

TO: Senate Curriculum and Academic Programs Committee

FROM: Elizabeth Langland, Dean, New College of Interdisciplinary Arts and Sciences

Siled Lanta

DATE: November 17, 2010

SUBJECT: Concentration in Forensics (within existing Life Sciences B.S.)

I am happy to submit for your review the attached, proposed, revised concentration in Forensics (within the existing Life Sciences B.S.), which addresses the concerns you had identified. It has been reviewed and has received approval through the appropriate governance procedures in the College.

New College of Interdisciplinary Arts and Sciences Office of the Dean

Mailing Address: PO Box 37100, Phoenix, AZ 85069-7100 Street/Shipping Address: 4701 W. Thunderbird Road, Glendale, AZ 85306-4908 (602) 543-7000 Fax: (602) 543-4565 newcollege@asu.edu http://newcollege.asu.edu



FROM: Todd R. Sandrin, Ph.D. Associate Professor / Associate Director Division of Mathematical and Natural Sciences (MNS)

Model Sand ...

DATE: January 28, 2011

RE: Proposed establishment of **Forensics Concentration** (within existing Life Sciences B.S.)

Per guidelines detailed in the relevant document regarding establishing concentrations ("Establishing Undergraduate Concentrations", Office of the Executive Vice President and Provost of the University", Revised 07/08), a concentration in **Forensics** is proposed. This concentration is a formalized selection of courses within the existing Life Sciences B.S. degree program. Specifically, the concentration:

- Requires 31 semester hours, 28 of which are upper division and
- Is offered by MNS and is intended exclusively for students pursuing the Life Sciences B.S. degree.

This concentration will allow students interested in the life sciences to focus their courses of study on the field of forensics. Students pursuing this concentration will take a different, more forensics-relevant set of distribution courses than those students pursuing the current BS in Life Sciences. The concentration will prepare students interested in criminal forensics for careers in forensic science as well as entry into and success in graduate and professional degree programs. Much of the required coursework will be completed in chemistry and/or biology lab science courses to ensure that graduates of the program are competitive as they enter the workforce, pursue relevant careers (e.g., those in crime labs), and apply to graduate and professional degree programs. For example, representatives from crime labs have indicated that prospective employees should take at least 30 credits of chemistry. For this reason, students pursuing this concentration will acquire 32 credits germane to chemistry. In addition to rigorous coursework in the natural and mathematical sciences, the curriculum will be enhanced and broadened by required coursework in oral and written communication (e.g., ENG 301 OR ENG 311 OR PHI 406) as well as psychology and law (PGS 468).

In addition to responses to questions raised by the University Provost's Academic Council to enhance this proposal, this proposal includes each of the items listed in the "Proposal Procedures Checklist":

1. A supporting letter from the Director of MNS, Dr. Roger Berger, verifying that: A. the Forensics concentration has been reviewed and has received faculty approval through appropriate governance procedures in the unit and B. the Division has the resources to support the concentration as presented here, without impacting core course resources.

2. A supporting letter from University Vice President and Dean of the New College of Interdisciplinary Arts and Sciences, Dr. Elizabeth Langland, verifying that the Forensics concentration has been reviewed and has received approval through appropriate governance procedures in the college.

3. A statement concerning demand for the program (student/community/market): Enrollment in the MNS has been increasingly steadily. Growth in the Life Sciences B.S. degree program, in particular, has been substantial. Since 2002-03, fall headcounts have more than doubled (from 188 to 393). Growth has been remarkably high in some years (e.g., a headcount increase of 73 in 2005-06). While many of these students pursue a life sciences degree in anticipation of applying to medical and other professional schools, a growing number of our students are interested in career paths in forensics. In addition, as MNS headcounts continue to increase, we anticipate that many new students will have interests in forensics, given the timeliness, relevance, and popularity of this discipline. In fact, high school and community college advisers have already indicated that students they advise will undoubtedly have keen interest in this concentration (see attached email from Kristin Bennes, Glendale Community College adviser).

4. Requirements for the Forensics concentration are detailed below and shown in the attached major map.

Required courses include:

BIO 305: Biology Behind the Crime Scene (4)
BIO 393 Careers in Natural and Health Sciences (1)
CHM 327: Instrumental Analysis (3)
CHM 328: Instrumental Analysis Laboratory (1)
CHM 302: Environmental Chemistry (3)
LSC 430 Environmental and Human Toxicol (4)
LSC 491: Comparative Forensics (3)
ENG 301 OR ENG 311 OR PHI 406, etc. (3)

COM 222 OR COM 225 OR COM 422 (3) (pre-requisite for concentration) PGS 101: Introduction to Psychology (3) (pre-requisite for concentration) PGS 468: Psychology and Law (3) CRJ 100: The Justice System (3) CRJ 410: Procedural Criminal Law (3)

The BS in Life Sciences with the Forensics concentration can be completed within 120 credit hours.

A single new course, LSC 491: Comparative Forensics, is required for this concentration. A brief course description follows:

Synthesis, application, and practical contextualization of techniques discussed in previous courses required for the concentration in forensics. Specifically, those forensic disciplines in which results are achieved by comparing the properties of questioned items to known items will be discussed.

We anticipate cross-listing LSC 430: Environmental and Human Toxicology with CHM to ensure that prospective employers (e.g., crime labs) recognize the course's focus on chemistry.

5. Primary faculty participants:

- Rebecca Ball, Assistant Professor, MNS
- Thomas Cahill, Assistant Professor, MNS
- Charles Deutch, Associate Professor, MNS
- Chad Johnson, Assistant Professor, MNS
- Peter Jurutka, Assistant Professor, MNS
- Pamela Marshall, Assistant Professor, MNS
- Todd Sandrin, Associate Professor/Associate Director, MNS
- Susannah Sandrin, Assistant Clinical Professor, MNS/CTEL
- Brian Sullivan, Professor, MNS
- Kuai Xu, Assistant Professor, MNS
- New hire (Fall 2010 Toxicologist/Environmental Chemist, Assistant Professor, MNS

6. Minimum residency requirement: A minimum of 12 upper-division semester hours in the major with this concentration must be taken in campus resident credit.

7. Other information: A draft major map for the concentration is attached.

In terms of learning outcomes, we anticipate that graduates of the Forensics Concentration within the BS in Life Sciences degree program will be able to:

1) Articulate fundamental and advanced chemical and biological principles that underpin methods commonly used in forensics.

2) Communicate to both technical and non-technical audiences the meaning of results of modern methods commonly used in forensics.

3) Interpret results of biological, chemical, and physical techniques used in forensics.

4) Articulate roles of law enforcement personnel, the courts, and correctional agencies in the justice system.

5) Identify constitutional and legal problems that can be encountered as forensics techniques are employed to solve crimes.

6) Compare diverse analytical techniques in forensics and select the most appropriate to solve a particular crime.



			Completed ATP	: Yes No	Completed AGEC: Yes No
Course Subject and Title		Upper	Transfer	Minimum Grade if	
(courses in <b>bold/shading</b> are critical)	Hrs.	Division	Course/Grade	Required	Additional Critical Requirement Notes
TERM ONE: 0-15 CREDIT HOURS	1				ASU 101 is for ASU freshman students only Not
ASU 101: The ASU Experience	1			Grade of C	required of transfer students
BIO 181: General Biology I -4 (SQ)	4			Grade of C	<ul> <li>An SAT, ACT, Accuplacer, or TOEFL score</li> </ul>
					determines placement into first-year composition
					<ul> <li>Courses</li> <li>ASU Math Placement Exam score determines</li> </ul>
					placement in Mathematics course
CHM 113: General Chemistry I (SQ) – 4)	4			Grade of C	• BIO181 & 182 must be completed by end of term 3
ENG 101 or 102: First-Year Composition OR					• CHM 113 & 116 must be completed by end of term 3
ENG 105: Advanced First-Year Composition OR	2				
ENG 107 or 108: English for Foreign Students	3			Grade of C	-
PGS 101: Introduction to Psychology (SB)	3				
TERM TWO: 16-30 CREDIT HOURS					
BIO182: General Biology I -4 (SQ)	4				<ul> <li>BIO 181 &amp; 182 must be completed by end of term 3</li> <li>CHM 113 &amp; 116 must be completed by end of term 3</li> </ul>
bio162. General biology 1 -4 (5Q)	-				ernwitts a tromast be completed by end of term s
• CHM 116: General Chemistry II – 4 (SQ)	4				
				Grade of C	4
ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR					
ENG 105. Advanced Prist-Tear Composition OK ENG 107 or 108: English for Foreign Students	3			Grade of C	
Choose 1 (L) course from the following:					
COM 222: Argumentation					
COM 225: Public Speaking	3				-
TERM THREE: 31-45 CREDIT HOURS	-i	1			
					• BIO 181 & 182 must be completed by end of term 3
					<ul> <li>CHM 113 &amp; 116 must be completed by end of term 3</li> <li>Complete First-Year Composition by the end of</li> </ul>
					semester 3
CHM 233/237: General Organic Chemistry I/Laboratory	4			Grade of C	
LSC 347/348: Fundamentals of Genetics/ Laboratory OR		_			
PHY111/ PHY113: General Physics/ Laboratory	4			Grade of C	-
CRJ 100: The Justice System (SB)	3				-
MAT 210: Brief Calculus – 3 (MA) or MAT270 Calculus I	3-4				
TERM FOUR: 46-60 CREDIT HOURS					Ĩ
BIO 353/354: Cell Biology/ Laboratory OR PHY112/114 General Physics/ Laboratory	4	$\boxtimes$		Grade of C	
· · · · · · · · · · · · · · · · · · ·	3/1				-
CHM 234/238: General Organic Chemistry II/Laboratory				Grade of C	4
LSC 393 Careers in Natural and Health Sciences BIO 305: Biology Behind the Crime Scene OR	1	L L	+	+	4
STP 226: Introduction to Statistics	3				
Humanities, Fine Arts & Design (HU) WITH (G) or (C) Awareness	3		1		1
TERM FIVE: 61-75 CREDIT HOURS					
LSC 347/348: Fundamentals of Genetics/ Laboratory OR					
PHY111/ PHY113: General Physics/ Laboratory	4			Grade of C	4
BCH361/367: Fundamentals of Biochemistry and Lab	3/1				
BIO 345: Organic Evolution	3				
BIO 305: Biology Behind the Crime Scene OR					
STP 226: Elements of Statistics (CS)	3	<u>  </u>			4
Humanities, Fine Arts & Design (HU) WITH (G) or (C) Awareness	3				
TERM SIX: 76-90 CREDIT HOURS					
BIO 353/354: Cell Biology/ Laboratory OR PHY112/114 General Physics/ Laboratory	3/1				
CHM 327/328: Instrumental Analysis and Lab	3/1				4
	3/2			+	4
		1 121			
BIO 320 and LSC 322: Fundamentals of Ecology and Lab General Studies History (H) Awareness Area	3/1				-



Course Subject and Title (courses in <b>bold/shading</b> are critical)	Hrs.	Upper Division	Transfer Course/Grade	Minimum Grade if Required	Additional Critical Requirement Notes
TERM SEVEN: 91-105 CREDIT HOURS	110	Division	Course on a	Required	Additional Critical Requirement (1000)
CHM 302: Environmental Chemistry	3	$\boxtimes$		Grade of C	Language and Cultures: see Additional Notes,
PGS 468: Psychology and Law (SB)	3	$\boxtimes$		Grade of C	below
CRJ 410: Procedural Criminal Law	3	$\boxtimes$		Grade of C	
Choose 1Upper Division (L) course from the following: ENG 301: Writing for the Professions ENG 311: Persuasive Writing PHI 406: Moral Dilemmas	3			Grade of C	
Language and Cultures: Upper Division G or C	3			Grade of C	-
TERM EIGHT: 106-120 CREDIT HOURS	5				
LSC 430 Environmental and Human Toxicology	4	$\boxtimes$		Grade of C	Language and Cultures: see Additional Notes,
MIC 444/ 445: The Microbial Universe and Lab	3/1	$\boxtimes$		Grade of C	below
LSC 491: Comparative Forensics	3	$\boxtimes$		Grade of C	
Language and Cultures: Upper Division G or C	3				

#### Graduation Requirements Summary:

Total Hours (minimum 120)	Total UD Hrs (minimum 50)	Cumulative GPA (2.00 minimum)	Major GPA (2.00 minimum)	Total Hrs at ASU (minimum 30)	Hrs Resident Credit for Academic Recognition (minimum 56)	Total Comm. College Hrs. (64 Max)

#### General University Requirements: Legend

- General Studies Core Requirements:
  - Literacy and Critical Inquiry (L)
  - 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 US (C)
  - Global Awareness (G)
  - Historical Awareness (H)
  - First-Year Composition

#### **Additional Notes:**

New College of Interdisciplinary Arts & Sciences Requirements:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of "C" or better.
- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major unless the grade in that course is at least a "C".
- Each student in the College is required to demonstrate proficiency in the analysis of language and cultures and mathematics by passing an examination or by completing the courses specified below with a grade of "C" or higher in each course. Students considering graduate work after completion of a bachelor's degree should consult with faculty advisors regarding language requirements in their intended areas of study.
  - Language and Cultures: This requirement may be satisfied through one of the following:
    - 1. completion of secondary education at a school in which the language of instruction is not English
    - 2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV
    - 3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
    - 4. 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.
    - 5. completion of two sequential semesters of coursework in a current computer language

## APPENDIX

# **OPERATIONAL INFORMATION FOR UNDERGRADUATE PROGRAMS**

(This information is used to populate the <u>Degree Search</u> /catalog website.)

## 1. Contact and Support Information

Office Location (Building & Room): CLCC 217

Campus Telephone Number: 602-543-6050

Program email address: mns@asu.edu

Program website address: http://newcollege.asu.edu/mns/

## 2. Additional Program Description Information

Α.	Additional program fee	required for this	s program? Yes 🗌	No 🖂
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- B. Does this program have a second language requirement? Yes 
  No 
  No
- **3. 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.

Graduates of this program will be able to pursue careers not only in forensics laboratories, but also in the research and development of new technologies in forensics. We believe graduates of this program will be particularly competitive for positions in forensics laboratories because the concentration focuses heavily on chemistry and biology laboratory coursework (both are areas that administrators and current employees in crime labs have reported are critically important). For example, as reliance upon DNA fingerprinting technologies increases, demand for forensic scientists trained in the requisite amounts of molecular biology will increase. The concentration also places focus on oral communication skills (e.g., through coursework in argumentation, COM 222 or 422) that will prepare graduates for the multifaceted aspects of their careers in forensics (e.g., providing articulate and compelling expert testimony in criminal trials). We anticipate that graduates of this program will also be well-positioned to enter graduate programs in forensics.

4. 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.)

none

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

Forensics, forensic science, chemistry, biology, criminal, crime scene

# 6. Area(s) of Interest

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

<ul> <li>Architecture, Construction &amp; Design</li> <li>Artistic Expression &amp; Performance</li> <li>Biological Sciences, Health &amp; Wellness</li> <li>Business, Management &amp; Economics</li> <li>Communication &amp; Media</li> <li>Computing &amp; Mathematics</li> <li>Education &amp; Teaching</li> </ul>	<ul> <li>Engineering &amp; Technology</li> <li>Environmental Issues &amp; Physical Science</li> <li>Interdisciplinary Studies</li> <li>Languages &amp; Cultures</li> <li>Law &amp; Justice</li> <li>Social Science, Policies &amp; Issues</li> </ul>
B. Select any additional Areas of Interest that app	ly to this program from the list below.
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	Architecture, Construction & Design		Environmental Issues & Physical Science
	Artistic Expression & Performance		Engineering & Technology
	<b>Biological Sciences, Health &amp; Wellness</b>		Interdisciplinary Studies
	Business, Management & Economics		Languages & Cultures
	Communication & Media	$\boxtimes$	Law & Justice
$\boxtimes$	Computing & Mathematics		Social Science, Policies & Issues
	Education & Teaching		



March 15, 2010

To: Whom It May Concern

From: Roger L. Berger, Director

Roger L Berger

Division of Mathematical and Natural Science

Re: Proposal to Establish a Forensics Concentration in the BS in Life Sciences Degree and Proposal to Establish an Environmental Science Concentration in the BS in Life Sciences Degree

These proposals to establish two new concentrations in the Life Sciences BS degree have been discussed and approved by the faculty of the Division of Mathematical and Natural Science.

Offering of these new concentrations will not negatively impact our Division's ability to deliver our current curriculum. These concentrations are composed entirely of courses that we currently offer, except for one proposed new course called Environmental Disasters. But the proposal identifies an alternate course that may be taken in place of this new course, so that, until the new course is developed, students may still progress in the degree.



To: Todd Sandrin, Associate Director Division of Mathematical and Natural Sciences

Noungles Sur From: Douglas Green, Chair

Department of Applied Sciences and Mathematics

Date: 23 August, 2010

Re: Forensics Concentration Impact Statement

The proposed forensics contraction does not negatively impact curriculum in the Department of Applied Sciences and Mathematics. We look forward to working with you in the near future to develop a BS degree program and additional concentrations in Forensic Science particularly in the fields of forensic biotechnology and environmental forensics.

Department of Applied Sciences and Mathematics Wanner Hall, Suite 101 6073 S. Backus Mall Mesa, AZ 85212 (480) 727-1444 Fax: (480) 727-1236



### MEMO

TO: Todd Sandrin Associate Professor/Associate Director Division of Mathematical and Natural Sciences New College of Interdisciplinary Arts and Sciences

FROM: Paul Berman Dean Sandra Day O'Connor College of Law

DATE: September 7, 2010

**RE:** Forensics Concentration Proposal

The College of Law reviewed the proposal for a new concentration in Forensics with in the B.S. Life Sciences degree and has no objection to the proposal. It does not appear that the Forensics concentration would negatively impact the curriculum or degree programs offered by the College of Law.

PO Box 877906 Tempe, AZ 85287-7906 (480) 965-6188 Fax: (480) 965-6521 www.law.asu.edu Date: March 12, 2010

To: Todd Sandrin Associate Director Division of Math and Natural Sciences (MNS)

From: Carol Mueller Interim Director Division of Social and Behavioral Science (SBS)

The Division of Social and Behavioral Sciences is delighted to have our course, PGS 468: Psychology and Law, included in the Forensics concentration that you are developing in MNS. This course is regularly offered each year in our undergraduate psychology major.

Carol E. Mullen

Great News! -- GCC endorsement From: Kristin Bennes [Kristin.Bennes@asu.edu] Sent: Wednesday, March 10, 2010 10:10 AM To: Todd Sandrin Subject: Great News!

Follow Up Flag: Follow up Flag Status: Flagged

Dear Todd,

Thank you so much for the update and information concerning the upcoming concentrations for your BS in Life Sciences.

I was thrilled to hear that you will be offering them both, especially the Forensics because we have so many students who are interested and have previously had no good place to send them. This is truly good news! I also expect that with the focus on building new "Green" jobs across our country that many of our students will also have a strong interest in the Environmental concentration.

This is very exciting news for all of our students!

Thank you for all of your hard work to make this happen. The need is there.

Sincerely,

Kristin Bennes GCC Academic Advisement

# Impact Statements:

The following representatives of appropriate units were asked to indicate whether the proposed concentration in Forensics would negatively affect their curricula and students.

Unit	Representative(s)				
School of Life Sciences	Miles Orchinik (Associate Dean of Undergraduate Programs) Scot Schoenborn (Assistant Director, Academic Services)				
School of Criminology and Criminal Justice	Scott Decker (Director)				
No representatives indicated any neg	ative impacts.				

Relevant email exchanges are appended.

# **Todd Sandrin**

From: Sent: To: Cc: Subject: Miles Orchinik Friday, April 16, 2010 3:55 PM Todd Sandrin Roger Berger; Scot Schoenborn; Ben Minteer; Jane Maienschein RE: new concentrations in Environmental Science and Forensics

Hi Todd,

SoLS has no objection to the creation of an Environmental Science concentration or a Forensics concentration on the West Campus. We see no negative impact of the new programs on the SoLS undergraduate programs.

For the record, SoLS faculty are not happy about having PHI 310/BIO 324 offered online at West. A tremendous amount of work has gone into developing PHI 310/BIO 324 into a rigorous, high-quality course.

Thanks,

Miles

MILES ORCHINIK Associate Dean of Undergraduate Programs SCHOOL OF LIFE SCIENCES ARIZONA STATE UNIVERSITY Box 874501 | Tempe AZ 85287-4501 | Life Sciences C wing, room 502 480-965-5084 | <u>orchinik@asu.edu</u> http://sols.asu.edu/people/faculty/morchinik.php

From: Todd Sandrin
Sent: Friday, April 16, 2010 9:50 AM
To: Miles Orchinik; Scot Schoenborn
Cc: Roger Berger
Subject: FW: new concentrations in Environmental Science and Forensics
Importance: High

Hi Miles and Scot,

I hope this email finds both of you enjoying a pleasant and productive semester. We are eager to move forward with our Environmental Science and Forensics concentrations. Might you indicate to me whether these new programs will impact your students and curricula by **Monday, April 19**<sup>th</sup>?

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Thanks, Todd Sandrin

From: Todd Sandrin Sent: Tuesday, April 06, 2010 5:27 PM To: Miles Orchinik; Scot Schoenborn Cc: Roger Berger Subject: new concentrations in Environmental Science and Forensics

Dear Miles and Scot,

We are proposing two new concentrations within our Life Sciences B.S. degree program. One is in Environmental Science and the other is in Forensics. For your reference, I attach the proposals.

As part of the development process, I am writing to determine the impact of these proposals on other academic units and curricula. Might you provide feedback to me regarding whether these new programs will impact your students and curricula by *Friday, April 9 at 5 pm*?

Thanks, in advance, for you contributions to our efforts to develop these programs.

Best regards, Todd Sandrin

Todd R. Sandrin, Ph.D. Associate Professor/Associate Director Division of Mathematical and Natural Sciences New College of Interdisciplinary Arts and Sciences

Mailing address (letters): ASU | MC 2352 | PO Box 37100 | Phoenix, AZ 85069-7100 Shipping address (packages): ASU | 4701 W. Thunderbird Rd. | CLCC 217 | Glendale, AZ 85306-4908

lab webpage: http://sandrin-lab.asu.edu Proteomics and Functional Genomics Core Facility webpage: http://newcollege.asu.edu/mns/facilities/proteomics phone: (602) 543-6934 fax: (602) 543-6073

### **Todd Sandrin**

From:	Scott Decker
Sent:	Friday, April 09, 2010 9:03 AM
To:	Todd Sandrin
Cc:	Roger Berger
Subject:	RE: new concentration in Forensics
Follow Up Flag:	Follow up
Flag Status:	Flagged

We have no objections, but want to be sure that our course in forensics isn't affected by this. We find it odd that there are no CRJ courses; such concentratins at other universities include at least an intro course and a course on courts or constitutional criminal procedure where the 14th amendment is coursed. We would be beam to

a course on courts or constitutional criminal procedure where the 14th amendment is covered. We would be happy to work with you in adding those courses if you are amenable. The science requirements are probably a bit stiff for many of our students, but some may be interested. Not sure about the role of intro Soc or Psy.

Go forward with our endorsement, noting that we will continue to offer our forensics course.

Scott

Scott H. Decker Professor and Director School of Criminology and Criminal Justice Arizona State University 411 N. Central Avenue Phoenix AZ 85004 (602) 496-2333

From: Todd Sandrin Sent: Tuesday, April 06, 2010 5:29 PM To: Scott Decker Cc: Roger Berger Subject: new concentration in Forensics

Dear Dr. Decker,

We are proposing a new concentration in Forensics within our B.S. Life Sciences degree program. For your reference, I attach the proposal.

As part of the development process, I am writing to determine the impact of this proposal on other academic units and curricula. Might you provide feedback to me regarding whether this new program will impact your students and curricula by *Friday, April 9 at 5 pm*?

Thanks, in advance, for you contributions to our efforts to develop this program.

Best regards, Todd Sandrin Mailing address (letters): ASU | MC 2352 | PO Box 37100 | Phoenix, AZ 85069-7100 Shipping address (packages): ASU | 4701 W. Thunderbird Rd. | CLCC 217 | Glendale, AZ 85306-4908

lab webpage: http://sandrin-lab.asu.edu Proteomics and Functional Genomics Core Facility webpage: http://newcollege.asu.edu/mns/facilities/proteomics phone: (602) 543-6934 fax: (602) 543-6073 August 6, 2010

Dr. Todd R. Sandrin Associate Director of Mathematical and Natural Scieces ASU New College P.O. Box 37100 Phoenix, AZ 85069-7100

Dear Dr. Sandrin:

As a Forensic Scientist for over 30 years I am writing to express my support for the new Forensics Concentration being offered by ASU's New College of Interdisciplinary Arts and Sciences. I have perused the program and the heavy emphasis on the physical and natural sciences provides an appropriate and necessary academic background for someone working toward a career as a crime laboratory scientist.

Having recently retired as the Scientific Analysis Bureau Supervisor with the AZ Department of Public Safety, I am aware of the various academic forensic programs available throughout the country. I would encourage ASU to consider making the "concentration" a full-fledged degree program similar to others being offered at four year colleges and universities. The hiring of new Forensic Scientists that I was responsible for during the last five years of my career often resulted in jobs being offered to those applicants who had a strong familiarity with evidence handling and court testimony, not just the hard sciences. I see these types of courses as an important adjunct to a well-rounded program.

As forensic science advances 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 undefunded 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.

I am excited for ASU as it establishes academic forensics within the State. Graduates will be hired not only by the various municipal, county, and state crime laboratories within Arizona, but by the myriad of private and public labs throughout the nation. Good luck on this important endeavor that will serve criminal justice worldwide.

Respectfully,

Howard a. Bintra

Howard A. Birnbaum



August 22, 2010

Todd R. Sandrin, Ph.D. Associate Professor/Associate Director Division of Mathematical and Natural Sciences New College of Interdisciplinary Arts and Sciences Arizona State University MC 2352 P O Box 37100 Phoenix AZ 85069-7100

Dear Dr. Sandrin:

I am delighted to learn of the new forensics degree program. As a former Assistant United States Attorney, District of Arizona, and former Arizona appellate judge, I especially appreciate the critical role that forensics laboratories hold in our justice system. Indeed I shudder to think of the cases in which justice was delayed due to the lack of laboratories staffed by sufficient and qualified analysts or, far worse, cases in which justice did not prevail due to questionable or dishonest practices.

In its 2009 report, *Strengthening Forensic Science in the United States*, the National Academies' National Research Council noted the lack of laboratories and qualified analysts, and properly damned the laboratories and practices in this country. This month, the Attorney General of North Carolina revealed that the laboratory practices of the State Bureau of Investigation had been so dubious as to challenge the criminal cases against 269 people, three of whom have been executed and the remainder of whom have served or are serving lengthy prison terms. The Houston laboratory still is reeling from a scandal involving almost 500 cases.

This type of comprehensive program is as greatly needed as it is important. Certainly there is no comparable curriculum offered in this large and growing state.

You have my congratulations and my full support.

Sincerely,

Susan Shrlich

Susan A. Ehrlich, J.D., LL.M. (biotechnology & genomics) Judge (ret.), Arizona Court of Appeals Adjunct Professor, Barrett Honors College, Arizona State University

Member, National Science Advisory Board for Biosecurity

BARRETT THE HONORS COLLEGE PO Box 871612, Tempe, AZ 85287-1612 (480) 965-4033 FAX: (480) 965-0760