

Term Information

Effective Term Autumn 2014
[Previous Value](#) [Summer 2012](#)

Course Change Information

What change is being proposed? (If more than one, what changes are being proposed?)

The Department of Anthropology requests that "Introduction to Forensic Sciences" (3211) serve as a General Education (GE) Biological Science course within the Natural Sciences category.

What is the rationale for the proposed change(s)?

Based upon our understanding of the expected learning outcomes for such courses, we believe that Introduction to Forensic Sciences is especially appropriate for inclusion as a GE elective in the Biological Sciences category. This course offers students a survey of forensic sciences, a field that includes a broad range of scientific disciplines as applied in the medico-legal system. This course also highlights the interdisciplinary nature the biological sciences, and their interdependence with other sciences, including the Natural, Mathematical, and Physical sciences.

What are the programmatic implications of the proposed change(s)?

(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?
N/A

Is approval of the request contingent upon the approval of other course or curricular program request? No

Is this a request to withdraw the course? No

General Information

Course Bulletin Listing/Subject Area	Anthropology
Fiscal Unit/Academic Org	Anthropology - D0711
College/Academic Group	Arts and Sciences
Level/Career	Undergraduate
Course Number/Catalog	3211
Course Title	Introduction to Forensic Science
Transcript Abbreviation	Intro to Forensics
Course Description	This team-taught interdisciplinary course will give students an introduction to the major concepts, issues and techniques used in forensic science. It is designed to expose students to different disciplines and career paths within forensic science.
Semester Credit Hours/Units	Fixed: 3

Offering Information

Length Of Course	14 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	No
Grading Basis	Letter Grade
Repeatable	No
Course Components	Lecture
Grade Roster Component	Lecture
Credit Available by Exam	No

Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites	
Exclusions	Not open to students with credit for 211.

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code	45.0202
Subsidy Level	Baccalaureate Course
Intended Rank	Freshman, Sophomore, Junior, Senior

Quarters to Semesters

Quarters to Semesters	Semester equivalent of a quarter course (e.g., a 5 credit hour course under quarters which becomes a 3 credit hour course under semesters)
List the number and title of current course being converted	ArtsSci 211: Introduction to Forensic Science.

Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors
General Education course:
Biological Science

Previous Value

Required for this unit's degrees, majors, and/or minors

Course Details

Course goals or learning objectives/outcomes	<ul style="list-style-type: none">• Comprehend the breadth of the field of forensic science• Exhibit a basic knowledge of the methods & measures used in forensics• Identify the social factors that impact forensic science• Categorize types of evidence
Content Topic List	<ul style="list-style-type: none">• Forensic techniques• Forensic evidence in the courtroom• Collection and analyses of crime scene evidence

COURSE CHANGE REQUEST
3211 - Status: PENDING

Last Updated: Haddad,Deborah Moore
05/16/2013

Attachments

- GE Rational for Anth 3211.docx: GE Rational
(GEC Course Assessment Plan. Owner: Freeman,Elizabeth A.)
- ANTH3211_Syllabus_GE.doc: Anth 3211 Syllabus
(Syllabus. Owner: Freeman,Elizabeth A.)
- Anth 3211 Cover Letter.pdf: Cover Letter
(Cover Letter. Owner: Freeman,Elizabeth A.)

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Freeman,Elizabeth A.	05/16/2013 03:47 PM	Submitted for Approval
Approved	McGraw,William Scott	05/16/2013 03:48 PM	Unit Approval
Approved	Haddad,Deborah Moore	05/16/2013 04:48 PM	College Approval
Pending Approval	Nolen,Dawn Jenkins,Mary Ellen Bigler Vankeerbergen,Bernadette Chantal Hogle,Danielle Nicole Hanlin,Deborah Kay	05/16/2013 04:48 PM	ASCCAO Approval



Department of Anthropology

4034 Smith Laboratory
174 W. 18th Avenue
Columbus, OH 43210-1106

May 16, 2013

Phone (614) 292-4149
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TO: Arts and Sciences Curriculum Committee

FROM: Sam D. Stout

RE: GE Status for Anthropology 3211

To Whom It May Concern:

The Department of Anthropology requests that "Introduction to Forensic Sciences" (3211) serve as a General Elective (GE), Biological Science course within the Natural Sciences category. Based upon our understanding of the expected learning outcomes for such courses, we believe that Introduction to Forensic Sciences is especially appropriate for inclusion as a GE elective in the Biological Sciences category. This course offers students a survey of forensic sciences, a field that includes a broad range of scientific disciplines as applied in the medico-legal system (See attached course syllabus). I might add that this course also highlights the interdisciplinary nature the biological sciences, and their interdependence with other sciences, including the Natural, Mathematical, and Physical sciences. I strongly support approval of Anthropology 3211 as a GE course.

Respectfully,

A handwritten signature in black ink, appearing to read "S. Stout".

Sam D. Stout, Ph.D.
Professor
stout.126@osu.edu

ANTH 3211: *Introduction to Forensic Science*

Fall 2013. Call # 15518

Class: WF 9.35am – 10.55am Gateway Film Theater #3

Course Description: This team-taught interdisciplinary course will give students an introduction to the major concepts, issues and techniques used in forensic science. It is designed to expose students to different disciplines and career paths within forensic science.

Student Learning Outcomes: Students successfully completing this course will:

1. Comprehend the breadth and interdisciplinary nature of the field of forensic science.
2. Exhibit a basic knowledge of the methods and measures used in forensic science.
3. Identify the social factors that impact forensic science.
4. Categorize types of evidence and their importance to the law.
5. Apply concepts and methods to hypothetical case studies.

NB: We will add appropriate GE language once the course is granted GE status.

Course Coordinators: Jules R. Angel, PhD, Rm. 4046, Smith Labs.

Angel.29@osu.edu

Office hours 1.35pm – 3.05pm MW

Sam Stout, PhD, Rm. 4052, Smith Labs.

Stout.1@osu.edu

Office hours by appt.

Textbook: Houck, M., and J. Siegel (2010) Fundamentals of Forensic Science 2nd edition. Elsevier Press, Amsterdam, New York, 672 pp. ISBN 13: 978-0-12-374989-5

Interdisciplinary Course: This course is a core course in the Forensic Science minor. Information regarding the minor and its requirements may be obtained from angel.29@osu.edu and advising in Denney Hall.

STUDENTS WITH DISABILITIES: ARE RESPONSIBLE FOR MAKING THEIR NEEDS KNOWN TO THE INSTRUCTOR AS SOON AS THE SEMESTER BEGINS, AND ARE RESPONSIBLE FOR SEEKING AVAILABLE ASSISTANCE FROM THE OFFICE OF DISABILITY SERVICES (292-3307), PRIOR TO OR AT THE BEGINNING OF THE QUARTER. I RELY ON THE OFFICE FOR DISABILITY SERVICES FOR ASSISTANCE IN VERIFYING THE NEED FOR ACCOMMODATIONS & DEVELOPING ACCOMMODATION STRATEGIES.

Please note that if you have ANY issue that will impact you taking this class, including but not limited to anxiety, panic attacks, ADHD, depression etc., then I encourage you to contact ODS for assessment and accommodations. Please do not wait until the end of the sem. to decide you required help – be proactive in your educational needs.

Disability services are found at 150, Pomerene Hall, Neil Ave., 292–3307; TDD 292–0901; 24hr info 292–0870. Any student requesting accommodations MUST provide a letter from ODS detailing those accommodations BEFORE the first exam.

Cancellation Notices: <http://anthropology.osu.edu/news/coursenews.php>

In case of unexpected instructor absences, the information will be posted on the above departmental website. This site should be consulted in the event of inclement weather to check for possible class cancellations or delays. As a rule of thumb I only cancel class if OSU cancels class. Thus if OSU has closed (or the building is otherwise closed for a safety reason) class will be cancelled. Do not call the Department, check the dept. website of the main OSU website.

Attendance. Attendance is mandatory. This is not an online class, thus attendance is mandatory. This class, as an essential core course, will set students up for the rest of the minor. Consider the class as you would a job – you will earn your grade (as you would a paycheck). If you have unexcused absences then your ‘paycheck’ will suffer as a result. Getting and handing in the unannounced graded activities will partly serve as your attendance, thus absences and tardiness will be detrimental to your final grade. If you miss a class, you are responsible for the material covered. If you want an absence erased due to ‘life happening’ you must provide some kind of documentation (e.g. funeral home note, flight itinerary, letter from work, car tow receipt, email from another professor, doctor’s note etc.) I WILL authenticate those excuses. Please ensure the excuse covers the days of absence! I will only accept excuse documents within 14 days after the actual absence in question; I will NOT accept multiple excuse documents bundled at the end of the semester.

Please be prompt in class, not only to minimize interruptions but as tardiness counts toward attendance too. I will take attendance sign-in, and will use those records for grading purposes. That is, if you are within 1% of the next fractional grade, then I will consider advancing a student who had regular attendance to that higher grade. You must make sure you sign in every class – on most days that is the **only** record I have of your attendance. **It is up to you to check the sign in sheet and query any absences you think are not accurate ASAP.**

Please note – you MUST be in class to hand in homework, get writing assignments and give in writing assignments unless you have prior written permission or a documented excuse. As attendance is mandatory in this class, attendance points drop precipitously with each unexcused absence. 0 – 1 unexcused absences = 50/50 pts; 2 unexcused absences = 40/50 pts; 3 unexcused absences = 25/50 pts; 4 or more unexcused absences = 0/50 (zero) points. Each tardy drops any attendance points by 2 pts.

Being physically present in class is not enough to earn you these points, you must be actively engaged in listening, taking notes, and being otherwise attentive. Web surfing, texting, or doing other work will not be tolerated unless it is part of a class activity.

Missed Lectures

If you miss a lecture, lecture notes may not be provided. Some presenters do not make their PPT's available at all, and others only provide edited versions – I have no control on whether an instructor makes their PPT's available or not, or how quickly they can get it to me. I would always urge you to make a NOTES BUDDY in class.

Make ups

If you have a documented excuse for missing an in-class activity day then you will be allowed to make-up that activity as long as it occurs before the graded item is returned to your classmates; if you do not have a documented excuse presented within the grading timeframe explained above then you will receive a zero. It is up to YOU to make the instructor aware of an excused absence ASAP. This is especially true if it is an absence that is known in advance – e.g. flight, work, Drs appt., etc. I will only grade items once I have the excuse IN HAND. I will not chase students for excuses in order to grade their work.

Make-up exams are at my discretion and will be **entirely** essay in format. If you miss an exam you have **24 hours** to contact me by email. Official documentation is required and exams must be taken within one week after the original exam date – I will only grade assignments when I have the excuse in hand. Students who fail to contact me will receive a zero for the exam. Any documentation will be authenticated. No one is permitted to take the exam if they arrive late after the first person has left the exam room.

Grading

In accordance with university policy, grades cannot be discussed over the phone or through e-mail, nor may exam scores be posted. I cannot discuss your grades with anyone other than you unless I have your *express written consent*. Do not contact the Arts and Sciences office regarding grades – you must contact me. **Extra credit work cannot be used to make up a grade.** For a general guide on how you are progressing in the course refer to the average for each exam or see me regularly and certainly BEFORE THE FINAL EXAM. Final grades are based on a standardized distribution using the total number of points available for the course, and I use the OSU grading scheme except that my A's start at 92%.

Your course grade will be determined as follows:

Exam 1	100 points
Exam 2	100 points
Final Exam – 2 sections	
1. examination on the material since the second midterm	100 points
2. application of ALL materials presented in the class to case studies	50 points
Take home quizzes (n=4)	100 points
Take home chapter questions (50 pts per section)	150 points
Attendance	<u>50 points</u>
Total	650 points

Exams

Exams will contain questions in a variety of formats, i.e., multiple choice, short answer, fill in the blank, short answer, applied etc.

Take Home items

Take home activities will be distributed in class and are to be completed and turned in *at the beginning* of the next scheduled class meeting or points will be deducted for it being late. Only hard copies will be accepted. For typed assignments use 12 pt Times New Roman font and place your name, "ANTH 3211", and the date in the *header*. FIVE points will be deducted for every *day* the assignment is late; this includes non-class days and weekends. Excuses such as "computer problems" or "printer malfunctions" are not acceptable. Late or early assignments may be turned in to my mailbox in 4034 Smith Lab.

Chapter Questions/homework

At the end of each chapter are up to 20 Test Your Knowledge study questions. For each chapter you will complete between 10-20 of those (details later) – they must be typed. These questions will help you read the chapter and study for the exams. We will collect some chapters for grading on exam day; the exact chapters required will be announced on exam day, so bring ALL your completed chapter questions in.

All take home work is to be completed by the individual student – whilst you may find it useful to work together sometimes, any work you hand in MUST BE YOURS AND YOURS ALONE. Should any irregularities be apparent I have duty to report the students concerned to COAM.

Late Assignments: All late assignments will receive a 10% reduction in the assignment grade for each calendar day it is late (this includes weekends & days when the class is not meeting).

Philosophy of Grading

I do not *give* grades, students *earn* their grades, so your final grade is your responsibility alone. The only legitimate reason to change a grade is if I have made a mistake in grading. Any questions about grading must be submitted in writing within the first week following the questioned item. If necessary, details of a students' academic progress in the class will be discussed with the faculty coordinator.

The following are not legitimate reasons to request a grade change: 1) you need a higher grade or you will fail to graduate, lose a scholarship, be dismissed from OSU, or lose athletic eligibility, or 2) you are only one point shy of a higher grade. Each time that argument is accepted, many other students are also only one point shy. Remember, if you are 1 % shy and you have had only one or less unexcused absences I will bump you up 1%!!

Earning a grade in this class will mean attending lectures, participating in discussion, asking and answering questions, studying for exams and fulfilling assignments on time. The grade you earn thus depends on your abilities and dedication as a student. This class is a tool towards earning your

graduation and to that end I will give you the information to assemble a comprehensive view of forensic science. If you have to graduate, get a specific job, keep a scholarship, keep athletic eligibility etc. then you are encouraged to be the best student you can be by working hard, scheduling plenty of time to study, making study buddies, and knowing exactly what your ongoing grade is.

Carmen Carmen is the Course Management System currently in use at OSU. You can access Carmen at <http://carmen.osu.edu> and use your OSU username. You will find your grades, some class notes, some power points, exam review sheets, and other important pieces of information. Not all instructors use power points, others use them but don't post them. You will need to attend class to get the course material. You are responsible for ALL the material in the class whether you are there or not and whether it is covered in the book or only in class.

ACADEMIC MISCONDUCT

All students should become familiar with the rules governing alleged academic and non-academic misconduct. All students should be familiar with what constitutes academic misconduct, especially as it pertains to plagiarism and test taking. The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." **Examples of academic misconduct include, but are not limited to, plagiarism, unauthorized collaboration, copying the work of another student, and possession of unauthorized materials during an exam. Ignorance of the code is not considered an excuse for academic misconduct.** Be aware that academic misconduct also includes inaccurate verbal excuses for absences and fabricated medical excuse forms. This instructor WILL prosecute alleged cases of academic misconduct – I am currently 18 – 0 with COAM. The code of student behavior also covers non-academic misconduct in the form of sexual harassment, and threatening or coercive behavior against any person in the class.

Ignorance of the rules governing academic and non-academic misconduct or ignorance of what constitutes academic and non-academic misconduct is not an acceptable defense. If I suspect that a student has committed academic misconduct I am obliged by the University Rules to report my suspicions to the Committee on Academic Misconduct. Sanctions for violating the University's Code of Student Conduct could include a failing grade in the course and suspension or dismissal from the University. Sources of information: Academic Misconduct Pages: <http://oaa.osu.edu/coam/home.html> Preserving Academic Integrity: <http://oaa.osu.edu/coam/ten-suggestions.html>

Plagiarism.

Students should also be aware of what constitutes plagiarism. This includes, but is not limited to, passing off somebody else's words, ideas, research papers, quotes or test answers as your own and without the proper acknowledgment. Anything that is not your own, original work MUST be referenced by source. Apart from in-class discussions, students in Anth. 3211 are expected to produce their own work on writing assignments, homework and tests, and any other material should be cited appropriately.

Week	Date	Lecture Topic ^a	Lecturer	Chapter
intro	W Aug 22	Course Administration, Introduction	ANGEL	1
intro	F Aug 24	Intro – chain of custody	ANGEL	1
1	W Aug 29	The nature of evidence, types, classification	PLESICH	3
1	F Aug 31	The courtroom, expert witness; Criminal Justice	PLESICH	23
2	W Sept 5	The Crime Scene	DIETZ	2
2	F Sept 7	Video	GAILLARD	article on Carmen
3	W Sept 12	Spectroscopic techniques	HARRIS	5
3	F Sept 14	Separation methods in forensic science	HARRIS	6
4	W Sept 19	EXAM 1		
4	F Sept 21	Serology	KENNEDY	10
5	W Sept 26	DNA analysis: DNA structure	ZIANNI	11
5	F Sept 28	DNA typing and PCR	ZIANNI	11
6	W Oct 3	Integration of DNA typing results	ZIANNI	11
6	F Oct 5	CODIS	SCHWADERER	11
7	W Oct 10	Pathology	TATE	7
7	F Oct 12	Entomology	SHETLAR	9
8	W Oct 17	Blood Stain patterns	OSUPD	10
8	F Oct 19	EXAM 2		
9	W Oct 24	Forensic Toxicology	WYMAN	13,14
9	F Oct 26	Pharmacology and case study	WYMAN	14
10	W Oct 31	Friction Ridge Examination	OSUPD	19
10	F Nov 2	Firearms/toolmarks	OSUPD	21
11	W Nov 7	Questioned documents	ANGEL	20
11	F Nov 9	Fire investigation	HAPP	18
12	W Nov 14	Forensic archaeology	ANGEL	no chp
12	F Nov 16	Forensic engineering	MORR	no chp
13	W Nov 21	NO CLASSES Thanksgiving		
13	F Nov 23	NO CLASSES Thanksgiving		
14	W Nov 28	Forensic Psych	KUKOR	article on Carmen
14	F Nov 30	Review	ANGEL	no chp
	DEC 7	FINAL EXAM	8am – 9.45am	

The FINAL is at a COMPLETELY DIFFERENT TIME TO CLASS!!!!

^a Some lectures may be changed if presenters become unavailable.

ANTH 3211: *Introduction to Forensic Science*

Course Description: This interdisciplinary course introduces students to the major concepts, issues and techniques within the field of forensic science. It is designed to expose students to different trajectories and career paths within the broad and rapidly expanding discipline of forensic science. The content of this class directly addresses the goals of the GE Natural Science category.

Expected Learning Outcomes:

1. How do the course objectives address the GE category expected learning outcomes?

Student Learning Outcomes: Students completing the course will:

1. Comprehend the breadth and interdisciplinary nature of the field of forensic science.
2. Exhibit a basic knowledge of the methods and measures used in forensic science.
3. Identify the social factors that impact forensic science.
4. Categorize types of evidence and their importance to the law.
5. Apply concepts and methods to hypothetical case studies.

2. How do the readings assigned address the GE category expected learning outcomes?

The required book in this class is Houck, M., and J. Siegel (2010) *Fundamentals of Forensic Science* 2nd edition. Elsevier Press, Amsterdam, New York, 672 pp. ISBN 13: 978-0-12-374989-5. 17 of the 23 chapters in the text are explored as defined subject areas (see section 3) in this class.

3. How do the topics address the GE category expected learning outcomes?

For each of the 17 subject areas (Table 1), between one and three experts in the forensic field deliver at least one class lecture. These class presentations include those on the history of forensic science, cutting edge techniques, ethical and moral considerations in forensic investigations, application of forensic methods during investigations, critical thinking from crime scene to court room, etc.

The class stresses the interdisciplinary nature of forensic investigation and illustrates how evidence can be analyzed by different experts from multiple backgrounds in order to give an integrated result for law enforcement to use.

Lecturers provide extensive examples, by way of case studies, to show how their subject area is an integral part of forensic investigation.

Table 1. Subjects covered in ANTH 3211.

Lecture Topic	Number of Lectures	Subjects
Intro, chain of custody	2	History, systematics, temporal and spatial management, case studies
Evidence types, the courtroom	2	Systematics, legal system, state and federal law, case studies
The crime scene	1	Systematics, temporal and spatial management, case studies
Video	1	Technical and practical aspects of video and photography applications, case studies
Spectroscopy and separation methods	2	Use of biology, physics and chemistry to identify unknown substances, case studies
Serology, DNA	5	The biology of blood, body fluids, and DNA, DNA profiling and individual matching, case studies
Forensic Pathology	1	Autopsies, the biology of deciding cause and manner of death, case studies
Entomology	1	Biology and taxonomy of insects, insect ID, insect succession, post mortem interval, case studies
Blood spatter analysis	1	Trigonometric analysis of blood spots to ascertain number, direction and sequence of injuries resulting in bleeding, case studies
Forensic toxicology and pharmacology	2	Postmortem biological signs of drug use, biology of drug use, chemical analyses and measurement of molecular structure for drug identification, case studies
Fingerprint analysis	1	History, systematics, biology of fingerprints, physics and chemistry of fingerprint visualization, case studies
Firearms and tools marks	1	The physics and chemistry of firearms and bullets, biology of firearm wounds, trigonometry of shooting scenes, case studies
Questioned documents	1	Physical and chemical aspects of document fraud, case studies

Fire investigation	1	The physics and chemistry of fire, arson investigation, case studies
Forensic archaeology and anthropology	1	Biological aspects of human remains identification, field recovery, postmortem interval assessment, creating a biological profile from skeletal remains (sex, age, ancestry, stature, trauma, pathology, taphonomy), case studies
Forensic engineering	1	The biology and physics of trauma analysis, case studies
Forensic psychology	1	Competency and insanity determination, case studies

4. How do the written assignments address the GE category expected learning outcomes?

In addition to three exams, there are three categories of written assignments consisting of (1) take home study questions completed for each section (2) four take home quizzes, (3) a CSI extra credit. The study questions are found at the end of each chapter and help students garner the basics of each chapter. The quizzes are more synthetic.

1. *Quiz 1 – Concept mapping of the chain of custody.* Students demonstrate how the chain of custody concept involves many different people, places, tests, equipment etc. and yields an integrated result that is admissible in court.
2. *Quiz 2 – Testing DNA knowledge.* Students demonstrate understanding of blood, DNA, DNA testing, profiling and matching in a hypothetical case based on the Innocence Project. Students are instructed to write an explanation to a family member of a newly exonerated prisoner. They are to illustrate in technical and non-technical language how new testing on DNA from an old case has shown the innocence of the now incarcerated person.
3. *Quiz 3 – Testing toxicology knowledge.* Students are given a hypothetical case involving a driver suspected of DUI. Students are asked to calculate Blood Alcohol Content at the time of a stop from a blood sample taken some time later and are asked to explain how the Ohio *per se* DUI law relates to the case.
4. *Quiz 4 – Fingerprint identification and classification.* Students are given a sample of multiple fingerprint images and are asked to identify the prints, label minutiae, and use the Henry System to classify some prints.

Finally, the last class period involves an extra credit assignment. The class watches a CSI episode and students are asked to present a typed list of what elements of forensic science were depicted correctly and incorrectly.

5. How do the prerequisites provide an appropriate level of preparation for the proposed course? If there are no prerequisites, please indicate how this is consistent with the proposed level of the course.

There are no prerequisites for ANTH 3211. The course is a general introduction to the field of forensic science and is appropriate for students interested in pursuing the minor in Forensic Sciences or anyone curious about forensic science.

6. What type(s) of experiences will students have in the laboratory component of the course—if a lab is included?

There are no formal labs in this class; however, there are multiple opportunities for “hand on” experiences during class presentations/demonstrations.

Assessment Plan

The assessment for ANTH 3211 includes both **direct** and **indirect** measures. The **direct measures** involve embedded questions (multiple choice and short answer) on quizzes and examinations. Performance on these questions are reviewed annually and tracked over time. They are reviewed and discussed with the Forensic Science Coordinator (Dr. Sam Stout), Director of Undergrad Studies (Dr. Scott McGraw) and Department Chair (Dr. Clark Larsen). Below are several examples:

Sample embedded question: multiple choice.

- (1) In serological examinations, _____ tests are _____, but not specific.
 - a. Presumptive, confirmatory
 - b. Presumptive, sensitive**
 - c. Confirmatory, sensitive
 - d. Confirmatory, positive
 - e. NONE of the above

- (2) You are a fire investigator searching a fire scene. Which is the correct order to proceed?
 - a. Determine point of origin, least burned to most burned, wind direction, reconstruct, determine area of origin,
 - b. Wind direction, least burned to most burned, determine area of origin, determine point of origin, reconstruct**
 - c. Determine area of origin, determine point of origin, least burned to most burned, reconstruct, wind direction
 - d. Least burned to most burned, wind direction, reconstruct, determine point of origin, determine area of origin
 - e. Reconstruct, least burned to most burned, wind direction, determine point of origin, determine area of origin

Sample embedded question: short answer.

(1) Consider the following scenario: Upon arriving at the scene of a house burglary you are advised by the first responding officer that the point of entry was a first floor bedroom window located above an outside flower bed. The window glass was broken near the lock and it appears the subject reached in and unlatched the window, opened it and climbed through the window. A lap top computer was taken from the kitchen table along with several items of jewelry from the bedroom dresser. Two drops of blood were found on the interior window sill. The back door was found standing open. The officer advised you that no one in the house and that the scene is secured. The time is 2pm in the afternoon, the temperature is 70 degrees and the weather is fair with no threat of rain.

Given this scenario, what order would you process the scene in to maximize the evidence? Select a location, discuss the evidence you would collect and what analysis could be conducted on it.

(2) You are at a death scene, investigating the circumstances for the coroner. The body is lying on the living room floor, covered in a blanket with both hands showing. You do an initial visual exam of the body and see on the ends of the fingers of both hands a coating of a fine, white powdery substance.

Although you will have to do further testing, list TWO things that spring to mind that the powder could be and how the person may have got it on their hands.

(3) You are a criminalist with the Columbus Police Department and are asked to appear in court to discuss a piece of evidence from a crime committed three years ago. You found and recovered a jacket from a trashcan in Pearl Alley that the police know belonged to an individual in custody who is suspected of murdering his girlfriend. So you can refresh your memory and explain this process to a jury you make a list of what happened to this piece of evidence from the moment it was found to the moment it appears in the courtroom. Assuming everyone followed protocol, how should the jacket have been handled and processed? Include key terms, but be sure to define them.

Indirect measure examples questions:

All students will complete a short survey at the conclusion of the course designed to assess the strengths and weaknesses of the presentations and how these may have impacted student ability to process and retain course material. This feedback is particularly important given the interdisciplinary nature of the course, the number of guest speakers (practicing experts) involved, and the disparate backgrounds these experts have. Survey questions include: (1) What were your top **five** modules and why? (2) How has this course impacted you with regards to forensics (or not impacted you as the case may be)? (3) What was the most challenging thing you did and why?

(4) Who were the strongest presenters and why? Who were the weakest?

Results of these surveys will be reviewed annually by the course coordinator/lead instructor, the head of the forensic science program (Dr. Sam Stout), the director of undergrad studies (Dr. Scott McGraw), and the department chair (Dr. Clark Larsen). Gathering student feedback will allow us to modify the course as the science and technology within the forensic discipline evolve. The use of practicing experts allows us to offer a cutting edge class with the latest techniques and technology while providing opportunities for students to network with those experts. All the information gained from the direct and indirect measures will be archived as a hard copy in the Department of Anthropology main office.