

# FORENSIC SCIENCE (B.S.)

The Bachelor of Science (B.S.) in Forensic Science covers the areas of forensic chemistry, biochemistry, and criminal justice. This rigorous science degree prepares graduates for positions such as criminalists in crime laboratories, research assistants in grant funded university research, and for entry into graduate programs in forensic science and medical schools. Coursework integrates chemistry with forensic science and criminal justice including forensic chemistry, forensic biochemistry and forensic anthropology. The program provides opportunities for undergraduate research and internships at the University or at crime laboratories.

## Program Progression and Additional Graduation Requirements

For timely degree completion, students must complete all program milestones. The following actions occur when milestone are missed: first occurrence—warning and advising hold; second occurrence—advising hold and counseling regarding progression requirements; and third occurrence—counseling and change to a major outside of the Department of Chemistry and Physics or Department of Biological Sciences that is more appropriate to student goals and academic performance. Appeals are handled through the relevant department. The decision of the appeal committee is final. Program milestones include the following:

- CHM 1045 General Chemistry I/CHM 1045L General Chemistry I Laboratory (or CHM 1045C ) minimum grade of C completed one calendar year from admission as FTIC or 30 credits earned, whichever is earlier.
- CHM 1046 General Chemistry II/CHM 1046L General Chemistry II Lab (or CHM 1046C ) minimum grade of C completed by end of fifth semester (including summers) from admission as FTIC or 60 credits earned, whichever is earlier.
- CHM 2210 Organic Chemistry I/CHM 2210L Organic Chemistry I Laboratory (or CHM 2210C ) minimum grade of C completed by end of seventh semester (including summers) from admission as FTIC or 75 credits earned, whichever is earlier.
- CHM 2211 Organic Chemistry II/CHM 2211L Organic Chemistry II Laborator (or CHM 2211C ) minimum grade of C completed by end of eighth semester (including summers) from admission as FTIC or 90 credits earned, whichever is earlier.
- CHM 3120 Analytical Chemistry/CHM 3120L Analytical Chemistry Lab (or CHM 3120C ) minimum grade of C completed by end of eighth semester (including summers) from admission as FTIC or 90 credits earned, whichever is earlier.

Transfer students may declare the major after they have completed CHM 1045 General Chemistry I/CHM 1045L General Chemistry I Laboratory, CHM 1046 General Chemistry II/CHM 1046L General Chemistry II Lab, and CHM 2210 Organic Chemistry I/CHM 2210L Organic Chemistry I Laboratory with grades of C or better in each course. CHM 2211 Organic Chemistry II/CHM 2211L Organic Chemistry II Laborator and CHM 3120 Analytical Chemistry/CHM 3120L Analytical Chemistry Lab must be completed with a grade of C or better within three semesters (including summer) of declaring the major.

In addition to the program requirements, students must:

- Complete a minimum of 120 credits.
- Complete a minimum of 48 of the 120 credits at the upper division (3000-4999 level).
- Earn a cumulative GPA of 2.0 for all coursework attempted at FGCU.
- Satisfy the College-Level Skills and foreign language entrance requirements.
- Satisfy the Service-Learning requirement.
- Satisfy the Civic Literacy requirement.
- Satisfy the residency requirement: 30 of the last 60 credits must be completed at FGCU.
- Complete the summer course enrollment requirement.
- Submit an Application for Graduation by the deadline listed in the FGCU Academic Calendar.

## Program Requirements

| Code                                                                                                                                                                                                                                                                                                                                                                                                                           | Title                                                                                                                                                      | Credits |
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| <b>FGCU General Education Program (<a href="https://www.fgcu.edu/academics/undergraduatestudies/generaleducation/">https://www.fgcu.edu/academics/undergraduatestudies/generaleducation/</a>)</b>                                                                                                                                                                                                                              |                                                                                                                                                            |         |
| To prevent or minimize excess hours, select general education courses that satisfy common prerequisite requirements for your intended major.                                                                                                                                                                                                                                                                                   |                                                                                                                                                            |         |
| <b>Common Prerequisites</b>                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                            |         |
| For this major, common prerequisite courses with an asterisk (*) require prior knowledge and skills demonstrated through degree acceleration programs (e.g., the College Board's Advanced Placement Program [AP], International Baccalaureate Program [IB], College-Level Examination Program [CLEP], Advanced International Certificate of Education Program [AICE]); dual enrollment; placement exam; or college coursework. |                                                                                                                                                            |         |
| A minimum grade of C is required in each course                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                            |         |
| BSC 1010C                                                                                                                                                                                                                                                                                                                                                                                                                      | General Biology with Lab I (Acceptable Substitute: (BSCX010 and BSCX010L) or BSC X010C)                                                                    | 4       |
| CHM 1045 & 1045L                                                                                                                                                                                                                                                                                                                                                                                                               | General Chemistry I and General Chemistry I Laboratory (Acceptable Substitutes: (CHMX040 and CHMX041) or CHM045C or (CHMX045 and CHMX045L)) <sup>*,1</sup> | 4       |
| CHM 1046 & 1046L                                                                                                                                                                                                                                                                                                                                                                                                               | General Chemistry II and General Chemistry II Lab (Acceptable Substitutes: (CHMX046 and CHMX046L) or CHMX046C)                                             | 4       |
| CHM 2210 & 2210L                                                                                                                                                                                                                                                                                                                                                                                                               | Organic Chemistry I and Organic Chemistry I Laboratory (Acceptable Substitutes: (CHMX210 and CHMX210L) or (CHMX210C))                                      | 4       |
| CHM 2211 & 2211L                                                                                                                                                                                                                                                                                                                                                                                                               | Organic Chemistry II and Organic Chemistry II Laborator (Acceptable Substitutes: (CHMX211 and CHMX211L) or (CHMX211C))                                     | 4       |
| MAC 2311                                                                                                                                                                                                                                                                                                                                                                                                                       | Calculus I (Acceptable Substitute: MACX311) <sup>*,2</sup>                                                                                                 | 4       |
| MAC 2312                                                                                                                                                                                                                                                                                                                                                                                                                       | Calculus II (Acceptable Substitute: MACX312)                                                                                                               | 4       |
| PHY 2048 & 2048L                                                                                                                                                                                                                                                                                                                                                                                                               | General Physics I and General Physics I Laboratory (Acceptable Substitutes: PHYX048C or (PHYX048 and PHYX048L) or PHY X053C or (PHYX053 and PHYX053L))     | 4       |

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| PHY 2049<br>& 2049L | General Physics II<br>and General Physics II Laboratory (Acceptable<br>Substitutes: PHYX049C or (PHYX049 and<br>PHYX049L) or PHY 2054C or (PHYX054 and<br>PHYX054L)) | 4 |
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| STA 2023 | Statistical Methods (Acceptable Substitute:<br>STAX023) <sup>*,3</sup> | 3 |
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| <b>Required Courses in the Major</b> | <b>(43 credits)</b> |
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A minimum grade of C is required in each course

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| ANT 2511C | Intro to Physical Anthropology      | 3 |
| ANT 3520C | Forensic Anthropology               | 3 |
| BSC 1011  | General Biology II                  | 3 |
| BSC 1011L | General Biology II Laboratory       | 1 |
| CCJ 1080  | Intro to Forensic Studies           | 3 |
| CCJ 3670  | Crime Scene Investigation           | 3 |
| CCJ 4054  | Ethics in the Crim Justice Sys      | 3 |
| CHM 3120  | Analytical Chemistry                | 3 |
| CHM 3120L | Analytical Chemistry Lab            | 1 |
| CHM 4130  | Instrumental Analysis               | 3 |
| CHM 4130L | Instrumental Analysis Lab           | 1 |
| CHM 4932  | Chemistry Senior Seminar (capstone) | 3 |
| CHS 4533C | Forensic Biochemistry               | 3 |
| CHS 4544C | Forensic Chemistry                  | 3 |
| CJL 4133  | Criminal Evidence                   | 3 |
| PCB 3063C | Genetics                            | 4 |

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| <b>Restricted Electives in the Major</b> | <b>(12 credits)</b> |
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A minimum grade of C is required in each course

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| ANT 4525C | Human Osteology                             | 3   |
| BCH 3023C | Biochemistry                                | 3   |
| BCH 3025C | Analytical Biochemistry                     | 3   |
| CHM 4080C | Adv Environmental Chemistry                 | 3   |
| CHM 4174C | Lasers in Physical Sciences                 | 3   |
| CHM 4220C | Advanced Organic Chemistry                  | 3   |
| CHM 4230C | Practical NMR Spectroscopy                  | 3   |
| CHM 4254C | Medicinal Organic Synthesis                 | 3   |
| CHM 4300  | Bio-Organic Chemistry                       | 3   |
| CHM 4671  | Bioinorganic Chemistry                      | 3   |
| CHM 4905C | Dir Ind Study/Res in Chem <sup>4</sup>      | 1-4 |
| CHS 3941  | Internship in Forensic Science <sup>4</sup> | 1-4 |
| CHS 4905C | Dir. Ind. Res. - Forensic Sci. <sup>4</sup> | 1-4 |
| ENY 4701C | Forensic Entomology                         | 3   |
| MCB 3020C | General Microbiology                        | 4   |
| PCB 3023C | Cell Biology                                | 4   |
| PCB 4522C | Molecular Genetics                          | 3   |

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| <b>Sustainability Course Graduation Requirement</b> | <b>(3 credits)</b> |
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| Select at least 3 credits in sustainability coursework (SCGR Attribute) | 3 |
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**Additional Electives**

As needed to reach total credits required for the degree

<sup>1</sup> Prerequisites of MAT 1033 Intermediate Algebra minimum grade of C then MAC 1105 College Algebra minimum grade of C; or relevant accelerated credit; or placement exam]

<sup>2</sup> Prerequisites of MAT 1033 Intermediate Algebra minimum grade of C then MAC 1105 College Algebra minimum grade of C then MAC 1147 Precalculus minimum grade of C; or relevant accelerated credit; or placement exam

<sup>3</sup> Prerequisites of MAT 1033 Intermediate Algebra minimum grade of C; or relevant accelerated credit; or placement exam

<sup>4</sup> A maximum number of 4 credits combined from these courses can be used to fulfill the elective requirement.

**Total Credits Required: 120**