

## Promoting Critical Thinking in a Robotics Class

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**Abstract :** This paper describes the creation and teaching of an undergraduate course aimed at promoting critical thinking among the students in the course. The class, Robots in Business and Society, taught at Clemson University, is open to all undergraduate students of any discipline. It is taught as part of Clemson's online class program and is structured to promote critical thinking via a series of interactive discussion boards and assignments. Critical thinking is measured via pre- and post-testing using a benchmark standardized test. The paper will detail the class organization, and describe and discuss the results and lessons learned with respect to improvement of student critical thinking from three offerings of the class.

**Keywords :** critical thinking, pedagogy, robotics, undergraduate teaching

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