1046-97-513   **Morton Brown*** (`mbrown@umich.edu`), Morton Brown, Department of Mathematics, University of Michigan, Ann Arbor, MI 48109. *Two very different Inquiry Based Learning courses at the University of Michigan.*

I will discuss two courses that have been given at University of Michigan: "Principles of Analysis" and "Mathematical Games". The first is a rigorous examination of the notions of convergence, limits, continuity and the real line. I will summarize the experiences of the instructors and students who have taught and taken the course over the last few years. The second course, Combinatorial Combat, has been successful with both high school and college students. Students play and study two person combinatorial games (finite, perfect information, with no "chance"). The goal is to is to utilize interesting and challenging mathematical games to introduce students to generic concepts of mathematical thinking not frequently found in beginning calculus courses: searching for patterns, thinking logically and systematically, problem solving, abstracting, choosing effective notation, and developing proofs. (Received September 05, 2008)