



ARIZONA STATE UNIVERSITY
PROPOSAL TO ESTABLISH A NEW UNDERGRADUATE DEGREE

This template is to be used only by programs that have received specific written approval from the Provost's office to proceed with internal proposal development and review. A separate proposal must be submitted for each individual new degree program.

DEGREE PROGRAM INFORMATION

College/School(s) offering this degree: New College

Unit(s) within college/school responsible for program: School of Mathematical and Natural Sciences

If this is for an official joint degree program, list all units and colleges/schools that will be involved in offering the degree program and providing the necessary resources:

Proposed Degree Name: Forensics

Undergraduate Degree Type: BS-Bachelor of Science

If Degree Type is Other, provide proposed degree type:

and proposed abbreviation:

Proposed title of major: Forensics

Is a program fee required? Yes No

Is the unit willing and able to implement the program if the fee is denied? Yes No

Requested effective term: Fall and year: 2013

(The first semester and year for which students may begin applying to the program.)

PROPOSAL CONTACT INFORMATION

(Person to contact regarding this proposal)

Name: Todd Sandrin

Title: Asc. Vice Provost & Asc. Director

Phone: 602-543-6934

email: Todd.Sandrin@asu.edu

DEAN APPROVAL

This proposal has been approved by all necessary unit and College/School levels of review, and the College/School(s) has the resources to offer this degree program. I recommend implementation of the proposed degree program. (Note: An electronic signature, an email from the dean or dean's designee, or a PDF of the signed signature page is acceptable.)

College Dean name:

College Dean signature _____ Date: _____

College Dean name:
(if more than one college involved)

College Dean signature _____ Date: _____

**ARIZONA STATE UNIVERSITY
PROPOSAL TO ESTABLISH A NEW UNDERGRADUATE DEGREE**

This proposal template should be completed in full and submitted to the University Provost's Academic Council [[mailto: curriculumplanning@asu.edu](mailto:curriculumplanning@asu.edu)]. It must undergo all internal university review and approval steps including those at the unit, college, and university levels. A program **may not** be implemented until the Provost's Office notifies the academic unit that the program may be offered.

DEGREE PROGRAM INFORMATION

Undergraduate: BS-Bachelor of Science

**If Degree Type is Other, provide proposed degree type:
and proposed abbreviation:**

Proposed title of major: Forensics

1. PURPOSE AND NATURE OF PROGRAM

A. Brief program description (This is a catalog type description. Include the distinctive features of the program that make it unique. Do not include program or admission requirements.)

The program provides prepares students to pursue careers in forensics laboratories and in the research and development of new technologies in forensics. The degree places emphasis on chemistry and biology laboratory coursework as both provide experience with essential techniques commonly used crime labs. The degree also places focus on oral communication skills that will prepare graduates for the multifaceted, interdisciplinary aspects of their careers in forensics (e.g., providing articulate and compelling expert testimony in criminal trials).

2. STUDENT LEARNING OUTCOMES AND ASSESMENT

A. List the knowledge, competencies, and skills students should have when they graduate from the proposed degree program. (You can find examples of program Learning Outcomes at (<http://www.asu.edu/oue/assessment.html>))

B.

OUTCOME 1	Be able to demonstrate knowledge in relevant areas of forensics including pertinent topics in biology, chemistry, and evidence analysis.
OUTCOME 2	Be able to demonstrate proficiency in laboratory techniques covered in required laboratory classes.

C. Describe the plan and methods to assess whether students have achieved the knowledge, competencies and skills identified in the Learning Outcomes. (You can find examples of assessment methods at (<http://www.asu.edu/oue/assessment.html>))

OUTCOME 1	Be able to demonstrate knowledge in relevant areas of forensics including pertinent topics in biology, chemistry, and evidence analysis.
Measure 1.1	Students' knowledge will be assessed by a final exam in BIO 353 Cell Biology.
Performance Criterion 1.1	This measure will be met if at least 70% of the students receive grades of C or better on the final exam in BIO 353.
Measure 1.2	Students' knowledge will be assessed by a final exam in CHM 327 Instrumental Analysis.
Performance Criterion 1.2	This measure will be met if at least 70% of the students receive grades of C or better on the final exam in CHM 327

Measure 1.3	Students' knowledge will be assessed by a final exam in FOR4XX: Trace Evidence
Performance Criterion 1.3	This measure will be met if at least 70% of the students receive grades of C or better on the final exam in FOR 4XX: Trace Evidence.

OUTCOME 2	Be able to demonstrate proficiency in laboratory techniques covered in required laboratory classes.
Measure 2.1	Students' knowledge will be assessed by a final laboratory exam in BIO 354 Cell Biology Laboratory.
Performance Criterion 2.1	This measure will be met if at least 70% of the students receive grades of C or better on the final lab exam in BIO 354.
Measure 2.2	Students' knowledge will be assessed by laboratory assignments in BIO 305 Biology Behind the Crime Scene.
Performance Criterion 2.2	This measure will be met if at least 70% of the students receive grades of C or better in the lab portion of BIO 305.
Measure 2.3	Students' knowledge will be assessed by final laboratory exam in CHM 328 Instrumental Analysis Laboratory
Performance Criterion 2.3	This measure will be met if at least 70% of the students receive grades of C or better on the final lab exam in CHM 328.

3. CURRICULUM OF THE PROPOSED PROGRAM

Total credit hours must be 120 to include: first year composition, general studies, core/required courses, program specific electives, and any additional requirements.

A. Major Map. Please prepare and attach a Major Map. If there are concentrations in this degree program, prepare a separate Major Map for each one. (Examples of Major Maps can be found at <http://provost.asu.edu/curriculum>)

B. Total credit hours required for this program: 120

C. Core/Required Courses.

- i. Total required and/or core course credit hours: 93
- ii. List the name, prefix, and credit hours for each required/core class for this program attached

D. Program Specific Electives.

- i. Total required program elective credit hours: 1
- ii. List the name, prefix, and credit hours for any program specific electives for this program: none

E. Additional Program Requirements, if any. List and describe any capstone experiences, milestone, and/or additional requirements for this degree program:

F. Are any concentrations to be established under this degree program? Yes No

i. If "Yes", please check one:

- Students must select a concentration as part of this degree program
- Concentrations are optional

ii. List courses & additional requirements for the proposed concentration (s):

Concentration Name	Total credit hours	Core/Required Courses for Concentration (Include course name and prefix)	Total Core credit hours	Program Specific Electives (include course name and prefix)	Total Elective credit hours	Additional Requirements (i.e. milestones, capstones)

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(Please expand table as needed. Right click in white space of last cell. Select "Insert Rows Below")

4. NEW COURSE DEVELOPMENT

A. Will a new course prefix(es) be required for this degree program? Yes No

If yes, complete the Request for a New Prefix for each prefix and submit with this proposal:

http://provost.asu.edu/files/shared/curriculum/Prefix_Request.doc.

B. New Courses Required for Proposed Degree Program. List all new courses required for this program, including course prefix, number and course description.

NOTE: Each of the following four (4) courses is listed in the attached major map as an omnibus course (FOR 394/494: Special Topics). Each course will be replaced by the courses shown below once the courses listed below are approved and assigned non-omnibus course numbers.

FOR 4XX: Trace Evidence (Term 7 of Major Map)

Analytical techniques and instrumentation used in the forensic examination hair, fiber, glass, soil, paint, accelerants, and explosives. Pre-requisite: CHM 327 with a grade of C or better.

FOR 3XX: Computer Forensics (Term 8 of Major Map)

Collection of computer forensic data, forensic analysis techniques, computer forensic tools and software for forensic investigators, network forensics, data forensics, mobile device forensics, malware forensics, cyber-crimes and fraud, computer security incident response. Pre-requisite: CSE 180 with a grade of C or better.

FOR 4XX: Toxicology (Term 8 of Major Map)

Mechanisms of toxic action of common poisons, narcotics and pollutants. Quantification of toxic effects through dose-response curves. Pre-requisite: LSC 394: Modern Concepts in Biochemistry Lecture with a grade of C or better.

FOR 4XX: Comparative Forensics(Term 8 of Major Map)

Comparative methods used in the forensic analysis of fingerprints, questioned documents, and firearms evidence. Theory and principles of individualization as assessed in forensic casework. Pre-requisite: BIO 305 with a grade of C or better.

5. PROGRAM NEED. Explain why the university needs to offer this program (include target audience and market).

Data from the US Bureau of Labor Statistics (Occupational Outlook Handbook, 2010) indicates that there is and will continue to be a need for graduates of this type of degree program. The Handbook states, "Jobs for forensic science technicians are expected to increase by 20 percent, which is much faster than average. Employment growth in State and local government should be driven by the increasing application of forensic science techniques, such as DNA analysis, to examine, solve, and prevent crime."

These data are underscored by Mr. Howard Birnbaum, a forensic scientist with 30 years of experience and former Scientific Analysis Bureau Supervisor with the Arizona Department of Public Safety, who states in his letter (attached) supporting a recent degree concentration in Forensics that ASU launched in Fall 2011: "there will continue to be a demand for qualified individuals to fill jobs not only as bench analysts, but as scientists who can validate new methodologies that are developed and review and verify actual forensic casework. The National Academy of Science, in response to concerns raised by the legal community, calls for major reforms and new research in forensic science. While many crime laboratories are underfunded and understaffed, laboratory accreditation and analyst certification are becoming mandatory. This will result in less output per analyst thus requiring an influx of trained professionals ready to fill the void."

Nearby community colleges (e.g., Estrella Mountain Community College) offer certificates in crime scene processing. Recipients of these certificates typically work as Evidence Technicians. Graduates of these programs who have interests in the science of forensics beyond that covered in the Evidence Technology curricula and want to work in a lab and/or validate and develop new methodologies will likely be keenly interested in our proposed degree program in Forensics.

The target audience and market includes both new incoming students and graduates of relevant community college degree programs. We anticipate interest in this new degree to be strong. While a new concentration in Forensics (http://newcollege.asu.edu/mns/degrees/naturalsci/life_sci_forensics) just launched in fall 2011, already 137 students have enrolled in this degree program. Considering such vigorous enrollment in this existing degree program, projections provided below regarding annual enrollment for the proposed Forensics degree detailed below may be conservative.

6. **IMPACT ON OTHER PROGRAMS.** List other academic units that might be impacted by the proposed program and describe the potential impact (e.g., how the implementation of this program might affect student headcount/enrollment, student recruitment, faculty participation, course content, etc. in other programs). Attach letters of collaboration/support from impacted programs.

Possible impacts on other programs may be that some students choose this major rather than one offered by one of the academic units listed below, but we believe this number will be relatively small because students often have other reasons for wanting to study and stay at campuses other than the West campus. Additional possible unit-specific impacts are highlighted below.

- College of Liberal Arts and Science (CLAS) (impact statement requested on 4/19/2012 from Dr. Miles Orchinik, School of Life Sciences Undergraduate Programs Associate Director/Associate Dean; no impact statement was provided)

We believe that the proposed program will positively impact CLAS by producing a sizable pool of appropriately trained graduates that will likely have interest in pursuing graduate studies in relevant programs in the natural sciences in CLAS.

- School of Criminology and Criminal Justice (see impact statement from Scott Decker appended below)

RE: new degree in Forensics and request for impact statement

Scott Decker

 You replied to this message on 4/19/2012 4:04 PM.

Sent: Thu 4/19/2012 2:56 PM

To: Todd Sandrin

Thank you Todd, this looks fine to us, and we welcome it as an addition to the ASU curriculum.

Scott

We believe that the proposed program will positively impact the School of Criminology and Criminal Justice by generating substantial enrollment in courses offered by the School, including CRJ 100 and 230.

- College of Technology and Innovation (CTI) (impact statement requested on 4/19/2012 from Dr. Doug Green, Chair of Applied Sciences and Mathematics at CTI; no impact statement was provided)

We look forward to working with CTI to explore development of additional concentrations in our proposed degree program, particularly in the fields of forensic biotechnology and environmental forensics.

- College of Law (impact statement requested on 4/19/2012 from Dr. Douglas Sylvester, Dean of the College of Law; no impact statement was provided)

We anticipate that many graduates of the proposed program will be well-qualified and interested in entering the College of Law.

7. PROJECTED ENROLLMENT How many new students do you anticipate enrolling in this program each year for the next five years? Please utilize the following tabular format.

5-YEAR PROJECTED ANNUAL ENROLLMENT					
	1st Year	2nd Year (Yr 1 continuing + new entering)	3rd Year (Yr 1 & 2 continuing + new entering)	4th Year (Yrs 1, 2, 3 continuing + new entering)	5th Year (Yrs 1, 2, 3, 4 continuing + new entering)
Number of Students Majoring (Headcount)	50	100	200	400	650

8. ACCREDITATION OR LICENSING REQUIREMENTS (if applicable). Provide the names of the external agencies for accreditation, professional licensing, etc. that guide your curriculum for this program, if any. Describe any requirements for accreditation or licensing.

Academic programs in Forensics are accredited by FEPAC (Forensic Science Education Programs Accreditation Commission). Accreditation standards required by FEPAC are **attached**. Per FEPAC Accreditation Standards (section 3.1.3), "A program seeking FEPAC accreditation shall have graduated at least two classes before the Application for Accreditation (FEPAC Form 5.1) is submitted." The courses included in the curriculum of the degree have been selected to meet requirements for FEPAC accreditation.

9. FACULTY and STAFF

- a. **Current Faculty.** List the name, rank, highest degree, area of specialization/expertise and estimate of the level of involvement of all current faculty who will teach in the program.

Faculty Member	Rank	Highest Degree	Specialization	Involvement
Mr. Howard Birnbaum	Faculty Associate	M.S.	Comparative Forensics, Trace Evidence	Instruction in FOR 4XX (Comparative Forensics) and 4XX (Trace Evidence)
Dr. Connie Borrer	Professor	Ph.D.	Statistics	Instruction in STP 226
Dr. Jennifer Broatch	Assistant Professor	Ph.D.	Statistics	Instruction in STP 226
Dr. Thomas Cahill	Assistant Professor	Ph.D.	Analytical Chemistry	Instruction in CHM 116, 327/328, and 302 or FOR 4XX Toxicol.
Dr. Jennifer Hackney	Assistant Professor	Ph.D.	Cell Biology	Instruction in BIO 353/354 and LSC

				394 (Biochemistry)
Dr. Pamela Marshall	Associate Professor	Ph.D.	Genetics	Instruction in LSC 347/348
Dr. Beth Polidoro	Assistant Professor	Ph.D.	Environmental Chemistry	Instruction in CHM 113, 302 and/or FOR 4XX Toxicol.
Dr. Todd Sandrin	Associate Professor	Ph.D.	Microbiology	Instruction in relevant BIO courses
Dr. Carl Wagner	Assistant Professor	Ph.D.	Organic Chemistry	Instruction in CHM 233/234 and 237/238
Dr. Kuai Xu	Assistant Professor	Ph.D.	Network Security	Instruction in FOR 3XX (Computer Forensics)

- b. **New Faculty.** Describe the new faculty hiring needed during the next three years to sustain the program. List the anticipated hiring schedule and financial sources for supporting the addition of these faculty.

The degree program can be launched with existing Faculty and Faculty Associate support. As enrollments grow, though, additional faculty will soon be needed to teach the core forensics and chemistry courses and to manage the program as it grows and secures FEPAC accreditation. For this reason, we anticipate needing in the next three years two faculty detailed in the table below. Because the doctoral degree is not typically offered in Forensics, we anticipate that these faculty hires may join ASU without doctoral degrees. Faculty with such practical experience would help the degree program meet FEPAC accreditation standards (Section 3.4) that state that "Faculty members with working experience in a forensic science laboratory are preferred."

We anticipate that one of the new faculty hires will serve as the FEPAC-required program director of the forensics degree program. FEPAC accreditation standards require management of accredited degree programs by a program director (Section 4.4). Requirements for the program director include: "Minimum of a Master's or professional degree appropriate for a forensic science program, and at least three years relevant experience as a forensic-science practitioner in an operational forensic science laboratory setting (the three years not including any training period); OR earned doctorate in an appropriate discipline, and three years experience as an academic forensic scientist that includes appropriate educational, research and service contributions to forensic science."

Faculty Member	Rank	Highest Degree	Specialization	Involvement
New Faculty Hire	Asst./Assoc./Prof. OR Clinical Faculty	TBD	Comparative Forensics, Trace Evidence	Instruction in FOR 4XX (Comparative Forensics) and 4XX (Trace Evidence)
New Faculty Hire	Asst./Assoc./Prof. OR Clinical Faculty	TBD	Forensic Toxicology/ Forensic Chemistry	Instruction in CHM 327/328 and FOR 4XX Toxicology

- c. **Administration of the program.** Explain how the program will be administered for the purposes of admissions, advising, course offerings, etc. Discuss the available staff support.

The program will be administered by the School of Mathematical and Natural Sciences in the New College of Interdisciplinary Arts and Sciences. Admissions will be handled by the usual ASU admissions procedures; there will be no special admission requirements for this program. Advising for this program will be provided by academic advisors in our School (currently, there are two). These advisers currently serve the four majors in our School: Applied Computing, Applied Mathematics, Life Sciences, and Statistics. Advising for the new program will be provided by our two current advisers and the additional adviser mentioned below. Teaching schedules and course offerings by semester are determined by the School Director in consultation with the Associate Director, faculty, and advisers. Technology support will be provided by ASU's UTO office and the New College technology support staff.

10. RESOURCES (necessary to launch and sustain the program)

- a. Describe any new resources required for this program's success, such as new support staff, new facilities, new library resources, new technology resources, etc.

New support staff: One new Academic Success Specialist for this program will be required considering the substantial enrollment anticipated. No new facilities, library, technology resources will be needed.

- b. Explain where you will get the resources to support this program.

Most of the financial resources for supporting this program will come from reallocation of New College funds. See Dean Langland's support letter (**attached**). Other funds will come from increased tuition revenue from new students who will be attracted to this degree and will not need to go to another institution to pursue a BS in Forensics.

**APPENDIX
OPERATIONAL INFORMATION FOR UNDERGRADUATE PROGRAMS**

(This information is used to populate the [Degree Search](#)/catalog website.)

1. Program Name (Major): Forensics**2. Program Description** (150 words maximum)

The program provides prepares students to pursue careers in forensics laboratories and in the research and development of new technologies in forensics. The degree places emphasis on chemistry and biology laboratory coursework as both provide experience with essential techniques commonly used crime labs. The degree also places focus on oral communication skills that will prepare graduates for the multifaceted, interdisciplinary aspects of their careers in forensics (e.g., providing articulate and compelling expert testimony in criminal trials).

3. Contact and Support Information

Building Name, code and room number: (Search ASU map)	FAB N101
Program office telephone number: (i.e. 480/965-2100)	602/543-6050
Program Email Address:	mns@asu.edu
Program Website Address:	http://newcollege.asu.edu/mns

4. Delivery/Campus Information Delivery: West campus

Note: Once students elect a campus or On-line option, students will not be able to move back and forth between the on-campus and the ASU Online options. Approval from the Office of the Provost and Philip Regier (Executive Vice Provost and Dean) is required to offer programs through ASU Online.

5. Campus/Locations: indicate all locations where this program will be offered.

Downtown Phoenix Polytechnic Tempe West Other:

6. Additional Program Description Information

- A. Additional program fee required for this program? No
B. Does this program have a second language requirement? No

7. Career Opportunities & Concentrations

Provide a brief description of career opportunities available for this degree program. If program will have concentrations, provide a brief description for each concentration. (150 words maximum)

Career opportunities for graduates of this program include employment in crime laboratories, police departments, government agencies, law firms, insurance companies, hospitals, and consulting firms. Graduates of the program will also be well-qualified to pursue graduate studies in relevant areas of the natural sciences.

8. Additional Admission Requirements

If applicable list any admission requirements (freshman and/or transfer) that are higher than and/or in addition to the university minimum undergraduate admission requirements.)

If applicable list any admission requirements (freshman and/or transfer) that are higher than and/or in addition to the university minimum undergraduate admission requirements.)

9. Keywords

List all keywords used to search for this program. Keywords should be specific to the proposed program.

Forensics, forensic science, forensic scientist, crime scene investigation

10. Advising Committee Code

List the existing advising committee code to be associated with this degree.

Note: If a new advising committee needs to be created, please complete the following form:

[Proposal to create an undergraduate advising committee](#)

11. First Required Math Course

List the first math course required in the major map. MAT 210: Brief Calculus

12. Western Undergraduate Exchange (WUE) Eligible:

Has a request been submitted to the Provost by the Dean to consider this degree program as eligible for WUE?
As a degree offered by New College, a request is made that the proposed degree will be WUE eligible.

Note: No action will be taken during the implementation process with regards to WUE until approval is received from the Provost.

13. Area(s) of Interest

A. Select **one** (1) primary Area of Interest from the list below that applies to this program.

- | | |
|---|--|
| <input type="checkbox"/> Architecture, Construction & Design | <input type="checkbox"/> Engineering & Technology |
| <input type="checkbox"/> Artistic Expression & Performance | <input type="checkbox"/> Environmental Issues & Physical Science |
| <input type="checkbox"/> Biological Sciences, Health & Wellness | <input type="checkbox"/> Interdisciplinary Studies |
| <input type="checkbox"/> Business, Management & Economics | <input type="checkbox"/> Languages & Cultures |
| <input type="checkbox"/> Communication & Media | <input checked="" type="checkbox"/> Law & Justice |
| <input type="checkbox"/> Computing & Mathematics | <input type="checkbox"/> Social Science, Policies & Issues |
| <input type="checkbox"/> Education & Teaching | |

B. Select **any** additional Areas of Interest that apply to this program from the list below.

- | | |
|--|---|
| <input type="checkbox"/> Architecture, Construction & Design | <input type="checkbox"/> Engineering & Technology |
| <input type="checkbox"/> Artistic Expression & Performance | <input type="checkbox"/> Environmental Issues & Physical Science |
| <input checked="" type="checkbox"/> Biological Sciences, Health & Wellness | <input type="checkbox"/> Interdisciplinary Studies |
| <input type="checkbox"/> Business, Management & Economics | <input type="checkbox"/> Languages & Cultures |
| <input type="checkbox"/> Communication & Media | <input type="checkbox"/> Law & Justice |
| <input checked="" type="checkbox"/> Computing & Mathematics | <input checked="" type="checkbox"/> Social Science, Policies & Issues |
| <input type="checkbox"/> Education & Teaching | |

The following fields are to be completed by the Office of the Executive Vice President and Provost of the University.

CIP Code: _____

Plan Code:

Subject	Course Name	Credits
A	BIO 181 General Biology I	4
	BIO 182 General Biology II	4
	BIO 305 Biology Behind the Crime Scene	4
	LSC 347 Fundamentals of Genetics	3
	LSC 348 Fundamentals of Genetics Laboratory	1
	BIO 353 Cell Biology	3
	BIO 354 Cell Biology Laboratory	1
B	CHM 113 General Chemistry I	4
	CHM 116 General Chemistry II	4
	CHM 233 General Organic Chemistry I	3
	CHM 237 General Organic Chemistry I Laboratory	1
	CHM 234 General Organic Chemistry II	3
	CHM 238 General Organic Chemistry II Laboratory	1
	LSC 394 Modern Concepts in Biochemistry	3
	LSC 394 Modern Concepts in Biochemistry Laboratory	1
	CHM 327 Instrumental Analysis	3
	CHM 328 Instrumental Analysis Laboratory	2
	CHM 302 Environmental Chemistry	3
	LSC 4XX Toxicology	4
C	MAT 210 Brief Calculus	3
	STP 226 Elements of Statistics	3
	CSE 180 Computer Literacy	3 OR
	PHY 111 General Physics I	3
	PHY 113 General Physics I Laboratory	1
	PHY 112 General Physics II	3
	PHY 114 General Physics II Laboratory	1
D	FOR 3XX Computer Forensics	3
	FOR 4XX Comparative Forensics	3
	FOR 4XX Trace Evidence	3
E	CRJ 100 Introduction to Criminal Justice	3
	CRJ 230 Introduction to Policing	3
	PGS 101 Introduction to Psychology	3
	ENG 301 Writing for the Professions OR	
	ENG 311 Persuasive Writing	3
	COM 222 Argumentation OR	
	COM 225 Public Speaking	3
	ACO 101 Intro to Computer Science	3
Total Credit Hours for Core Requirements		99


2013 - 2014 Major Map
Forensic Science, BS (Proposed)

ZCZFHGO

Term 1	0 - 16 Credit Hours Critical course signified by ♦	Hours	Minimum Grade	Notes
	IAS 191: The Freshmen Experience	2		<ul style="list-style-type: none"> An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses ASU Math Placement Exam score determines placement in Mathematics course ASU 101 or College specific equivalent First Year Seminar required of all freshman students
	ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students	3	C	
♦	BIO 181: General Biology I (SQ)	4	C	
♦	CHM 113: General Chemistry I (SQ)	4	C	
	MAT 210: Brief Calculus (MA)	3	C	
	Term hours subtotal:	16		

Term 2	17 - 30 Credit Hours Critical course signified by ♦	Hours	Minimum Grade	Notes
	ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students	3	C	
♦	BIO 182: General Biology II (SG)	4	C	
♦	CHM 116: General Chemistry II (SQ)	4	C	
	PSY 101: Introduction to Psychology (SB)	3	C	
♦	Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
	Term hours subtotal:	14		

Term 3	31 - 44 Credit Hours Critical course signified by ♦	Hours	Minimum Grade	Notes
	CRJ 100: Introduction to Criminal Justice (SB)	3	C	
	COM 225: Public Speaking (L) OR COM 222: Argumentation (L)	3	C	
♦	CHM 233: General Organic Chemistry I	3	C	
♦	CHM 237: General Organic Chemistry Laboratory I	1	C	
	PHY 111: General Physics (SQ)	3	C	
	PHY 113: General Physics Laboratory (SQ)	1	C	
♦	Complete Mathematics (MA) requirement.			
	Term hours subtotal:	14		

Term 4	45 - 58 Credit Hours Critical course signified by ♦	Hours	Minimum Grade	Notes
	STP 226: Elements of Statistics (CS)	3	C	
	Historical Awareness (H)	3		
♦	CHM 234: General Organic Chemistry II	3	C	
♦	CHM 238: General Organic Chemistry Laboratory II	1	C	
	PHY 112: General Physics (SQ)	3	C	
	PHY 114: General Physics Laboratory (SQ)	1	C	
	Term hours subtotal:	14		

Term 5	59 - 73 Credit Hours	Hours	Minimum Grade	Notes
	LSC 347: Fundamentals of Genetics AND LSC 348: Fundamentals of Genetics Laboratory	4	C	
	BIO 305: Biology Behind the Crime Scene (SG)	4	C	
	Elective	1		
	Lower Division Humanities, Fine Arts and Design (HU) AND Cultural Diversity in the U.S. (C)	3		
	CSE 180: Computer Literacy (CS) OR ACO 100: Overview of Applied Computing (CS)	3	C	
	Term hours subtotal:	15		

Term 6 74 - 88 Credit Hours	Hours	Minimum Grade	Notes
CRJ 230: Introduction to Policing	3	C	
BIO 353: Cell Biology AND BIO 354: Cell Biology Laboratory	4	C	
CHM 327: Instrumental Analysis	3	C	
CHM 328: Instrumental Analysis Laboratory	2	C	
Upper Division Social and Behavioral Sciences (SB)	3		
Term hours subtotal	15		

Term 7 89 - 104 Credit Hours	Hours	Minimum Grade	Notes
Upper Division Humanities, Fine Arts and Design (HU) AND Global Awareness (G)	3		
BCH 371: Modern Concepts in Biochemistry	3	C	
BCH 372: Modern Concepts in Biochemistry Laboratory	1	C	
CHM 302: Environmental Chemistry	3	C	
FOR 494: Special Topics	3	C	
Language and Cultures: Requirement satisfied through the following: * Completion of secondary education at a school in which the language of instruction is not English; * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV; * Completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country; * Completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the University General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper-division hours is required if lower division courses are used; * Completion of two sequential semesters of coursework in a current computer language.	3		
Term hours subtotal	16		

Term 8 105 - 120 Credit Hours	Hours	Minimum Grade	Notes
ENG 301: Writing for the Professions (L) OR ENG 311: Persuasive Writing (L)	3	C	
FOR 394: Special Topics	3	C	
FOR 494: Special Topics	4	C	
FOR 494: Special Topics	3	C	
Language and Cultures: Requirement satisfied through the following: * Completion of secondary education at a school in which the language of instruction is not English; * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV; * Completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country; * Completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the University General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper-division hours is required if lower division courses are used; * Completion of two sequential semesters of coursework in a current computer language.	3		
Term hours subtotal	16		

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.50 minimum
Total hrs at ASU: 30 minimum
Hrs Resident Credit for Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

General University Requirements Legend
General Studies Core Requirements:

- Literacy and Critical Inquiry (LI)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Fine Arts and Design (HU)
- Social and Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2013 - 2014 academic year.

-----Original Message-----

From: Elizabeth Langland

Sent: Tuesday, September 11, 2012 2:43 PM

To: CurriculumPlanning@asu.edu

Subject: FW: BS in Forensics

To Whom It May Concern,

I am delighted to support this proposal for a new BS degree in Forensics, to be offered by New College's School of Mathematical and Natural Sciences. Our Forensics concentration is already attracting a number of new students to the College, so I'm convinced that the major will prove very attractive to prospective students.

Best regards,
Elizabeth Langland

Elizabeth Langland
Vice Provost and Dean
New College of Interdisciplinary Arts and Sciences Foundation Professor of Humanities Arizona State University
4701 W. Thunderbird Road
Glendale, AZ 85306
602-543-4506



May 14, 2012

To: Elizabeth Langland, Vice Provost and Dean
New College of Interdisciplinary Arts and Sciences

From: Roger L. Berger, Director *Roger L Berger*
Division of Mathematical and Natural Sciences

Re: Proposal for new degree, BS in Forensics

Please review and approve the attached proposal for a new BS degree in Forensics. This proposal has been approved by the Curriculum Committee of the Division of Mathematical and Natural Sciences and by the faculty of the Division.

We look forward to receiving permission to offer this exciting new degree. Based on the popularity of our concentration in Forensics, we anticipate this degree will be very popular with students.

Thank you.

Roger L. Berger, Director
Division of Mathematical and Natural Sciences
New College of Interdisciplinary Arts and Sciences
Mailing address: P O Box 37100, Mail code 2352, Phoenix, AZ 85069-7100
Shipping address: 4701 W Thunderbird Road, Glendale, AZ 85306-4908
602-543-8545 Fax: 602-543-6073