

CRIM 190, PH 190, SWRK 190, or WS 190: Independent Study on selected aspects of alcohol/drug abuse (1 unit)

**Total (12 units)**

For further information you may contact the Department of Public Health at 559.278.4014.

## Certificate in Applied Sociological Research Methods

The certificate gives students who are interested in data analysis and research methodology a more comprehensive coverage of research techniques and theories in both qualitative and quantitative areas, and it provides more in-depth training in computer applications for research.

Students who complete the requirements for this certificate will have the ability and skills needed to do social research independently once they graduate and join the workforce. They will also be better prepared to enter graduate schools with these skills and knowledge.

### Requirements

SOC 125 - Statistics for the Social Sciences

SOC 174 - Computer Data Analysis

SOC 175 - Quantitative Research Methods in Sociology

SOC 176 - Qualitative Research Methods in Sociology

The latter two courses (i.e., in "research methods") serve as the capstone experience of the Certificate in Applied Sociological Research. Each of these two courses is designed to have the student complete the course with a relatively well-developed research paper that could be presented at an undergraduate research conference. The Sociology Club applies each year for ASI Instructionally-Related Activities (IRA) funding to help sponsor sociology students who wish to present their paper at such a conference. Faculty often work with students on an "Independent Study" to assist students in preparation for this culminating experience.

## Certificate in Biotechnology

The Certificate of Advanced Study in Biotechnology is a postbaccalaureate, one-year, laboratory-intensive program of study consisting of eight specified courses among the M.Bt. program courses. Students may not receive both the M.Bt. and the Certificate of Advanced Study in Biotechnology.

Students interested in entry-level biotechnology careers may pursue the certificate to acquire a breadth of relevant technical skills and knowledge for enhanced career options. Students with advanced degrees (M.S., Ph.D., J.D., M.D.) may expand their skills for specific careers. Students interested in research careers in biotechnology fields are encouraged to supplement a disciplinary master's degree with the certificate. Double-counting of courses for the certificate and the master's degree is possible, but 9 units independent of master's degree coursework must be reserved for the certificate.

**Admission Requirements for the Certificate.** All admission requirements for the M.Bt. apply except that the prerequisite courses are limited to categories 1-4, and the minimum for admission to the program is two courses, i.e. general genetics and biochemistry lecture. All prerequisite courses must be completed for the certificate award.

### Certificate Requirements

#### Set program of study (20 units)

(See Master of Biotechnology program requirements for specific courses.)

M.Bt. Core requirements IA and IB (8 units)

M.Bt. Courses IIA, B, C, F (12 units)

## Certificate in Business Information Systems

### Required Courses (9 units)

IS 158, 166, 181