# **Course Form** (One form per course, lab, or recitation)

## NORTHEAST Integrated Curriculum Committee



Date:	9	/20	/20	22
Date.	J.	/ 20/	/ 20	~~

1. Contact person: Conrad Quintyn

**Phone:** 570-389-5379

Email: cquintyn@bloomu.edu

2. Department: Anthropology

Program: Anthropology, Criminal Justice & Sociology

- 3. Tracking # (For Provost office use only)
- 4. CIP# (For Provost office use only)
- 5. Select which actions you are requesting for \_X\_ Undergraduate \_\_ Graduate

 $\boxtimes$  Course Modified for Integration  $\square$  Course Not Previously Offered at any campus

6. Click modalities that the course may be offered (80% +)

 $\boxtimes$  Face-to-Face/In person  $\square$  Online (100%)  $\square$  Interactive TV  $x \square$  Multi-modal

New University	New University	New University	
Course Prefix	Course Number	Course Title	
ANTH	221	Forensic Anthropology GE	
Current University	Current University	Current University	
Course Prefix	Course Number	Course Title	
*Only list Current Courses that are equivalent to the New Course			
BU: ANTHRO	221	Forensic Anthropology	
LHU:			
MU:			

New Course for Integrated University

# 7. Will the course be seeking General Education approval?

- □ No ⊠ Yes (if yes, go to next section <u>General Education Approval- click on this link</u>)
- 8. Resources at Each Campus: List any resources, including faculty, facilities, technology, equipment, or library resources necessary at each campus listed above.

The course will be offered within load of current faculty and will be available to all three campuses. For face to face offering there are no additional resources needed beyond current classroom technology. For multi-modal offering classroom will need to be equipped with proper technology to facilitate synchronous communications with faculty member and students in-person and those students that are accessing the class remotely.

Identify on which campuses the course is intended to be offered in the integrated university (for administration use only):

|--|--|

**9.** Identify Departments/Programs/Courses impacted by changes on this form (Identify any programs/departments/courses that may be impacted by course changes. Contact programs, departments to obtain support if you are offering a course that will impact their program:

No other departments, courses, programs, campuses are impacted.

10. Indicate Semester and Year Course will be implemented: Fall semester 2023

11. Provide a rationale for how this course relates to the mission and goals of the related program:

A B.A. in Anthropology provides students with skills needed to understand social and cultural systems, and helps them develop critical thinking, analytical, problem-solving, and presentation skills necessary for professional success. The goals of the Anthropology program are to have students be able to: 1. Identify diverse worldviews, 2. Describe anthropological theories, 3. Apply ethical principles in research, 4. Conduct research, 5. Demonstrate effective communication skills, and 6) Evaluate the viability of potential solutions

Forensic anthropology is the examination of human skeletal remains for law enforcement agencies to help with the recovery of human remains, determine the identity of unidentified human remains, interpret trauma, and estimate time since death. As a scientific, applied component of biological anthropology the scientific method is used and data is critically evaluated to answer questions which will impact real world events (i.e., criminal cases and bringing closure for families) and promote informed decision-making and action.

12. Abbreviated Title (for Master Schedule, Maximum 20 spaces): FORENSIC ANT

- 13. Course Description for Catalog (Maximum 75 words -start with an action verb.): Explores the methods of biological anthropology and archaeology in the analysis of human skeletal remains resulting from unexplained deaths. Students will learn how race, sex, age, stature, and trauma are determined from the human skeleton. Special attention will be paid to the cause and manner of death in fleshed bodies so that students will take away a general knowledge of forensic pathology. Open to all students; taught by lecture and discussion; offered each semester.
- **14.** Credit(s): 3

Clock Hours: 3Lecture: hoursRecitation: hours Lab: hoursContract Hours: 3Lecture: hoursRecitation: hours Lab: hours

- **15. Prerequisites** (Courses completed prior to taking this course): None
- **16. Co-requisites** (Courses which must be taken simultaneously with other courses): None
- **17. Enrollment Restrictions** (e.g., limited to majors in program XXX, restricted from majors in program XXX, etc.):

None

**18. Repeatable:** Can this course be repeated for credit as a multi-topic class, not just for a grade change?

 $\boxtimes$  No  $\square$  Yes: How many times is the course repeatable?

- **19.** Dual-Level or Cross-Listed: Is this course dual-level?  $\Box$  Yes  $\boxtimes$  No.
- **20. Estimated Frequency of Offering:** Course will be offered every semester.
- **21. Recommended class size for student success:** *Provide the recommended class size number and a clear rationale based on accreditation guidelines, discipline standards, or pedagogical limitations.*

The recommended class size for student success is 25. This course is writing, presentation, and discussion intensive. The course involves in-depth examination of limited skeletal collections necessitating a smaller class size. The recommended class size is to meet the needs of students by allowing for meaningful classroom discussions, more personal communication, inclusion of all students in assessment of performance in formal and informal presentation settings, and working with students on a one-on-one basis, and it is based on review of students' performance.

Submit a Master Course Syllabus – (see attached)

## General\_Education\_Approval

Locate the required Curricular Theme, Program Goal, and Learning Objectives and Desired Outcomes for your selected area of this program in the <u>General Education Plan (click on this link)</u>.

**GE-1:** Select the Curricular Theme and Program Goal you are applying from the drop down below (click on the words Choose an item, then click on the arrow and select one option):

## Natural World & Technologies: Nat. World

**GE-2:** How does your course fit into the General Education *Curricular Theme and Program Goal* to which you are applying (be sure to address all of the required areas of the selected Program Goal)?

ANTH 221 will benefit the university by providing a multifaceted course that applies to a key university goal (N) that will create an educated student body prepared to work within a global world. Scientific principles will be applied in order for students to assess race, sex, age, stature, and trauma on unidentified human skeletons recovered in suspicious circumstances. With the growth of interest in forensic sciences it is anticipated that the course will provide vital training for our students.

**GE-3:** List the Course Specific SLOs that correspond to the General Education SLOs of the relevant *Curricular Theme and Program Goal* and explain how your course will meet each one of these Course Objectives. *Please be specific and use examples to align in column two and to demonstrate how this will be implemented in column three.* 

		to meet each aligned pair of General Education and Course Specific SLOs?
Students will identify the principle Image: Students will identify the principle Image: Students will identify the principle   foundational concepts of the field Tl   of forensic sciences. bit   principle tr   tc tr	Scientific Principles The student demonstrates a broad understanding of scientific principles and theories specific to the discipline and can explain their origins.	Lectures, discussions, and assigned readings will give students a basic knowledge of the foundation concepts. Formative assessment: Pre-test (not-graded) Practice tests (non-graded) Quizzes Discussion

		Exams (multiple choice/TF), short answers, essay) Cumulative final exam focus on all goals reinforced in lectures and discussions
Students will identify and categorize key biological aspects of the human skeleton	Data and Problem-Solving The student critically evaluates scientific information and/or solves problems using scientific data.	Lectures will give student an overall view of the key aspects of the human skeleton. Practical scenarios (in the forensic context) involving injury on bones in which students have to identify and state cause <u>Formative assessment</u> : Practical quizzes (lab) Discussion <u>Summative assessment</u> : Exams (multiple choice/TF) Cumulative final exam focus on all goals reinforced in lectures
Students will recognize & identify the identification features of death and trauma & their characteristic pattern on soft tissue & bone.	Data and Problem-Solving The student critically evaluates scientific information and/or solves problems using scientific data.	and discussionsLectures will give student an overall view of the key aspects of the human skeleton. Practical scenarios (in the forensic context) involving trauma on human bone or tissue in which students have to distinguish between blunt force, projectile, or sharp force trauma and state manner of deathFormative assessment: Practical quizzes (lab) DiscussionSummative assessment: Exams (multiple choice/TF)

Students will recognize & discriminate the assessment of	Data and Problem-Solving The student critically evaluates	Cumulative final exam focus on all goals reinforced in lectures and discussions Lectures will give student an overall view of the key
race, sex, age, stature, physique, & trauma on the human skeleton.	scientific information and/or solves problems using scientific data.	aspects of the human skeleton including assessment of race, sex, age. Practical scenarios (in the forensic context) involving trauma on human bone or tissue where students have identify the trauma and estimate race, sex, age using the human skeleton. <u>Formative assessment</u> : Practical quizzes (lab) <u>Summative assessment</u> : Exams (multiple choice/TF) Cumulative final exam focus on all goals reinforced in lectures and discussions

Submit the Master Course Syllabus (including assessment) in addition to this form to be considered for General Education approval.

Signatures		
Required Signatures	Name	Date
Department Chairperson	David Fazzino	9/20/2022

## By typing my name in the box above, I am electronically signing this form. Dean, ICC Chair, and President/Designee will sign to indicate approval directly in SharePoint.

#### Final status: Approved



Approved by Rogers-Adkinson, Diana

The recommended class size is acknowledged. The president (or designee of the president) retains the right to alter the class size as warranted, in support of the mission, vision and operation of the university.

## MASTER COURSE SYLLABUS

## NORTHEAST Integrated Curriculum Committee

- **1. DATE PREPARED:** 7/8/2022
- 2. **PREPARED BY:** Conrad Quintyn
- **3. DEPARTMENT:** Anthropology, Criminal Justice & Sociology **Program:** Anthropology
- 4. COURSE PREFIX & NUMBER (without space in-between): ANTH221
- 5. COURSE TITLE: Forensic Anthropology GE
- 6. CREDIT HOURS: 3
- 7. RECOMMENDED CLASS SIZE: 25
- 8. PREREQUISITES/CO-REQUISITES: None
- 9. COURSE DESCRIPTION FOR CATALOG: Explores the methods of biological anthropology and archaeology in the analysis of human skeletal remains resulting from unexplained deaths. Students will learn how race, sex, age, stature, and trauma are determined from the human skeleton. Special attention will be paid to the cause and manner of death in fleshed bodies so that students will take away a general knowledge of forensic pathology. Open to all students; taught by lecture and discussion; offered each semester.

## **10.CONTENT DESCRIPTION:** The following areas of study will be included:

- A. The Use of Forensic Science in Anthropology
  - 1. Identification of Human Remains
  - 2. Closure for Families
  - 3. Public Service
- B. Forensic Science
  - 1. Definition
  - 2. Science and the Legal System
  - 3. Evidence and Expert Witnesses
  - 4. Chain of Custody
  - 5. Forensic Specialists
  - 6. Coroner versus Medical Examiner
  - 7. Cause and Manner of Death
  - 8. Autopsy
- C. The Process of Decomposition
  - 1. Defining Death
  - 2. Estimating *Time of Death* and *Time Since Death*
  - 3. Decomposition
  - 4. Skeletonization

- 5. Environmental and Physical Conditions Affecting Decomposition Rate
- D. Forensic Anthropology
  - 1. History of Skeletal Identification
  - 2. The U.S. Army Central Identification LAB
  - 3. The Human Skeleton as Evidence
  - 4. Skeletal Recovery
  - 5. Skeletal Inventory
- E. Assessing the Skeletal Remains
  - 1. Forensic Anthropology Techniques: Non-Metrics versus Metrics
  - 2. Biological Identity
  - 3. Social Identity
  - 4. 'Race' (Ancestry) Estimation
  - 5. Sex Estimation
  - 6. Age Estimation
  - 7. Stature Estimation
- F. Evidence of Trauma
  - 1. Antemortem (Premortem)
  - 2. Perimortem
  - 3. Postmortem damage
  - 4. Blunt Force
  - 5. Sharp Force
  - 6. Projectile (Bullets, Arrows, etc.)
  - 7. Miscellaneous
- G. Reconstructing Identity
  - 1. Facial Reconstruction

**11. & 12. TABLE: STUDENT LEARNING OBJECTIVES AND STUDENT ASSESSMENT.** Use the Table below to document the outcomes and assessment for the course. *If this is a General Education course, be sure to complete the second column as well, it if is not a General Education course, you can leave the 2<sup>nd</sup> column blank.* 

If General Education: Select the *Curricular Theme* and *Program Goal* you are applying from the drop down below directly as done on the Course Form above (*click on the words Choose an item, then click on the arrow and select one option*):

Natural World & Technologies: Nat. World

11. Course Specific Student Learning Objectives (SLOs)	General Education Student Learning Objectives ( <i>Complete</i> <i>this column for GE courses</i> <i>only</i> )	<b>12. Student Assessment</b> Include assessment(s) and whether they are suggested or mandated (e.g., to comply with accreditation or as a minimum standard)
Students will identify the principle foundational concepts of the field of forensic sciences.	Scientific Principles The student demonstrates a broad understanding of scientific principles and theories specific to the discipline and can explain their origins.	Lectures, discussions, and assigned readings will give students a basic knowledge of the foundation concepts. <u>Formative assessment</u> : Pre-test (not-graded) Practice tests (non-graded) Quizzes Discussion <u>Summative assessment</u> : Exams (multiple choice/TF), short answers, essay) Cumulative final exam focus on all goals reinforced in lectures and discussions
Students will identify and categorize key biological aspects of the human skeleton	Data and Problem-Solving The student critically evaluates scientific information and/or solves problems using scientific data.	Lectures will give student an overall view of the key aspects of the human skeleton. Practical scenarios (in the forensic context) involving injury on bones in which students have to identify and state cause <u>Formative assessment</u> : Practical quizzes (lab) Discussion <u>Summative assessment</u> : Exams (multiple choice/TF) Cumulative final exam focus on all goals reinforced in lectures and discussions

Students will recognize &	Data and Problem-Solving	Lectures will give student an
identify the identification	The student critically evaluates	overall view of the key
features of death and trauma &	scientific information and/or	aspects of the human
their characteristic pattern on	solves problems using scientific	skeleton. Practical scenarios
soft tissue & bone.	data.	(in the forensic context)
		involving trauma on human
		bone or tissue in which
		students have to distinguish
		between blunt force,
		projectile, or sharp force
		trauma and state manner of
		death.
		Formative assessment:
		Practical quizzes (lab)
		Discussion
		Summative assessment:
		Exams (multiple choice/TF)
		Cumulative final exam focus
		on all goals reinforced in
		lectures and discussions
Students will recognize &	Data and Problem-Solving	
Students will recognize & discriminate the assessment of	Data and Problem-Solving The student critically evaluates	Lectures will give student an
Students will recognize & discriminate the assessment of race, sex, age, stature, physique,	Data and Problem-Solving The student critically evaluates scientific information and/or	Lectures will give student an overall view of the key
Students will recognize & discriminate the assessment of race, sex, age, stature, physique, & trauma on the human skeleton	Data and Problem-Solving The student critically evaluates scientific information and/or solves problems using scientific	Lectures will give student an overall view of the key aspects of the human
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	Cumulative final exam focus on all goals reinforced in lectures and discussions

\*Note- Rows can be added

## 13. METHODS:

This course is offered as a lecture/discussion course, using other materials and techniques such as films, videos, and Power Point slides, and fossil skull casts as appropriate. To facilitate discussion the proposed class size is 25 students. The course is offered every fall and spring semester.

Distance Education Setting: This course may be taught online using synchronous methods based on the instructor. Techniques may include using D2L (BOLT) combined with Zoom (i.e., whiteboard, chat, polling, yahoots, breakout rooms, YouTube videos, etc.). Discussions and homework exercises will be posted via D2L. A computer (desktop, laptop, tablet, etc.), personal smart phone, Microsoft Office (Word, PowerPoint, Excel, and Access) and reliable Internet are required. Exams will be given via D2L.

## **14. COURSE ASSESSMENT:**

The department collects departmental-developed rubrics and/or results on exam items across all sections of the course, both distance and in-class learning each semester. The Department will utilize a bank of questions that will serve to assess student learning objectives through the strategy of embedded questions on exams (test blueprinting). The question bank will be developed from contributions by department faculty members and will be large enough for faculty to select questions that vary from individual to individual and semester to semester, but at the same time test each of the four objectives in a reasonably consistent measurable manner. Each student learning objective will have its own set of questions. For each of the objectives, three to five embedded questions will be utilized on exams throughout the semester to test overall knowledge acquisition. Embedded question data is reported to the department outcomes assessment committee within 30 days of the final day of the semester. The data for all sections will be statistically analyzed and summarized into one data set for assessment purposes. The assessment data assists in identifying changes needed to the course to ensure greater student attainment of the Student Learning Objectives.

The assessment results will be utilized to assist our program outcomes and general education goals as well as helping in long-term planning for curriculum and development. Data from course assessment will be transmitted to the university Office of Planning and Assessment.

**15. SUPPORTING MATERIALS- SAMPLE TEXTS (Recommended):** Listed below are some of the materials which might be used in the course development but course materials are not limited to the following references. The following list includes both historical materials and more recent references (\*holdings available in the Andruss, North Hall, and Stevenson Libraries).

Adams, D. M. and Pilloud, M. A. (2021). The (mis)appropriation of biological anthropology in race science and the implications for Forensic Anthropology. *Forensic Anthropology, Gainesville* 4: 97-118.

Alves-Cardoso, F. and Campanacho, V. (2022). The scientific profiles of documented collections via publication data: past, present, and future directions in forensic anthropology. *Forensic Sciences* 2: 37-56.

Austin-Smith, D. and Maples, W.R. (1994). The reliability of skull/photograph superimposition in individual identification. *Journal of Forensic Sciences* 39:446-455.

\*Baden, M. (1989). Unnatural Death: Confessions of a Medical Examiner. New York: Random House.

Bass, W.M. (1997). Outdoor decomposition rates in Tennessee. In *Forensic Taphonomy*, edited by W. D. Haglund and M.H. Sorg, pp. 181-186. New York: CRC Press.

\*Bell, S. (2004). *Encyclopedia of Forensic Science*. New York: Facts on File.

\*Benecke, M. (2005). *Murderous Methods: Using forensic Science to Solve Lethal Crimes.* New York: Columbia University Press.

Berryman, H.E. and Symes, S.A. (1998). Recognizing gunshot and blunt cranial trauma through fracture interpretation. In *Forensic Osteology: Advances in the Identification of Human Remains.* 2nd ed. edited by K. 1. Reichs. Springfield, IL: Charles C. Thomas.

Bethard, J. D. and DiGangi, E. A. (2020). Moving Beyond a lost cause: Forensic Anthroplogy and ancestry estimates in the United States. *Journal of Forensic Sciences* 65: 1791-1792.

\*Binford, L.R. (1981). Bones: Ancient Men and Modern Myths. New York: Academic Press.

\*Black, Sue and Eilidh Ferguson (2011). Forensic Anthropology: 2000 to 2010. New York: Taylor & Francis.

Bramanti, B. et al. (2020). An investigative strategy for assessment of injuries in forensic anthropology. Legal Medicine 42: 10-16.

Buikstra, J.E., Gordon, C.C., and St. Hoyme, L. (1984). The case of the severed skull: Individuation in Forensic Anthropology. In *Human Identification: Case Studies in Forensic Anthropology*, edited by TA. Rathbun and J.E. Buikstra, pp.121-135. Springfield, IL: Charles C. Thomas.

Bums, K.R. (1999). *Forensic Anthropology Training Manual*. Upper Saddle River, NJ: Prentice Hall.

\*Byers, S.N. (2010). Introduction to Forensic Anthropology. New Jersey: Prentice-Hall.

Curran, B.K. (1990). The application of measures of mid facial projection for racial classification. In *Skeletal Attribution of Race*, edited by G.W. Gill and J.S. Rhine, pp. 55-57. Anthropological Papers 4, Maxwell Museum of Anthropology, Albuquerque, NM.

Galera, V., Ubelaker, D.J-I., and Hayek, L.A. (1998). Comparison of macroscopic cranial methods of age estimation applied to skeletons from the Terry Collection. *Journal of Forensic Sciences 43 :933-939.* 

Haglund, W.O. (1993). Disappearance of soft tissue and the disarticulation of human remains from aqueous environments. *Journal of Forensic Sciences* 38:806-81.

Haglund, W.O. and Sorg, M.I-I. (1997). *Forensic Taphonomy: The Postmortem Fate of Human Remains*. New York: CRC Press.

\*Huber, P.W. (1991). *Galileo 's Revenge: Junk Science in the Courtroom*. New York: BasicBooks.

Iscan, M.Y. and Cotton, TS. (1990). Osteometric assessment of racial affinity from multiple sites in the postcranial skeleton. In *Skeletal Auribution of Races: Methods for Forensic Anthropology*, edited by G.W. Gill and S. Rhine, pp. 83-90. Anthropological Papers No.4. Albuquerque: Maxwell Museum of Anthropology.

\*James, S.H. and Nordby, J.J. (2005). *Forensic Science: An Introduction to Scientific and Investigative Techniques.* New York: Taylor & Francis Group.

Jason, D.R. and Taylor, K. (1995). Estimation of stature from the length of the cervical, thoracic, and lumbar segments of the spine in American whites and blacks. *Journal of Forensic Sciences* 40:59-62.

\*Kirby, L.T. (1990). DNA Fingerprinting: An Introduction. New York: Stockton Press.

Klales, A. (2020). Sex Estimation of the Human Skeleton: History, Methods, and Emerging Techniques. Cambridge, MA: Academic Press.

\*Lee, H. C. (2002). *Cracking cases: the science of solving crimes.* New York: Prometheus Books.

\*Lee, H.C. and O'Neill, TW. (2004). *Cracking More Cases: The Forensic Science of Solving Crimes.* New York: Prometheus Books.

\*Lee, H.C., Palmbach, TM., and Miller, M.T. (2001). *Henry Lee's Crime Scene Handbook*. Boston: Academic Press.

\*Manhein, M.H. (2005). *Trail of Bones: More Cases from the Files of a Forensic Anthropologist.* Baton Rouge: Louisiana State University Press.

McCrery, N. (2014). *Silent Witness: The Often Gruesome but Always Fascinating History of Forensic Science*. Chicago, IL: Chicago Review Press.

Nafte, M. and Dalrymple, B. (2011). Crime and Measurement: Methods in Forensic Investigation. Durham, NC: Carolina Academic Press.

Peterson, B.L. (1991). External beveling of cranial gunshot entrance wounds. *Journal of Forensic Sciences* 36:1592-1595.

Pickering, R.B. and Bachman, D.C. (1997). *The Use of Forensic Anthropology*. Boca Raton, FL: CRC Press.

Prag, J. and Neave, R. (1997). *Making Faces: Using Forensic and Archaeological Evidence*. College Station, TX: Texas A&M University Press.

Randall, B. (1991). Body retrieval and morgue operations at the crash of United Flight 232. *Journal of Forensic Sciences, 36:403-409.* 

Reichs, KJ. (1998). Postmortem dismemberment: recovery, analysis and interpretation. In *Forensic Osteology Advances in the Identification of Human Remains,* edited by K.J.Reichs, pp. 353-387. Springfield, IL: Charles C. Thomas.

\*Robertson, J. (1999). *Forensic Examination of Hair.* Philadelphia: Taylor & Francis.

Ross, AH. (1996). Caliber estimation from cranial entrance defect measurements. *Journal of Forensic Sciences* 41:629-633.

Tallman, S. et al. (2021). Assumed differences; unquestioned typologies: The oversimplification of race and ancestry in forensic anthropology. *Forensic Anthropology; Gainesville* 4: 73-96.

Ubelaker, D. H. and Wu, Yaohan (2020). Fragment analysis in forensic anthropology. *Forensic Sciences Research* 5: 260-265.

Ubelaker, D. H. and DeGaglia (2020). The impact of scavenging: perspective from casework in forensic anthropology. *Forensic Sciences Research* 5: 32-37.

Ubelaker, D. H. (2021). Research integrity in forensic anthropology. *Forensic Sciences Research* 6: 285-291.

16. Prototype Text: May include, but not be limited to:

Ferlini, R. (2012). *Silent Witness: How Forensic Anthropology is Used to Solve the World's Toughest Crimes.* 2nd ed. Buffalo: Firefly Books Inc.

Nafte, M. (2016). *Flesh and Bone: An Introduction to Forensic Anthropology*. 3rd ed. Durham: Carolina Academic Press.

Steadman, D.W. (2009). *Hard Evidence: Case Studies in Forensic Anthropology.* Upper Saddle River: Prentice Hall.

Indicate possible recommended texts for the course where appropriate, including author/editor, title, publisher, edition, and date of publication. The style of entry should consistently follow a manual such as Turabian, MLA, APA, or an accepted guide in a specific discipline.