As a pioneer in distance education, Saint Mary-of-the-Woods College has undergone an institution-wide evolution in course delivery methods. The mathematics faculty has generally been in the forefront of this evolution, since we offer the entire mathematics major online and also have a large service load. This paper will briefly discuss the institutional changes in methodologies for distance learning, along with such challenges as setting the limits to flexibility and meeting the Federal and accrediting body requirements for “online” versus “correspondence” delivery. Specific applications for math courses from College Algebra to Real Analysis and Seminar will then be addressed. These include developing interactive methods of content delivery, incorporating group work, linking to environmental and social concerns, using Maple labs in Real Analysis, and creating the seminar experience. (Received September 22, 2011)