ASSIGNMENT CHECKLIST:
The assignment checklist will help you plan your work. Check off assignments as you complete them.

CLOCK, PDU, 400 LEVEL, or 500 LEVEL ASSIGNMENTS
A. Information Acquisition:
   ___ # 1: Introduce yourself via email. **Send to instructor.**
   ___ # 2: Read and respond to the articles on the blog [http://johnratey.typepad.com/](http://johnratey.typepad.com/) **Send to instructor.**
   ___ # 3: Read and respond to pages 3-56 on how exercise can transform learning. **Send to instructor.**
   ___ # 4: Read and respond to pages on stress, anxiety, depression and exercise. **Send to instructor.**
   ___ # 5: Read and respond to pages on the effect of exercise on AD/HD & addiction. **Send to instructor.**
   ___ # 6: Read and respond to pages 191-243 and the power of exercise on aging. **Send to instructor.**
   ___ # 7: Keep an exercise journal for 15 days. **Send to instructor.**

**NOTE: If you are doing this course for Clock Hours or PDUs, then you are done.**

400 & 500 LEVEL ASSIGNMENTS
B. Learning Application:
   ___ # 8: Create a success journal as you experience the power of exercise. **Send to instructor.**
   ___ # 9: Develop an action plan or lesson plan for one aspect of your teaching. **Send to instructor.**
   ___ #10: Share with a colleague how it has changed your life. Report context. **Send to instructor.**

500 LEVEL ASSIGNMENT
   ___ #11: In addition to the 400 level assignments, complete one of the following and **send to instructor.**
   Option A) Create a PowerPoint presentation for staff based on this course.
   Option B) Read 3-5 articles on benefit of exercise. Summarize in 2-3 page paper.
   Option C) Design your own assignment with the instructor's prior approval.

400 & 500 LEVEL ASSIGNMENT
C. Integration Paper:
   ___ #12: Complete the Integration Paper as described in the syllabus. **Send to instructor.**

NOTES:
- You may work collaboratively with other teachers and submit joint assignments on all but the final Integration Paper, which must be individually authored and submitted.
- Alternatives to written assignments (video, audio tape, photo collage, a collection of products, letters to editor, brochure and Web pages) may be submitted as substitute assignments with the instructor's prior approval.
- To maintain privacy, please do not refer to students in your paper by their actual name, but rather use an alias or designation such as “Student A.”
COURSE TITLE: EXERCISE & THE BRAIN FOR PEAK PERFORMANCE

INSTRUCTOR: BRENDA MCKINNEY, M.A.
360/607-6033
bbbrain@comcast.net
www.latestmind.com

COURSE DESCRIPTION:
Did you know you can beat stress, lift your mood, fight memory loss, sharpen your intellect, and function better than ever simply by elevating your heart rate and breaking a sweat? The evidence is incontrovertible: Aerobic exercise can physically remodel your brain for peak performance. The text we will be using, SPARK, embarks upon a fascinating and entertaining journey through the mind-body connection, presenting startling research to prove that exercise is truly our defense against everything from depression to ADD to addiction to aggression to menopause to Alzheimer's. This is a timely course for the decade. The book is filled with amazing case studies including the revolutionary fitness program in Naperville, Illinois, which has put this school district of 19,000 kids first in the world of science test scores. SPARK, by John Ratey, is the first book to explore comprehensively the connection between exercise and the brain. It will change forever the way you think about exercise, aging, or, for that matter, simply the way you think. Don’t miss the opportunity to be a part of this groundbreaking research. You will be able to share this with your family, your students, your aging parents; everyone can benefit. Join me today; don’t put off this opportunity.

Participants will purchase the required text SPARK. The Revolutionary New Science of Exercise and the Brain by John Ratey, MD, from Amazon.com for approximately $25.00 Hardback.

LEARNING OUTCOMES:
Upon completion of this course, participant will have:
1. Explored key findings about how your brain works and how exercise works.
2. Gained an understanding of the neurological and behavioral changes in the brain.
3. Gained an understanding of how exercise can improve learning, mood, and work ethics.
4. Experienced the power of beginning or continuing an exercise program.
5. Learned the revolutionary science connecting exercise with depression, AD/HD, addiction, and aging.

As a result of this course, you will learn facts and research that topple assumptions previously held about your exercise and mind body development

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

HOURS EarnED
Completing the basic assignments (Section A. Information Acquisition) for this course automatically earns participants their choice of 30 Washington State Clock Hours or 30 Oregon PDUs. The Heritage Institute is an approved provider of Washington State Clock Hours and Oregon PDUs.
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 (Upper Division) and 85% or better to issue credit at the 500 level (Post-Baccalaureate). These criteria refer both to the amount and quality of work submitted. Teachers who register for Antioch University Seattle 400 or 500 Level Credit will be required to:

1. Complete Section A: Information Acquisition assignments 30%
2. Complete Section B: Learning Application assignments appropriate for your levels 40%
3. Complete Section C: Integration Paper assignment 30%

CREDIT/NO CREDIT (No Letter Grades or Numeric Equivalents on Transcripts)
Antioch University Seattle (AUS) Continuing Education (CE) 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 stated on the back of the transcript.

AUS CE 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:

MATERIALS FEE:
There is no additional material fee.

HEADING REQUIRED FOR ALL ASSIGNMENTS
A heading is required; please use the following format.
Your Name: Instructor Name:
Course Number: Course Name:
Date: Level: Clock/ PDU/ Credit (400 or 500)
Assignment #: 
ASSIGNMENTS FOR HOURS OR UNIVERSITY QUARTER CREDIT

To gain a background in the subject matter, please complete the following assignments.
- As you go through Assignments 2-7, keep a journal of your notes or mark in the text looking for ideas, teaching strategies, or projects that appeal to you.
- 400 & 500 Level only: This journal will become the basis for changes in your own teaching which you will consider and plan in Section B: Learning Application portion of this course.

A. INFORMATION ACQUISITION

Assignment #1:
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?
Send to Brenda at bbbrain@comcast.net Subject line to read ‘Exercise #1’

Assignment #2:
Go to the blog for SPARK, The Revolutionary New Science of Exercise and the Brain http://johnratey.typepad.com/. Read at least 3 of the articles. Write a brief synopsis of each.
- What was most informational, provided you with new research or inspired you to keep reading.
- What research demonstrated why we need to move to think and feel?
Send to Brenda at bbbrain@comcast.net Subject line to read ‘Exercise #2’

Assignment #3:
In the text, SPARK, The Revolutionary New Science of Exercise and the Brain, read and summarize pages 3-56. Pay special to the dramatic effects of exercise on mind body learning
Respond to the following with a paper or a mind map:
- What study gave you insight into the power of exercise on learning?
- What role does exercise play in plasticity and why is that so important?
- What does learning really mean?
- What areas of the brain are involved in the thinking brain?
Send to Brenda at bbbrain@comcast.net Subject line to read ‘Exercise #3’

Assignment #4:
Why do we need to redefine stress and how does it affect learning?
Read 70-140 to understand the effects of stress, anxiety
Respond to the following with a paper, mind map, graphic organizer:
- Why do we need to redefine stress and how does it affect learning?
- What success has linked exercise to depression?
- Why is exercise the best defense against mood disorders?
- Why is it so important to understand that what affects the mind affects the body?
Send to Brenda at bbbrain@comcast.net Subject line to read ‘Exercise #4’
Assignment #5:
Read pages 141-190 about the role of exercise with AD/HD and addictions.
Respond to the following with a paper, graphic organizer, or mind map:
- What was the most significant case study for you?
- What is the underlying connection with AD/HD and exercise?
- What is the process of reclaiming self-control for an addict?
- What tales of dependence helped you understand the continuing cycle for addicts?
- How is it possible for exercise to replace a high?
Send to Brenda at bbbrain@comcast.net Subject line to read ‘Exercise #5’

Assignment #6:
Read pages 191-243 on hormones and aging
Respond to the following with a paper, graphic organizer, mind map:
- What is the effect of exercise on women’s health?
- What is the new expectation for pregnant mothers?
- Can PMS or postpartum depression be controlled?
- Is there help for cognitive decline (we all want to know)
- What are the elements of the life list and will that improve your lifestyle?
Send to Brenda at bbbrain@comcast.net Subject line to read ‘Exercise #6’

Assignment #7:
Read pages 245-270 and set up a lifestyle journal that you will keep for 15 days.
The journal will include your physical and mental exercise regimen for 15 days. This will be based on your fitness level. Make sure you read carefully before you begin. If you are continuing a work-out schedule, just maintain with the adjustments you noted in the regimen chapter. Plan to do a mental exercise each day.
Break your journal into:
- aerobic training see pages 240-241
- strength training see page 241
- balance and flexibility pages 241-242
- mental exercise page 24
Send to Brenda at bbbrain@comcast.net Subject line to read ‘Exercise #7’

This completes the assignments required for Hours.

Continue to the next section for additional assignments required for University Quarter Credit
ADDITIONAL ASSIGNMENTS 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 are not teaching in a classroom, please contact the instructor for course modifications. If you are a classroom teacher and start or need to complete this course during the summer, please try to apply your ideas when possible with youth from your neighborhood, at a local public library or parks department facility, (they will often be glad to sponsor community-based learning), or with students in another teacher’s summer classroom in session.

Assignment #8: (Required for 400 and 500 Level)
Set up a roadmap to success journal that you will keep for 15 days.
The journal will include your physical and mental exercise regimen for 15 days. This will be based on your fitness level.
Make sure you read carefully before you begin. If you are continuing a work-out schedule, just maintain with the adjustments you noted in the regimen chapter. Plan to do a mental exercise each day.
If possible purchase a pedometer to keep track of your steps. It's great to have at school also.

Break your journal into:
• aerobic training - pages 240-241
• strength training - page 241
• balance and flexibility - pages 241-242
• mental exercise - page 242

Use one of the computer programs online to track your exercise activity each day. Use the same program to keep track of the mental exercise you do each day.
When the 15 days are complete, summarize your regular exercise program and how it has benefited you.
Send to Brenda at bbbrain@comcast.net Subject line to read ‘Exercise #8’

Assignment #9: (Required for 400 and 500 Level)
• Develop an action plan or lesson plan for one aspect of your teaching.
• Explain how you will incorporate this into your subject matter.
Send to Brenda at bbbrain@comcast.net Subject line to read ‘Exercise #9’

Assignment #10: (Required for 400 and 500 Level)
• Share this information with another teacher taking this course or a friend or colleague.
• Encourage someone else to adopt and understand the critical components of this learning.
• Develop a discussion with other teachers at your school.
Send to Brenda at bbbrain@comcast.net Subject line to read ‘Exercise 10’

Continue to the next section for additional assignments required for University Quarter Credit
500 LEVEL ASSIGNMENTS

Assignment #11: (500 Level only)
In addition to the 400 level assignments, complete one of the following assignment options:

Option A)
Create a PowerPoint presentation for your staff based on this course and focused on how exercise could change your school. Save this as a PDF.
Send to Brenda at bbrain@comcast.net Subject line to read ‘Exercise #11-A’

OR

Option B)
Read at least 3-5 articles on the benefits of exercise. Check out http://www.johnratey.com/site/default.aspx and choose 3-5 that match your interest. Summarize in a 2-3 page paper.
Send to Brenda at bbrain@comcast.net Subject line to read ‘Exercise #11-B’

OR

Option C)
Design your own assignment with instructor’s prior approval.
Send to Brenda at bbrain@comcast.net Subject line to read ‘Exercise #11-C’

400 & 500 LEVEL ASSIGNMENT

C. INTEGRATION PAPER
Assignment #12: (Required for 400 and 500 Level Credit)
Write a 2-3 page Integration Paper answering these 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?
Send to Brenda at bbrain@comcast.net Subject line to read ‘Exercise #12’

INSTRUCTOR COMMENTS ON YOUR WORK:
Please indicate by email to the instructor if you would like to receive comments on your assignments.

QUALIFICATIONS FOR TEACHING THIS COURSE:
Brenda McKinney, M.A. brings 25 years of educational experience as a classroom teacher 6-12, a mentor teacher, consultant, motivational speaker, university instructor, and a reading specialist to each of her classes. Brenda provides consultation, seminars, in-services, and dynamic presentations to schools, businesses, and organizations throughout the Pacific Northwest. She has a Masters Degree, a National Certification in Brain Based Learning, has presented at regional, state, national, and international conferences.

Brenda currently teaches for Skyview High School, an open concept school in Vancouver, WA, is CEO of her own company, BrainVolution. She is a dynamic presenter and educator for Heritage Institute. Brenda has gone through life changing experiences to achieve the peak state of optimizing her own brain and life. Educators have found success and inspiration from working with Brenda on this personal level.
EXERCISE & THE BRAIN FOR PEAK PERFORMANCE

BIBLIOGRAPHY

This book is clear, fascinating, educational, and entertaining. It is a brain manual. The writing is excellent and accessible to everyone, even those with minimal teaching about neuroscience and the brain.

**Brain Science Podcast #33.** Exercise and the Brain. March 21, 2008.
brainscienpodcast.wordpress.com/2008/03/21/brain-science-podcast-33-exercise-and-the-brain/
A lively interview with professor of psychiatry at Harvard University, John Ratey.
Excellent.

Importance of exercise for life energy and wellness. Perfect reading.

A valuable resource for everyone. This should be the book you pull out every time you have a question about neuroscience or psychology. A guide book that contains the latest brain research.

Cutting edge research on 12 timely topics. This is my must read book of the year. Principle #1 deals with exercise and the brain.

A wonderful guide of scientific research sharing what we know about the brain and how to use this information. The emphasis is on how to use the brain to reach our maximum potential. Highly recommended.

*SPARK* is filled with amazing case studies and the cutting edge research. This is really the first book to explore the connection between exercise and the brain. This book will change the way you look at exercise and has the potential to change your life. Everyone can benefit from this groundbreaking work. I couldn’t wait for this book to come out, and I was not disappointed.