# **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**

BI 1110

Degree nequirements					
Course	Title	Credits			
Major Requirements					
CH 1050	Laboratory Safety	1			
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	on Skills				
Take one of the following: 3-4					
MA 2300	Statistics I (QRCO)				
MA 2130	Precalculus (QRCO)				
MA 2550	Calculus I (QRCO)				
Interdisciplinar	y Focus Areas				
Take at least 9 credits of (1000/2000) courses and at least 15 credit <b>2</b> 4-32 of (3000/4000) courses <sup>1,2</sup>					
===Forensic Lab Analysis Specialty===					

Biological Science I (TECO)

	DI 1100	B. I 10		
	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 P	sychology Specialty===		
	PS 2015	Introduction to General Psychology		
	PS 2055	Lifespan Developmental Psychology		
	PS 3035	Social Psychology		
	PS 3115	Research Methods and Statistics I (QRC0,TEC0)		
	PS 3125	Research Methods and Statistics II (WRCO)		
	PS 3220	Cognitive Psychology		
	PS 3325	Psychopathology		
	PS 3705	Psychology and Law		
	PS 4365	Internship in Psychology		
	PS 4945	Independent Research in Psychology		
G	eneral Education	n Requirements		
Εľ	N 1400	Composition	4	
IS	1115	Tackling a Wicked Problem	4	
C	ΓDI (https://	Creative Thought Direction	3-4	
	oursecatalog.ply	mouth.edu/		
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SI	DI (https://	Scientific Inquiry Direction	3-4	
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	lucation/#SIDI)	Calf and Casisty Divertion	3-4	
	SDI (https:// oursecatalog.ply	Self and Society Direction	3-4	
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_	lucation/			
#5	SSDI)			
	Directions (choose from CTDI, PPDI, SIDI, SSDI) (https://			
CC	oursecatalog.ply	mouth.edu/general-education/) <sup>3</sup>		

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.

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.

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.plymo general-education/ #PPDI)	Past and Present Direction	3-4
SIDI (https:// coursecatalog.plymo general-education/ #SIDI)	Scientific Inquiry Direction outh.edu/	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.plymor general-education/ #CTDI)	Creative Thought Direction uth.edu/	3-4
SSDI (https:// coursecatalog.plymor general-education/ #SSDI)	Self and Society Direction	3-4
	om CTDI, PPDI, SIDI, SSDI) (https:// uth.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 cou	rses	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.plymor general-education/ #WECO)	Wellness Connection uth.edu/	3-4
DICO (https:// coursecatalog.plymor general-education/ #DICO)	Diversity Connection	3-4
Electives		6-8
	Credits	19-23
	Total Credits	120

### **Learning Outcomes**

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- 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.