

1116-J1-817 **Veronika Furst*** (furst_v@fortlewis.edu), Department of Mathematics, Fort Lewis College,
1000 Rim Drive, Durango, CO 81301. *Image Processing in an Undergraduate Capstone
Experience*. Preliminary report.

We will outline the curriculum of an undergraduate course on wavelet-based image processing, in which all preliminary material is presented while completing a class project and preparing the students for research. The material is aimed at students with only calculus and linear algebra backgrounds and no previous programming experience. We will describe how to manage both the introductory material and the students' individual research in a project centric environment. The focus will be on providing mathematical and programming content on an as-needed basis, towards the completion of a class project. Completion of this project will then serve as a guideline for students to pursue research of their own, not simply end-of-term projects, for the remainder of the semester. (Received September 13, 2015)