

New Course Proposal

1. Catalog description:

- a) Course number: ELE 5500
- b) **Title:** **Creativity, Play, and the Brain of the Young Child**
- c) Meeting times and credit: 3-0-3
- d) Terms to be offered: F, S, SU (Rotational)
- e) Short title: Brain Development
- f) Course description: This course explores the brain development in the young child along with the roles of play and creativity.
- g) Prerequisites: Admittance to the Graduate School and completion of Phase I of the Elementary Masters program or permission of the department chair
- h) Initial term of offering: Summer 2007

2. Student Learning Objectives and Evaluation:

- a) List the student learning objectives.
- Identify and study the physiology of the brain, including the right and left hemispheres, lobes, functions;
 - Introduced to the growth of the brain at various ages and stages, prenatal to age 8 years;
 - Articulate three ways creativity and play are related to brain development;
 - Identify milestones in child development and their relationship to brain development;
 - Articulate the development of language milestones and the brain's capacity for music, balance, rhythm, sounds, language production;
 - Identify characteristics of an enriched environment for young children, birth to age eight years;
 - Compare convergent and divergent thinking skills and the value of both;
 - Compare the development of dramatic play skills, imagination, literacy, drama, and brain development;
 - Describe the creative process in regard to writing, movement and dance, music, sculpture, and the visual arts;
 - Students will be able to discuss social emotional development, meaningful relationships, self-esteem, and self-expression in the context of creativity, play and brain development.

b) **Assessment:**

Students will be assessed on the following:

- Two research papers on topics related to the course.
- A group project investigating an issue related to implementing brain research in the classroom.
- A review of a research study related to the course topic.
- A web search of the latest research on the course topic.
- A power point presentation of one research paper.

Technology will be used for the literature reviews, group project, web search and power point presentation.

- b) For technology-delivered and other nontraditional-delivered courses/sections, address the following:
- Describe how the format/technology will be used to support and assess students' achievement of the specified learning objectives. N/A.
 - Describe how the integrity of student work will be assured. N/A.
 - Describe provisions for and requirements of instructor-student and student-student interaction, including the kinds of technologies that will be used to support the interaction. N/A.
- c) For courses numbered 4750-4999, specify additional or more stringent requirements for students enrolling for graduate credit. N/A.
- d) If applicable, indicate whether this course is writing-active, writing-intensive, or writing-centered, and describe how the course satisfies the criteria for the type of writing course identified. N/A.

3. Outline of this course:

- a) **Meetings:** Three hours per week for 15 sessions, evenings or weekend format with equivalent contact hours.

SESSIONS 1, 2

- Introduction
- Sprouting Dendrites: The processing speed of neurons improves as dendrites increase their surface area through sprouting.
- Making Connections: Babies exhibit behavioral changes corresponding to changes taking place in the brain.
- Enriched Environments: Creating a stimulating, creative, interactive environment for students can make all the difference in learning.
- Enriched Minds: The human brain is transformed by its experiences. How creativity develops.
- Myelin Sheaths: An insulating substance that grows around neurons speeds up the rate of information processing in the brain.
- Newborns: An infant's brain comes equipped for survival. Attachment and bonding and brain organization.
- Toddlers to age 8: Myelination in the brain occurs in tandem with developmental milestones connecting creative thought processes and the brain.

SESSIONS 3, 4

- Introduction
- Synapses: Synapses are the "meeting places" of the mind, the points of information exchange in the brain.
- Synaptic Proliferation: In preparation for learning and skill development, the brain forms a huge number of synapses during the first year of life.
- Adaptability: All those synapses mean that the infant brain is prepared to respond to a wide range of environments and experiences.
- Synaptic Pruning: Throughout development, skills are refined and mastered by the elimination of excess synapses.
- Critical Periods: Basic skills learned during certain developmental periods pave the way for more advanced skill development.

- How Neurons Function: The electrochemical messages sent between neurons direct the reorganization of synapses in the brain.
- Learning Connection: Practice makes perfect. Left brain and Right brain relationship to drawing, writing, dance, drama, music.

SESSIONS 5, 6

- Introduction
- The Brain and the Mind: Brain scientists and educators are in pursuit of the same goal: understanding the how and why of the human brain.
- Mental Milestones: Developmental milestones reflect the changes taking place in the developing brain. Review Piaget's theory of developmental stages. Role of play in concept building.
- Language Development: The brain develops language skills in increasing stages of complexity. The role of multiple language proficiency.
- Nurturing Language: Adults can help support children's language development, creative writing, drawing, sculpting, etc.
- The Enriched Classroom: Brain scientists and educators have come up with tips for creating an enriched classroom environment that enhances creativity.
- An Enriching Example: Learn how one teacher created an enriching classroom activity to enhance creativity.

SESSIONS 7, 8

- Introduction
- Forming feelings and images
- Early musical development
- Music and movement in the creative classroom
- An enriching example: TBA

SESSIONS 9, 10

- Introduction
- Drama and literacy
- Writing screenplays for the creative classroom.
- An enriching example: TBA
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SESSIONS 11, 12

- Introduction
- Convergent and divergent thinking and implications for learning environments.
- Self esteem and the creative arts
- An enriching example: TBA

SESSIONS 13, 14, 15

- Presentation of culminating projects linking the brain to the creative arts.
- Summary of the course.

- b) For technology-delivered or other nontraditional-delivered courses/sections, explain how the course content "units" are sufficiently equivalent to the traditional on-campus semester hour units of time described above. N/A.

4. Rationale:

- a) Purpose and need: This course will introduce students to the current research on brain development in early childhood education. The course is designed for teachers in the early childhood classroom to gain the knowledge about this topic as well as strategies for setting up enriched environments for young children.
- b) Justification of the level of the course and of course prerequisites: This course is developed to challenge graduate level students with state of the art information on creating classrooms based on the latest brain research in early childhood education.
- c) Similarity to existing courses: There is a special topics course offered through Family and Consumer Sciences that does address some brain research. However, this course is distinct in that the application is for teachers in early childhood education settings, infancy through age eight years. The proposed course also has a significant focus on the integration of the arts for enriching "learning with the brain in mind."
- d) Impact on the program: This course will meet the needs of graduate level early childhood students in preparing them for teaching with the knowledge of the latest research on brain development.

5. Implementation:

- a) Faculty members to whom course may be assigned:: Faculty with Early Childhood Expertise
- b) Specification of any additional costs to students: none at the masters level for early childhood.
- c) Text and supplementary materials: Articles in the reference list readings and the text Wolfe, P. (2001). Brain matters: Translating research into classroom practice. Alexandria VA: Association for Supervision and Curriculum Development.

6. Community college transfer: NA

7. Date approved by the department or school 4-29-2005

8. Date approved by the college curriculum committee 9-26-2005

9. Date approved by CAA _____ CGS _____

* A **technology-aware** course section uses the Internet and other technologies to augment a regularly scheduled, face-to-face course section by providing basic catalog, scheduling, syllabus, and other routine information via the Internet. No two-way technology-based interaction between faculty and students is facilitated. A **technology-enhanced** course section augments a regularly scheduled course section and adds opportunities for interaction between a faculty member and the students or among students; course related information, including handouts and assignments, may be published dynamically during the course, and students may submit and have assignments returned electronically. The primary and predominant mode of instruction is face-to-face. A **technology-delivered** course section is designed and scheduled to use technology as the exclusive or predominant mode of instruction and faculty-student interaction.

** In **writing-active courses**, frequent, brief writing activities and assignments are required. Such activities – some of which are to be graded – might include five-minute in-class writing assignments, journal keeping, lab reports, essay examinations, short papers, longer papers, or a variety of other writing-to-learn activities of the instructor's invention. Writing assignments and activities in writing-active courses are designed primarily to assist students in mastering course

content, secondarily to strengthen students' writing skills. In **writing-intensive courses**, several writing assignments and writing activities are required. These assignments and activities, which are to be spread over the course of the semester, serve the dual purpose of strengthening writing skills and deepening understanding of course content. At least one writing assignment is to be revised by the student after it has been read and commented on by the instructor. In writing-intensive courses, students' writing should constitute no less than 35% of the final course grade. In **writing-centered courses** (English 1001G, English 1002G, and their honors equivalents), students learn the principles and the process of writing in all of its stages, from inception to completion. The quality of students' writing is the principal determinant of the course grade. The minimum writing requirement is 20 pages (5,000 words).