

962-I1-565

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Clarion University requires every mathematics major to participate in MATH 490 Senior Seminar, a one credit hour course. This seminar has used various formats to engage students in significant senior-level mathematics. In every format students study independently, write a comprehensive report on what they learn, and give an oral presentation at the end of the semester. In most cases students select their own topics and work with a faculty member to clarify difficult points. In recent years topics chosen have displayed a broad range. In one case a single topic was selected for the class and students shared the responsibility of presenting material to the class. In another, students selected topics from previous mathematics courses that interested them and pursued further study. Topic selection now includes guided research, such as in making conjectures from elementary number theory and proving or disproving them, and in using mathematical modeling to solve problems. In our presentation we will describe ways of accommodating diverse topics, both through the evaluation process and tutorial help, for a class of up to twelve students with one faculty member. (Received September 15, 2000)