

**Department:** MCB

**Course No.:** 226W

**Title:** Advanced Biochemistry Laboratory

**Credits:** 4

**Contact:** James Cole

**WQ:** W

**Catalog Copy:** Advanced Biochemistry Laboratory. Second semester. Four credits. One 1-hour lecture and two 4-hour laboratories. Prerequisite: Either MCB 204, or MCB 203 with consent of instructor; ENGL 105 or 110 or 111 or 250. Teschke

Theory and application of modern techniques for separation and characterization of biological macromolecules, including several types of liquid chromatography, liquid scintillation spectrophotometry, and SDS polyacrylamide gel electrophoresis. Instruction in writing a scientific paper.

**W Criteria:** Students are required to write a 15 page formal scientific manuscript that includes the following sections: abstract, materials and methods, introduction, results and discussion. Each section will be evaluated for scientific accuracy, clarity and grammar. Students will be given a detailed evaluation of each section according to these criteria and will be required to resubmit revised sections. The formal manuscript accounts for 30% of the final grade. A failing grade on this component will result in a failing grade in the course.

**Role of Grad Students:** The graduate assistant is supervised by the instructor and participates in the laboratory component of the course. All grading of the formal manuscript is performed by the instructor.