Math 155: Mathematical Imaging

<u>Math 155: General Course Outline and Catalog Description</u>

Math 155 is an introductory course on mathematical models for image processing and analysis. The students will become familiar with basic concepts (such as image formation, image representation, image quantization, change of contrast, image enhancement, noise, blur, image degradation), as well as with mathematical models for edge and contour detection (such as the Canny edge detector), filtering, denoising, morphology, image transforms, image restoration, image segmentation, and applications. All theoretical concepts will be accompanied by computer exercises.