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Forensic Science

B.S. with Major in Forensic Science (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/forensicscience/fs-bs/)

Four Year Plan - B.S. with Major in Forensic Science (p. 1)

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Freshman Year Credits Fall **BIOL 150** General Biology I 4 & 150L and General Biology I Laboratory **FNGI 110** College Composition I 3 Introduction to the Forensic Sciences FS 120 3 College Algebra Or highest Math eligible 3 **MATH 103** ES Social Science 3 Credits 16 Spring **BIOL 151** 4 General Biology II & 151L and General Biology II Laboratory **ENGL 130** Composition II: Writing for Public Audiences 3 **MATH 146** Applied Calculus I 3 or MATH 165 or Calculus I CJ 201 Introduction to Criminal Justice 3 ES Fine Art 3 Credits 16 Sophomore Year Fall 3 **COMM 110** Fundamentals of Public Speaking PHIL 120 Introduction to Ethics 3 **CHEM 121** General Chemistry I 4 and General Chemistry I Laboratory & 121L ES Social Science 3 ES Fine Art 3 Credits 16 Spring **CHEM 122** General Chemistry II 4 and General Chemistry II Laboratory & 122L **BIOL 470 Biostatistics** or SOC 326 or Sociological Statistics or PSYC 241 or Introduction to Statistics **ES Humanities** 3 Course for sub-plan or elective 3 Credits 14 Junior Year Fall **CHEM 340** Survey of Organic Chemistry (CHEM 341/L for Chemical Analysis Sub-plan) FS 345 Forensic Science Seminar 3 Criminal Investigation 3 CJ 352 ES Social Science 3 Course for sub-plan or elective 3 Credits 16 Spring FS 346 Analysis of Forensic Evidence 3 CJ 342 Criminal Procedure 3 Course for sub-plan or elective 6

Credits

Senior Year

Fall		
PHYS 161	Introductory College Physics I	4
Courses for sub-plan or elective		12
	Credits	16
Spring		
PHYS 162	Introductory College Physics II	4
FS 400		
Courses for sub-plan or electives		9
	Credits	13

This plan is an example. Students should consult with their adviser when registering for classes.

To graduate with a B.S. in Forensic Science, a student must have a 2.2 cumulative GPA.

Every student must fulfill all University, Departmental, and Essential Studies requirements. (https://und.edu/academics/essential-studies/)

FS 120. Introduction to the Forensic Sciences. 3 Credits.

Total Credits

Introduction to Forensic Sciences is for those who are curious about the many fields of the forensic sciences but have no previous background in: a) science; and/or b) forensic science. Forensic science is the study and application of science to the process of law and involves the collection, examination, evaluation, and interpretation of evidence. This course will provide the students with a greater understanding of the role of forensic science in society and the criminal justice system. F.

FS 345. Forensic Science Seminar. 3 Credits.

In this course, students will learn to analyze scientific literature, write peer scientific reviews, and prepare scientific presentations for class discussion. Students will be introduced to concepts, technologies, and methodologies that can be applied in forensic laboratories and experimental research. S.

FS 346. Analysis of Forensic Evidence. 3 Credits.

Emphasis on the practical applications of the forensic sciences. Whenever possible and practical, hands-on exercises will reinforce course topics. Prerequisite: FS 345 with a grade of C or better; Forensic Science majors and Criminal Justice majors and minors only or by instructor's consent. S.

FS 347. Firearms and Ballistics. 3 Credits.

Designed for all students majoring in Forensic Science. This course will allow students to practice and improve critical thinking skills as well as practical, oral, and/or written communication skills related to Firearms and Ballistics analytical techniques and methodologies, as well as case studies. This course provides an opportunity for students to integrate and apply knowledge related to forensic firearms examination, range of firing estimations and bullet hole examinations, and qualifying the expert and cross-examination questions. F.

FS 348. Bloodstain Pattern Analysis. 3 Credits.

Designed for all students majoring in Forensic Science. Bloodstain evidence has become a deciding factor in the outcome of many of the world's most notorious criminal cases. As a result, substantiation of this evidence is crucial to those on either side of the courtroom aisle. Bloodstain Pattern Analysis provides an in-depth investigation of this important subject matter. A multidisciplinary approach is presented that uses scene and laboratory examinations in conjunction with forensic pathology, forensic serology, and chemical enhancement techniques. Emphasis is on a thought process based on taxonomic classification of bloodstains that takes into account their physical characteristics of size, shape, and distribution, and the specific mechanisms that produce them. F.

FS 490. Forensic Microbiology. 3 Credits.

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Designed for all students majoring in Forensic Science. Students will participate in an applied experience related to decomposition process dynamics, postmortem interval estimation, microbiome, and metagenomics data interpretation. This course will allow students to practice and improve critical thinking skills as well as oral and/or written communication skills. This course provides an opportunity for students to integrate and apply knowledge and skills obtained in Forensic Science and Biology. F.



FS 499. Forensic Entomology - From Crime Scene to Courtroom. 3 Credits

Designed for all senior students majoring in Forensic Science. This course will allow students to practice and improve critical thinking skills as well as oral and/or written communication skills. This course provides an opportunity for students to integrate and apply knowledge and skills obtained in Forensic Science, starting with evidence collection and preservation, analysis and data interpretation, case report writing and expert courtroom testimony. Prerequisite: Senior class standing. F.