

ENVIRONMENTAL ENGR. SCI. (EES)

EES 3204C - Environ Chem for Engineers (3 Credits)

The course will cover basic chemical principles from general, physical, equilibrium, organic, biochemistry, colloid, and nuclear chemistry, focusing on the aspects of chemistry that are particularly valuable for solving environmental problems, thermodynamics, fugacity, charge-transfer, and properties of mixing; chemistry of aliphatic and aromatic compounds; organic functional groups and toxic organic chemicals; laboratory safety. This course is inquiry based and fully integrated with a laboratory that emphasized active learning strategies.

Prerequisite(s): ENV 3006C and (CHM 1045C or (CHM 1045 and CHM 1045L)) and EGN 1041C

Attribute(s): SUSC - Sustainability Component

EES 4102C - Wastewater Microbiology (3 Credits)

General concepts in microbiology with major emphasis on the role of microorganisms in polluted environments. Focuses on the biota (microorganisms, algae, zooplankton, fish, and plants) found in natural (lakes and wetlands) and engineered systems, ecological engineering approach to management of surface waters and ecological modeling.

Prerequisite(s): ENV 3006C

Attribute(s): SUSC - Sustainability Component