



Using Brain Research to Improve Learning

3 Semester, Graduate Level Credits

Thank you for registering for this course. Included are the following important information:

1. Course Syllabus
2. Assignment Plan – Assignments to turn in & Grading Rubric
3. Course Hourly Breakdown

Assignment Deadline: This course is a rolling course throughout the year, which means it does not have a specific deadline to submit completed assignments. However, you must submit all completed assignments by 6 months after the registration date with Credits for Teachers. Please allow 4 weeks from the date assignments are submitted for the grade to be added to your transcript.

Registering with the University: Please register with the university prior to starting your coursework. Students must register for the course through the university prior to the end of the semester in which they are enrolled with Credits for Teachers. To register, please follow the respective instructions on Schoology depending on the university you are registering with.

Upon Completion of the Course: Please submit assignments and discussion posts as instructed on Schoology. Make sure to check the email address you used to create your Schoology account regularly, including the spam folder, as we will be contacting you with this email address moving forward with any updates regarding your coursework.

If you need assistance or have any questions, feel free to contact our staff by leaving a message on Schoology or emailing at info@creditsforteachers.com.

Brain Research Syllabus

3 credits

Course Description: This course offers many different brain research-based strategies to help educators improve student learning. The course also provides an understanding of the brain and how it works, especially while the brain is learning. The basis of the course is developing an understanding of how the workings of the brain can help educators better their teaching. The strategies offered help improve student memory as well as memory retrieval which therefore helps them learn.

Learning Objectives:

- Students will learn and understand how the brain works while it is learning.
- Students will learn different strategies of how to make better neural connections in the brain, how to transfer information from short-term to long-term memory, and how to retrieve those memories.
- Students will be able to apply brain research to develop better teaching practices in order to improve student learning.
- Students will develop skills to reflect on & improve their own teaching practices.

Required Texts:

- “1: Memory, Learning and Test Taking Success” from the book *Research-Based Strategies to Ignite Student Learning: Insights from a Neurologist and Classroom Teacher* by Judy Willis, M.D.
- “2: Strategies to Captivate Students’ Attention” from the book *Research-Based Strategies to Ignite Student Learning: Insights from a Neurologist and Classroom Teacher* by Judy Willis, M.D.

Course Components:

This course includes selected readings, selected videos, discussion boards, online assignments, and a final paper. All components and all course materials can be found on the Schoology course page. The assignments, including the final paper, will be turned in online via Schoology. Students must receive an 80% or better on each assignment to receive university credit.

Course Outline:

- Part 1: Reading #1
 - Brain Research Reading PDF #1
 - Video: Brain Based Learning
 - Reading Response Discussion
- Part 2: Reading #2
 - Brain Research Reading PDF #2
 - Reading Assignment: Brain Research Reading Reflection
- Part 3: Implementation of Strategies

- Initial Thoughts Discussion
- Implementation Plan Assignment
- Lesson Plan Assignment
- Part 4: Final Reflection
 - Final Reflection Paper
 - Final Thoughts Discussion

Reading (and/or Video) Assignment:

The purpose of the reading assignment is to analyze the reading(s) (and at times the videos) and show an understanding of the content and strategies provided. Students are also responsible for reflecting on and explaining how these new strategies can be applied to their own practice.

Reading Assignment Rubric:

Grade	Description
A (14-15)	Student answers all questions thoroughly with detail. The responses are well thought out and in depth and show an understanding of the brain as well as strategies to improve learning. The examples given are detailed to the point that it is very clear what the outcome will look like in the classroom.
B (12-13)	Student answers all questions. Examples of new strategies are explained. More detail could have been given in one or more of the responses.
Not Passing (11 or below)	Some questions are complete while others are not. Student may have left out examples or just failed to answer all parts of the question. Brain based strategies are mentioned but full understanding is missing.

Implementation Plan:

The purpose of the Implementation Plan is for students to show how they will implement strategies from the course in their lessons and/or school days in the future. Students are responsible for creating a 4 week unit plan for one of the units in their curriculum that includes regular implementation of the strategies from the course within the lessons of the unit.

Implementation Plan Rubric:

Grade	Description
A (18-20)	Student's unit plan is a minimum of 4 weeks and includes all of the required components. Student also includes all of the required components for each lesson within the plan. Student demonstrates the implementation of learned strategies, and there is clear evidence that one or more strategies from the course are incorporated within each lesson.
B (16-17)	Student's unit plan is a minimum of 4 weeks and includes the required components. Student also includes the required components for the majority of the lessons within the plan, but 1-5 of the lessons are incomplete. Student

	demonstrates the implementation of learned strategies, and there is evidence of one strategy from the course incorporated within each lesson.
Not Passing (15 or below)	Student's unit plan is 3 weeks or less and includes some of the required components, but one or more are missing. Student includes some of the required components for the lessons within the plan, but 6 or more of the lessons are incomplete. Student partially demonstrates the implementation of learned strategies. Some of the lessons have strategies from the course incorporated while others do not, or none of them do.

Lesson Plan:

The purpose of the lesson plan assignment is to see a more detailed account of students utilizing the strategies from the course within their lessons. This provides a specific example of what will happen in the classroom.

Lesson Plan Rubric:

Grade	Description
A (14-15)	Student's lesson plan includes all of the required components. All activities within the lesson plan are described in detail. There is clear evidence that multiple strategies from the course were used throughout the lesson.
B (12-13)	Student's lesson plan includes the majority of the required components, but 1 or 2 are missing. Some detail is used when describing the activities within the lesson, but some activities are missing detail. There is evidence that multiple strategies from the course were used throughout the lesson.
Not Passing (11 or below)	Student's lesson plan is missing several of the required components. The activities within the lesson are not described in detail. There is little or no evidence that strategies from the course were used throughout the lesson.

Discussion Board:

The purpose of the discussion boards is to share ideas and experiences with fellow teachers in order to learn from each other and inevitably improve everyone's practice. For each discussion board, students are responsible for responding to the questions presented in a well-thought out response. Students must also reply to a minimum of 1 other student's response per discussion board.

Discussion Board Rubric:

Grade	Description
A (5)	Student's responses are clear, well written, and include a high level of detail. Student answers all parts of the question(s) thoroughly using clear and highly appropriate evidence from the course. For each discussion board, student also completes a minimum of 1 reply to another student's post. The reply is thoughtful and incorporates ideas learned from the course.

B (4)	<p>Student's responses are clear, well written, and include some amount of detail. Student answers the majority of the question(s) thoroughly using appropriate evidence from the course. For each discussion board, student also completes a minimum of 1 reply to another student's post. The reply is thoughtful and incorporates ideas learned from the course.</p> <p>OR</p> <p>Student's response meets the requirements of an A. However, they did not include a reply to another student's post.</p>
Not Passing (3 or below)	<p>Student's responses are unclear and do not include very much detail. Student answers some of the question(s) using some or no evidence from the course. The reply to another student's post is brief and does not incorporate ideas learned from the course, or it is missing all together.</p>

Final Reflection Paper:

Within the final paper, students must explain the strategies from the course they plan to implement and reflect on the impact they hope those strategies will have on their practice and on student learning. Students will also explain how they plan to implement the strategies, aspects they valued, and aspects they would modify.

Final Paper Rubric:

Grade	Description
A (36-40)	<p>Student has incorporated all of the strategies listed in the assignment. There is a detailed explanation of how each strategy was implemented within the lessons, and the explanation clearly shows an understanding of each strategy. If anything was modified, an explanation of how and why strategies were modified is included. Lastly, student has answered all of the reflection questions.</p>
B (32-35)	<p>Student has incorporated the majority of the strategies listed in the assignment, but 2-4 are missing. There is an explanation of how the strategies were implemented within the lessons, and the explanation shows an understanding of the strategies mentioned. If anything was modified, an explanation of how and why strategies were modified is included. Lastly, student has answered the majority of the reflection questions, but one or two are missing.</p>
Not Passing (31 or below)	<p>Student has incorporated multiple strategies listed in the assignment, but 5 or more are missing. Student has provided some explanation of how the strategies used were incorporated or modified if needed, but the explanation is incomplete. Lastly, student has answered some of the reflection questions but responses are incomplete, or none of the questions have been answered.</p>

Brain Research - Assignment Plan, Grading, & Hourly Breakdown

Brain Research Reading Reflection Assignment	X/15 pts
Implementation Plan Assignment	X/20 pts
Lesson Plan Assignment	X/15 pts
Reading Response Discussion Board	X/5 pts
Initial Thoughts Discussion Board	X/5 pts
Final Thoughts Discussion Board	X/5 pts
Final Reflection Paper on Brain Research	X/40 pts
Final Grade	X/105 pts

Final Grade Scale

95-105 pts	A
84-94 pts	B
83 pts & below	Not Passing

Suggested Hourly Breakdown

Reading/reviewing assigned course materials	5
Planning strategies into a unit plan	8
Practicing strategies/techniques in the classroom (within the unit plan)	20
Reflecting on lessons and effectiveness of strategies	5
Brainstorming and writing all discussion boards & assignments	7
Total Hours	45

Bibliography

Hutton, Graham, director. *Brain Based Learning*. YouTube, YouTube, 24 Feb. 2018, www.youtube.com/watch?v=-T9f50_uvlg.

Willis, Judy. *Research-Based Strategies to Ignite Student Learning: Insights from a Neurologist and Classroom Teacher*. Association for Supervision and Curriculum Development, 2006.

Credits for Teachers Policies

Graduate-level professional development credits are not part of a degree program. These courses can be used for professional development, salary advancement, and recertification. Students should seek

approval of appropriate district or college officials before enrolling in these courses to satisfy any degree, state credential, or local school district requirements. This credit may be applied toward a degree program at the discretion of the accepting institution. Courses are rolling throughout the year, which means it does not have a specific deadline to submit completed assignments. You must submit coursework by 6 months after the registration date with Credits for Teachers. Students have up to 30 days after the purchase of a course to request a refund.

Thank You!

