

1046-S1-1900 **Feryal Alayont*** (alayontf@gvsu.edu), Grand Valley State University, Mathematics Department, 1 Campus Drive, Allendale, MI 49401. *Inquiry-based learning in a discrete mathematics with graph theory course*. Preliminary report.

The topics in discrete mathematics courses provide a wealth of problems that students can investigate and make conjectures about without being introduced to the topic in the classroom or through reading. This presentation will focus on an inquiry-based style discrete mathematics course for math majors with a significant graph theory component. Students are assigned presentation problems related to the material for the next class and are asked to create their own approaches to solving these problems. Through student presentations and group activities these approaches are discussed in class and generalized if possible. This course format enables students to form a base of knowledge on which the in-class instruction can build. Sample assignments as well as student response to the course will be discussed. (Received September 16, 2008)