

# GENERAL STUDIES COURSE PROPOSAL COVER FORM

# **Course information:**

			formation from <u>(</u> of Interdisciplina			Mathematical Sciences	l and Natural	
Prefix	FOR	Number	106	Title	_ Biology Behind t		Units: 4	
		- sted course?	No	If yes, please	identify course(s)			
Is this a	a shared	course?	No	If so, list all a	cademic units offe	ring this course		
offers to to ensu	he course re that a	e is required for Il faculty teachir	each designation	n requested. By s c aware of the Ge	ubmitting this lette	air/director of <u>each</u> er of support, the cha gnation(s) and will te	iir/director agre	es
	a perman with top:	nent numbered ics?	Yes					
meets t chair/d Studies Course technic crime I such as investig Request	the criter lirector to designa descript ques beh laborator s forensi- gation. N ed desig	ia for the appro o ensure that all tion(s) and adhe ion: This is a 4 c ind the identific- ries. This non-no c toxicology, se to prerequisites gnation: Natura	ved designation( I faculty teaching ere to the above g credit hour lecti cation and analy najors biology c crology, DNA an s. al Sciences-SQ	(s). It is the response the course are guidelines. The sure and laborate was of biologica course will introlalysis, forensic	aware of the Gener ory course explori l evidence and cri duce students to t anthropology, for		ent in forensic forensic analy:	ses
		proposal is requi	ired for each des	ignation request	ed			
	ient num				ity's review and ap	proval process. u or <u>Lauren.Leo@as</u>	u.edu.	
	_	dlines dates ar			,			
			te: October 1, 20	015	For Spring 20	017 Effective Date: M	arch 10, 2016	
A single require core are	e course ment an eas simu	d more than one ltaneously, even	ed for more than e awareness area i if approved for	requirements co those areas. Wi	oncurrently, but m th departmental co	rse may satisfy a co ay not satisfy requir onsent, an approved or program of study.	ements in two General Studies	
Checklis	sts for g	eneral studies	designations:					
_		ttach the approp						
		d Critical Inquiry						
		cs core courses (M /statistics/quantit	<u>IA)</u> ative applications (	core courses (CS)				
• <u>H</u>	<u> Iumanitie</u>	s, Arts and Design	core courses (HU)					
		avioral Sciences co ences core course						
			ted States courses	(C)				
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		Awareness courses						
	Signed Criteria	posal should i course proposal checklist for Ge catalog descript	cover form eneral Studies de	esignation(s) beir	ng requested			
$\boxtimes$	Sample Copy of	syllabus for the table of conten	course ts from the textl		required readings/	books <b>th all files compil</b>	ed into one PI	)F
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				kimberly.kob	ojek			
Name	Kimb	erly Kobojek	E-mail			602-543-3913		
Depart	ment (	Chair/Direc	tor approva	l: (Required)				
-		·	Or. Lara Ferry, In Mathema	terim Director-S		Date:		

Chair/Director (Signature):

Lara Ferry

9-28-15

#### Arizona State University Criteria Checklist for

# NATURAL SCIENCES [SQ/SG]

#### **Rationale and Objectives**

Public scientific literacy, critical for sound decisions on scientifically infused issues such as climate change, includes understanding of basic science concepts, such as the fundamental behavior of matter and energy. It also includes the understanding that "science" is not an encyclopedic collection of facts. Rather, it is a process of exploration that embraces curiosity, inquiry, testing, and communication, to reduce uncertainty about nature. Absent understanding of scientific concepts and of the nature of science, science and pseudoscience are difficult to distinguish, and normal scientific disagreements may be misinterpreted as ideological or political disputes. The goal of the natural sciences (SQ/SG) requirement, including the laboratory requirement, is to instill understanding of basic science content and of the nature of science in every ASU graduate.

10/1989

REV: 1/1991, 3/1991, 1/2000, 10/2008, 4/2014

Proposer: Please complete the following sections and attach appropriate documentation.

## **ASU--[SQ] CRITERIA** I. - FOR ALL *QUANTITATIVE* [SQ] NATURAL SCIENCES CORE AREA COURSES, THE FOLLOWING ARE CRITICAL **CRITERIA AND MUST BE MET: Identify** YES NO **Documentation Submitted** Syllabus & supporting **A.** Course emphasizes the mastery of basic scientific Xinformation at end of principles and concepts. checklist Syllabus & supporting $\boxtimes$ **B.** Addresses knowledge of scientific method. information at end of checklist Syllabus & supporting C. Includes coverage of the methods of scientific inquiry X that characterize the particular discipline. information at end of checklist Syllabus & supporting X **D.** Addresses potential for uncertainty in scientific inquiry. information at end of checklist Syllabus & supporting E. Illustrates the usefulness of mathematics in scientific X description and reasoning. information at end of checklist Syllabus & F. Includes weekly laboratory and/or field sessions that supporting provide hands-on exposure to scientific phenomena and X

methodology in the discipline, and enhance the learning

of course material.

information at end of

checklist

		G. Students submit written reports of laboratory experiments for constructive evaluation by the instructor.	Syllabus & supporting information at end of checklist		
		H. Course is general or introductory in nature, ordinarily at lower-division level; not a course with great depth or specificity.	Syllabus & supporting information at end of checklist		
I	II AT LEAST ONE OF THE FOLLOWING ADDITIONAL CRITERIA MUST BE MET WITHIN THE CONTEXT OF THE COURSE:				
		A. Stresses understanding of the nature of basic scientific issues.	Syllabus & supporting information at end of checklist		
		B. Develops appreciation of the scope and reality of limitations in scientific capabilities.	Syllabus & supporting information at end of checklist		
		C. Discusses costs (time, human, financial) and risks of scientific inquiry.			
	NOTE: CRITERIA FOR [SG] COURSES BEGIN ON PAGE 4.				

III.	- [SQ	] COURSES MUST ALSO MEET THESE ADDITIO	NAL CRITERIA:	
YES	NO		Identify Documentation Submitted	
			Syllabus &	
		<b>A.</b> Provides a substantial, quantitative introduction to fundamental principles governing behavior of matter and	supporting	
		energy, in physical or biological systems.	information at end of	
			checklist	
		B. Includes a college-level treatment of some of the following topics (check all that apply below):		
		a. Atomic and molecular structure		
		<b>b.</b> Electrical processes		
		c. Chemical processes	Syllabus & supporting	
			information at end of checklist	
		d. Elementary thermodynamics		
		e. Electromagnetics		
		f. Dynamics and mechanics		
	[SQ] REQUIREMENTS CANNOT BE MET BY COURSES:			
• Pı	Presenting a qualitative survey of a discipline.			
• Fo	Focusing on the impact of science on social, economic, or environmental issues.			
• Fo	Focusing on a specific or limiting but in-depth theme suitable for upper-division majors.			

Proposer: Please complete the following section and attach appropriate documentation.

	ASU[SG] CRITERIA				
	I FOR ALL <i>GENERAL</i> [SG] NATURAL SCIENCES CORE AREA COURSES, THE FOLLOWING ARE CRITICAL CRITERIA AND MUST BE MET:				
YES	NO		Identify Documentation Submitted		
		Course emphasizes the mastery of basic scientific principles and concepts.			
		2. Addresses knowledge of scientific method.			
		3. Includes coverage of the methods of scientific inquiry that characterize the particular discipline.			
		4. Addresses potential for uncertainty in scientific inquiry.			
		5. Illustrates the usefulness of mathematics in scientific description and reasoning.			
		6. Includes weekly laboratory and/or field sessions that provide hands-on exposure to scientific phenomena and methodology in the discipline, and enhance the learning of course material.			
		7. Students submit written reports of laboratory experiments for constructive evaluation by the instructor.			
		8. Course is general or introductory in nature, ordinarily at lower-division level; not a course with great depth or specificity.			
		II AT LEAST ONE OF THE ADDITIONAL CRITERI MUST BE MET WITHIN THE CONTEXT OF THE CO			
		A. Stresses understanding of the nature of basic scientific issues.			
		<b>B.</b> Develops appreciation of the scope and reality of limitations in scientific capabilities.			
		C. Discusses costs (time, human, financial) and risks of scientific inquiry.			

# **[SG] REQUIREMENTS CANNOT BE MET BY COURSES:**

- Presenting a qualitative survey of a discipline.
- Focusing on the impact of science on social, economic or environmental issues.
- Focusing on a specific or limiting but in-depth theme suitable for upper-division majors.

Course Prefix	Number	Title	General Studies Designation
FOR	106	Biology behind the Crime Scene	SQ

Explain in detail which student activities correspond to the specific designation criteria. Please use the following organizer to explain how the criteria are being met.

Criteria (from checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
Section I, A-	Lectures; class discussions and	See the content under these headings in
Н	assignments; and laboratory	the syllabus: "Course Overview", "Course
	exercises	Objectives and Learning Outcomes",
		"Lecture & Laboratory Schedule" Students
		will be required to keep a laboratory
		notebook which will include written
		documentation of their laboratory activities
		and results. This course, along with FOR
		105 Physical Evidence and the Crime
		Scene, is an introduction to forensic
		science technology and anlytical
		methodologies involved with physical
		evidence and crime scene management.
Section II, A-	Lectures; class discussions and	Lecture will discuss how these elements of
В	assignments; and laboratory	forensic science fit under the overall
	exercises	"science" umbrella to include the realities
		of what forensic science does and can do
		within society. Laboratory exercises will
		allow students to apply knowledge gained
		in lecture to lab exercises that are
		designed around real-world forensic
		science methodologies. Strengths and
		limitations of the disciplines will also be
		explored. See the content under these
		headings in the syllabus: "Course
		Overview", "Course Objectives and

		Learning Outcomes", "Lecture & Laboratory Schedule".
Section III, A-B	Lectures; class discussions and assignments; and laboratory exercises	See the content under these headings in the syllabus: "Course Overview", "Course Objectives and Learning Outcomes", "Lecture & Laboratory Schedule".  Examples of laboratory exercises include: Blood and Bloodstain Analysis; Forensic Entomology; and DNA analysis. In each of these exercises, both the strengths and limitations of these particular areas of analysis in forensic science will be explored as part of the exercise.

Course Description\_FOR 106 Biology behind the Crime Scene

**Course Description:** This is a 4 credit hour lecture and laboratory course exploring the science and analytical techniques behind the identification and analysis of biological evidence and crime scene management in forensic crime laboratories. This non-majors biology course will introduce students to the concepts behind forensic analyses such as forensic toxicology, serology, DNA analysis, forensic anthropology, forensic entomology, and death investigation.

Prerequisites: none



**Course:** FOR 106 Biology behind the Crime Scene

Instructor: Kimberly Kobojek FAB N181D

602-543-3913 <a href="mailto:kimberly.kobojek@asu.edu">kimberly.kobojek@asu.edu</a>

Office Hours: TBA

If you find it necessary to leave a note for this instructor, please contact the administrative reception desk of the School of Mathematical and Natural Sciences located at FAB North Level 1 room N101-1

#### **Course Overview:**

This is a 4 credit hour lecture and laboratory course exploring the science and analytical techniques behind the identification and analysis of biological evidence and crime scene management in forensic crime laboratories. This non-majors biology course will introduce students to the concepts behind forensic analyses such as forensic toxicology, serology, DNA analysis, forensic anthropology, forensic entomology, and death investigation.

#### **Course Objectives and Learning Outcomes:**

Upon successful completion of lecture and laboratory assignments and exams, students will:

- 1. Describe the role of the Forensic Scientist as it relates to the Criminal Justice System.
- 2. Discuss the various analytical sections of a modern crime laboratory dealing with biological evidence.
- 3. Describe types of biological evidence commonly encountered in crime laboratories
- 4. Apply knowledge gained in lecture presentations to laboratory activities.
- 5. Apply knowledge gained in lecture and laboratory activities to "solve" a mock crime scene.
- 6. Describe the biological concepts behind specific forensic analytical techniques
- 7. Discuss the safety and quality assurance practices used by modern forensic scientists in a crime lab

#### **Required Materials:**

- 1. Forensic Science: from the Crime Scene to the Crime Lab 2<sup>nd</sup> Edition by Richard Saferstein
- 2. Campbell Essential Biology with Physiology 5th Edition, Simon, Dickey, Hogan, Reece
- 2. A bound, blank laboratory notebook for taking laboratory notes (composition or quadrille)
- 3. A pair of laboratory safety glasses with top/side protection [see bookstore]
- 4. Laboratory handouts Provided via Blackboard for student download & printing

#### **Attendance:**

Attendance is essential to doing well in this or any class. Attend lectures, arrive on time, and keep current with assignments. If you must miss a class, it is **your** responsibility to obtain the missed information from classmates and/or the class Blackboard site.

# **Lab Attendance:**

Students must attend the lab section for which they registered. Students may not make up laboratory exercises in another lab section. Students who miss more than two (2) scheduled laboratory sessions, excused or unexcused, will automatically receive a failing grade for the entire course.

#### **Cell Phone Use**

Cell phones must be turned off during class time, especially exams. Students seen using a cell phone in any way during an exam may receive a zero on the exam. Please be considerate of those around you during lecture. Students seen using a cell phone in any way during lecture and/or laboratory may be asked to leave the classroom for the remainder of class time. In cases of family emergencies (pregnant spouse, etc.), arrangements must be made with the instructor in advance.

Cell phone use in the laboratory is a safety and health hazard. Cell phones are not permitted to be used in the laboratory.



#### **Class Conduct**

All students are expected to conduct themselves with the maturity expected of adults in any University classroom. Disruptive, disrespectful, harassing, offensive, and/or threatening behavior, even via e-mail, toward any other students and/or an instructor in this class will not be tolerated. Students who are disrupting the class will be made to leave the classroom. Students who continually disrupt class and/or harass other students and/or instructors may be dropped from the class by the instructor. Students are expected to pay attention during lecture. See the *Student Services Manual* for the specific policy against threatening behavior, <u>SSM 104–02</u>, "Handling Disruptive, Threatening, or Violent Individuals on Campus".

Students are expected to follow all safety and health regulations in the laboratories. Students who do not follow the safety and health regulations may be asked to leave the laboratory for their, and their classmates, safety.

#### **Class Materials and Reading**

The planned textbook readings are listed in the schedule grid. The textbook readings will help you prepare for lecture. Students must have at least heavily skimmed the assigned reading before the lecture. The lecture may discuss the readings; however topics covered in the reading, but not the lecture, may be fair game for the exam. Additional class materials may be posted on the class Blackboard site. Computer and printer access are available in the library through Technopolis in the basement of the Library.

#### **Class Participation**

Official attendance will not be taken in the lecture portion of the course; however, a number of important assignments and other pieces of information will be disseminated during the lecture periods. Do not rely solely on Blackboard for lecture information. Your presence or absence in lecture can have a direct effect on the quality of work produced in this course.

Students are required to attend the laboratory section for which they are registered. Missing more than two (2) labs for any reason will result in a failing grade for the entire course (lecture and lab).

#### **Computer Access**

Class announcements and many course materials will be posted on the class Blackboard website. Therefore, students must have a myASU account and use a computer to access this site on a regular basis. Computers for student use are available at Technopolis in the basement of the library. Access to Blackboard is at my.asu.edu (no www.). The instructor will use the student's asu.edu email account for electronic communication, if necessary.

#### E-Mail

I highly encourage students to ask questions, especially if you need clarification on something said in lecture; on assignments, or participation activities. Emails will generally be answered during the business/school day Monday-Friday. The instructor's email is: Kimberly.kobojek@asu.edu

Occasionally, emails may be answered on weekends and/or school holidays. While you may occasionally receive an immediate reply, expect most replies from any instructor to take some time.

#### **Grading:**

Your grade will be composed of three main components:

Laboratory (Including notebooks and presentation): ≈31% Exams (4 quizzes, midterm and a final): ≈ 62% Class Participation (attendance, discussion boards, etc.) ≈ 7% Final grades will be assigned based on the following scale:

A+: 97% or above B+: 87% - 89.99% C+: 77% - 79.99% D: 60% - 69.99% A: 93% - 96.99% B: 83% - 86.99% C: 70% - 76.99% E: Less than 60%

A-: 90% - 92.99% B-: 80% - 82.99%



The above percentages will be based on the number of points earned divided by the number of total possible points.

Item N	lumber/Times assessed	Given Points per Item	Total Points	
LECTURE				
Class Participation	n 10	5	50	
Quizzes	4	50	200	
Midterm Exam	1	100	100	
Final Exam	1	200	200	
LAB				
Group lab present	tations 1	100	100	
Laboratory notebo	ooks 2	50	100	
Laboratory Quizze		5	50	
Total:			800	

## Course/Instructor Evaluation

The course/instructor evaluation for this course will be conducted online 7-10 days before the last official day of classes of each semester or summer session. Your response(s) to the course/instructor are anonymous and will not be returned to your instructor until after grades have been submitted. The use of a course/instructor evaluation is an important process that allows our college to (1) help faculty improve their instruction, (2) help administrators evaluate instructional quality, (3) ensure high standards of teaching, and (4) ultimately improve instruction and student learning over time. Completion of the evaluation is not required for you to pass this class and will not affect your grade, but your cooperation and participation in this process is critical. About two weeks before the class finishes, watch for an e-mail with "NCIAS Course/Instructor Evaluation" in the subject heading. The email will be sent to your official ASU e-mail address.

<u>Withdrawals:</u> The instructor will NOT withdraw students for any reason. Specifically, students should be aware that non-attendance will NOT automatically result in their being dropped from the course. Therefore, if a student does not attend class during the first week or for any extended period of time during the semester, they should not presume that they are no longer registered. <u>It is the student's responsibility to be aware of their registration status</u>.

#### Please note the following dates:

	Session A	Session B	Session C
Session Date & Deadlines	(7 Week Session)	(7.5 Week Session)	(15 Week Session)
	Aug 20 – Oct. 9, 2015	Oct 14 – Dec 4, 2015	Aug 20 – Dec 4, 2015
			(Final Exams Dec 7 -12, 2015)
Classes Begin	August 20, 2015	October 14, 2015	August 20, 2015
Drop/Add Deadline (w/out College approval)	August 21, 2015	October 15, 2015	August 26, 2015
Tuition & Fees 100% Refund Deadline	TBD	TBD	TBD
Labor Day Holiday Observed – University Closed		September 7, 2015	
University 21st Day	September 9, 2015	November 3, 2015	September 9, 2015
Course Withdrawal Deadline	September 9, 2015	November 3, 2015	November 4, 2015
Complete Session Withdrawal Deadline	October 9, 2015	December 4, 2015	December 4, 2015
Veteran's Day Observed - University Closed		November 11, 2013	
Thanksgiving Observed – University Closed		November 26 – 27, 2015	
Deadline to Apply for Graduation		October 1, 2015	
Classes End/Last Day to Process transactions	October 9, 2015	December 4, 2015	December 4, 2015
Final Exams	Last day of classes	Last day of classes	Last day of classes
Final Grades Due	October 12, 2015	Dec 7 – 14, 2015	Dec 7 – 14, 2015
Degree Conferral Date		December 14, 2015	



Any withdrawal transaction must be completed by the deadline date in accordance to the appropriate session at the registrar's office. If not, you will still be officially enrolled and you will receive a grade based on your work completed.

\*As part of a complete session withdrawal a student must withdraw from all classes in a session. Beginning the first day of classes, undergraduate students are required to work with a Student Retention Coordinator to facilitate the withdrawal process. Please refer to <a href="http://students.asu.edu/StudentRetention">http://students.asu.edu/StudentRetention</a>

For additional information about ASU's withdrawal policy and the possible consequences of withdrawing from a class, contact Registration Services or your academic counselor.

### Students are responsible for their registration status!

<u>The Grade of Incomplete</u>: A grade of incomplete will be awarded only in the event that a documented emergency or illness prevents a student who is doing acceptable work from completing a small percentage of the course requirements at the end of the semester. The guidelines in the current general ASU catalog regarding a grade of incomplete will be strictly followed. A grade of incomplete will NOT be awarded unless there is documented evidence of extreme personal or immediate family hardship. Changes in work hours, child-care emergencies, or other similar personal problems will not be approved as reasons for awarding incompletes. The Director of the School of Mathematical and Natural Sciences must approve all incomplete grade requests.

Reasonable Accommodations for Students with Disabilities: The Disability Resource Center (DRC) provides information and services to students with any documented disability who are attending ASU West. Individualized program strategies and recommendations are available for each student as well as current information regarding community resources. Students also may have access to specialized equipment and supportive services and should contact the instructor for accommodations that are necessary for course completion.

#### **Academic Integrity and Code of Conduct:**

As defined in the ASU Student Academic Integrity Policy: http://provost.asu.edu/academicintegrity.

Each student has an obligation to act with honesty and integrity, and to respect the rights of others in carrying out all academic assignments. A student may be found to have violated this obligation and to have engaged in academic dishonesty if during or in connection with any academic evaluation, he or she:

- Engages in any form of academic deceit;
- ➤ Refers to materials or sources or employs devices (e.g., audio recorders, crib sheets, calculators, solution manuals, or commercial research services) not authorized by the instructor for use during the academic evaluation:
- Possesses, buys, sells, obtains, or uses, without appropriate authorization, a copy of any materials intended to be used for academic evaluation in advance of its administration;
- Acts as a substitute for another person in any academic evaluation;
- Uses a substitute in any academic evaluation;
- > Depends on the aid of others to the extent that the work is not representative of the student's abilities, knowing or having good reason to believe that this aid is not authorized by the instructor;
- Provides inappropriate aid to another person, knowing or having good reason to believe the aid is not authorized by the instructor;
- Engages in plagiarism;
- > Permits his or her work to be submitted by another person without the instructor's authorization; or
- > Attempts to influence or change any academic evaluation or record for reasons having no relevance to class achievement.



FOR 106 follows the ASU Academic Integrity Policy in the administration of all course examinations and assignments. Violations of the University Academic Integrity policy will not be ignored. Penalties include reduced or no credit for submitted work, a failing grade in the class, a note on your official transcript that shows you were punished for cheating, suspension, expulsion and revocation of already awarded degrees. The university requires that the implementation of any of these penalties for violations of the academic integrity policy be reported to the Dean's office. The Integrity Policy defines the process to be used if the student wishes to appeal this action.

In FOR 106 you are expected to follow the *ASU Student Code of Conduct* (<a href="http://students.asu.edu/srr/code">http://students.asu.edu/srr/code</a>) especially when communicating with your peers, instructors, and teaching assistants. Violations of the student code of conduct may result in withdrawal from the class.

<u>Final Exam Make-up Policy</u>: The final exam schedule listed in the Schedule of Classes will be strictly followed. Exceptions to the schedule and requests for make-up examinations can be granted only by the director of the School of Mathematical and Natural Sciences for one of the following reasons:

- 1) religious observances
- 2) the student has more than three exams scheduled on the same day
- 3) two finals are scheduled to occur at the same time

Make-up exams will **NOT** be given for reasons of non refundable airline tickets, vacation plans, work schedules, weddings, family reunions, or other such activities. Students should consult the final exam schedule before making end-of-semester travel plans.

If there is a last-minute personal or medical emergency, the student may receive a grade of Incomplete and makeup the final within one calendar month. The student must provide written documentation and be passing the class at the time to receive an Incomplete. A signed "Request for Grade of Incomplete" must be submitted by the student and approved by the student's instructor and the Director of the School of Mathematical and Natural Sciences.

The instructor reserves the right to make changes to this syllabus as needed.

If you find it necessary to leave a note for this instructor, please contact the administrative reception desk of the School of Mathematical and Natural Sciences located at FAB North Level 1 room N101-1.

#### Policy against Threatening Behavior:

In the classroom and out students are required to conduct themselves in a manner that promotes an environment that is safe and conductive to learning and conducting other university-related business. All incidents and allegations of violent or threatening conduct by an ASU student will be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students. Such incidents will be dealt with in accordance with the policies and procedures described in Section 104-02 of the Student Services Manual (<a href="https://www.asu.edu/aad/manuals/ssm/ssm104-02.html">https://www.asu.edu/aad/manuals/ssm/ssm104-02.html</a>).

## Potentially Offensive Content:

This course will discuss scientific evidence related to criminal activities as commonly seen in a forensic crime laboratory. Some evidence, photos, and discussion topics will cover violent and disturbing material. The content presented is not meant to be offensive, but rather meant for educational and demonstrative purposes.

If you find any of the content of his class offensive, please bring your concerns to the instructor immediately.

## **Power Outage:**

In the event of a campus power outage or other event affecting the ability of the University to deliver classes, any decision to cancel classes will be announced using the ASU emergency notification system. For this reason, it is imperative that students register with the ASU emergency notification system at: <a href="https://cfo.asu.edu/emergency-alert">https://cfo.asu.edu/emergency-alert</a>. In cases in which a limited number of buildings are affected, students should check the university website and/or call the School office at (602) 543-6050.

#### **Emergency Evacuation Plan:**

Students should be aware of the evacuation route posted on the exit door of each classroom. Students who cannot walk down stairs should notify the instructor as early in the course as possible so the instructor can provide information regarding the location of the designated meeting area on each upper floor of the building (marked with a blue sign that states Emergency Evacuation Response Area).



# Lecture and Laboratory Schedule (subject to change):

Lecture	Topic	Laboratory
Week 1	Welcome	No Lab
	Introduction	
Week 2	Crime Scene Basics	Introduction -
	Crime Scene Evidence	Lab Safety
Week 3	Physical Evidence	
	Trace Evidence	Quiz #1
		Crime Scene
	Quiz #1	Basics Quiz #2
		Biological Trace &
Week 4	Fingerprints	Physical Evidence
	Intro to Death Investigation	0 : "0
		<b>Quiz #3</b> Fingerprints:
		Development and
Week 5	Forensic Anthropology	Comparison
	Forensic Pathology	Quiz #4
Week 6	Forensic Entomology	Forensic Autopsy
	Crime Scene Creatures	
		Quiz #5
Week 7	Quiz #2	Forensic Entomology
Week 8	Plants at the Scene/Forensic Botany	Quiz #6
VVCCR O	Figure 4 the oderies of original Botarry	Forensic Botany:
	Forencia Dalumala su	Plants & Pollen, Part I
M/1- 0	Forensic Palynology	
Week 9	Midterm Review	Quiz #7 Forensic Botany:
		Plants & Pollen,
	MIDTERM EXAM	Part II
Week 10	Biological Stain Analysis/Serology	Quiz #8
		Blood & Bloodstain
	Bloodstain Pattern Analysis	Analysis
Week 11		
VVEEKII	Introduction to DNA	Oi- #0
		Quiz #9 DNA Extraction and PCR
Week 12	Quiz #3	Quiz #10
	DNA	DNA Analysis: Gel
		Electrophoresis
Week 13	Crime Scene Reconstruction	No Quiz!
	Crime Scene Revisited	Crime Scene/ Lab Practical
Week 14	Quiz #4	

ARIZONA STATE UNIVERSITY

	Toxicology	Quiz #11  In-lab workday/Evidence analysis
Week 15	Microbes	**LAB FINAL
	Bioterrorism	Presentations
Finals Week	FINAL EXAM	

# **BRIEF CONTENTS**

1	Introduction 1
2	Securing and Searching the Crime Scene 33
3	Recording the Crime Scene 50
4	Collection of Crime-Scene Evidence 80
5	Physical Evidence 104
6	Death Investigation 123
7	Crime-Scene Reconstruction 152
8	Fingerprints 163
9	Firearms, Tool Marks, and Other Impressions 191
0	Bloodstain Pattern Analysis 230
11	Drugs 251
2	Forensic Toxicology 290
3	Trace Evidence I: Hairs and Fibers 319
4	Trace Evidence II: Paint, Glass, and Soil 344
5	Biological Stain Analysis: DNA 369
6	Forensic Aspects of Fire and Explosion Investigation 410
7	Document Examination 439
8	Computer Forensics 458
9	Mobile Device Forensics 490

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