

CHEM 3700: Environmental Chemistry

3 Credit Hours

Concurrent: CHEM 3361

This course will cover the environmental chemistry involving the transport, distribution, reactions, and speciation of inorganic, organometallic and organic chemicals occurring in the air, soil and water environments at the local, national and global scale. Environmental transformations and degradation processes, toxicology, pollution and hazardous substances will be discussed.

Notes: This course may be cross-leveled with CHEM 5700

CHEM 3710L: Environmental Chemistry Lab

1 Credit Hours

Prerequisite: CHEM 3361L

This laboratory course is designed to teach sampling, environmental analysis, data handling, systems modeling, specialized instrumental techniques, and field techniques related to atmospheric, geologic, and freshwater environmental chemistry. Additionally, team research projects will be designed to address a specific question related to the topics mentioned above.

CHEM 3800: Forensic Analytical Chemistry

3 Credit Hours

Prerequisite: CHEM 2800 and CHEM 3361

This course covers fundamental topics of forensic analytical chemistry including statistics and data quality, sample preparation, drugs (pharmacology and toxicology), arson and the chemistry of combustion, and trace chemical evidence. Throughout the course, emphasis is placed on modern chemical instrumentation as applied to forensic casework.

Notes: This course may be cross-leveled with CHEM 5800

CHEM 4000: Service Learning in Chemistry

1-3 Credit Hours

Prerequisite: 60 hours and permission of the instructor and department chair/program director.

A community activity which links learning to life by connecting meaningful community service activities with academic learning, personal growth, and civic responsibility. Activity will be designed with the instructor and approved by the chair/program director.