

**STATE UNIVERSITY OF NEW YORK  
COLLEGE OF TECHNOLOGY  
CANTON, NEW YORK**



**MASTER SYLLABUS**

**JUST 413 – METHODS OF HUMAN SKELETAL IDENTIFICATION**

**Created by: Carrie LeGarde  
Updated by:**

**SCHOOL OF SCIENCE, HEALTH, AND CRIMINAL JUSTICE  
CRIMINAL JUSTICE DEPARTMENT  
SPRING 2020**

- A. **TITLE:** Methods of Human Skeletal Identification
- B. **COURSE NUMBER:** JUST 413
- C. **CREDIT HOURS:** 3 – 3 hours lecture / week
- D. **WRITING INTENSIVE COURSE:** No
- E. **GER CATEGORY:** N/A
- F. **SEMESTER(S) OFFERED:** Spring
- G. **COURSE DESCRIPTION:** This course provides an overview of human skeletal identification methods, such as biological profile, radiographic comparison, craniofacial superimposition, stable isotopes, and DNA. The applicability of these methods in forensic, human rights, and mass disaster contexts is explored.
- H. **PRE-REQUISITES/CO-REQUISITES:**
- a. Pre-requisite(s): Completion of 45 credit hours or permission of instructor.  
 b. Co-requisite(s): None.
- I. **STUDENT LEARNING OUTCOMES:**

| <b><u>Course Student Learning Outcome [SLO]</u></b>                       | <b><u>PSLO</u></b>  | <b><u>GER</u></b> | <b><u>ISLO</u></b> |
|---|---|-------------------|--------------------|
| a. Evaluate and apply the biological profile                              | PL0 2. Students will be able to apply the scientific methods to analyze and compare physical evidence to determine its properties and possible origin |                   | 2. IA              |
| b. Research radiographic and superimposition methods.                     | PL0 2. Students will be able to apply the scientific methods to analyze and compare physical evidence to determine its properties and possible origin |                   | 2. IA              |
| c. Explain stable isotopes and geolocating.                               | PL0 3. Students will be able to identify, analyze and utilize various techniques used in a criminal investigation                                     |                   | 2. IA              |
| d. Analyze types of DNA from bone and utilizing family reference samples. | PL0 3. Students will be able to identify, analyze   |                   | 2. IA              |

|  |   |  |  |
|--|---|--|--|
|  | and utilize various techniques used in a criminal investigation |  |  |
|--|---|--|--|

| KEY    | <u>Institutional Student Learning Outcomes [ISLO 1 – 5]</u>   |
|--------|---|
| ISLO # | ISLO & Subsets  |
| 1      | <b>Communication Skills</b><br>Oral [O], Written [W]  |
| 2      | <b>Critical Thinking</b><br><i>Critical Analysis [CA], Inquiry &amp; Analysis [IA], Problem Solving [PS]</i>                    |
| 3      | <b>Foundational Skills</b><br><i>Information Management [IM], Quantitative Lit./Reasoning [QTR]</i>                             |
| 4      | <b>Social Responsibility</b><br><i>Ethical Reasoning [ER], Global Learning [GL], Intercultural Knowledge [IK], Teamwork [T]</i> |
| 5      | <b>Industry, Professional, Discipline Specific Knowledge and Skills</b>   |

J. **APPLIED LEARNING COMPONENT:** Yes \_\_\_\_\_ No X \_\_\_\_\_

K. **TEXTS:**

Christensen, A. M., Passalacqua, N. V., & Bartelink, E. J. (2013). *Forensic anthropology: Current methods and practice*. San Diego, CA: Academic Press. [E-Book free from library]

L. **REFERENCES:**

M. **EQUIPMENT:** None

N. **GRADING METHOD:** A-F

O. **SUGGESTED MEASUREMENT CRITERIA/METHODS:**

- a. Assignments
- b. Quizzes
- c. Exams

**P. DETAILED COURSE OUTLINE:**

- I. Introduction
  - A. Applications of human skeletal identification
- II. Biological Profile
  - A. Introduction and application
  - B. Assessing sex
  - C. Assessing ancestry
  - D. Estimating age
  - E. Estimating stature
  - F. Trauma
- III. Radiographic and Superimposition Methods
  - A. Frontal sinuses and other methods
  - B. Clavicles and chest radiograph comparison
  - C. Craniofacial superimposition
  - D. Facial reconstruction
- IV. Stable Isotopes
  - A. Overview of isotopes and testing
  - B. Archaeological applications and geolocating
- V. DNA
  - A. Types of DNA from bone
  - B. Family reference samples
- VI. International Studies and Mass Disasters
  - A. International Advances and Cases Studies in Human Identification
  - B. Human Rights and Disaster Victim Identification

**Q. LABORATORY OUTLINE: n/a**