



ARIZONA STATE UNIVERSITY

GENERAL STUDIES PROGRAM COURSE PROPOSAL COVER FORM

Courses submitted to the GSC between 2/1 and 4/30 if approved, will be effective the following Spring.

Courses submitted between 5/1 and 1/31 if approved, will be effective the following Fall.

(SUBMISSION VIA ADOBE.PDF FILES IS PREFERRED)

DATE 9/15/2009

1. ACADEMIC UNIT: SHESC

2. COURSE PROPOSED: ASM 275 Forensic Anthropology 3
(prefix) (number) (title) (semester hours)

3. CONTACT PERSON: Name: Christopher Stojanowski Phone: 7-0768

Mail Code: E-Mail: christopher.stojanowski@asu.edu

4. ELIGIBILITY: New courses must be approved by the Tempe Campus Curriculum Subcommittee and must have a regular course number. For the rules governing approval of omnibus courses, contact the General Studies Program Office at 965-0739.

5. AREA(S) PROPOSED COURSE WILL SERVE. A single course may be proposed for more than one core or awareness area. A course may satisfy a core area requirement and more than one awareness area requirements concurrently, but may not satisfy requirements in two core areas simultaneously, even if approved for those areas. With departmental consent, an approved General Studies course may be counted toward both the General Studies requirement and the major program of study. (Please submit one designation per proposal)

Core Areas

Awareness Areas

- Literacy and Critical Inquiry-L
Mathematical Studies-MA CS
Humanities, Fine Arts and Design-HU
Social and Behavioral Sciences-SB
Natural Sciences-SQ SG

- Global Awareness-G
Historical Awareness-H
Cultural Diversity in the United States-C

6. DOCUMENTATION REQUIRED.
(1) Course Description
(2) Course Syllabus
(3) Criteria Checklist for the area
(4) Table of Contents from the textbook used, if available

7. In the space provided below (or on a separate sheet), please also provide a description of how the course meets the specific criteria in the area for which the course is being proposed.

CROSS-LISTED COURSES: [X] No [ ] Yes; Please identify courses:

Is this multisection course?: [X] No [ ] Yes; Is it governed by a common syllabus?

Alex Brewis/Keith Kintigh

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ARIZONA STATE UNIVERSITY

Chair/Director (Print or Type)

Chair/Director (Signature)

Date:

9/22/09

## JUSTIFICATION FOR SOCIAL AND BEHAVIORAL SCIENCE DESIGNATION

ASM 275 (Forensic Anthropology) is a survey course that covers a broad range of topics detailing the role of the forensic anthropologist in the investigation of crime scenes, mass disasters and human rights cases. Through lectures and readings the student will gain a better understanding of how anthropological knowledge is used to provide insight into human behaviors and interactions in the context of criminal investigations. The class will explore the historical development of forensic anthropology, built from decades of archaeological excavations that provided a tremendous inventory of human skeletons for the development of basic observation standards. In addition, this knowledge base provides a platform for viewing the body as a partially socially constructed object imprinted with cultural information. The skeleton contains numerous clues regarding who a person was during life, as well as the circumstances of the life and death of the individual. This class also provides students with an understanding of the connection between anthropological data and method, and interpreting situations of social and legal significance. Case studies are presented throughout the course. These not only describe the role of the anthropologist in crime scene investigation but demonstrate the subtle nuances of human behavior often inferred from careful crime scene analysis. This is the basis of generating a victim and perpetrator psychological profile. Of particular relevance to social-behavioral studies are case studies presented involving mass disaster incidents, global human rights issues, historical forensic case studies, and the recovery of American servicemen from foreign wars.

Arizona State University Criteria Checklist for

**SOCIAL AND BEHAVIORAL SCIENCES [SB]**

**Rationale and Objectives**

The importance of the social and behavioral sciences is evident in both the increasing number of scientific inquiries into human behavior and the amount of attention paid to those inquiries. In both private and public sectors people rely on social scientific findings to assess the social consequences of large-scale economic, technological, scientific, and cultural changes.

Social scientists' observations about human behavior and their unique perspectives on human events make an important contribution to civic dialogue. Today, those insights are particularly crucial due to the growing economic and political interdependence among nations.

Courses proposed for General Studies designation in the Social and Behavioral Sciences area must demonstrate emphases on: (1) social scientific theories and principles, (2) the methods used to acquire knowledge about cultural or social events and processes, and (3) the impact of social scientific understanding on the world.

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

<b>ASU--[SB] CRITERIA</b>					
<b>A SOCIAL AND BEHAVIORAL SCIENCE [SB] course should meet all of the following criteria. If not, a rationale for exclusion should be provided.</b>					
YES	NO		Identify Documentation Submitted		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>1. Course is designed to advance basic understanding and knowledge about human interaction.</p>	<p><u>Syllabus weeks</u> 1, 5, 6, 8, 12, 13, 14, 15  <u>Byers text</u> 1, 2, 7, 10, 14, 16  <u>Readings:</u> Grivas and Komar 2008, Birkby et al. 2008, Berg 2008, Allaire and Mannheim 2008, Stojanowski and Duncan 2008, Park et al. 2009, Ubelaker et al. 1995, Komar and Lathrap 2008, Anderson 2008, Fulginiti 2008, Hougen 2008</p>		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>2. Course content emphasizes the study of social behavior such as that found in:</p> <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>• ANTHROPOLOGY</li> <li>• ECONOMICS</li> <li>• CULTURAL GEOGRAPHY</li> <li>• HISTORY</li> </ul> </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>• LINGUISTICS</li> <li>• POLITICAL SCIENCE</li> <li>• SOCIAL PSYCHOLOGY</li> <li>• SOCIOLOGY</li> </ul> </td> </tr> </table>	<ul style="list-style-type: none"> <li>• ANTHROPOLOGY</li> <li>• ECONOMICS</li> <li>• CULTURAL GEOGRAPHY</li> <li>• HISTORY</li> </ul>	<ul style="list-style-type: none"> <li>• LINGUISTICS</li> <li>• POLITICAL SCIENCE</li> <li>• SOCIAL PSYCHOLOGY</li> <li>• SOCIOLOGY</li> </ul>	<p><u>Syllabus weeks</u> 1, 2, 3, 5, 6, 12, 13, 14, 15  <u>Byers text</u> 1, 2, 3, 4, 5, 7, 10,  <u>Readings:</u> Grivas and Komar 2008, Ubelaker et al. 1991, Ubelaker and Sperber 1988, Birkby et al 2008, Stojanowski and Duncan 2009, Park et al. 2009, Ubelaker et al 1995, Komar and Lathrap 2008, Anderson 2008, Fulginiti 2008, Hougen 2008</p>
<ul style="list-style-type: none"> <li>• ANTHROPOLOGY</li> <li>• ECONOMICS</li> <li>• CULTURAL GEOGRAPHY</li> <li>• HISTORY</li> </ul>	<ul style="list-style-type: none"> <li>• LINGUISTICS</li> <li>• POLITICAL SCIENCE</li> <li>• SOCIAL PSYCHOLOGY</li> <li>• SOCIOLOGY</li> </ul>				

## ASU--[SB] CRITERIA

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>3. Course emphasizes:</p> <p>a. the distinct knowledge base of the social and behavioral sciences (e.g., sociological anthropological).</p> <p style="text-align: center;"><b>OR</b></p> <p>b. the distinct methods of inquiry of the social and behavioral sciences (e.g., ethnography, historical analysis).</p>	<p>Syllabus weeks 1, 2, 3, 4, 5, 6, 7, 8, 10, 11</p> <p>Byers text 1, 2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 15, 17, 18</p> <p>Readings Grivas and Komar 2008, Ubelaker et al. 1991, Connor et al 2001, Ubelaker and Sperber 1988, Birkby et al. 2008, Ubelaker 1996, Ta'ala et al. 2006, Berg 2008, Allaire and Manheim 2008, Helmer 1987, Rothwell 1995</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>4. Course illustrates use of social and behavioral science perspectives and data.</p>	<p>Syllabus weeks 2, 4, 5, 6, 7, 8, 12, 13, 14, 15</p> <p>Byers text 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, 16</p> <p>Readings: Ubelaker et al. 1991, Birkby et al. 2008, Ubelaker 1996, Ta'ala et al. 2006, Allaire and Manheim 2008, Helmer 1987, Rothwell, 1995, Stojanowski and Duncan 2009, Park et al. 2009, Ubelaker et al. 1995, Komar and Lathrap 2008, Anderson 2008, Fulginiti 2008, Hougen 2008</p>
		<p><b>THE FOLLOWING TYPES OF COURSES ARE EXCLUDED FROM THE [SB] AREA EVEN THOUGH THEY MIGHT GIVE SOME CONSIDERATION TO SOCIAL AND BEHAVIORAL SCIENCE CONCERNS:</b></p> <ul style="list-style-type: none"> <li>• Courses with primarily fine arts, humanities, literary, or philosophical content.</li> <li>• Courses with primarily natural or physical science content.</li> <li>• Courses with predominantly applied orientation for professional skills or training purposes.</li> <li>• Courses emphasizing primarily oral, quantitative, or written skills.</li> </ul>	

Course Prefix	Number	Title	Designation
ASM	275	Introduction to Forensic Anthropology	SB

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)
Course is designed to advance basic understanding and knowledge about human interaction.	The course includes numerous case studies that describe the role of the anthropologist in crime scene investigation. There is also an emphasis on how data from crime scene and skeletal analysis can be used to understand why people behave in certain fashions in certain situations. Of particular relevance to social-behavioral studies are case studies of mass disaster incidents and global human rights issues in which the work of forensic anthropologists aids in convicting war criminals, including those involved in Argentina's "Dirty War" and Pol Pot's regime in Cambodia.	<u>Syllabus weeks</u> 1, 5, 6, 8, 12 13, 14, 15 <u>Byers text</u> 1, 2, 7, 10, 14, 16 <u>Readings:</u> Grivas and Komar 2008, Birkby et al. 2008, Berg 2008, Allaire and Manheim 2008, Stojanowski and Duncan 2008, Park et al 2009, Ubelaker et al. 1995, Komar and Lathrap 20008, Anderson 2008, Fulginiti 2008, Hougen 2008
Course content emphasizes the study of social behavior such as that found in: ANTHROPOLOGY.	The class is a survey of the role of the forensic anthropologist, who main role is to use anthropological knowledge to provide insight into human behaviors and interactions in the context of criminal investigations, as well as in the context of human rights issues, mass disaster situations found in today's world, and in the context of historical situations involving an unsolved death or death in unusual circumstances.	Syllabus weeks 1, 2, 3, 5, 6, 12, 13, 14, 15 <u>Byers text</u> 1, 2, 3, 4, 5, 7, 10, <u>Readings:</u> Grivas and Komar 2008, Ubelaker et al. 1991, Ubelaker and Sperber 1988, Birkby et al 2008, Stojanowski and Duncan 2009, Park et al. 2009, Ubelaker et al 1995, Komar and Lathrap 2008, Anderson 2008, Fulginiti 2008, Hougen 2008
Course emphasizes b. the distinct methods of inquiry of the social and behavioral sciences.	Anthropologists became involved in forensic work because of the large database of human skeletal material, collected over many decades of archaeological excavation, that provides a huge amount of information about the human skeleton, including biological and cultural variation	Syllabus weeks 1, 2, 3, 4, 5, 6, 7, 8, 10, 11 <u>Byers text</u> 1, 2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 15, 17, 18 <u>Readings</u> Grivas and Komar 2008, Ubelaker et al. 1991, Connor et al 2001, Ubelaker and Sperber 1988, Birkby et al. 2008, Ubelaker 1996, Ta'ala et

	<p>therein and effects of the post-mortem environment on bone. This skeletal information can be used to determine who a person was during life, as well as the circumstances of the life and death of the individual. Anthropological data and methods are emphasized throughout the class and their applicability to legal situations.</p>	<p>al. 2006, Berg 2008, Allaire and Manheim 2008, Helmer 1987, Rothwell 1995</p>
<p>Course illustrates use of social and behavioral science perspectives and data.</p>	<p>The class gives students an understanding of the connection between anthropological data and methods, and in particular how these are used to interpret situations of social and legal significance. Numerous case studies are presented that describe the role of the anthropologist in crime scene investigation that differentiate the anthropologist's roles and perspectives from that of trained law enforcement personnel or those with a strictly medical training. This distinction demonstrates the unique perspectives that anthropologist's bring to forensic investigations by virtue of their combines natural and social science training with an emphasis on cultural understanding.</p>	<p>Syllabus weeks 2, 4, 5, 6, 7, 8, 12, 13, 14, 15                  Byers text 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, 16                  Readings: Ubelaker et al. 1991, Birkby et al. 2008, Ubelaker 1996, Ta'ala et al. 2006, Allaire and Manheim 2008, Helmer 1987, Rothwell, 1995, Stojanowski and Duncan 2009, Park et al. 2009, Ubelaker et al. 1995, Komar and Lathrap 2008, Anderson 2008, Fulginiti 2008, Hougen 2008</p>



## **ASM 275 -Forensic Anthropology (3 credits)**

**LECTURE:** T/R 9:15-10:30

**LOCATION:** Coor Hall 170

**OFFICE HOURS:** T/R 10:30-12:00

**EMAIL:** Christopher.stojanowski@asu.edu

**INSTRUCTOR:** Dr. C. Stojanowski

**OFFICE:** ANTH 310

**PHONE:** 727-0768

**TA Information:** TBA

**COURSE DESCRIPTION:** This course will discuss the role of the forensic anthropologist and skeletal biologist in medico-legal investigations. We will focus on the types of information available through skeletal analysis that can aid in legal investigations. These include: human osteology and bone biology, techniques of forensic recovery, identification of victims through skeletal and dental analysis, and reconstructing trauma in crime scene analysis. The course will cover both the legal aspects of forensic practice as well as the underlying biological or evolutionary basis for the observations made on skeletons remains. Social theoretical aspects are incorporated through discussion of the meaning of human "racial" variation and the causes of ethnic-based warfare. Finally, we will consider historical forensic case studies and the contributions of forensic anthropology to mass disasters investigations and human rights violations including victims of torture, ethnic violence, and genocide. Ongoing efforts in the recovery of GI MIA cases from the 20th century will also be considered.

**PREREQUISITE:** None

**COURSE GOALS:** The course curriculum is structured into four units each with a specific desired learning outcome. In general, the class is designed to introduce forensic practice and provide guidance on the types of work available to forensic anthropologists. The four structural units of the class are as follows:

- 1) Human Osteology and Forensic Archaeology – The student will gain a basic understanding of bone cellular and macroscopic biology and become familiar with the names of different bones in the human body; the student will also learn basics of forensic recovery in the field. A critical component of this unit is a nuanced understanding of the role of the forensic anthropologist in medico-legal contexts.
- 2) Baseline Individuation - Students will learn the variety of ways in which the list of potential matches for an unknown decedent is limited based on assessment of sex, age-at-death, stature, and ancestral affiliation. A critical component of this unit is a nuanced understanding of the complexities of forensic ancestral affiliation assessment.
- 3) Crime Scene Analysis, Trauma and Taphonomy – The student will be able to identify whether a traumatic injury was pre-, peri- or post-mortem, whether the injury was caused by sharp force,

blunt force, or projectile trauma, analyze characteristics of the weapon used, and reconstruct, where possible, the crime scene. The student will discuss the role of trauma analysis in human rights investigations.

4) Positive Identification – The student will be exposed to the myriad idiosyncratic ways that positive identification of a decedent can occur, from the standard DNA fingerprinting technology to medical and dental records comparisons and facial reconstruction. The student will be able to discuss the role of the forensic anthropologist in public outreach initiatives through discussion of biohistorical forensic consultations and articulation with the military through POW/MIA recovery efforts.

**REQUIRED TEXTBOOK:**

Steven N. Byers. *Introduction to Forensic Anthropology*, 3rd edition.

**COURSE REQUIREMENTS AND GRADING:** All students are expected to attend every class. It is expected that students will have read the assigned readings for each week BEFORE the class for which they are scheduled. Exams can be made up with an appropriate written excuse from a doctor or relevant official. Excused absences include: sickness, death in the family, incarceration or court appearance, and jury duty. Examples of unexcused absences include: oversleeping, illness of a friend, or conflict with employment outside the university. All decisions on the validity of an excused absence remain the sole discretion of the course instructor.

The course grade will be based on the average of four unit exams. No exams will be dropped. Exams will be objective in scope and include multiple choice and true/false questions based on the material covered in each section. There will also be a visual section to each exam that requires students to identify or interpret a series of images. Although each unit exam is not technically comprehensive, the course does build on previous work, and in this sense there is some continuity and overlap throughout the semester. Scantron forms will be used so please bring a pencil on exam day. I use the ASU +/- system with the following ranges. All grades will be rounded to the nearest hundredth of a decimal place (e.g., 89.99).

The grading scale is: A 93-100; A- 90-92.99; B+ 87-89.99; B 83-86.99; B- 80-82.99; C+ 77-79.99; C 70-76.99; D 60-69.99; F < 60

**COURSE CONDUCT:** Academic honesty and integrity is taken very seriously. Cheating will not be tolerated and students should feel free to inform me of such behavior without fear of reprisal and with anonymity guaranteed. Academic dishonesty includes cheating on exams, plagiarism, fabrication and falsification. Recording your notes as an mp3 file for “exam music” is cheating. Photographing the exam with cell phone, emailing to friend with book and having answers text messaged back to you is cheating.

## SCHEDULE OF CLASSES (SUBJECT TO CHANGE)

### UNIT 1: Anatomy and Forensic Archaeology

#### **Week 1**

Tuesday History of Forensic Anthropology

Thursday Bone Biology, Osteology and Anatomy

#### Readings:

- 1) Byers Chapter 1: Introduction and Historical Context of Forensic Anthropology
- 2) Byers Chapter 2: Basics of Human Osteology and Odonotology
- 3) Grivas and Komar 2008. *Kumho, Daubert, and the Nature of Scientific Inquiry: Implications for Forensic Anthropology.*

#### **Week 2**

Tuesday Bones (continued); Animal vs Human, Modern vs Ancient

Thursday Forensic Archaeology and Recovery

#### Readings:

- 1) Byers Chapter 3: Establishing the Forensic Context
- 2) Byers Chapter 4: Recovery Scene Methods
- 3) Ubelaker et al. 1991. *Differentiation of Hydrocephalic Calf and Human Calvariae*

#### **Week 3**

Tuesday Forensic Archaeology and Recovery

Thursday Time since Death and Laboratory Processing

#### Readings:

- 1) Byers Chapter 5: Estimating Time Since Death
- 2) Connor et al. 2001. *Archaeologists as Forensic Investigators: Defining the Role.*
- 3) Ubelaker and Sperber. 1988. *Alterations in Human Bones and Teeth as a Result of Restricted Sun Exposure and Contact with Corrosive Agents.*

#### **Week 4**

Tuesday **TEST 1 – Basic Anatomy, Archaeological Recovery, Context**

## **UNIT 2: Identifying the Victim**

### **Week 4**

Thursday Sexing and Aging Human Remains

#### **Readings:**

- 1) Byers Chapter 8: Attribution of Sex
- 2) Byers Chapter 9: Estimation of Age at Death

### **Week 5**

Tuesday Sexing and Aging, Stature Estimation

Thursday Human Variation and Population Affinity

#### **Readings:**

- 1) Byers Chapter 10: Calculation of Stature
- 2) Byers Chapter 7: Ancestry Estimation

### **Week 6**

Tuesday Human Variation and Population Affinity

Thursday **TEST 2 – Assessing Basic Identification**

#### **Readings:**

- 1) Byers Chapter 7: Ancestry Estimation
- 2) Birkby et al. 2008. *Identifying Southwest Hispanics Using Nonmetric Traits and the Cultural Profile*.

### **UNIT 3: Crime Scene Analysis, Trauma and Taphonomy**

#### **Week 7**

Tuesday Manner of Death- Trauma – Basic Principles, Projectile  
Thursday Manner of Death - Trauma – Blunt Force

#### **Readings:**

- 1) Byers Chapter 11: Death, Trauma, and the Skeleton
- 2) Byers Chapter 12: Projectile Trauma
- 3) Byers Chapter 13: Blunt Trauma
- 4) Ubelaker. 1996. *The Remains of Dr. Carl Austin Weiss: Anthropological Analysis*
- 5) Ta'ala et al. 2006. *Blunt Force Cranial Trauma in the Cambodian Killing Fields.*

#### **Week 8**

Tuesday Manner of Death - Trauma - Sharp Force  
Thursday Taphonomy - Intentional Mutilations, Pseudo-pathology

#### **Readings:**

- 1) Byers Chapter 14: Miscellaneous Trauma and Evidence of Torture
- 2) Byers Chapter 16: Postmortem Changes to Bone
- 3) Berg. 2008. *Probable Machete Trauma from the Cambodian Killing Fields.*
- 4) Allaire and Manheim. 2008. *Suicide by Blasting Caps: A Case Study of Rare Cranial Trauma.*

#### **Week 9**

Tuesday **SPRING BREAK**  
Thursday **SPRING BREAK**

#### **Week 10**

Tuesday **TEST 3 – Manner of Death and Taphonomy**

## **UNIT 4: Individuation, Human Rights and Mass Fatality**

### **Week 10**

Thursday Individuation – Antemortem Skeletal Conditions

#### **Readings:**

- 1) Byers Chapter 15: Antemortem Skeletal Conditions
- 2) Byers Chapter 17: Additional Aspects of Individualization

### **Week 11**

Tuesday Individuation - Addtl Aspects of Individuation

Thursday Facial Reconstruction, Forensic Odontology

#### **Readings:**

- 1) Byers Chapter 18: Identification Using Antemortem Records
- 2) Helmer. 1987. *Identification of the Cadaver Remains of Josef Mengele*
- 3) Rothwell. 1995. *Bite Marks in Forensic Dentistry: A Review of Legal, Scientific Issues.*

### **Week 12**

Tuesday Historical Case Studies

Thursday Historical Case Studies

#### **Readings:**

- 1) Stojanowski and Duncan. 2009. *Historiography and Forensic Analysis of the Fort King George "Skull": Craniometric Assessment using the Specific Population Approach.*

### **Week 13**

Tuesday Mass Disaster and Mass Fatality Investigations

Thursday Mass Disaster and Mass Fatality Investigations

#### **Readings:**

- 1) Park et al. 2009. *The Role of Forensic Anthropology in the Examination of the Daegu Subway Disaster.*
- 2) Ubelaker et al. 1995. *The Role of Forensic Anthropology in the Recovery and Analysis of Branch Davidian Compound Victims: Recovery Procedures and Characteristics of the Victims.*

### **Week 14**

Tuesday Human Rights and Forensic Anthropology

Thursday Human Rights and Forensic Anthropology

#### **Readings:**

- 1) Komar and Lathrap. 2008. *The Use of Material Culture to Establish the Ethnic Identity of Victims in Genocide Investigations: A Validation Study from the American Southwest.*
- 2) Anderson. 2008. *Identifying the Dead: Methods Utilized by the Pima County (Arizona) Office of the Medical Examiner for Undocumented Border Crossers: 2001-2006.*
- 3) Fulginiti. 2008. *Fatal Footsteps: Murder of Undocumented Border Crossers in*

*Maricopa County, Arizona.*

**Week 15**

Tuesday Human Rights/CILHI Research

Thursday Careers and Courtroom Testimony

Readings:

2) Hougen. 2008. *Torture Sequels to the Skeleton.*

**Week 16**

Tuesday **TEST 4 – Aspects of Individuation**