

Course Tag Reflection Exemplar Critical and Creative Thinking

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NEU 496: Neuroscience and Society

Identify the course learning objectives in the syllabus that are clearly aligned to Critical & Creative Thinking and respective assignment(s).

1. Evaluate the science to media process, identifying how the public is affected by the reporting of scientific discoveries
2. Discuss current topics within neuroscience that affect the public, including both broad and controversial subjects
3. Critique a news story on the accuracy of reporting the findings of a primary article, identifying both inaccuracies and positive examples.

Explain the connection between specific assignment(s) and Critical & Creative Thinking. At least 30% of the course grade must engage students in the selected competency for the course to be tagged.

Students are engaged in work that has been intentionally designed to further develop their critical thinking abilities.

Small group and full class discussions: 20%

- The foundation of the course is small group and full class discussion, and it contributes to 20% of the course grade. Small group discussion is aimed at dissecting the topic for the week, going through each reading to explore the topics, evaluate arguments for or against specific aspects of the weekly topic, and to research related ideas to enhance the full class discussion. Full class discussion is aimed at synthesizing the ideas from the week and developing new insights into the topic at hand. These topics are varied, but could possibly include neuroscience and the law, brain injury and medical decisions, addiction, or mental health.

Paper: 30%

- Students find an article in the popular press about a neuroscience topic that is based on a primary research article published in an academic journal. They write a paper evaluating both the primary research article and the news story written about it, focusing on the quality of the scientific work, the accuracy and validity of the popular press version of that work, and the real-world implications of the science reporting. In this paper, they lay out the importance of accurate news reporting of scientific articles, analysis of the research, comparing and contrasting the two sources, and discussing insights into the positive and negative aspects of science reporting. This paper is a chance for students to practice the critical thinking and application skills they gain throughout the course readings and discussion.
- 50% of the course grade relates to this competency.

Describe in detail the instructional strategies faculty use to intentionally teach Critical & Creative Thinking in the course.

Facilitation of discussion.

In the course of small group and class discussions about assigned readings, the faculty provides guidance through asking questions, probing theories, and facilitating further exploration and expansion of the topic by the students. The goal is for students to be engaged in critical discourse among peers and the faculty member to explore new ideas, develop and evaluate arguments, and think of creative solutions to problems posed by the weekly topics.

The faculty provides guidelines for the paper assignment to provide an overview of expectations and guide student success.

The faculty participates in one-on-one discussions with students to talk about the feedback of their work, discuss class topics further, and/or guide students on assignments.

Students are able to revise and resubmit their work, which helps them to critically think through their analyses and improve their evaluation of the science to news process.

Describe the feedback tool(s) faculty use to support students' competency development on Critical & Creative Thinking.

Students receive support and feedback from instructors in multiple ways:

Participation

- Students receive overall feedback on their participation during the semester with a numerical score. They are given transparent guidelines and tips on how to effectively participate in small group and full class discussions.

Paper feedback

- Students have checkpoints for the paper.
- For each draft, written feedback is provided, potentially guiding grammar issues, structure, content, and detail. Suggestions are given to improve the paper, and the faculty is available to meet with students to answer any questions they have about the feedback.
- Every student can receive additional feedback on their paper in one-on-one interactions, where they can bounce ideas off the professor or ask questions. These can occur either during class time, via email, or during office hours.