

ATTACHMENT 2.3

California State University, Long Beach University Resources Council

Proposal for Implementing New Degree, Option, Certificate, Minor or Specialization

Initiating Department(s): Criminal Justice

College(s): Health and Human Services

Name of Proposed Program: Minor in Forensic Studies

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The Department of Criminal Justice underwent a massive curricular transformation during the 2007-2008 academic year. In addition to completely revising our curricula at the undergraduate minor, undergraduate major, and master's levels, we also revised the substance of all of our courses as evidenced by the more than sixty changes that went through the curriculum certification process in January 2008. It should be noted that new course offerings and degree requirements were designed with the proposed minor in forensic studies in mind. While all of our core courses and a number of our electives were updated with new master syllabi as part of this transformation, nineteen courses were eliminated from our former curricula. This was done quite intentionally to allow us to shuffle our resources such that we may begin to offer multiple sections of our new forensic courses without needing additional FTEF resources.

The table on the next page should be viewed in light of the curricular changes described above. Accordingly, while the table may appear, at first blush, to predict an increase in FTES without the need for additional resources, that is not the case. Given that we have discontinued offering nearly twenty courses that we used to offer, we fully expect that we will be able to staff the increased number of sections of the forensic courses required for the proposed major simply by reallocating our current resources. The notes in the far right column of the table explain this redistribution in detail.

Table 1: Courses Required by the Proposed Program

Course Number	When First Offered (Year)	Frequency F & S	# of Sections (Total)	Current AY Enrollment (#)	Projected Enrollment (#)	Notes
CRJU 230	Fall 2008	Every Fall and Spring Semester	2 (1 in Fall & 1 in Spring)	50	100	We plan to offer one section each semester without needing an increase in FTEF since this course replaced an older elective that we used to offer each semester that enrolled only 40 students annually (CRIM 301), but now is no longer offered. Thus without increasing FTEF, we expect to boost FTEs.
CRJU 301	Fall 2008	Every Fall and Spring Semester	8 (4 in Fall & 4 in Spring)	320	320-400 Note: Required for CRJU Major	This course was previously offered by the Department of Criminal Justice for many years as CRIM 351. Four sections of the course have been offered every semester for several years with enrollments of 40 students per section (160 per semester; 320 per year). Due to increased demand, we added a fifth section of this course in the fall 2008 and spring 2009. This change was able to be made since we no longer offering four sections of CRIM 487 (juvenile justice) each semester since that course is now an elective, rather than a required course.
CRJU 350	Fall 2008	Every Fall and Spring Semester	4 (2 in Fall & 2 in Spring)	70	320 Note: Required for CRJU Major	This course was previously offered by the Department of Criminal Justice for more than 20 years as CRIM 451. One section of the course has been offered every semester with enrollments of roughly 35 students per section (70 per year). In our new curriculum, it is now a required course for our majors. Moreover if the proposed minor is approved, it will be required for the minor as well. To accommodate this increase, we will need to offer at least two sections of the class each semester. This has been easily accomplished since we will no longer teach CRIM 331, a course that used to be required and, therefore, was offered at least twice per semester. Thus, the increase in enrollments for this particular course really represents a shift of enrollments from CRIM 331 to CRJU 350; the new course, however, can be taught in larger class sections.
CRJU 412	Fall 1998 (as CRIM 361)	Every Fall and Spring Semester	4 (2 in Fall & 2 in Spring)	104	320	We have traditionally offered two sections of this course each semester as CRIM 361. It is taught in large classrooms with an average enrollment of 52 students per section. We will move to teaching the course in larger classrooms that accommodate 80 students per section to accommodate students in the proposed minor without needing to add more sections of the course.
CRJU 440	Fall 2006 (as CRIM 499)	Every Fall and Spring Semester	3 (1 in Fall, 1 in Spring, 1 in Summer)	50	105	We have offered this course for several years twice per year with a cap of 25 students. Having now secured lab space in MLSC 107, we can increase enrollments to 35 students per section, thereby accommodating ten additional students per section. Moreover, we will begin to offer a section of this course every semester since we have discontinued offering CRIM 302. If additional sections are needed to meet demand, we can add them since we have also discontinued other CRIM electives (see box below)
Any two CRJU Forensic Electives	Fall 2006 (as CRIM 499)	At least 3 every Fall and Spring Semester	4 (3 in Fall & 2 in Spring)	50	210	We have discontinued a number of electives that we used to offer in our old curricula (e.g., CRIM 405, 424, 482, 493, 623, 624, 630, 640, 641 and 650). In lieu of offering these courses that were typically under-subscribed, we have begun to offer forensic electives that we expect will draw high student enrollments if the minor is approved. We had done so in the past with only two forensic electives, both of which were offered once per year with a cap of 25 students. We now offer at least three forensic electives each semester with caps of at least 35 students.

Expected Total FTES in Program: _____

Staffing Needs for Program (in FTEF): None beyond our current 18.0 allocation, as we already offer all of the classes in the proposed minor.

Space Needs for Program (Classrooms): None beyond the space we already have for the classes we are currently teaching.

OE&E Needs for Program (in Dollars): \$0.00

Release Time Needs in FTEF: None

Purpose of Release Time: _____

Library Support Required: No new library resources are needed since the library already has subscriptions to the *Journal of Forensic Sciences* (electronically through Blackwell-Synergy), a number of criminal justice publications, and Westlaw.

Clerical Support for Program (Positions): No new clerical support needed. The office staff in the Department of Criminal Justice can adequately handle this minor since the courses required for the proposed minor are already offered by the Department and, therefore, supported by current staff.

Other Support for Program (Dollars): No additional support for the program is needed. We already have many pieces of forensic equipment and the money generated from our special sessions programs continues to fund the purchase of additional forensic equipment.

Types of Other Support: N/A

Financial Impact on Other Programs: None.

Additions, Deletions and other Changes in Existing Programs: None.

Potential Use of non-State Funds:

Source: UCES-Generated Certificate Programs (already exist)

Area of Use: To periodically purchase additional equipment.

Continuity (Expected length of support in Years): Ongoing for the foreseeable future.

Proposing New CSULB Minor and Certificate Programs Bachelor's and Master's Levels

1. Program Type (Please specify any from the list below that apply—delete the others)

√ State-Support

2. Program Identification

- a. CSULB Main Campus
- b. Minor in Forensic Studies
- c. Submitted: Spring 2009; Anticipated Start Date if Approved: Spring 2010 or Fall 2010
- d. Department with Primary Responsibility: Criminal Justice
- e. Minor Primarily Crafted by:
 - Henry F. Fradella, M. Fors. Sci., J.D., Ph.D.
Professor and Chair, Department of Criminal Justice
 - and
 - John Zheng Wang, Ph.D.
Professor, Department of Criminal Justice
- f. By our signatures below, the Chairperson of the Department of Criminal Justice and both the Dean and Associate Dean of the College of Health and Human Services certify that the addition of this program supports the missions of the University, the College of Health and Human Services, and the Department of Criminal Justice. Moreover, we certify that its creation and offering will not impede the successful operation and growth of existing academic programs, but will enhance the reputation and service to our students and the community. The new Forensic Studies minor will provide a new direction for interdisciplinary efforts among several departments on campus and more marketable skills for our students. For these reasons we all agree the proposed minor in forensic studies is appropriate to University, College, and Departmental missions, please see the subsection "Mission Fit" in Part 3, section (a) below.
- g. The Faculty of the Department of Criminal Justice voted unanimously to approve to the new minor in November 2007. The Educational Policies Committee of the College of Health and Human Sciences approved the proposed minor in December 2007.

3. Program Overview and Rationale

- a. Rationale, including a brief description of the program, its purpose and strengths, fit with institutional mission, and a justification for offering the program at this time. The rationale may explain the relationship among the program philosophy, design, target population, and any distinctive pedagogical methods. (CPEC "Appropriateness to Institutional and Segmental Mission")

Rationale for Forensic Studies

The value in forensic studies lies in the fact that, in modern criminal investigations, it is simply impossible to avoid scientific evidence.¹ After all, the role of the forensic sciences in the civil and criminal justice system has become increasingly important.² "Justice and liberty often depend on the reliability of forensics; . . . errors can mean freedom for the guilty and incarceration for the innocent."³ Further, because the quality of evidence plays a vital role in criminal investigation and prosecution, an understanding of "the types of evidence to look for . . . and maintaining the integrity and subsequent admissibility of such evidence is as vital a role for the line officer as it is for the . . . investigator."⁴ Osterburg's classic study of crime laboratories found that an accurate understanding of crime laboratory resources is essential to maximize proper utilization of these resources. A lack of awareness can cause officers to disregard certain types of evidence, or cause overconfidence in (or misunderstanding of) laboratory abilities, potentially leading to sloppiness, frustration, and disappointment.⁵ Accordingly, providing a scientific understanding of evidence has become a new component of criminal justice education throughout the world.

Yet, in spite of the importance that the forensic sciences play in the justice system, criminal justice educators have been slow to address this need mainstream curricula. We have a responsibility to do so, though, because, "contrary to popular myth, the majority of crime scene investigators are sworn police officers."⁶ In addition, professionals in fields such as institutional corrections⁷ and juvenile justice⁸ may be in positions to conduct investigations and/or analyze criminal evidence. Indeed, a 1999 report by the Office of Law Enforcement Standards titled, *Forensic Sciences: Review of Status and Needs* provided a series of recommendations regarding forensic education and training. One recommendation worth noting was, "Forensic scientists need to educate their end users – those who use their services and therefore need to understand those services and terminology." Regrettably, the report found that such end-user education "is rare." To remedy this shortcoming, it is our desire to provide such education and training to our students who will become justice professionals, thereby improving the quality of the justice system.

¹ Fradella, H.F. Owen, S.S., & Burke, T.W. (2007). Building bridges between criminal justice and the forensic sciences to create forensic studies programs. *Journal of Criminal Justice Education*, 18(2), 261-282.

² Goldberg, S. (1987). The reluctant embrace: Law and science in America. *Georgetown Law Journal*, 75, 1341-88.

³ Jonakait, R.N. (1991). Forensic science: The need for regulation. *Harvard Journal of Law and Technology*, 4, 109-191, p. 109.

⁴ Hess, K.M., & Wroblewski, H.M. (2006). *Police operations: Theory and practice* (4th ed.). Belmont, CA: Thomson Wadsworth, p. 230.

⁵ Osterburg, J.W. (1968). *The crime laboratory*. Bloomington, IN: Indiana University Press.

⁶ Gaensslen, R.E. (2003). How do I become a forensic scientist? Educational pathways to forensic science careers" *Analytical and Bioanalytical Chemistry*, 376, 1151-55, p. 1151.

⁷ Bell, W.R. (2002). *Practical criminal investigations in correctional facilities*. Boca Raton, FL: CRC Press.

⁸ Champion, D.J. (1998). *The juvenile justice system: Delinquency, processing, and the law*. Upper Saddle River, NJ: Prentice Hall.

In addition to placing the role of crime laboratories and their forensic analytic capabilities in context, forensic studies can help address knowledge areas desired by law enforcement agencies. A survey of law enforcement agencies in Michigan identified four competencies that a majority of agencies identified as “very important” for recruits: “Latent and fingerprint evidence” (55.7%); “Evidence collection” (59.3%); “Crime scene documentation” (57.1%); and “Interviewing techniques” (55.7%).⁹ Notably, these skills are not taught in classes offered by any of the natural sciences. But the goal of the program is *not* vocationally-oriented training, but rather we seek to integrate some applied science work into the modern social scientific approach to criminal justice education.¹⁰ In a classic article on forensic science education, Lindquist refers to three models of criminal justice education:

The training model purports to emphasize the mastery of skills; the professional model purports to explore the internalization of standards appropriate to role-specific behavior in a particular career ladder; the social science model purports to emphasize the acquisition of broad-based knowledge that is not specific to preparation for a particular career.¹¹

While not appropriate preparation for work in a crime laboratory, Lindquist suggests that forensics courses and programs spanning the three models may contribute to each model of criminal justice education, and be desirable for criminal justice professionals:

If criminalistics courses are designed to provide some rudimentary skills for law enforcement officers (training model), to heighten awareness of evidentiary standards (professional model), or to illustrate how science can be applied to the needs of justice (social science model)....¹²

To summarize, forensic *studies* programs – as distinct from forensic *science* programs that involve the study of many subfields in biology, chemistry, physics, bio-chemistry, medicine, and mathematics – are uniquely tailored to the needs of justice professionals (most of whom major in criminal justice, sociology, political science, psychology, nursing, and social work) by helping them understand the nature of criminal evidence, thereby teaching them how forensic methods aid in the quest for justice. Forensic studies must be more than a training academy; rather, courses must be placed within the context of an institution’s mission to provide a quality baccalaureate education. Most importantly, programs must be structured with a coherent focus and academic rigor. The goal of doing so is *not* to create forensic scientists, but rather to provide students of many disciplinary backgrounds a meaningful understanding of the ever-increasing interplay between science and law as it affects the criminal justice system. By so doing, we will be preparing students with both a

⁹ Lambert, E., Nerbonne, T., Watson, P.L., Buss, J., Clarke, A, Hogan, N., Barton, S. & Lambert, J. (2003). The forensic science needs of law enforcement applicants and recruits: A survey of Michigan law enforcement agencies. *Journal of Criminal Justice Education*, 14, 67-81, p. 76.

¹⁰ Fradella, H.F. Owen, S.S., & Burke, T.W. (2007). Building bridges between criminal justice and the forensic sciences to create forensic studies programs. *Journal of Criminal Justice Education*, 18(2), 261-282.

¹¹ Lindquist, C.A. (1994). Criminalistics in the curriculum: Some views from the forensic science community. *Journal of Criminal Justice Education*, 5, 59-68, p. 66.

¹² *Ibid.*

knowledge base and skill set that many criminal justice agencies and private companies look for when hiring.¹³

Mission Fit

A forensic studies program serves the Departmental mission by adding to "the interdisciplinary and comparative study of crime and criminal behavior, as well as the policies and systems designed to control criminality." Moreover, by integrating the training model, professional model, and social scientific model of justice education we serve the mission of the College of Health and Human Services by helping students "seeking professional careers" become more marketable because their undergraduate program of study included interdisciplinary "student-centered learning" on a topic that "reflects the dynamic societal needs" in the fields relating to the prevention and investigation of crimes and the prosecution and rehabilitation of criminal offenders. In doing so, the program would serve "people of California" in furtherance of the University's mission.

Program Overview

The proposed minor first introduces students to the fields of law and justice by having them take the two courses that the Department of Criminal Justice requires as pre-requisites to all of its upper-division courses: CRJU 100 and 110.

The core forensic studies curriculum begins with an overview of the many different areas of forensic investigations in CRJU 230. A course in courts, CRJU 301, is also required. Such a course is designed to teach the various judicial processes used in courts of law since they are ultimately where forensic evidence will be used. The third core of the forensic studies curriculum is a course in constitutional criminal procedure: CRJU 350. This class is essential because the ultimate admissibility of all evidence – testimonial, physical, and scientific – rests in constitutional law. Making sure criminal justice students understand the constitutional limitations on the use of evidence in courts of law is essential to good policing and courtroom advocacy.

A class in criminal investigations, CRJU 412, serves as a conceptual bridge between the basic law courses and the criminalistics course by providing students an in-depth examination of one of the most important police roles in the forensic process: the gathering of evidence. Special attention is paid in this course to the proper methods of collecting and preserving evidence so that forensic scientists can properly analyze uncontaminated specimens while a proper chain of custody is consistently maintained.

The core then moves to the study of Criminalistics: Forensic Science in the Crime Laboratory in CRJU 440. In this course, students explore what happens to the evidence after it is collected by law enforcement personnel and how the evidence is examined in a crime lab. Again, the focus of this course is to introduce students to the meaning and significance of scientific evidence and its role – and limitations – in criminal investigations and trials (e.g., the difference between a presumptive and confirmatory test; the difference between results that include or exclude a suspect as the potential donor of physical evidence, but cannot be

¹³ Lambert, E., Nerbonne, T., Watson, P.L., Buss, J., Clarke, A, Hogan, N., Barton, S. & Lambert, J. (2003). The forensic science needs of law enforcement applicants and recruits: A survey of Michigan law enforcement agencies. *Journal of Criminal Justice Education*, 14, 67-81, p. 76.

used for specific identification). The goal is to help future justice professionals gain a basic understanding of the work performed by forensic scientists and the practical implications and limitations that their findings will have on criminal cases once in court.

Finally, students would choose two electives that allow a more in-depth exploration of particular areas of forensic interest. But only after they have taken the core courses discussed above are students properly able to contextualize how such applied forensic classes fit into the big picture of the intersection of law, criminal justice, science, and technology. It is important that elective courses be carefully structured. Elective courses should explore topics in such a way that students continue to see the interplay between law enforcement, scientific and/or technical concepts and personnel, and the law.

After completing the curriculum described in Table 1, students will be more savvy observers of forensic issues. They will appreciate the roles that numerous actors (police, technicians, laboratory analysts, lawyers, and judges) play, pertinent to forensic matters. They will also have developed a number of beneficial skills (logical reasoning, communication, ability to think scientifically) that can serve them well across any number of professional fields.

To return to a discussion of the models of criminal justice education presented above, note how each may be supported in the type of forensic studies program proposed in Table 1. Students may learn the skills of rudimentary fingerprinting, crime scene diagramming and presumptive toxicological field testing (from criminal investigations and criminalistics), illustrating the training model. Students may learn professional ethics (from all courses) and norms of scientific laboratory analysis (from criminalistics and applied forensic electives), illustrating the professional model. Students may learn philosophies of judicial reasoning (from both the courts class and in criminal procedure), oral and written communication skills (from all courses), the fundamentals of basic science (from criminalistics and applied forensic electives), as well as how disciplinary boundaries merge in the search for justice (from all courses), illustrating the social science model. Furthermore, students who have completed a forensic studies program will have a broader and more useful understanding of forensic issues than students completing more narrowly-focused programs in traditional forensic science or crime scene processing. Rather than focusing on a narrow science curriculum that prepares them for analytical work, for instance, students in the forensic studies minor will not only learn the practical knowledge and skills for their entry level jobs, but also see how multiple actors and agencies interact in the dynamic process that is the criminal justice system.

Market Demand

In the last few years, the Department of Criminal Justice has offered two forensic-based courses: one called "Forensic Science" and another entitled "Investigating High Tech Crime." These classes have proven so popular that we have had to move them to larger laboratories in the MLSC Complex. Moreover, these classes have caused students to repeatedly ask for additional coursework in the forensic investigations arena. Some may argue that the demand for forensic coursework is only a fad, popularized by the media's current interest in all things forensic. We believe that forensic studies is better viewed as a trend, as it is highly unlikely that the criminal justice system will suddenly abandon use of scientific evidence. Regardless of what television programs and movies are popular at a given time, the demand for criminal justice professionals with a basic working knowledge of forensics will certainly remain constant, if not increase.

Our experience suggests that forensic studies appeals to many students who find the coursework to be interesting and relevant. For example, a 2003 survey conducted of criminal justice at a mid-sized eastern university students found that 10% of students at the university selected the school because it had a forensic studies program.¹⁴ Similarly, once a forensic studies program in other institutions were implemented, students from psychology, sociology, biology, chemistry, and computer science flocked to courses that made them more marketable within their respective disciplines, since they had applied forensic knowledge and skills.¹⁵ Many of these students found good jobs after graduation in forensic areas; an occurrence that should not be surprising in light of the fact that a quality forensic studies program can provide graduates with both the theoretical and applied background in the content areas that police agencies judged useful.¹⁶ It should be emphasized this result was especially pronounced for students majoring in a natural science who pursued careers in a crime laboratory, as their interdisciplinary training and education in forensic studies is very appealing to employers who recognize that these students' scientific training had been supplemented by knowledge of criminal law, criminal procedure, courts and judicial processes, the law of evidence, and crime scene investigation techniques.

Resources

Creating an interdisciplinary forensic studies program would be beneficial to CSULB. It allows resources to be maximized, producing the greatest learning experience for students. Many institutions are hampered by the fact that it is often difficult to locate qualified faculty to teach forensic courses, particularly in a forensic studies degree program that is structured as a minor or concentration, rather than a major. But that is not the case at CSULB. The Department of Criminal Justice currently employs two full-time faculty members, both at the rank of full professor, who have graduate degrees and practical experience in forensic investigations. Dr. John Wang and Dr. Hank Fradella not only have sufficient experience in forensics, but also have the ability to coordinate an interdisciplinary forensic studies program and teach several courses in the proposed minor. Dr. Fradella has taught four different forensic studies courses at other universities, and Dr. Wang has been teaching both the criminalistics course and the high-tech crimes class since 2003. Moreover, we have several highly experienced part-time faculty members (all of whom have relevant graduate degrees; see Table 5) who also teach forensic studies courses. Thus, staffing is not an issue for us. Moreover, the Department of Criminal Justice hopes to work with faculty from other departments – such as anthropology, biology, chemistry, computer science, accounting, nursing, psychology, social work, and sociology (to name a few) – to identify existing courses, faculty, and resources (as well as opportunities for new growth) that could contribute to the forensic studies program. Each academic department may have something to gain from participating in the program. Central to making this work is an understanding among the participating faculty that no one is trying to “steal” students away from any major. Instead, programs may share students, largely through the use of minors across relevant disciplines.

¹⁴ Owen, S.S. & Call, J. (2003). Report from the spring 2003 criminal justice student survey. Radford University Department of Criminal Justice, Radford, VA: Unpublished Manuscript.

¹⁵ Fradella, H.F. Owen, S.S., & Burke, T.W. (2007). Building bridges between criminal justice and the forensic sciences to create forensic studies programs. *Journal of Criminal Justice Education*, 18(2), 261-282.

¹⁶ Lambert, E., Nerbonne, T., Watson, P.L., Buss, J., Clarke, A, Hogan, N., Barton, S. & Lambert, J. (2003). The forensic science needs of law enforcement applicants and recruits: A survey of Michigan law enforcement agencies. *Journal of Criminal Justice Education*, 14, 67-81.

For example, criminal justice majors who became interested in laboratory careers in forensic science are advised to become major of a natural science, but to retain a minor in forensic studies. Other students who discovered new interests through the program may choose to add new minors to their degree programs (and even double-major, in some cases), while not abandoning their primary fields of study.

- b. Proposed catalog description, including program description, degree requirements, and admission requirements.

Minor in Forensic Studies (code CRJUUM02)

The minor in Forensic Studies is designed to provide students of the natural sciences, social sciences, humanities, and human services with an understanding of the nature of criminal evidence and an appreciation of how forensic investigative methods are used in quest for justice.

Requirements

All students are required to take a minimum of 27 units of forensic-related coursework to meet the requirements for a minor in Forensic Studies: 6 units are prerequisite courses; 15 units are comprised of core forensics courses offered in the Department of Criminal Justice; 6 units are elective forensic courses either in Criminal Justice or in an approved, related discipline. Students who would like to declare and/or change to Forensic Studies as their minor must have completed the two prerequisite courses (CRJU 100 & 110) and have an overall G.P.A. of 2.5. Alternative admission requirements may apply during times when the department is impacted.

The 6 units of prerequisite courses are CRJU 100 and 110 (note: CRJU 100 may be double-counted for both minor credit and General Education D.2. credit). The 15 units of required courses that constitute the core are: CRJU 230, 301, 350, 412, and 440. Each course in the minor must be completed with a grade of "C" or better. In addition, a course in which a grade lower than "C" is received must be retaken and successfully completed prior to enrolling in a course for which it is a prerequisite.

In addition to the core, students are required to complete 6 additional units of forensics electives which may be taken before, concurrently, or after the core courses. The 6 units of forensic electives must be satisfied by taking any two approved, upper-division forensic electives drawn from CRJU 430; any course numbered between CRJU 441 and 449; any approved applied forensics special topics course in Criminal Justice (CRJU 490); or any approved applied forensics course in a related discipline that other departments may choose to create to become a part of an interdisciplinary minor (e.g., art may develop a course in forensic photography; business may develop a course or two in forensic accounting; etc.).

4. Curriculum

a. Goals and Objective

Program Goals:

1. To prepare students for entry-level civilian and law-enforcement positions as crime scene investigators or technicians.
2. To provide students with an understanding of the theoretical and practical principles of forensic crime scene investigation.
3. To provide students with knowledge of the methods, application, and implications of criminal justice and forensic scientific research.

Program-Level Objectives:

1. To differentiate the various subfields of forensic science and their unique roles in the investigation and prosecution of criminal offenses.
2. To identify appropriate scientific methods to investigate, recognize, collect, and preserve various types of physical and biological evidence.
3. To identify appropriate procedures and technology to protect and process crime scenes by searching for, collecting, and preserving crime scene evidence.
4. To conduct presumptive field tests that can contribute to a valid probable cause determination to search for and/or seize evidence, or to make a custodial arrest.
5. To evaluate the problems related to the preservation of evidence in a proper chain of custody.
6. To explain the inter-related roles of law enforcement officers, forensic scientists, civil crime scene investigators, and court officials in the detection, investigation, and prosecution of crime using physical, biological, and behavioral scientific evidence.
7. To analyze basic forms of forensic evidence for their evidentiary value, including fingerprints, firearm and toolmark evidence, questioned documents, blood, blood spatter, hair, fibers, soil, DNA, and basic pathological findings.
8. To explain the legal constraints on searches, seizures, and interrogations, as well as the limitations on the introduction of such evidence in courts of law.
9. To interpret relevant forensic findings for forensic scientific and justice professionals, as well as to laypersons in courts of law.

- b. Assessment. Assessing program goals and student learning outcomes will happen in two stages. First, the specific learning goals indicated in the matrix below (see Table 1) will be measured by student performance on graded course assessments (Key: L = Graded Lab Work/Lab Reports/Simulation Exercises; E = Exam Questions; W = Graded Writing Assignments; and M = Mock-Trial Exercises).

Table1: Matrix of Learning Goals To Be Achieved in Forensic Courses

Course	Learning Objectives								
	1	2	3	4	5	6	7	8	9
Core									
CRJU 230	E	E			E	E	E		
CRJU 301					E	E		E	
CRJU 350					E	E		E, W	
CRJU 412	E, W	E	E	E	E, W	E, W		E	E, W
CRJU 440	L, E, W, M	L, E, W	L, E, W	L, E	L, E, W, M	E, W, M	L, E, W, M	E, W, M	E, W, M
Electives									
CRJU 430	W, M				E, M	E, W, M	M	E, M	W, M
CRJU 441	L, E, W, M	L, E, W	L, E, W	L, E	L, E, W, M	E, W, M	L, E, W, M	E, W, M	E, W, M
CRJU 442	E, W			L, E	L, E, W, M	E, W	E, W	E	E, W
CRJU 443	E, W	E	E	E	E, W	E, W	W	E	E, W
CRJU 444	E, L		L, E	L, E	E	E, W		E	E, W

Second, we will integrate the forensic studies minor into the exit survey we conduct as part of our annual assessment efforts.

- c. Total number of units required for the minor:

27 units (6 units of prerequisites and 21 units within Forensic Studies).

- d. A list of all courses *required* for the minor, specifying catalog number, title, units of credit, and prerequisites or co-requisites (ensuring that there are no “hidden” prerequisites that would drive the total units required to graduate beyond the total reported in 4c above).

Table 2: Required Courses and their Prerequisites

Catalogue #	Course Name	Units	Pre/Corequisites
CRJU 100	Introduction to Criminal Justice in Society	3	None
CRJU 110	Justice Research, Writing, and Reasoning	3	None
CRJU 230	Survey of the Forensic Sciences	3	None
CRJU 301	Courts and Judicial Processes	3	CRJU 100 & 110
CRJU 350	Constitutional Criminal Procedure	3	CRJU 301
CRJU 412	Criminal Investigations	3	CRJU 100 & 110
CRJU 440	Criminalistics: Forensic Science in the Crime Laboratory	3	CRJU 230

- e. List of *elective* courses that can be used to satisfy requirements for the minor, specifying catalog number, title, units of credit, and prerequisites or co-requisites. Include proposed catalog descriptions of all new courses. For graduate program proposals, identify whether each course is a graduate or undergraduate offering.

See Table 3 on the following page.

Table 3: Elective Courses and their Prerequisites

Catalogue #	Course Name	Units	Pre/Corequisites
Any two (2) Upper- Division Forensic Electives	Any two upper-division, applied forensics courses:	3	
	• CRJU 430: Criminal Evidence and Trial Processes	3	CRJU 301
	• CRJU 441: Investigating High-Tech Crimes	3	CRJU 230
	• CRJU 442: Forensic Psychology and the CJ System	3	CRJU 301
	• CRJU 443: Forensic Pathology & the Medico-Legal Investigation of Death	3	CRJU 220
	• CRJU 490: Any forensics special topic courses (e.g., Criminal Profiling; Investigating Sex Offenses; Firearm and Toolmark Identification; etc.)	3	CRJU 220
		3	Varies
	• Courses offered by other disciplines that have an applied forensic focus (e.g., Forensic Accounting; Forensic Art and Photography; Forensic Nursing, etc.).	3-4	Varies

- f. List of any new courses that are: (1) needed to initiate the program and (2) needed during the first two years after implementation. Only include proposed catalog descriptions for new courses. For graduate program proposals, identify whether each course is a graduate-level or undergraduate-level offering.

No new classes are needed. All of the courses that would be a part of the minor in Forensic Studies currently exist.

- g. Attach a proposed course-offering plan for the first three years of program implementation, indicating, where possible, likely faculty teaching assignments.

For the first three years of the minor, if approved, we expect offering the courses presented on the next page in Table 4 in the semesters indicated. The faculty members responsible for teaching the courses are indicated, although the particular instructor teaching the course in any given semester will be rotated among the participating faculty in the program.

Table 4: Course Offerings and their Instructors

Catalogue #	Course Name	Offered	Instructor
CRJU 101	Introduction to Criminal Justice in Society	Fall and Spring	Various Lecturers
CRJU 110	Justice Research, Writing, and Reasoning	Fall and Spring	Various Lecturers
CRJU 230	Survey of the Forensic Sciences	Fall and Spring	Sigal, Wang, Fradella
CRJU 301	Courts and Judicial Processes	Fall, Spring, and Summer	Barboza, Gibbs, Choi, Fradella, Hails, Love, Parker, Young
CRJU 350	Constitutional Criminal Procedure	Fall, Spring, and Summer	Barboza, Gibbs, Choi, Fradella, Hails, Love, Parker, Young
CRJU 412	Criminal Investigations	Fall, Spring, and Summer	Gibbs, Mark, Tucker
CRJU 440	Criminalistics: Fors. Sci. in the Crime Laboratory	Fall and Spring	Wang, Sigal
CRJU 430	Criminal Evidence and Trial Processes	Fall and Spring	Barboza, Gibbs, Fradella, Young
CRJU 441	Investigating High-Tech Crimes	Spring	Wang, Tucker
CRJU 442	Forensic Psychology and the CJ System	Spring	Gamez, Fradella

h. Admission criteria, including prerequisite coursework.

Students who would like to declare and/or change to Forensic Studies as their minor must have completed the two prerequisite courses (CRJU 100 & 110) and have an overall G.P.A. of 2.5.

i. Criteria for student continuation in the program.

Students will be retained in the minor so long as they maintain a cumulative G.P.A. of 2.0 or higher.

j. Provision for meeting accreditation requirements, if applicable, and anticipated date of accreditation request (including the WASC Substantive Change process).

Not applicable.

5. Need for the Proposed Minor or Certificate Program

(CPEC “Societal Need,” “Number of Existing Programs in the Field,” and “Advancement of the Field”)

a. List of other California State University campuses currently offering or projecting the proposed programs; list of neighboring institutions, public and private, currently offering the proposed programs.

While a number of forensic science programs exist in the State of California, only California State University, Stanislaus offers a minor akin to the one proposed herein.

California State University, Chico offers a program in forensic anthropology, but not one in general forensic studies.

California State University, Fresno offers a number of forensic science programs for its students majoring or minoring in chemistry, but does not offer a general program in forensic studies that is open to all majors.

Both California State University, Fullerton and the University of California at Riverside offer certificate programs through their extension services divisions that are similar to the minor proposed herein. These certificate program classes, however, are not a part of a B.A., B.S., or academic minor program.

California State University, Los Angeles offers a criminalistics option in its major's program and a 32-unit undergraduate minor in forensic science. The focus of the minor, however, is in forensic biology, chemistry, and microscopy.

California State University, Sacramento offers a minor in forensic studies that is only open to biology and chemistry majors.

California State University, Stanislaus offers a 28-unit forensic science concentration for its criminal justice majors much like the one proposed herein.

National University offers a master's degree in forensic science, but neither an undergraduate major nor minor in the subject matter.

San Jose State University offers a B.S. in forensic science with either a concentration in forensic biology or forensic chemistry. As such, its goals and objectives are quite different from those of the proposed minor in forensic studies, as SJSU seeks to prepare people for scientific careers in crime laboratories.

University of California, Davis offers a master's degree in forensic science, but neither an undergraduate major nor minor in the subject matter.

b. Differences between the proposed program and programs listed in Section 5a above.

As described above, the other programs in the surrounding areas are either designed exclusively for those majoring in the natural sciences or for those seeking a graduate degree in the field. The program at California State University, Los Angeles is similar, although minor in forensic science is more focused on forensic biology, chemistry, and microscopy than the generalist program proposed herein. Only California State University, Stanislaus (which is located in Northern California) offers a minor similar to the one we propose.

- c. List of other curricula currently offered by the campus that are closely related to the proposed program.

CSULB does not offer any state-side programs in forensics at this current time. The Department of Criminal Justice does, however, offer a certificate program in Applied Forensic Science and Crime Analysis through UCES with different purposes and emphases. If the minor proposed herein is approved, that certificate program may be folded-into the minor.

- d. Community participation, if any, in the planning process. This may include prospective employers of graduates.

The proposed minor was constructed with input from several community agencies, primarily from the law enforcement and legal realms.

- e. Applicable workforce demand projections and other relevant data.

There is considerable need for criminalists and other forensic investigators at the local, state, federal and private spheres.¹⁷ In fact, the Bureau of Labor Statistics estimates that in the decade between 2006 and 2016, there will be at least a 31% increase in the need for forensic technicians.¹⁸ And while this proposed major may assist in meeting part of that need, as discussed at great length above, the primary goal of the proposed minor is not to forensic scientists, but rather to better educate human service professionals (especially criminal justices) about how science and technology affect their careers. The other primary goal is to take those already trained in fields that qualify majors to engage in applied forensic work (e.g., students majoring in biology, chemistry, anthropology, psychology, social work, nursing, etc.) and teach them about how their fields intersect with the justice system so that they will have a competitive edge in securing forensic-related jobs in their respective fields.

- f. If the program was proposed to meet society's need for the advancement of knowledge, please specify the need and explain how the program meets that need.

Please see Section 3 and Section 5(e) above.

6. Student Demand (CPEC "Student Demand")

- a. Response to Student Feedback. The driving force behind the Department of Criminal Justice's desire to create this program comes from what our own students tell us. Up to academic 2007-2008, the Department only offered two forensic studies courses. On student evaluations of these courses, students repeatedly called for additional courses in forensics. These calls for additional courses were repeated in the senior exit-survey conducted in the

¹⁷ Dillon, H. (1999). *A career in forensics*. Washington, DC: Bureau of Labor Statistics. Available at: <http://www.bls.gov/opub/ooq/1999/fall/art01.pdf> (last visited February 17, 2008).

¹⁸ Bureau of Labor Statistics, *U.S. Department of Labor Occupational Outlook Handbook, 2008-09 Edition, Science Technicians*. Washington, D.C.: Author. Available at <http://www.bls.gov/oco/ocos115.htm> (last visited February 17, 2008).

spring 2007 semester as part of the Department's assessment efforts. Finally, both Dr. Wang and Dr. Fradella received numerous phone calls or email messages each week asking for more forensic courses. Some of these students have even indicated a willingness to delay their graduation in order to earn the proposed minor in Forensic Studies.

- b. Issues of Access. Given that only two lower-division courses serve as prerequisites for the proposed minor, we do not anticipate that there will be any problems with students enrolling in this minor if they elect to do so. The Department also plans to seek General Education certificate for CRJU 230 (Survey of the Forensic Sciences) so that students in the minor may meet two GE requirements through completion of the forensic studies program. The only potential access issue we currently foresee is the possibility of more student interests than we can handle at our current FTEF allocation. If our FTES rise beyond what we can currently accommodate, we will reallocate some of the FTEF that we currently use to provide criminology electives to support offering addition electives relevant to forensic investigations.
- c. Professional Uses of the Proposed Program. Please see Section 3 and Section 5(e) above.
- d. Expected Students Enrollments. Please see attachment entitled "Proposal for Implementing New Degree, Option, Certificate, Minor or Specialization."

7. Existing Support Resources for the Proposed Minor or Certificate Program (CPEC "Total Costs of the Program")

Note: Sections 7 and 8 should be prepared in consultation with the campus administrators responsible for faculty staffing and instructional facilities allocation and planning. A statement from the responsible administrator(s) should be attached to the proposal assuring that such consultation has taken place.

- a. Faculty Who Would Teach in the Program.

Please see the table on the next page.

Table 5: Faculty Who Will Teach in the Proposed Forensic Studies Minor

Instructor	Degree	Academic Rank	Professional Experience
Gia E. Barboza	J.D., Ph.D.	Assistant Professor	Teaches courts and judicial processes and constitutional criminal procedure.
Alice Choi	J.D.	Lecturer	Tenured professor at CSU-Sacramento; practicing attorney.
Henry F. Fradella	M. Fors. Sci., J.D., Ph.D.	Professor	Former medical examiner technician; former practicing attorney; 15+ years professorial experience; author of textbook in forensic psychology and textbook in criminal procedure.
Ana Gamez	A.B.D.	Lecturer	Practicing forensic psychologist.
Gregory Gibbs	J.D.	Lecturer	20+ years in law enforcement doing criminal investigations; attorney.
Judy Hails	J.D., LL.M.	Professor	Author of textbook in criminal procedure and of textbook in criminal evidence. 30+ years of teaching experience.
Jeffery Love	J.D.	Lecturer	Practicing attorney and retired police lieutenant.
Ron Mark	M.S.	Lecturer	Captain, Signal Hill Police Department; 10+ years teaching criminal investigations and CJ Ethics.
Kellee Parker	J.D.	Lecturer	Practicing attorney.
Mitch Sigal	M. Fors. Sci.	Lecturer	Assistant Director of Orange County Crime Laboratory; 5+ years of professorial experience teaching forensics
Damon Tucker	M.S.	Lecturer	Chief Criminal Investigator for Orange County, CA
John Wang	Ph.D.	Professor	Former forensic crime lab scientist. 20+ years of forensic teaching experience.
James Young	J.D.	Lecturer	15+ years prosecutorial experience in major crimes; currently deputy District Attorney.

b. Space and facilities that would be used in support of the proposed program.

The only additional space we need to offer this minor is laboratory space. Working with Vice-President David Dowell and Dr. Robert Loeschen, Criminal Justice has been sharing the Genetics Laboratory in MLSC 107 with the Department of Biology. Having already secured this space, no additional space should be needed.

- c. A report provided by the campus Library, detailing resources available to support the program (discussion of subject areas, volume counts, periodical holdings, etc. are appropriate).

Between its current holdings and subscriptions for existing programs in biology, chemistry, criminal justice, nursing, psychology, and social work, the library currently has all of the resources necessary to support the proposed minor in forensic studies. Most notably, the University's current subscription to Blackwell-Synergy includes access to the *Journal of Forensic Science*. The other major journal in the field, the *Internet Journal of Forensic Sciences* is an online open-access, web-based journal that does not require a subscription.

- d. Existing academic technology, equipment, and other specialized materials currently available.

Through a competitive grants process with the College of Health and Human Services, the Department of Criminal Justice has secured tens of thousands of dollars from lottery funds over the last several years to buy forensic scientific equipment ranging from microscopes to digital scanners and various specialized forensic technological equipment. At this point, the Department has amassed significant resources. In fact, several examination devices we are using in our current teaching of forensic science course and certificate program are much better and more useful than those in most police department crime labs in the region. Future expenditures should be able to be supported through lottery fund grants and from course fees generated in lab courses.

**8. Additional Support Resources Required
(CPEC "Total Costs of the Program")**

Not applicable since no new resources are necessary to support the proposed program.