA ACT 48: 30

INSTRUCTOR: Brenda McKinney
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COURSE DESCRIPTION:

What’s going on in there? This is a question every parent and teacher of a teen has asked. No one expected the answer that the teen brain was keeping secrets-big ones at that. What scientists found took everyone by surprise; indeed, the adolescent brain was undergoing a dynamic transformation getting ready itself for adulthood. Even more shocking was the information that the brain keeps developing into the twenties.

This is your chance to discover that the old culprits, rebellion, exuberance and hormones, are not the only answers. In this course you will learn about the teen brain, how to navigate the abrupt shifts in emotion and behavior and still be an effective teacher.

Now is the time to unlock adolescent thinking and behavior by explaining the biological changes happening in the teenage brain. The practical side of this exciting class is to provide strategies for creating a more academically AND emotionally productive classroom. Don’t miss this opportunity to find out the secrets that have eluded teachers since teenagers have been going to school!

LEARNING OUTCOMES: Upon completion of this course, participants will have:

- Explored key findings of the adolescent brain
- Gained an understanding of the neurological and behavioral changes in the brain
- Gained an understanding of the impact of drugs and other risk taking behaviors
- Experienced effective teaching strategies to effectively work with teens
- Learned positive ways to communicate and stay grounded with teens
- Learned facts and research that topple assumptions previously held about the teen brain
- Discovered ways to transform your classroom to take advantage of those ever changing teen brains

COURSE REQUIREMENTS:

Completion of all specified assignments is required for issuance of hours or credit. The Heritage Institute does not award partial credit.

The use of artificial intelligence is not permitted. Assignment responses found to be generated by AI will not be accepted.

HOURS EARNED:

Completing the basic assignments (Section A. Information Acquisition) for this course automatically earns participants their choice of CEUs (Continuing Education Units), Washington State Clock Hours, Oregon PDUs, or Pennsylvania ACT 48 Hours. The Heritage Institute offers CEUs and is an approved provider of Washington State Clock Hours, Oregon PDUs, and Pennsylvania ACT 48 Hours.

UNIVERSITY QUARTER CREDIT INFORMATION

REQUIREMENTS FOR UNIVERSITY QUARTER CREDIT

Continuing Education Quarter credits are awarded by Antioch University Seattle (AUS). AUS requires 75% or better for credit at the 400 level and 85% or better to issue credit at the 500 level. These criteria refer both to the amount and quality of work submitted.

1. Completion of Information Acquisition assignments 30%
 2. Completion of Learning Application assignments 40%
 3. Completion of Integration Paper assignment 30%
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CREDIT/NO CREDIT (No Letter Grades or Numeric Equivalents on Transcripts)

Antioch University Seattle (AUS) Continuing Education Quarter credit is offered on a Credit/No Credit basis; neither letter grades nor numeric equivalents are on a transcript. 400 level credit is equal to a "C" or better, 500 level credit is equal to a "B" or better. This information is on the back of the transcript.

AUS Continuing Education quarter credits may or may not be accepted into degree programs. Prior to registering, determine with your district personnel, department head, or state education office the acceptability of these credits for your purpose.

ADDITIONAL COURSE INFORMATION

REQUIRED TEXT

Feinstein, Cheryl. *Secrets of the Teenage Brain*. 2009. Corwin Press. ISBN 1-890460-42-7.

None. All reading is online.

MATERIALS FEE

Text, *Secrets of the Teenage Brain*, is approximately \$14 on Amazon.com. Available used from \$4.00 and up.

ASSIGNMENTS REQUIRED FOR HOURS OR UNIVERSITY QUARTER CREDIT

A. INFORMATION ACQUISITION

Assignments done in a course forum will show responses from all educators who have or are taking the course independently. Feel free to read and respond to others' comments.

Group participants can only view and respond to their group members in the Forum.

Assignment #1: Introduction.

For those participating in Group Collaboration, you must read and follow the instructions outlined in the Group Collaboration Guidelines. Click on the link for Guidelines. <https://www.hol.edu/about/group-collaboration>

- Assignment #1, each participant must complete this assignment independently.
- There should be a minimum of (4) four group meetings during which the course content is discussed.
- Teleconferences or live meetings are acceptable. A good videoconference option is Zoom (<https://zoom.us/>).
- Each participant must attend at least 75% of the group meetings (a minimum of 3 of 4 meetings).

You must complete your introduction before moving on to other assignments.

Introduce yourself with a background profile.

- What led you to choose teaching as your profession?
- Describe your current professional situation.
- What brings you the most joy in your work?
- What led you to choose this class?
- What outcomes do you hope to achieve through this coursework?

Assignment #2: A Different Brain.

Neurological and biological changes are rampant during adolescence. Your response will consider how these changes affect what you do in the classroom, along with your understanding of how their thinking and feeling brain

- In the text, *Secrets of the Teenage Brain*, read pages 1-48.
- Watch this introductory video providing an overview of the teen brain from Dan Siegel.

<https://www.youtube.com/embed/0O1u5OEc5eY>

- Watch this video to learn about the neuroanatomical transformation from Dr. Jill Bolte Taylor.

https://www.youtube.com/embed/PzT_SBI31-s

- Consider the following in your response to the videos and the reading.
 - the role of chemicals and hormones
 - role of emotion
 - areas of the brain involved: survival brain, thinking brain, and feeling brain
 - connection between how teens spend their time and hard wiring the brain
 - structural and development differences in the teen brain
 - portions of this reading that provided new research and connections to the classroom
 - survival mode of the brain and maturation rate

Assignment #3: About Emotional Impact

Adolescents' judgment can be overwhelmed by the urge for new experiences, thrill-seeking, and sexual and aggressive impulses. They sometimes seem driven to seek experiences that produce strong feelings and sensations. Now scientific research is suggesting a new reason for the clashes between teenagers and their environment. Unsettled moods and unsettling behavior may be rooted in uneven brain development. This section of reading is critical to understanding behavior and considering discipline and motivation.

- In your text, *Secrets of the Teenage Brain*, read pages 49-75.
- Watch the video from Sarah-Jayne Blakemore: The mysterious workings of the adolescent brain

<https://www.youtube.com/embed/6zVS8HIPUng>

- Respond to this powerful learning from the video and the reading by creating a mind map. At least five branches. Color. Graphics and or pictures included. Written response minimal words while considering the following:
 1. Why teens have trouble mastering and controlling impulses
 2. Why teen behavior is driven by pursuit of pleasure
 3. Why memory and emotions are so closely connected
 4. Impact of this research and the significant findings for teens and learning

Assignment #4: Self Esteem.

It is during adolescence when teens feel a strong need to deeply reflect on who they are. At the same time, the teen brain is maturing and learning new things. All of this is a part of finding an identity. Developing a coherent self-concept will help them be able to build a strong self-esteem. Self-esteem is based on self-concept and their perspective of themselves will revolve around their concepts of worth and competence. It is closely related to success at school, social competence, and emotional balance.

- In your text, *Secrets of the Teenage Brain*, read pages 77-97 to understand the mental upheavals teens experience and how the behavior affects their school performance. Also focus on why their self esteem is under attack.
- Watch the video on Understanding the Teenage Brain

https://www.youtube.com/embed/N8zrKaE_dzw

- Respond in group forum sharing what was most profound for you and how your understanding of the teen brain has changed
- Consider the following about how brain development, self esteem and affects behavior:
 - Why teens experience emotions that they cannot articulate
 - Why teens are more vulnerable to stress
 - Why the teen brain reacts emotionally without logical strategies
 - What parts of the brain are most impacted
 - What adjustments will you need to make to adjust to the highs and lows of the teen brain

Assignment #5: Hormones.

During this time, the adolescent brain is changing in important ways, and scientists are now beginning to understand how hormones

also play a role in some of these changes. Neuroscientists are increasingly interested in how the flood of testosterone and estrogen unleashed by puberty plays a role in driving fundamental and permanent changes in brain anatomy. The brain of a young teen isn't just a bigger version of a small kid's. It isn't a smaller version of an adult's, either. With time and maturity, some areas right behind the forehead will also get involved. And those new areas are important. They can be key to making decisions that allow teens to keep their cool. You definitely want to dispel the myths and now what is happening with the brain and hormones.

- Read pages 99-122 in your text, *Secrets of the Teenage Brain*.
- Watch the video *The Teenage Brain Explained* <https://www.youtube.com/embed/hiduiTq1ei8>
- Then respond to the reading and video through a response or a video response
 - why teen brains and hormones are critical to academic success and mental wellness
 - role hormones play in the erratic and risk taking behaviors
 - significance of early/late maturation in boys and girls and the social self
 - Role of serotonin, dopamine, and norepinephrine
 - Importance of food and sleep in attention issues, explosive behaviors, and emotional wellness
 - specifically what you can do within your grade level/teaching assignment to encourage learning

Assignment #6: Vulnerable to Addictions.

Why are teens so vulnerable to drug addiction? Why do teens act out, and take drugs to begin with? Why are drugs being initiated so early on in adolescence, and why is the scope of these national statistics still growing? We often view teens as irresponsible or immature without recognizing that there is almost always a biological or chemical explanation behind their behavior. And while this remodeling occurs, teenagers simultaneously become inevitably susceptible to certain risks like addiction.

- In your text, *Secrets of the Teenage Brain*, read pages 125-145 to learn why teens do sometimes thoughtless things, are more prone to addiction, and why the risk taking brain makes them so vulnerable.

Watch the video *Which Brain Do You Want* featuring Dr. Daniel Amen

<https://www.youtube.com/embed/fpXwHU3dRts>

- Watch the video *The Teen Brain and Addiction* by Dr. Frances Jensen

https://www.youtube.com/embed/ZTy1_aQV9pA

Consider the following in your response:

- Teen vulnerability to addiction and why are teen addictions hard to break
- Effects of alcohol and drugs on the brain
- Parts of the brain involved with this reckless behavior
- Dopamine rush and how it affects the brain
- Age appropriate to discuss and inform kids about these vulnerabilities

ADDITIONAL ASSIGNMENTS REQUIRED FOR UNIVERSITY QUARTER CREDIT

B. LEARNING APPLICATION

In this section, you will apply your learning to your professional situation. This course assumes that most participants are classroom teachers who have access to students. If you do not have a classroom available to you, please contact the instructor for course modifications. Assignments done in a course forum will show responses from all educators who have or are taking the course independently. Feel free to read and respond to others' comments. Group participants can only view and respond to their group members in the Forum.

Assignment #7: Lesson Development.

Complete one (1) of the following options:

Option A)

- Develop an action plan for one aspect of your teaching reflecting what you have learned about teen brains in this course.
- Teach the lesson.
- Write a commentary on what worked well and what could be improved.
- Include any student feedback on your lesson.
- Share what you've learned with other teachers taking our courses by also contributing your Lesson to The Heritage Institute Lesson Library at <https://www.hol.edu/lesson-plan-library>
- You may download a copy of THI's lesson plan template at <https://www.hol.edu/about/lesson-template/>

Send your modified lesson and your commentary via email to your instructor.

OR

Option B)

Use this option if you do not have a classroom available.

- Adapt a lesson to reflect what you've learned in this course. (Do not implement it.)
- Share what you've learned with other teachers taking our courses by contributing your Lesson to The Heritage Institute Lesson Library at www.hol.edu/lesson-plan-library
- You may download a copy of THI's lesson plan template at <https://www.hol.edu/about/lesson-template/>
- Write a 500+ word article concerning any noteworthy success you've had as a teacher with one or more students.
- Please refer to the guidelines on our blog [What Works: Teaching at its Best](https://www.hol.edu/blog) prior to writing your article. (<https://www.hol.edu/blog>)
- Indicate whether or not you are OK with having your article considered for publishing on our website.

Assignment #8: Teaching Strategies

Emerging cognitive and neuroscience research suggests ways schools can help leverage teens' strengths in this unique developmental period. The adolescent brain is still developing and therefore requires different brain compatible strategies for learning. This assignment asks you to describe and detail specific learning strategies in "Things to Know" you learned in your teen brain course.

- Include the following in the development of your plan for the classroom. You can choose a mind map, a type of graphic organizer, or write a letter to a colleague or administrator outlining these strategies. No matter what you choose, you must include a personal response about your choices.
- Using the instructional strategies listed throughout the text, choose your favorite strategies and how they will help you walk the walk with the teens in your life/classroom.
- What are fifteen to twenty (15-20) specific changes that you would like to implement in the coming year? If you are taking this course in the summer, what changes will you make, what are the expected results?

Assignment #9: Share Your Learning.

Share critical aspects of this learning with a colleague, a parent of a teen, or an administrator.

- Share with a colleague what you have learned and how you will implement changes.
- Create an outline for someone parenting a teen and share the neurological and biological changes
- Encourage someone else to adopt and understand the critical components of this learning.
- Develop a discussion with other teachers at your school.
- A summary of the context of the discussion must also be included

Assignment #10: (500 Level ONLY)

In addition to the 400 level assignments, complete **one (1)** of the following assignment options:

Option A) Visit a "choice" school in your region and sit in on one or more classes observing teen behaviors. Write a response connecting your observations with your learning on the teen brain.

OR

Option B) Create a PowerPoint presentation for your staff based on this course and focused on perspectives that would be beneficial for your school. Save this as a PDF.

- 20 slides required, more acceptable

- graphics and pictures must be included
- PPT must be created in a format that is friendly to the teen brain
- Use as few words as possible
- Bibliography
- At least one activity

OR

Option C) Research your insight into the mysteries of the teen brain by finding five videos that could be used to share with all students from grades five through twelve. Explain how you would use the video and the neurological/biological changes that are affecting them.

C. INTEGRATION PAPER

Assignment #11: (Required for 400 and 500 Level)

SELF REFLECTION & INTEGRATION PAPER

(Please do not write this paper until you've completed all of your other assignments)

Write a 400-500 word Integration Paper answering these 5 questions:

1. What did you learn vs. what you expected to learn from this course?
2. What aspects of the course were most helpful and why?
3. What further knowledge and skills in this general area do you feel you need?
4. How, when and where will you use what you have learned?
5. How and with what other school or community members might you share what you learned?

INSTRUCTOR COMMENTS ON YOUR WORK:

Instructors will comment on each assignment. If you do not hear from the instructor within a few days of posting your assignment, please get in touch with them immediately.

QUALIFICATIONS FOR TEACHING THIS COURSE:

Brenda McKinney, CEO of Vancouver, WA based BrainVolution, is a developer and dynamic facilitator of workshops that teach practical thinking and learning tools for raising student achievement with the brain in mind. She has trained educators throughout the Pacific Northwest and is a popular presenter because of her ability to motivate, make things fun, and teach practical techniques for the classroom that can be used immediately. Brenda continues to read hundreds of books and articles on the subject of neuroscience and searches for the answer to success for every student. Her work with at-risk students and those with reading problems have made her a popular speaker at the state, regional and national level.

Brenda is able to synthesize the new research and continues to address the role of how to use the latest findings to create high achievement classroom. She brings 30+ years of experience at the elementary, middle school, high school and university level as a mentor teacher, consultant, motivational speaker, university instructor, and reading specialist. Brenda has her Master's in Education from Washington State University and is nationally certified in Brain Based Learning through the renowned Jensen Corporation, led by Eric Jensen, a noted international spokesperson for neuroscience and education.

Brenda will inspire and motivate you with her energy, enthusiasm and knowledge. Her wisdom, techniques, and brain based approach to education will inspire you and challenge you to meet the demands of this ever changing world.

BIBLIOGRAPHY

TEACHING THE TEEN BRAIN (Closed for New Registrations)

Feinstein, Cheryl. *Secrets of the Teenage Brain.* Corwin Press. 2009. Recent advances in neuroscience technology has finally made it possible to peer inside the teen brains. The secrets have been revealed in this wonderful text. The print is user friendly and the text reads almost like a novel. Every middle school and high school teacher will find this a must read. The critical element is that though we cannot change teen behavior we can adapt our teaching to more effectively reach and teach these teen minds. This text provides the science and the practical applications.

Jensen, Eric & Carole Snider. *Turnaround Tools for the Teenage Brain: Helping Underperforming Students Become Lifelong Learners.* Jossey Bass. 2013.

ISBN: 978-1-118-34305-0. The latest research shows not only that brains can change, but that teachers and other providers have the

power to boost students' effort, focus, attitude, and even IQs. In this book bestselling author Eric Jensen and co-author Carole Snider offer teacher-friendly strategies to ensure that all students graduate, become lifelong learners and ultimately be successful in school and life. Drawing on cutting-edge science, this breakthrough book reveals core tools to increase student effort, build attitudes, and improve behaviors.

Jensen, Frances, MD. *The Teenage Brain: A Neuroscientist's Survival Guide to Raising Adolescents and Young Adults.* Harper Collins. 2016. ISBN: 978-0-06-206785-2. Dr. Jensen explores adolescent brain functioning and development in the contexts of learning and multitasking, stress and memory, sleep, addiction, and decision-making. *The Teenage Brain* sheds new light on the brains—and behaviors—of adolescents and young adults, and analyzes this knowledge to share specific ways in which parents, educators, and even the legal system can help them navigate their way more smoothly into adulthood.

Siegel, Daniel, MD. *Brainstorm: The Power and Purpose of the Teenage Brain.* Penguin Books. 2013. ISBN: 978-1-101-63152-2. Between the ages of twelve and twenty-four, the brain changes in important and, at times, challenging ways. In *Brainstorm*, Dr. Daniel Siegel busts a number of commonly held myths about adolescence. Drawing on important new research in the field of interpersonal neurobiology, Siegel explores exciting ways in which understanding how the brain functions can improve the lives of adolescents.

Stauch, Barbara. *The Primal Teen: What Discoveries about the Teenage Brain Tell Us About Our Kids.* Anchor Books, 2003. This book offers cutting edge studies that now tell us the whole story about the teen brain. It is not finished growing. I like this text because it is appropriate for parents or educators. This offers critical information about the wild wacky teen brains. Find out about the blueprint for growth that shows us critical information about what happens during the teen years.

Sylwester, Robert. *The Adolescent Brain. Reaching for Autonomy.* Corwin Press. 2007. Sylwester always calls it like it is. In this wonderful book, he traces the biological and cultural universals in the teen life. Each chapter offers critical information from drugs to sexual activity, video games to understanding the wiring of the brain.

Walsh, David. *Why Do They Act That Way? A Survival Guide to the Adolescent Brain for You and Your Teen.* Free Press. 2004. This book reveals the latest scientific findings in easy to understand terms. Sample dialogues with parents and teens, examples of behavior contracts and an entire arsenal of strategies for parents, but teachers can benefit as well. It is powerful and practical and answers the question, "Why do they act this way?"