

ROBERT S. WELCH CENTER FOR GRADUATE
AND PROFESSIONAL STUDIES
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INTRODUCTION LETTER
ED 519 Brain Research: Implication for the Classroom Teacher
Monday June 20th – Friday June 24th, 2011
Instructor: Maureen Flanigan

Dear Summer Friends,

I'd like to introduce myself, as I will be working with you this summer from Monday June 20th – Friday June 24th 2011. I would like to welcome you to ED 519 Brain Research: Implications for Classroom Teachers, summer session of the Teachers' Institute. My name is Maureen Flanigan and this is my 12th year as an instructor with Goucher's summer program. My teaching experience includes 35 years as a Special Education Teacher in the Baltimore County Public School System and 25 years teaching undergrad and graduate courses at local Baltimore area colleges.

The brain is an amazing, complex and constantly evolving organism! During this course we will explore current brain research and the effects this research can have on our classroom instruction. We will discuss the learning process, emotional implications, how the brain reads and understands numbers, gender issues, learning styles and processing difficulties, how the arts shape the brain and design brain based methods and techniques relevant to your instruction purposes.

Our course text is **Brain Matters: Translating Research into Classroom Practice** by **Patricia Wolfe**, Association for Supervision and Curriculum Development that can be purchased at the Goucher book store. We will also be reading and discussing various articles throughout the week. Please also note class attendance from Monday June 20th-Friday June 24th 2011 8:30 to 4:00 is mandatory.

***Finally, one of the requirements of this course is an oral and written demonstration of a Brain-Based classroom activity. It will include presenting materials, manipulatives, overheads etc that you would use for this classroom activity. You may want to either bring materials home with you at the end of the year or know that you will have access to these materials.

I am looking forward to meeting and working with you all in this course. Together we will "use our brains to learn how to use our brains!"

Thank you,
Maureen Flanigan

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SYLLABUS

Brain Research: Implications for the Classroom Teacher
ED 519 Monday June 20th- Friday June 24th 2011
Summer 2011

Maureen Flanigan 410-321-1216 mick2005@comcast.net

Required Text: Brain Matters: Translating Research into Classroom Practice
Association for Supervision & Curriculum Development

***Can be purchased at Goucher College Bookstore

Objectives: By the end of this course students will be able to:

- Identify the key components of the brain, their functions and roles in the learning process.
- Evaluate how emotions affect the learning process.
- Discuss how various memories influence learning and retention
- Analyze how the brain reads, processes numbers and develops language
- Explore brain processing difficulties and their affects on learning.
- Examine the implications of the arts on brain development
- Design brain-based instructional methods relevant to the today's classrooms and students.

Schedule of classes by Topic and Assignments:

Day 1: Monday June 20th Reading: Article "Principals of Brain-Based Learning" & pages 1-30 from text "Brain Matters..."

- Introductions
- Structure and Requirements of Course
- Brain Anatomy: Parts & Functions
- Emotions/Attention: how affect learning
- Brain Strategies/Instruction

Day 2: Tuesday June 21 Reading: Pages 71 – 129 in text "Brain Matters..."

- Information Processing
- Memory: Retention and learning
- Age & the brain
- Brain Strategies/Instruction

Day 3: Wednesday June 22th Reading: Pages 131-169 in text "Brain Matters..."

- How the Brain Reads
- Numbers and the brain

- Language: How the brain thinks
- Gender & the brain
- Brain Strategies/Instruction
- Principals of Brain-Based Learning Paper due (discussion of paper in class)

Day 4: Thursday June 23rd Reading: Pages 171 – 191 in text “Brain Matters...”

- Learning Disabilities/Learning Styles
- Arts with the Brain in Mind
- Brain Strategies/Instruction
- Brain Activity Presentations (if needed)
- Action – Research Topic due

Day 5: Friday June 24th

- Brain Activity Presentations
- Brain Strategies/Instruction
- Conclusion/Celebration

Course Requirements:

1. Reading assignments will be read both prior to and during class sessions. Instructions will be provided the first day of class.
2. Adhere to instructors’ and college attendance policies. Participants must attend this week course each day during designated hours. Monday June 20th – Friday June 24th 2011, 8:30 AM to 4:00 PM. Participants must attend 5 full days, lateness and absence are not permitted.
3. Please **NO CELL PHONES ON DURING CLASS.**
4. Participate actively in whole and small group discussions.

5. Projects and Papers:

1) Response Paper 15 points:

a) **Principals of Brain-Based Learning Response Paper**-You will be randomly assigned (first day of class) one of the Principals of Brain – Based Learning statements. Reflecting on this statement and your own personal teaching experience, construct three (3) page paper answering the questions, “How is the principal demonstrated by your students?” and “How does this affect your teaching style?” Due Wednesday June 22nd 2011. Please be prepared to discuss in class. (See detailed explanation of this requirement under Description of Requirement for Graduate Credit)

b) **Brain-Based Classroom Activity/Matching How the Brain Learns to Instruction.** This will be an oral and written project. Due Friday June 24th, 2011 Design and present a teacher/student activity in the area/grade/subject of your choice. (See detailed explanation of this requirement under Description of Requirement for Graduate Credit)

c) **Research Paper** – Due by 12:00 midnight Tuesday June 28th, 2011 by email. Select a brain-based learning topic relevant to your classroom needs and which you can apply the research to your classroom instruction. Compose a five (5)-page paper, excluding cover page and bibliography, summarizing the research and applying research to your classroom. (See detailed explanation of this requirement under Description of Requirement for Graduate Credit)

Evaluation: Your grade will be based on the following:

- Brain Based Learning Response Paper 15 points
- Brain-Based Classroom Activity 30 points
- Research Paper 40 points
- Participation 15 points

Grades:

- 100 – 90 points A
- 89 – 80 points B
- 79 – 70 points C
- Below 70 F

*****Goucher College does not issue grade reports. You can obtain your grade approximately 3 weeks after concluding the course by going to the Goucher website (mygoucher) and follow the prompts to receive your grade. If you have misplaced your password, please contact the help desk and they will walk you through this procedure (410-337-6322).**

If you need a paper copy of grades for tuition reimbursement, you will need to request a transcript in writing. You can fax your request to Student Administrative Services (SAS) at 410-337-6504 or mail to SAS at

**Goucher College, SAS
1021 Dulaney Valley Road
Baltimore, MD 21204**

There is no charge for this request. Please allow 3-5 working days to process. To access the transcript request form, please go to <http://www.goucher.edu/x1891.xml>

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BIBLIOGRAPHY

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Wolfe, Patricia; Nevills, Pamela; "Building the Reading Brain, PreK-3", 2008, Corwin
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DESCRIPTION OF REQUIREMENT FOR GRADUATE CREDIT

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***ALL PAPERS/PROJECTS SHOULD BE TYPED DOUBLE SPACED, 12 POINT FONT, APPROPRIATELY ORGANIZED, STRUCTURED, WITH CORRECT SPELLING, PROPER SENTENCE STRUCTURE AND CHECKED FOR TYPING ERRORS.

1) Response Paper 15 points:

Principals of Brain-Based Learning Response Paper – Based on one of the twelve (12) brain-based principals. Reflecting on this statement and your own personal teaching experience, construct a three (3)-page paper with cover page answering the questions, #1 “How is the principal demonstrated by your students?” (Give three (3) specific examples) and #2 “How does this affect or not affect your teaching style?”(Give three (3) specific examples) **Due Wednesday June 22nd 2011.** Please be prepared to discuss in class.

Name _____

Professional Quality

****Total points __**

3 points Correct length, cover page, 12-point font, double-spaced, no spelling errors, appropriate sentence structure, no typing errors.

2 points No cover page, one (1) spelling error, 1 typing error

0 points No cover page, less than 3 pages, poor sentence structure, 2 spelling errors, 2 typing errors

Question #1

*****Total points __**

6 points Three (3) specific examples of students’ behaviors/responses directly related to Brain-Based Principal

3 points Two (2) or one (1) example; or direct relationship of students’ responses/behaviors is vague; not established

0 points One (1) or no examples directly showing relationship of student’s responses/behaviors to Brain-Based Principal

Question # 2

******Total points _____**

6 points Three (3) specific examples of how teaching style is affected or not affected by students’ demonstrated responses/behaviors to Brain-Based Principal

3 points Two (2) or one (1) examples; or direct relationship of affect or no affect on teaching style is vague; not established

0 points One (1) or no examples of direct relationship of affect or no affect on your teaching style

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2) Brain-Based Classroom Activity/Matching How the Brain Learns to Instruction
30 points: (Use Text as Reference Part Three-chapters 8, 9, & 10)

- Develop and demonstrate (you will not actually teach it) a classroom student activity that reflects brain-based learning and brain-based instructional strategies. The students/grade/curriculum area is your choice while the activity can be an art project, solving a problem, experiment, music, drama, writing, field trip, game, construction, social studies, research etc. This is both an oral (15 points) and typed (15 points) project due **Friday June 24th 2011**. (See scoring rubric)

The oral presentation (10 minimum-15 minutes maximum) should contain a summary of the specific content (see below) with materials such as student directions, work, model etc.

Name _____

Typed – Professional Quality ***Total points** _____

4 points Four (4) pages, cover page, appropriate font, doubled spaced, outline, organized, no spelling errors, and no typing errors

2 points Less than four (4) pages, one (1) typing error

0 points Less than 3 pages, no cover page, one (1) spelling error, one (1) typing error

Typed – Content ****Total points** _____

.5 points Grade & subject _____

.5 points Name & purpose of activity _____

.5 points Objectives (behavioral/measurable) _____

.5 points Teaching Strategies _____

2 points Selection of Learning Strategy & why selected from text pages 131-134

=Recalling important information/explain choice _____

=Remembering & understanding concepts/explain choice _____

=Applying Learning/explain choice _____

2 points Type of Learning selected & why selected from pages 135-138

- =Concrete Learning/explain choice _____
- =Representational or Symbolic Learning/explain choice _____
- =Abstract Learning/explain choice _____
- 2 points Multisensory Processing. Direct demonstration of 2 sensory processors (VAKT)/explain how utilized _____
- 2 points Memory Pathways/Retention. Direct demonstration of 2 memory pathways and how utilized _____
- .5 points Materials _____
- Technology (optional .5 extra) _____
- 1 point Steps/Procedure – clear beginning, middle, end _____
- .5 points Evaluation of student learning _____

Oral Presentation

*****Total points _____**

- 1 point Professional Quality – clear, not reading from paper, engaging _____
- .5 Length Ten (10) minutes minimum to Fifteen (15) minutes maximum _____
- 2 points Visuals (overhead of activity not accepted) examples-product, worksheets, poster, book _____
- .5 points Objectives, name of activity, grade _____
- .5 points Teaching Strategies _____
- 2 points Learning Strategies/explain choice(s) _____
- 2 points Type of Learning/explain choice(s) _____
- 2 points Multisensory Processing/ clear examples of 2 _____
- 2 points Memory Pathways/clear examples of 2 _____
- 1 point Summary of Procedures/Steps of activity beginning, middle, end _____
- .5 points Evaluation method of students’ learning _____

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Research Paper

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Research Paper – Due by 12:00 midnight Tuesday June 28th 2011 by email mick2005@comcast.net Select a brain-based learning topic relevant to your classroom needs and which you can apply the research to your classroom instruction. Compose a five (5)-page paper, excluding cover page and bibliography, summarizing the research and applying research to your classroom.

*Criteria & Guidelines: Five (5) pages excluding cover page and bibliography. First select a brain based learning topic such as the affect of emotions on learning, music and learning, what affects retention, strength/weaknesses of memories, attention and learning etc. Please hand in your topic selection in writing by Thursday June 23rd, 2011. (See scoring rubric)

* Second, select three (3) research articles on your topic choice and summarize each in the paper.

* Third, based on the information from the articles and what we have discussed in class answer the following questions:

- What does this brain research suggest that might have implications in your classroom?

- How might you implement this research into your instructional methods/approaches/techniques in order to improve student's learning? Be specific!

Professional Quality

***Total points _____**

5 points Typed, 12-point font, double spaced, organized, appropriate sentence structure,

no spelling errors, not typing errors, references cited, cover page, appropriate length

3 points Less than 6 pages, no cover page, one typing error

0 points Refer to 3-point standards plus poor sentence structure, one spelling error

Topic Selection

****Total points _____**

5 points Selection of research topic clearly stated; why topic selected-what is personal connection

3 points Topic selected; vague personal connection

0 points Topic broad, no personal connection established

Summary of Three (3) Research Articles *Total points _____**

10 points Three (3) research articles clearly related to topic selection, Main ideas of articles stated, and interpretation of results explained

5 points Three (3) articles related to topic selection, Main idea poorly stated, Interpretation of each vague

0 points Three (3) articles in Brain Research, Main ideas incomplete, interpretation of each missing

Content Question # 1 ***Total points _____**

10 points Correlate results from each article to your classroom, why important to you (personal connection), State 2 implications/changes you may try in your classroom

5 points Direct correlation of articles finds not established, Personal connection vague, one (1) implications/change you may try

0 points Poor correlation of articles, no personal connection, implications not specified.

Content Question #2 ***Total points _____**

10 points Three (3) concrete examples of how you implement changes into your classroom based on articles, discussion

5 points Two (2) examples of how you would implement, vague examples

0 points Implications unclear, not examples provided

4) Participation & Attendance – 15 points Class is Monday June 20th – Friday June 24th 2011. Time is 8:30AM – 4:00PM each day. As a student you are expected to attend each day the class is in session, be on time and remain in the class till the end of the time period. Each student is expected to complete the daily readings, and actively participate in large and small group discussions.

