

1077-C1-2531 **Marc Chamberland*** (chamber1@math.grinnell.edu), Department of Mathematics and Statistics, 1116 8th Avenue, Grinnell, IA 50112. *A Course in Experimental Mathematics.*

Experimental Mathematics is the utilization of advanced computing technology in mathematical research for discovering new patterns and relationships, testing and falsifying conjectures, replacing lengthy hand derivations with the computer, and suggesting approaches for a formal proof. With support from the NSF, a course in Experimental Mathematics was developed and taught. The course is integrative (covers many different mathematical areas), incorporates an REU-like research experience, and models how some current mathematical research is done. (Received September 22, 2011)