

Scheduled lectures and supervised laboratory sessions are the classical method for teaching remote sensing courses. This paper describes a new teaching method that uses multimedia and Internet technology in offering self-paced, web-based courses. Examples are taken from a new on-line course (<http://extend.unb.ca/oalp/courses/for4304.php>) dealing with radar polarimetry and RADARSAT-2 images. It was sponsored by the Canadian Space Agency and the U. of New Brunswick. The objective of the course is to provide the required skills to process SAR images, particularly the polarimetric SAR images. Online courses are more than simple tutorials, because at the end of the theoretical part of each module, there is an online quiz to be completed. Each theoretical chapter is joined with a hands-on on-line laboratory. The course has also a final exam which tests the ability to understand radar polarimetry and to process polarimetric SAR images. Up to now, students from Ontario, Québec, British Columbia, New Foundland, Argentina, Spain, Poland, United Kingdom, South Africa, and Equator have been registered into the course. Advantages and disadvantages of each method are presented, particularly for the African context.