

FORENSIC SCIENCE (BS)

Exploration and Discovery

The word “forensic” relates the application of scientific methods and techniques to the investigation of a crime. Plymouth State’s forensic program is geared to both science and non-science students who love investigation and problem-solving. Plymouth State Forensic is the first baccalaureate degree program from a public university in New Hampshire.

The collaborative and project-based emphasis of Plymouth State’s Cluster Learning model combined with core program studies in Criminal Justice and Chemistry along with specialized course work from Psychology, Computer Science, Biology, and Anthropology gives our students unmatched opportunity to excel in this field. Professionals and distinguished faculty from each field will be involved in training our students. The BS in forensic science is a STEM-orientated program that emphasizes a solid theoretical foundation and laboratory skills while cultivating a critical, detail-oriented approach to investigations. The curriculum features modern laboratory setups and instrumentation. An important consideration is given the huge surge in interest in careers that are experiencing exponential occupational growth, including forensic laboratory specialty, forensic psychology, and computer information security.

As a Forensic scientist, you can work in laboratories or at crime scenes. You may work as a private investigator, insurance officer, a cyber security analyst. You may choose to work for private and public offices or laboratories.

The curriculum is adaptable enough for students to obtain additional specialties and/or minors in Chemistry, Psychology, Criminal Justice, and Biology with few additional courses using their free electives.

Degree Requirements

Course	Title	Credits
Major Requirements		
FS 1200	Majoring and Working in Forensic Science	1
CJ 1020	Criminal Justice in Action	4
CJ 2045	Criminal Procedure	4
CH 2255	Techniques in Laboratory	3
CH 2335	General Chemistry I (QRCO)	4
CJ 3005	Criminal Investigation	4
CJ 3025	Forensic Science	4
CH 3550	Instrumental Analysis (TECO,WRCO)	4
FS 4100	Forensic Science Capstone Project	3

Math Foundation Skills

Take one of the following:	3-4
MA 2300	Statistics I (QRCO)
MA 2130	Precalculus (QRCO)
MA 2550	Calculus I (QRCO)

Interdisciplinary Focus Areas

Take at least 9 credits of (1000/2000) courses and at least 15 credits of (3000/4000) courses ^{1,2}

===Forensic Lab Analysis Specialty===

BI 1110	Biological Science I (TECO)
BI 1120	Biological Science II

BI 2030	Invertebrate Zoology
CH 2340	General Chemistry II
BI 3060	Genetics
CH 3370	Organic Chemistry I
CH 3380	Organic Chemistry II
CH 3410	Physical Chemistry: Thermodynamics and Kinetics (WRCO)
AN 3605	Forensic Anthropology
CH 4600	Internship

===Digital Forensic Specialty===

CS 2010	Computing Fundamentals (TECO)
MA 2550	Calculus I (QRCO)
MA 2560	Calculus II (QRCO)
CJ 3015	Cybercrime
CS 3420	Introduction to Cybersecurity
CS 4500	Topics in Computer Science and Technology
CS 4420	Computer Security
CS 4520	CyberEthics (DICO,WRCO)

===Forensic Psychology Specialty===

PS 2015	Introduction to General Psychology
PS 2055	Life-Span Developmental Psychology
PS 3035	Social Psychology
PS 3115	Research Methods and Statistics I (QRCO,TECO)
PS 3125	Research Methods and Statistics II (WRCO)
PS 3220	Cognitive Psychology
PS 3325	Abnormal Psychology
PS 3705	Psychology and Law
PS 4365	Internship in Psychology
PS 4945	Independent Research in Psychology

General Education Requirements

EN 1400	Composition	4
IS 1115	Tackling a Wicked Problem	4
CTDI (https://coursecatalog.plymouth.edu/general-education/#CTDI)	Creative Thought Direction	3-4
PPDI (https://coursecatalog.plymouth.edu/general-education/#PPDI)	Past and Present Direction	3-4
SIDI (https://coursecatalog.plymouth.edu/general-education/#SIDI)	Scientific Inquiry Direction	3-4
SSDI (https://coursecatalog.plymouth.edu/general-education/#SSDI)	Self and Society Direction	3-4
Directions (choose from CTDI, PPDI, SIDI, SSDI) (https://coursecatalog.plymouth.edu/general-education/) ³		4-8

DICO (https://coursecatalog.plymouth.edu/general-education/#DICO) Diversity Connection	3-4
WECO (https://coursecatalog.plymouth.edu/general-education/#WECO) Wellness Connection	3-4
INCP (https://coursecatalog.plymouth.edu/general-education/#INCP) Integrated Capstone	4
GACO (https://coursecatalog.plymouth.edu/general-education/#GACO) Global Awareness Connection	3-4
Electives	24-14
Total Credits	120

¹ To enhance career opportunities students may choose one or two interdisciplinary specialties as long as they take two lower-level and five upper-level courses. One thing students must be aware of is the courses in some specialties may have lower-level prerequisites associated with the same specialty. Students may use their free electives to choose additional courses to get a minor or a second major.

² The courses from the Interdisciplinary Specialty can be applied towards one or more minor requirements. Possible minors of interest: Biology, Chemistry, Computer Science, Criminal Justice, Mathematics, Psychology.

³ Directions should total 20 credits (unless the major has a waiver for a specific Direction).

Recommended Course Sequence

Course	Title	Credits
Year One		
IS 1115	Tackling a Wicked Problem	4
EN 1400	Composition	4
FS 1200	Majoring and Working in Forensic Science	1
CH 1050	Laboratory Safety	1
CJ 1020	Criminal Justice in Action	4
CH 2255	Techniques in Laboratory	3
MA 2300	Statistics I (QRCO)	3
PPDI (https://coursecatalog.plymouth.edu/general-education/#PPDI)	Past and Present Direction	3-4
SIDI (https://coursecatalog.plymouth.edu/general-education/#SIDI)	Scientific Inquiry Direction	3-4
One 1000/2000 level specialty course		4
Credits		30-32

Year Two		
CJ 2045	Criminal Procedure	4
MA 2130	Precalculus (QRCO)	4
Two 1000/2000 level specialty course		8
CTDI (https://coursecatalog.plymouth.edu/general-education/#CTDI)	Creative Thought Direction	3-4
SSDI (https://coursecatalog.plymouth.edu/general-education/#SSDI)	Self and Society Direction	3-4
Directions (choose from CTDI, PPDI, SIDI, SSDI) (https://coursecatalog.plymouth.edu/general-education/)		4-8
Electives		3-4
Credits		29-36

Year Three		
CJ 3005	Criminal Investigation	4
CJ 3025	Forensic Science	4
Two Connections courses		8
Three 3000/4000 level specialty course		12
Electives		3-4
Credits		31-32

Year Four		
FS 4100	Forensic Science Capstone Project	3
CH 3550	Instrumental Analysis (TECO,WRCO)	4
Two 3000/4000 level specialty courses		
WECO (https://coursecatalog.plymouth.edu/general-education/#WECO)	Wellness Connection	3-4
DICO (https://coursecatalog.plymouth.edu/general-education/#DICO)	Diversity Connection	3-4
Electives		6-8
Credits		19-23
Total Credits		120

Learning Outcomes

- Detail-oriented approach and ability to Validate sources and origins of error in crime investigations
- Purposeful communication: Demonstrate ability to interpret evidence and communicate results in both written and oral format.
- Integrated perspective: Work collaboratively with members of a team with diverse backgrounds.
- Professionalism: Even during a violent crime or chaotic conditions maintain composure and objectivity.
- Math and science skills: Forensic science technicians need a solid understanding of statistics and natural sciences to be able to analyze crime scene evidence.

Career Pathways

As a Forensic scientist, you can work in laboratories or at crime scenes. You may work as a private investigator, insurance officer, a cyber security

analyst. You may choose to work for private and public offices or laboratories. Careers in Forensic Science: Cybersecurity Analyst, Forensic Life Scientist, Information Security Specialist, Insurance Officer, Private Investigator.