

# FORENSIC TOXICOLOGY, UNDERGRADUATE CERTIFICATE (SCHOOL OF BIOMEDICAL SCIENCES AND HEALTH CARE ADMINISTRATION)

The Biomedical Sciences Program, Criminal Justice Program, and Departments of Anthropology and Chemistry cooperate in offering three certificates in the area of forensic sciences. Sponsored jointly by the College of Letters and Science, the College of Health Professions and Sciences, and the Helen Bader School of Social Welfare, these certificate curricula are designed to train students in basic skills that will provide the foundation for careers in the fields of law enforcement, death investigation, pathology, and toxicology. Certificates are offered in Death Investigation, Forensic Science, and Forensic Toxicology. Where applicable, the curriculum meets the criteria required for professional certification examinations (Medicolegal Death Investigation, Toxicological Chemist).

## Eligibility

Undergraduate students who pursue a forensic sciences certificate maintain their identity as majors in their home departments and continue to progress toward a baccalaureate degree while in the certificate program. Courses include lecture presentations and laboratory experiences that cover fundamental areas of forensic science and provide unique instruction on techniques that are essential in the specific certificates. Students are given instruction by faculty members at UWM and forensic professionals in the Milwaukee community. Any of the programs may be pursued as a post-baccalaureate educational certificate. Individuals who are not enrolled in a degree program at UWM, but are seeking continuing education for career development, may be admitted to courses in the certificate programs by meeting prerequisites with equivalent experience or consent of the instructor.

## Requirements

To receive a certificate in Death Investigation, Forensic Science, or Forensic Toxicology, students must complete at least one half of the required credits on the UWM campus. A minimum grade point average of 2.500 must be achieved on the required credits. All options within the certificate require at least a basic knowledge of chemistry and biology. To meet this requirement, prior to registering themselves in the Forensic Sciences Certificate Program, students must successfully complete CHEM 100 or equivalent and BIO SCI 100 or equivalent.

The following courses must be completed successfully to obtain a Certificate in Forensic Toxicology:

|                      |                                     |           |
|----------------------|-------------------------------------|-----------|
| BMS 610              | Pharmacology                        | 3         |
| CRM JST 110          | Introduction to Criminal Justice    | 3         |
| CRM JST 480          | Criminal Evidence and Investigation | 3         |
| ANTHRO 403           | The Human Skeleton                  | 3         |
| or ANTHRO 404        | Human Biological Variation          |           |
| <b>Total Credits</b> |                                     | <b>21</b> |

Additional courses with forensic content are listed below. Check prerequisites or consult the instructor for eligibility. These courses are recommended, but are not required, for the Certificate in Forensic Toxicology:

| Code                            | Title  | Credits |
|---------------------------------|--|---------|
| ANTHRO/BMS/CHEM/<br>CRM JST 285 | Medicolegal Death Investigation              | 3       |
| ANTHRO/BMS/CHEM/<br>CRM JST 585 | Internship in Forensic Toxicology            | 1-3     |
| ANTHRO/BMS/CHEM/<br>CRM JST 589 | Internship in Death Investigation            | 1-3     |
| ANTHRO/BMS/CHEM/<br>CRM JST 594 | Internship in Forensic Science               | 1-3     |
| ANTHRO 405                      | Forensic Anthropology                        | 3       |
| BIO SCI 539                     | Laboratory Techniques in Molecular Biology   | 4       |
| CHEM 194                        | First-Year Seminar: (with forensic subtitle) | 3       |
| CHEM 602                        | Biochemistry: Cellular Processes             | 3       |
| BMS 555                         | Toxicology and Therapeutic Drug Monitoring   | 1       |
| BMS 560                         | Molecular and Genetic Diagnostics            | 2       |
| BMS 561                         | Molecular Diagnostics Laboratory             | 1       |

| Code                            | Title   | Credits |
|---------------------------------|---|---------|
| ANTHRO/BMS/CHEM/<br>CRM JST 281 | Dead Men Do Tell Tales: An Introduction to Forensic Science | 3       |
| ANTHRO/BMS/CHEM/<br>CRM JST 481 | Criminalistics  | 3       |
| CHEM 524                        | Instrumental Analysis                                       | 3       |