COURSE ANNOUNCEMENT

Spring of Odd-Numbered Years

MULTIDISCIPLINARY BIOPROCESSING LABORATORY

3 Credits

Course Coordinator: Dr. Mark Worden

A multidisciplinary team of MSU faculty has developed a unique Multidisciplinary Bioprocessing Laboratory (MBL) course for seniors and graduate students from bioscience, chemistry, and engineering departments having an interest in biotechnology. The objectives of the course are (1) to train students to work together effectively in multidisciplinary teams and (2) to teach students advanced experimental techniques related to industrial biotechnology. Laboratory work will be done in multidisciplinary teams of about three students. Each team will be assigned a project broad enough in scope that skills from multiple disciplines must be applied. Students will be taught advanced experimental techniques used in the research laboratories of participating faculty. Recitations will cover skills needed to function effectively in multidisciplinary teams, as well as selected topics relevant to industrial biotechnology.

The following faculty have sponsored MBL student teams in their labs. Additional faculty may be added.

Pat Oriel (Microbiology)
Gemma Reguera (Microbiology)
Claire Vieille (Microbiology)
Greg Zeikus (Biochemistry)
Michael Garavito (Biochemistry)
Shelagh Ferguson-Miller (Biochemistry)
John Ohlrogge (Botany and Plant Pathology)
John Frost (Chemistry)
David Weliky (Chemistry)
Mark Worden (Chemical Engineering)
Carl Lira (Chemical Engineering)
Andrew Mason (Electrical Engineering)
Volodymyr Tarabara (Civil and Environmental Engineering)

The recitation will meet Wednesdays from 9:10 to 10:00 a.m. Lab times will be arranged by each team to meet the diverse schedules of the students involved.

The MBL course is listed as CHE 883. Senior or graduate standing in a department related to biotechnology is required. Students from departments outside of Chemical Engineering may need a computer override to enroll. For further information, please contact Dr. Mark Worden, 353-9015, worden@egr.msu.edu.