

BIOL4380 - Cell and Molecular Biology Laboratory

[BIOL 4380](#) Cell and Molecular Biology Laboratory (3 semester credit hours) Current techniques that are utilized in a modern molecular biology research laboratory. Practical skills taught include monitoring bacterial growth, phenotype testing, plasmid isolation, restriction digest analysis, DNA cloning, and DNA fingerprinting using the polymerase chain reaction (PCR). Advanced techniques include fundamental microscopy, DNA transfection and general characterization of animal cell cultures, sub-cellular fractionation using differential centrifugation, basic immunological techniques, and chemical mutagen testing. Prerequisite: [BIOL 3380](#). Prerequisite or Corequisite: [BIOL 3302](#). (1-4) S