



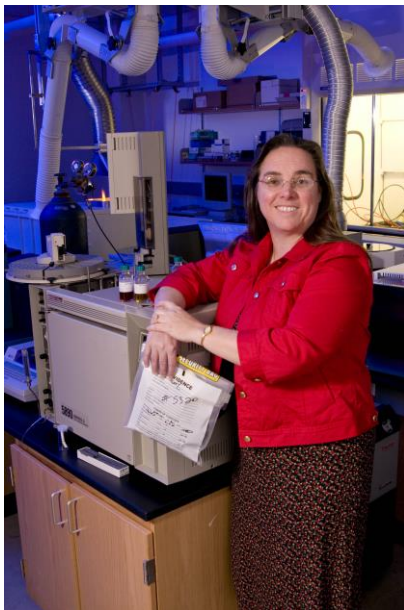
University of North Texas
Forensic Science Program



BACHELOR OF SCIENCE WITH FORENSIC SCIENCE CERTIFICATION



**UNT Chemistry Building*



**Dr. Teresa Golden is the Director of our Forensic Science Program at UNT*

For more information, contact:
Forensic Science Program Office
University of North Texas
1155 Union Circle, # 305070
Denton, TX 76203
(940) 369-8458
Website: www.forensic.unt.edu
forensic@unt.edu

The University of North Texas Forensic Science Program received its accreditation from the American Academy of Forensic Sciences (AAFS) in 2008. Our faculty for the Forensic Science program courses come from diverse forensic science backgrounds and specialties. We provide state of the art instruments and methodology in the instruction of our forensic science laboratory courses. Our instructors carry out many forensic science research projects for students to gain practical experience as well as opportunities for publications.



**Lab instructor Angie Ambers, Forensic DNA Analyst, teaching Forensic Molecular Biology lab.*

ABOUT OUR PROGRAM

The University of North Texas Forensic Science Program is a natural science undergraduate accredited forensic science programs located in Texas. Our accreditation is through the Forensic Science Education Program Accreditation Commission of the American Academy of Forensic Sciences.



The undergraduate program in Forensic Science at the University of North Texas offers a strong curriculum based on the natural sciences that has been in place for over 50 years. In addition, the Forensic Science Program has well defined goals that are supported by the forensic based coursework that forms the core of the program. Overall, the Forensic Science curriculum ensures that each student:

- Obtains a thorough grounding in the natural sciences,
- Builds upon this background by taking a series of more advanced science classes, and
- Develops, through course work and laboratory-based instruction, an appreciation of issues specific to forensic science.

COURSEWORK

The Forensic Science Program is made up of three tracks including a Bachelor of Science in Biology, a Bachelor of Science in Chemistry, and a Bachelor of Science in Biochemistry. The B.S. in Biology includes a chemistry minor and the B.S. in Chemistry and Biochemistry include a biology minor. Each degree requires 121 - 127 credit hours with over 50 advanced hours in the sciences. A Forensic Science certificate is also awarded with the completion of each degree.

The undergraduate degree is considered to be an interdisciplinary degree and has associated with it extensive laboratory work in both biology and chemistry, regardless of the core track.



FORENSIC SCIENCE UNT CERTIFICATION COURSES

The Forensic Science Program offers forensic science coursework that covers the following topics: courtroom testimony, introduction to law, quality assurance, ethics, professional practice, evidence identification, collection, processing, and a survey of forensic science as well as classes in forensic chemistry, forensic biology, physical methods, and forensic microscopy. Forensic science internships and research opportunities are also required of students in the Forensic Science Program.

- Introduction to Criminalistics
- Criminal Investigation
- Biomedical Criminalistics
- Forensic Molecular Biology
- Forensic Microscopy
- Instrumental Analysis
- Forensic Chemistry
- Ethical Issues in Criminal Justice
- Forensic Internship

INTERNSHIPS

Internships are a great way to become involved and gain experience in forensic science while still taking courses, whether it is doing research or working in a crime laboratory. Several internships are available for students to develop hands on experience and gain valuable skills in their particular field.

Internship opportunities include, but are not limited to:

- Forensic Chemistry Labs
- Forensic DNA/Genetics Labs
- Crime Labs
- Forensic Toxicology
- Forensic Anthropology
- Forensic Microscopy
- Crime Scene Investigations





Forensic Science Program Director
1155 Union Circle #305070
Denton, TX 76203
Tel: (940) 369-8458
Fax: (940) 565-4318
Email: forensic@unt.edu

Dear Sir or Madam:

Thanks for your recent inquiry about our Forensic Science Program at the University of North Texas (UNT). We are enclosing our program application form and degree requirements for the Chemistry, Biology, or Biochemistry options. You are also invited to visit our website at www.forensic.unt.edu which provides many of the answers you requested.

Please do not hesitate to contact us if you have any questions about our program. We will be happy to assist you.

Thank you again for your interest in our program and hope to hear from you soon.

Sincerely,

Forensic Science Program Director

Encl.

How to apply to the Forensic Science Program:

1. Choose a major in biology, chemistry, or biochemistry.
2. Fill out an application. The application can be downloaded from the Admissions tab on our website at www.forensic.unt.edu, or picked up in the Forensic Science Program Office located in the Chemistry Building, Room 207B.
3. Return the application to the Forensic Science Program Office by email (forensic@unt.edu), fax (940-565-4318), mail (Forensic Science Program Director, UNT, 1155 Union Circle #30507, Denton, Texas, 76203), or in person (Chemistry 207B).
4. You will be contacted to schedule an appointment to interview with the Forensic Science Program Director, Dr. Golden. The interview typically lasts 30 min to 1 hour.
5. If accepted into the program, set up an appointment for degree plan advising with the Forensic Science Program Director and the appropriate departmental advisor. This must be done each semester until graduation.
6. To continue in the program, students must maintain a grade point average (2.75) and obtain a C or better in the forensic science courses and in organic chemistry.

Note: Applications are accepted each fall and spring semester. Please check our website for current application deadlines.

University of North Texas
Application for the Forensic Science Program

Students wishing to obtain a B.S. in chemistry, biology or biochemistry with a Forensic Science Certification should complete this form. The completed form should be returned by mail or email to the Forensic Science Program Office at the address listed below. The student must realize that this form in no way serves as application to the University; it is an application for consideration for admission into this program only. Please read the **Important Information Section** below before filling out this form.

Cumulative GPA of at least 2.75 required for Transfer, Post Baccalaureate, and Current Students

In addition to this application entering freshman must have their science teacher forward a letter of recommendation to the address given below, and must plan to take the SAT or ACT tests (Verbal and Quantitative) and request that the scores be sent to the Forensic Science Office.

Name: _____

Address: _____

Email Address: _____

Home Phone Number: _____ **Alternate Phone Number:** _____

UNT ID #: _____

Current Status (check one)

Transfer Student: _____ (Please include your transcripts of transfer courses)

Incoming Freshman: _____ (Please include your high-school transcripts)

Post Baccalaureate: _____

Current UNT student: _____

Current School Attending: _____

If high school: anticipated semester of entry to UNT: _____

If UNT student: expected graduation date: _____

SAT Scores: Critical Reading: _____ **Math:** _____ **Writing:** _____

ACT Scores: Math: _____ **Reading:** _____ **Science:** _____ **English:** _____

If you have not taken the SAT or ACT exam, please indicate date you plan to take the exam: _____

Please list below the course and grades for any science and mathematics you have taken:

_____	_____
_____	_____
_____	_____
_____	_____

***For Entering Freshman Only**

Science Teacher Sending Letter of Recommendation: (With Address and Phone Number):

Name: _____

Address: _____

Phone number: _____

Important Information Section
Please read before filling out application form

Students who are considering this major should be aware that employment in a forensic related field requires an extensive background check. Components of this check may include any or all of the following:

- Background Checks (criminal and driving records)
- Polygraph Tests (checking unethical behavior)
- Credit Checks (issues relating to excessive debt or defaults)
- Drug Tests (to check for drug usage)
- Interviews of Friends and Family

If there are problems in any of these areas, a career in forensic science may be unlikely, and the student may need to consider a different major. If you have questions about this, you should contact the agency or lab in which you hope to gain employment and request their policies.

Background checks may also be required for the internships offered through this program. If you have any questions, please contact the program director.

Student's Signature: _____ Date: _____

All inquiries, letters of recommendation, scholarship application, and other correspondence concerning the forensic program at UNT should be sent to the address listed below: (Applications may be downloaded on-line at www.forensic.unt.edu)

Forensic Science Program Director
University of North Texas
1155 Union Circle, #305070
Denton, TX 76203
(940) 369-8458 (Voice)
(940) 565-4318 (FAX)
Email: forensic@unt.edu

Application Deadline: October 2nd for Spring 2020

***For Office Use Only**

Date Student Interviewed for Program: _____

Student's Status

Accepted: _____
Rejected: _____ Reason for rejection: _____
Declined: _____
Deferred: _____ File for Fall _____ or Spring _____

Date: _____

FORENSIC SCIENCE CERTIFICATION COURSES

The FORENSIC SCIENCE CERTIFICATE consists of courses covering topics in Forensic science. This certificate includes courses in the Biology, Chemistry, and Criminal Justice departments at UNT.

The courses and course descriptions required for the certificate are:

CHEM 3330 Forensic Science Analysis. 3 hours.

Overview of the field of criminalistics, with a focus on the recognition, collection, preservation and analysis of physical evidence. Introduction to topics such as fingerprint examination, trace evidence analysis and firearm examination. Prerequisite for more advanced criminalistics courses. Prerequisite(s): CJUS 2100 or equivalent, or consent of instructor.

CHEM 4360 Principles of Forensic Chemistry. 3 hours.

The study of methods of obtaining and reporting information from the crime scene, victims, witnesses and suspects. Specific attention is given to investigation of index crimes (homicide, rape, robbery, assault, burglary, arson, motor vehicle theft and larceny). Prerequisite(s): CJUS 3330 or equivalent.

BIOL 3331 Biomedical Criminalistics. 3 hours.

Survey of the various forensic sciences with emphasis on direct examination of human remains and directly related biological evidence; e.g. anthropology, pathology, odontology. Students learn how cases arise, i.e. how remains are located, recovered and processed. Supporting biological, clinical and physical sciences will also be covered; e.g. toxicology, entomology, DNA science, forensic geology/palynology and remote sensing. Prerequisite(s): CJUS 3330 or consent of department.

BIOL 4240 Forensic Microscopy. 3 hours.

Introduction to microscopic analysis with emphasis on the fundamentals necessary for identification and characterization of trace evidence materials such as glass, hair, fibers, explosives, soil, paint, and biological samples. Prerequisite(s): successful completion of a minimum of 60 semester hours; 8 hours organic chemistry; CJUS 3330; BIOL 3331; BIOL 3451/3452, and admission to Forensic Science Certificate program.

BIOL 4590 Forensic Molecular Biology. 3 hours.

Intensive laboratory course designed to give students experience and expertise in the basic molecular techniques currently utilized by the majority of forensic laboratories performing forensic DNA analysis. Prerequisite: BIOL/BIOC 4570.

CHEM 4631/4632 Instrumental Analysis w/ lab. 4 hours.

Principles and theory of chemical analysis utilizing absorption spectroscopy in UV, visible and IR regions, nuclear and electron spin resonance, mass spectrometry, chromatography, polarography and other advanced instrumental techniques. Prerequisite(s): CHEM 3451, 3452 and concurrent enrollment in CHEM 4632.

CHEM 4351 Forensic Chemistry w/ lab. 3 hours.

Analytical chemistry applied to forensic science. Statistics and error analysis, sampling techniques and instrumentation, pharmacology and toxicology, materials chemistry, combustion, analysis of drugs and physical evidence. Prerequisite(s): CHEM 2380, 3451/3452.

BIOL 4900/CHEM 4900 Forensic Internship. 1-3 hours.

Several internships are available for students who wish to develop hands on experience and gain valuable skills in their particular field including, but not limited to: forensic chemistry, DNA analysis labs, and crime labs. An application must be filled out in order to be eligible.

Continued on back...

Undergraduate Advisor:
 Dr. Charlie Williams
 Chemistry Building, Room 207B
 (940) 565-3554
 forensic@unt.edu

UNIVERSITY OF NORTH TEXAS
COLLEGE OF SCIENCE
BACHELOR OF SCIENCE (BS)
IN CHEMISTRY WITH FORENSIC SCIENCE
ACCREDITED DEGREE

Forensic Program Director:
 Dr. Teresa Golden
 forensic@unt.edu
 Chemistry, Room 207B
 (940) 369-8458
 http://www.forensic.unt.edu

NOTE: This degree is only for **Chemistry** majors that have been accepted into the UNT Forensic Science Program. Required Minor: Biology. The student must see the Program Director for their official degree plan. This degree also counts for ACS certification

	Credit Hours	Advanced Hours
CHEMISTRY (45 hrs)		
General (1410, 1420; and labs: 1430, 1440).....	8	
or Honors General (1413, 1423; and labs: 1430, 1440)		
Organic (2370, 2380; and labs: 3210, 3220).....	8	2
Quantitative Analysis (3451 and lab 3452).....	4	4
Physical Chemistry (3510, 3520; and labs: 3230, 3240).....	8	8
Advanced Inorganic (4610) <i>Fall Only</i>	3	3
Advance Inorganic Lab (4620) <i>Spring Only</i>	1	1
Instrumental Analysis ¹ (CHEM 4631 and lab: 4632) <i>Spring Only</i>	4	4
Additional hours at senior level (4xxx).....	9	9
Biochemistry I (4540 – to satisfy ACS certification requirements)		
Forensic Chemistry (CHEM 4351) <i>Spring Only</i>		
Forensic Science Internship (CHEM 4900 or 4912)		
MATHEMATICS (13 hours)		
Calculus I & II (1710 & 1720).....	7	
Probability Models (1780).....	3	
Multivariable calculus (2730).....	3	
NOTE: Without sufficient math competence, student will have to complete MATH 1100, 1650		
PHYSICS (8 hours)		
Gen. Technical (1710, 2220; and labs: 1730 and 2240).....	8	
BIOLOGY MINOR (22 hours)		
Principles of Biology I (1710 and lab 1760).....	5	
Biology of Microorganisms (2041 and lab 2042).....	4	
Genetics (3451 and lab: 3452).....	4	4
Forensic Microscopy (BIOL 4240) <i>Fall Only</i>	3	3
Biomedical Criminalistics (BIOL 3331) <i>Spring Only</i>	3	3
Forensic Molecular Biology (4590).....	3	3
FORENSIC SCIENCE COURSES (FSAT exam required)		
Forensic Science Analysis (CHEM 3330) ¹ <i>Fall Only</i>	4	4
Biomedical Criminalistics (BIOL 3331) <i>Spring Only</i>	(3)	(3)
Principle of Forensic Science (CHEM 4360) <i>Spring Only</i>	3	3
Forensic Microscopy (BIOL 4240) <i>Fall Only</i>	(3)	(3)
Forensic Chemistry (CHEM 4351) <i>Spring Only</i>	(3)	(3)
Instrumental Analysis w/ lab (CHEM 4631 and lab 4632) <i>Spring Only</i>	(4)	(4)
Forensic Molecular Biology (4590).....	(3)	(3)
Forensic Science Internship (CHEM 4900 or 4912).....	(3)	(3)

UNIVERSITY CORE REQUIREMENTS (33 hours)

ENGLISH COMPOSITION & RHETORIC (ENGL 1310 and TECM 2700).....	6
CREATIVE ARTS (See catalog).....	3
LANGUAGE, PHILOSOPHY AND CULTURE (PHIL 2600 Ethics in Science or PHIL 1400).....	3
UNITED STATES HISTORY (HIST 2610 and 2620).....	6
AMERICAN GOVERNMENT (PSCI 2305 and 2306).....	6
SOCIAL AND BEHAVIORAL SCIENCES (CJUS 2100 Crime and Justice in the U.S.).....	3
CAO A and B (Fulfilled by Science and Math Courses).....	(6)

TOTAL hours shown from above..... 122 51

Note: Hours in parenthesis count toward 2 requirements.....

7/9/19

¹ These classes satisfy the Foreign Language Option II for this degree

Undergraduate Advisor:
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**UNIVERSITY OF NORTH TEXAS
 COLLEGE OF SCIENCE
 BACHELOR OF SCIENCE (BS)
 IN BIOCHEMISTRY WITH FORENSIC SCIENCE
 ACCREDITED DEGREE**

Forensic Program Director:
 Dr. Teresa Golden
 forensic@unt.edu
 Chemistry, Room 207B
 (940) 369-8458
 http://www.forensic.unt.edu

NOTE: This degree is only for **Biochemistry** majors that have been accepted into the UNT Forensic Science Program.
 Required Minor: Biology. The student must see the Program Director for their official degree plan.

	Credit Hours	Advanced Hours
<u>BIOCHEMISTRY</u> (14 hrs)		
Biochemistry I (4540).....	3	3
Biochemistry II (4550).....	3	3
Biochemistry Laboratory (4560)	2	2
Biochemistry and Molecular Biology of the Gene (4570) and Forensic Molecular Biology (4590)	6	6
<u>CHEMISTRY</u> (26 hrs)		
General (1410, 1420; and labs: 1430, 1440).....	8	
<u>or</u> Honors General (1413, 1423; and labs: 1430, 1440)		
Organic (2370, 2380; and labs: 3210, 3220).....	8	2
Quantitative Analysis (3451 and lab 3452)	4	4
Physical Chemistry (3510 and 3520).....	6	6
<u>MATHEMATICS</u> (10 hours)		
Calculus I & II (1710 & 1720)	7	
Elementary Probability and Statistics ¹ (1680) or Probability Models ¹ (1780).....	3	
NOTE: Without sufficient math competence, student will have to complete MATH 1100, 1650		
<u>PHYSICS</u> (8 hours)		
General or Technical (1510, 1520 and labs: 1530, 1540; or 1710, 2220 and labs: 1730 and 2240)	8	
<u>MINOR</u> (23 hours)		
Principles of Biology I (1710 and lab 1760).....	5	
Biology of Microorganisms (2041 and lab 2042)	4	
Genetics (3451 and lab 3452).....	4	4
Cell Biology (3510 and lab 3520).....	4	4
Forensic Microscopy (BIOL 4240) <i>Fall Only</i>	3	3
Forensic Science Internship (BIOL 4900).....	3	3
<u>FORENSIC SCIENCE COURSES</u> (FSAT exam required)		
Forensic Science Analysis (CHEM 3330) ¹ <i>Fall Only</i>	4	4
Biomedical Criminalistics (BIOL 3331) <i>Spring Only</i>	3	3
Principles of Forensic Science (CHEM 4360) <i>Spring Only</i>	3	3
Forensic Microscopy (BIOL 4240) <i>Fall Only</i> (3)		(3)
Forensic Chemistry (CHEM 4351) <i>Spring Only</i>	3	3
Instrumental Analysis w/ lab (CHEM 4631 and lab 4632) <i>Spring Only</i>	4	4
Forensic Molecular Biology (4590).....	3	3
Forensic Science Internship (BIOL 4900)..... (3)		(3)

UNIVERSITY CORE REQUIREMENTS (33 hours)

<u>ENGLISH COMPOSITION & RHETORIC</u> (ENGL 1310 and TECM 2700).....	6
<u>CREATIVE ARTS</u> (See catalog)	3
<u>LANGUAGE, PHILOSOPHY AND CULTURE</u> (PHIL 2600 Ethics in Science or PHIL 1400)	3
<u>UNITED STATES HISTORY</u> (HIST 2610 and 2620)	6
<u>AMERICAN GOVERNMENT</u> (PSCI 2305 and 2306)	6
<u>SOCIAL AND BEHAVIORAL SCIENCES</u> (CJUS 2100 Crime and Justice in the U.S.)	3
<u>CAO A and B</u> (Fulfilled by Science and Math Courses)	(6)

TOTAL hours shown from above..... 128

57

Note: Hours in parenthesis count toward 2 requirements

¹ These classes satisfy university foreign language requirements

Advisor:
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**UNIVERSITY OF NORTH TEXAS
 COLLEGE OF SCIENCE
 BACHELOR OF SCIENCE (BS)
 IN BIOLOGY WITH FORENSIC SCIENCE
 ACCREDITED DEGREE**

Forensic Program Director
 Dr. Teresa Golden
 forensic@unt.edu
 Chemistry, Room 207B
 (940) 369-8458
 http://www.forensic.unt.edu

NOTE: This degree is only for **Biology** majors that have been accepted into the UNT Forensic Science Program.
 Required Minor: Chemistry. The student must see the Program Director for their official degree plan.

	Credit Hours	Advanced Hours
<u>BIOLOGY</u> (43 hours)		
Principles of Biology I and II (1710/1720 and lab: 1760)	8	
Biology of Microorganisms (2041 and lab 2042).....	4	
Genetics (3451 and lab 3452)	4	4
Cell Biology (3510 and lab 3520).....	4	4
Biomedical Criminalistics (BIOL 3331) and Forensic Microscopy (BIOL 4240)	6	6
Animal Physiology (BIOL 3800 and lab: 4510)	4	4
Biochemistry and Molecular Biology of the Gene (4570) and Forensic Molecular Biology (4590)	6	6
Elementary Biochemistry (BIOC 3621 and lab: 3622).....	4	4
Forensic Science Internship (BIOL 4900)	3	3
<u>MATHEMATICS</u> (7 hours)		
Calculus I (1710)	4	
Elementary Probability and Statistics ¹ (1680) or Probability Models (1780) ¹	3	
NOTE: Without sufficient math competence, student will have to complete MATH 1100, 1650		
<u>PHYSICS</u> (8 hours)		
General or Technical (1410 & 1420 and labs: 1430 & 1440; or higher	8	
<u>CHEMISTRY MINOR</u> (20 hrs)		
General Chemistry (1410, 1420; and labs: 1430, 1440).....	8	
or Honors General Chemistry(1413, 1423; and labs: 1430, 1440)		
Organic Chemistry (2370, 2380; and labs: 3210, 3220).....	8	2
Quantitative Analysis (3451 and lab 3452)	4	4
<u>FORENSIC SCIENCE COURSES</u> (FSAT exam required)		
Forensic Science Analysis (CHEM 3330) ¹ <i>Fall Only</i>	4	4
Biomedical Criminalistics (BIOL 3331) <i>Spring Only</i>	(3)	(3)
Principles of Forensic Science (CHEM 4360) <i>Spring Only</i>	3	3
Forensic Microscopy (BIOL 4240) <i>Fall Only</i>	(3)	(3)
Forensic Chemistry (CHEM 4351) <i>Spring Only</i>	3	3
Instrumental Analysis w/ lab (CHEM 4631 and lab 4632) <i>Spring Only</i>	4	4
Forensic Molecular Biology (4590)	(3)	(3)
Forensic Science Internship (BIOL 4900)	(3)	(3)

UNIVERSITY CORE REQUIREMENTS (33 hours)

<u>COMMUNICATION</u> (ENGL 1310 and TECM 2700)	6
<u>CREATIVE ARTS</u> (see catalog).....	3
<u>LANGUAGE, PHILOSOPHY AND CULTURE</u> (PHIL 2600 Ethics in Science or PHIL 1400)	3
<u>UNITED STATES HISTORY</u> (HIST 2610 and 2620)	6
<u>AMERICAN GOVERNMENT</u> (PSCI 2305 and 2306)	6
<u>SOCIAL AND BEHAVIORAL SCIENCES</u> (CJUS 2100 Crime and Justice in the U.S.)	3
<u>CAO A and B</u> (Fulfilled by Science and Math Courses)	(6)

TOTAL hours shown from above..... **119** **51**

Note: Hours in parenthesis count toward 2 requirements

¹These classes satisfy the Foreign Language requirement for this degree