SBC161: Brain Studies

A First Course in Neuroscience

Fall 2024

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1 Course Description

This course offers a captivating journey into the intricate landscapes of the human mind and its underlying mechanisms over four units:

- Unit 1: The Nervous System, the Brain, and Perception
- Unit 2: Stress and Wellness Management
- Unit 3: Brain Development and Intelligence
- Unit 4: Memory, Creativity, and Practical Applications

2 Course Objectives

- 1. Develop a comprehensive understanding of the structure and function of the nervous system, including the intricate network of neurons, neurotransmission, and the role of the central and peripheral nervous systems.
- 2. Understand how the functioning of the brain leads to our perceptions.
- 3. Explore the physiological and psychological aspects of stress, discovering effective strategies to manage and mitigate its impact. Acquire practical tools to promote overall wellness and enhance emotional resilience.
- 4. Explore the intricate interactions between the brain, emotions, and physical health, recognizing the interdependence of mental and physical well-being.
- 5. Engage in thoughtful discussions that encourage the exchange of ideas and diverse perspectives, fostering a deeper understanding of the complexities of the brain and its influence on human behavior.

3 Required materials

Please have the following with you each class period:

- The Brain Studies collection of readings.
- A bound composition notebook used only for this class.
- A folder or binder to store papers that won't go in your notebook.
- Your charged GBN device for:
 - Classroom: (Join Codes; 1 Gold: y6nus3n, 4 Gold: 45yqrnp)

4 Grading

Term grades will be calculated using a total points system in the following categories: Assessments, Notebook Entries, Activities, and Participation. A final exam worth 20 % of the semester grade will be given during *final exam week* as outlined in the Glenbrook District 225 Student/Parent handbook.

4.1 Assessments

- Two, 20 point reference quizzes will be given during Unit 1 covering the basics of neuroanatomy and physiology.
- An individual written exam (100 points each) will be given after the completion of Units 1, 2, and 3.

4.2 Notebook Entries

Your notebook will be collected 3 times (50 points each) during the course and will be assessed in terms of completion and quality of response to a randomly selected prompt. More information will be given prior to each collection.

4.3 Activities and Participation

You will carry out a wide range of activities during this course. A select number will require completion of a reflection or short assignment. Detailed information will be given at the start of each activity.

5 Class Climate and Procedures

- I am committed to creating a classroom environment that values the diversity of experiences and perspectives that all students bring. Everyone here has the right to be treated with dignity and respect. Note that you should expect to be challenged intellectually by me and your peers, and at times this may feel uncomfortable. Indeed, it can be helpful to be pushed sometimes in order to learn and grow. But at no time in this learning process should someone be singled out or treated in a disrespectful manner.
- Class begins at the bell. Be in your assigned seat with your notebook out and ready to go before the bell rings.
- Electronic devices Mobile phones are to be placed in your assigned, numbered slot. All other personal electronic devices should be put in your bag. Refer to section 6.80 of the Parent and Student Handbook for complete details.
- **During lectures/discussions** you should be quiet, attentive, and taking notes in your composition notebook. Questions are always encouraged (often expected), but please raise your hand.
- During activities and experiments stay with your group at your assigned table. Our laboratory space is small and unnecessary movement increases the possibility for injury.
- If you miss class: Do not email me! First check the course website, PowerSchool, and then talk with a classmate. Any graded assignments will be fully described in PowerSchool.
- Academic Integrity: I take this issue very seriously. Lack of knowledge of the academic integrity policy is not a reasonable explanation for a violation. Chat GPT and other related AI technologies are presenting new opportunities and challenges to teaching and learning. We will discuss this issue as needed during the year.
- I will not discuss grades during class or through email. Please make an appointment to discuss.
- Late work is not accepted.

Note: This syllabus is subject to change based on the instructor's discretion and the needs of the class. Any modifications will be communicated in advance.