

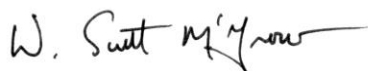
December 16, 2022

Dear Colleagues and Curricular Committee Members,

On behalf of the Department of Anthropology, I am pleased to present a proposal for an undergraduate major in Forensic Anthropology. The major, leading to the Bachelor of Science degree, fills a long-standing gap in our undergraduate curriculum and will be the first of its kind in the nation. The program capitalizes on the many elements of forensic expertise already present at OSU and prepares students either for advanced study or the growing number of employment opportunities within the forensic realm.

The demand for a dedicated major in Forensic Anthropology has never been greater. We hope you agree the program we've constructed will expand the career prospects of our undergraduates, strengthen the overall quality of the Department of Anthropology, and enhance the reputation of our university. Thank you for your consideration.

Sincerely,



W. Scott McGraw
Professor and Chair

December 16, 2022

Dr. Scott McGraw
Professor and Chair
Department of Anthropology

Re: Forensic Anthropology major

Dear Dr. McGraw,

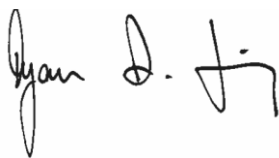
I write to express my enthusiastic support for the proposed Bachelor of Science in Forensic Anthropology. As you know from our prior conversations, I have supported this effort since you brought it to my attention during my first year as Divisional Dean. This new major will add distinction to the Department of Anthropology and to The Ohio State University. We are poised to be the first institution to offer an undergraduate degree in Forensic Anthropology.

I am particularly appreciative of the academic plan and the smart use of existing infrastructure and human capital on campus. As you state in the proposal, OSU already has the resources needed to offer an elite program in forensic anthropology, and with the addition of this major, OSU can set the standard for training future practitioners in the field.

I also want to pledge my financial support for the Forensics Lab, which is certain to enhance the student experience by allowing for hands-on activities and lab work. The pledged amount will be no less than \$20,000 if resources are needed for supplies and equipment.

I again thank you and your team for taking this idea from vision to action. I look forward to this program coming to fruition, and I am particularly excited to hear from the students as they take advantage of this unique opportunity that can only be found at Ohio State.

Sincerely,



Ryan D. King
Dean of Social and Behavioral Sciences
College of Arts and Sciences



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December 13, 2022

W. Scott McGraw
Professor and Chair
Department of Anthropology
4042 Smith Laboratory, 174 W. 18th Avenue
Columbus, OH 43210

Re: Support for proposed major in Forensic Anthropology

Dear Dr. McGraw:

I write to express my support for the proposed Bachelor of Science in Forensic Anthropology. This new major will build on existing strengths and resources in the Department of Anthropology and elsewhere at Ohio State to offer our students an innovative pathway to a growing career. The proposal is thoughtful and informative. The new major promises to be a significant asset in our undergraduate curriculum.

I concur with the Forensic Anthropology proposal and support its approval.

Respectfully,

Norman W. Jones
Professor of English
Vice Provost and Dean for Undergraduate Education



College of Arts and Sciences

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December 14, 2022

Dr. McGraw, Chair
Department of Anthropology

Dear Scott:

I am delighted that our department is moving forward with a new major in Forensics. The Undergraduate Studies Committee has reviewed the proposal and fully endorses this new major. This will be an exciting addition to our program.

Sincerely,

Debbie Guatelli-Steinberg, Ph.D.
Professor and Undergraduate Studies Chair
Department of Anthropology

Proposal for a major in Forensic Anthropology

Department of Anthropology
College of Arts and Sciences

Executive Summary

- Student interest in forensic anthropology is high and expected to continue growing.
- All curricular components for a Forensic Anthropology major exist.
- Personnel required to support the major are already at OSU (e.g., Department of Anthropology, School of Health and Rehabilitation Sciences in the College of Medicine).
- Development of a dedicated forensic anthropology laboratory is underway.

1. General Information

- a) Name of proposed major: ***Forensic Anthropology***
- b) Degree students completing the major will receive: ***Bachelor of Science***
- c) Proposed implementation date: ***Autumn Semester 2023***
- d) Academic units responsible for administering the major program: ***College of Arts and Sciences; Department of Anthropology***

2. Rationale

The Department of Anthropology at The Ohio State University proposes a new baccalaureate major called *Forensic Anthropology*. It consists of one curricular track culminating in the Bachelor of Science degree.

Forensic Anthropology is the application of the anatomical science of biological anthropology and osteology to aid in the recovery, analysis, and identification of human remains within medicolegal contexts. This specialized field is an applied area of biological anthropology, combining the science, methods, and technologies of biological anthropology with archaeology, taphonomy, and other related fields (e.g., forensic pathology, dental anthropology, medical anthropology, biomedical engineering, etc.). While there are multiple universities that offer undergraduate degrees with a concentration or a minor in forensic science or forensic anthropology, *there are currently no institutions in the United States that offer undergraduate degrees in Forensic Anthropology*. An undergraduate major in forensic anthropology would immediately put The Ohio State University at the forefront of forensic anthropology education.

Forensic anthropologists are increasingly consulted to oversee excavation and/or recovery of human remains, conduct analyses of unidentified human remains, and interpret skeletal trauma. Traditionally, forensic anthropologists occupied positions in academic institutions and consulted for medical-examiners or coroners; however, current trends reveal that an increased number of forensic anthropology positions are associated with the federal government and local medical-examiner/coroner offices, in addition to those housed in colleges and universities.

The role of forensic anthropologists continues to expand. According to the Bureau of Labor Statistics, the career outlook for anthropologists is expected to grow by 7% between 2022 and 2030. The demand for positions commonly occupied by forensic anthropologists is predicted to grow at even greater rates (e.g., Death Investigations and Crime Scene Technicians are expected to grow 17% by 2026 and an additional 16% by 2030, respectively). Reflecting these labor demand increases, a 2021 study reported that academic programs with forensic anthropology undergraduate concentrations resulted in higher anthropology major enrollments and graduation rates (¹Passalacqua et al, 2021). As of 2021, programs introducing forensic anthropology concentrations saw at least a 45% increase in major enrollment (nb: one program saw a 181% increase). The same study found that students specializing in forensic anthropology accounted for more than half the majors within departments of anthropology (¹Passalacqua et al., 2021).

Remarkably, despite this demand, no institution in the US currently offers an undergraduate degree in forensic anthropology. By creating a major that combines superior training with individualized, hands-on forensic anthropological experiences, OSU will expand the career prospects of its undergraduates, make them more competitive for acceptance into elite graduate programs in forensic sciences, strengthen the overall quality of the Department of Anthropology, and enhance the reputation of the university. The Forensic Anthropology major will prepare our students for careers in the medicolegal field (e.g., Death Investigator, Morgue Technician) and/or graduate or professional study opportunities. Students with a B.S. in Forensic Anthropology from OSU will have a strong foundation in anthropological research, forensic methods, and applications, as well as advanced hands-on training, which is a rare opportunity for undergraduates.

A Forensic Anthropology major will contribute to Ohio State's commitment to providing undergraduate students with research experiences by training them in research methods and linking them with research experiences on campus, in the community (e.g., Franklin County Forensic Science Center, Montgomery County Coroner's Office, Miami Valley Regional Crime Laboratory), and internationally (e.g., field schools and study abroad experiences). A Bachelor of Science in Forensic Anthropology from OSU will give students an advantage in terms of acceptance to competitive graduate programs and success in obtaining employment.

The Department of Anthropology at The Ohio State University is well-positioned to provide a Forensic Anthropology B.S. program. The department has a national reputation in biological anthropology; numerous graduates from OSU's PhD program are currently employed as forensic anthropologists in government and academic positions. The faculty is composed of experts in human osteology, skeletal biology, dental anthropology, bone histology, anatomy, bioarchaeology, growth and development, biological anthropology, medical anthropology, and forensic anthropology. The educational foundation for a highly successful forensic anthropology major is already present within the Department of Anthropology and through its interdisciplinary connections with departments, schools, and colleges across OSU (e.g., Department of EEOB, Department of Sociology, School of Health and Rehabilitation Sciences, College of Medicine, etc.). Additionally, the team of faculty and staff involved with Forensic Anthropology major will

¹ Passalacqua NV & MA Pilloud (2021) The need to professionalize forensic anthropology. *European Journal of Anatomy* 25:35-47.

contribute to the multidisciplinary education of students and have a large community network and associated resources to provide educational and professional opportunities outside of the classroom.

3. Goals/Objectives and Evaluation of the Program

I. Assessment Plan for the Forensic Anthropology Major

Our assessment plan for the Forensic Anthropology major focuses on three areas:

1. Measurable student learning outcomes
2. Student engagement in and beyond the classroom
3. Continued enhancement of student learning and preparedness for professional appointments in forensic science positions (e.g., Death Investigations, Crime Scene Technicians) and in academic ventures (e.g., graduate placement)

II. Learning Goals for the Forensic Anthropology Major

Upon completion of the B.S. degree in Forensic Anthropology, students should be able to:

1. Exhibit comprehensive knowledge of the field of forensic anthropology (human osteology, distinguishing human vs nonhuman remains, biological profile, trauma analysis, academic and case work applications, multidisciplinary application of forensic anthropology, history and future of forensic anthropology) and acquire foundational knowledge of the theoretical perspectives and concepts of the discipline as they pertain to skeletal research and forensic case work (e.g., development of a biological profile [e.g., assessment of age-at-death, population affinity, sex, stature], analysis of skeletal trauma).
2. Understand and evaluate research methods (e.g., biological profile research), research designs (e.g., experimental vs case study approaches to skeletal trauma), and statistical approaches (e.g., critically evaluate different analytical methods utilized in forensic anthropology) and be provided with opportunities to conduct research relevant to forensic anthropology.
3. Demonstrate a strong educational and training foundation in forensic anthropology in support of search for employment or graduate/professional training.
4. Demonstrate information and scientific literacy, as well as communication skills amongst peers, professionals, and individuals within and outside of the medicolegal community.
5. Recognize the role of forensic anthropologists in the medicolegal community.

III. Evidence of Acquisition of Learning Goals

a) Direct Measures

1. Standardized Tests and Classroom Assignments – Learning Goals 1–5
 - a. Evidence that majors have mastered the stated learning goals of the individual courses, including mastery of foundational knowledge and core concepts, will be assessed using traditional evaluative methods. Depending on structure and class size of individual courses, these methods will include: exams, quizzes, papers, and projects. Material covered in the core courses provides a foundation for advanced coursework within the B.S. degree program.

- b. As with the core courses, we will use a variety of traditional evaluative methods to assess students' knowledge acquisition in upper division courses. Evaluative methods will be congruent with class content and will include at least one of the following: exams, quizzes, papers, and projects.
2. Evaluation of a Body of Work Produced by the Student – Learning Goals 2–5
 - a. Students will have a variety of opportunities to understand, evaluate, and conduct research via undergraduate theses, capstone reports/presentations, internships, field schools, etc. Their body of work will be evaluated via thesis defenses, presentations at local and national conferences, and presentations of projects to peers.

b) Indirect Measures

1. Surveys and Interviews – Learning Goals 3, 5
 - a) The Forensic Anthropology Advising Committee will conduct pre- and post-course questions and maintain a database on student performance. The questions will consist of self-assessments that relate to education, training, and professional development. The committee will review data annually to monitor student learning and will use assessed performances to adjust the program and ensure learning goals for individual courses and the B.S. degree are being met.
 - b) All graduating seniors in the Forensic Anthropology major will be administered a questionnaire inquiring about their experiences with a focus on coursework, research opportunities, and perceived preparedness for future study or in the job market. This will be incorporated into the ASC exit interview and will be used to further enhance the major.

IV. Criteria to Evaluate Successful Student Learning

- Outcomes, descriptions, assessment methods, and criteria for evaluating the success of student learning are summarized in the table below
- After data collection, data analysis, interpretation, and sharing will be conducted
 - ▲ Analysis, Interpretation, and Data Sharing
 - After data are collected from a sufficient number of students, the data will be entered into TracDat, analyzed, and summarized.
 - Annual meetings with faculty, staff, and students will be scheduled to review and discuss the results.
- Modifications and improvements will be determined based on the data analysis and interpretations of the status of successful student learning
 - ▲ Modifications and Improvement
 - The faculty will meet annually to discuss ways in which student learning can be improved.

- If modifications are made to the program, faculty will make appropriate adjustments to the assessment process.

Outcome	Description	Assessment Method	Criteria
Knowledge	Exhibit comprehensive knowledge of the field of forensic anthropology (e.g., human osteology, human vs nonhuman, biological profile, trauma analysis) and acquire a grasp of the theoretical perspectives and concepts of the discipline	Standardized Tests and Classroom Assignments in Introductory and Core Courses	≥75% will pass introductory and core courses with a B- or higher demonstrating comprehensive knowledge of forensic anthropology
Scientific Research	Understand and evaluate research methods, designs, and statistical procedures and have opportunities to conduct research	Standardized Tests and Classroom Assignments in Upper Division Courses	≥75% will pass practical training and applications to upper division forensic anthropology courses with a B- or higher demonstrating comprehension of research and analytical methods
		Students will compose a two page critique of the research methods and applications in papers read in three classes.	≥75% will achieve a score of 3 in a 4-point rubric developed to measure the success of achieving a research milestone
Professional Development	Demonstrate knowledge of job preparation and application process.	Students will prepare their CVs and job application letters and do peer evaluations of these.	≥80% will achieve a score of 3 in a 4-point *rubric developed to measure the effectiveness of the CV and letter.
Scientific Communication	Demonstrate information and scientific literacy, as well as communication skills amongst peers, professionals, and individuals within and outside of the medicolegal community	Students will compose a (a) case report for coroner review and (b) press release for public dissemination.	≥75% will achieve a score of 3 in a 4-point *rubric developed to measure the success of students communicating (a) to other scientists and (b) the public.
Synthesis	Recognize the role of forensic anthropologists in the medicolegal community and understand educational/training requirements to work as a forensic anthropologist	Rubric evaluating performance in community involvement or interdisciplinary applications.	≥80% will achieve a 3 in a 4-point rubric developed to evaluate the perceived success of the program in preparing students for the future job market or graduate school

V. Timeline for Implementation of Assessment Plan

- a) Standardized Tests and Classroom Assignments
 - i. Data from current courses will be reviewed and data from new courses will begin collection the first semester of the new major.
- b) Evaluation of a Body of Work Produced by the Student
 - i. Administered annually beginning with the first students to produce bodies of work.
 - ii. Assessed by the students' advisor and committee members
- c) Surveys and Interviews
 - i. Pre- and Post- Course Questionnaires: Administered each semester beginning with the first semester of students enrolled in the Forensic Anthropology major.
 - ii. Graduating Senior Questionnaire: Administered annually beginning with the first graduating students.

4. Relationships to Other Programs / Benchmarking

Current Major and Minor Anthropology Programs

The Department of Anthropology currently offers majors in Anthropology (BA), Anthropological Sciences (BS), and Medical Anthropology (BA and BS). The overall goal of these majors is to prepare students for employment (or continued study in graduate school) that combines critical thinking, communication, and analytical skills with an understanding of human diversity in both time and space. These goals also lie at the core of the Forensic Anthropology major. In addition to the learning goals stated above, this program supports the following educational and career goals of students.

Higher Education Goals for the Forensic Anthropology Major

1. Prepare students for graduate school through the development of key concepts and foundational knowledge in forensic anthropology.
2. Provide students with hands-on learning opportunities to begin developing the skillsets critical to applying forensic anthropological methods.
3. Support individualized education with course selections that allow for advanced study in specific areas to reflect the students' interests and higher educational pursuits.

Career Goals for the Forensic Anthropology Major

1. Prepare students for immediate employment in the medicolegal community by providing training in directly applicable knowledge and skills.
2. Support direct college-to-career paths for students in the following areas: morgue attendant, medicolegal death investigator, forensic photographer, and similar medicolegal positions.

3. Provide a strong foundation for students to continue their training by entering graduate programs to ultimately enter academia, government, or industry jobs.

The Department of Anthropology also offers minors in (a) Forensic Science and (b) Anthropology, the latter which has three tracks: Archaeology, Cultural, and Biological (Physical) Anthropology. Students enrolled in the Forensic Anthropology major will not be able to minor in either (a) Forensic Science or (b) the Anthropology-Biological (Physical) track, due to course overlap between these programs. Forensic Anthropology majors will be able to minor in the Archaeological or Cultural tracks of the Anthropology minor. The Forensic Science and Biological (Physical) Anthropology minors provide students interested in supplementing their major(a) a way to incorporate forensic or anthropological knowledge to support their educational foundation; however, it stops short of providing comprehensive exposure and training across the breadth of forensics. A forensic anthropology major would do so, and support students interested in pursuing careers in the medicolegal field or continuing in a graduate or professional program directly related to forensic anthropology. Students majoring in Forensic Anthropology would likely be drawn from both existing academic programs and outside of the university. The estimated mix of students entering the major internally and externally is 40% and 60%, respectively.

The Department of Anthropology also offers a *Forensic Anthropology Certificate*, which is open to any current Ohio State undergraduate student or any post-high school diploma certificate. This certificate is comprised of 16 credit-hours and introduces students to the methods, practices, and ethical considerations surrounding osteological and bioarchaeological analyses. The certificate provides an opportunity for students enrolled in other majors at OSU and individuals outside of the OSU system to gain introductory education and training in forensic anthropology. OSU students pursuing the Forensic Anthropology major will not be eligible to earn the Forensic Anthropology certificate as certificate courses are all components of the major program.

OSU's Center for Life Science Education currently offers a Forensic Biology concentration: <https://clse.osu.edu/students/requirements/forensic-biology>. It is important to understand that Forensic Biology is the analysis of body fluids, stains, and other bodily materials to assist in medicolegal investigations, whereas Forensic Anthropology focuses on osteological (skeletal) dimensions (Table 1).

Table 1. Comparison of Forensic Anthropology major and Forensic Biology concentration

	Forensic Anthropology	Forensic Biology
<i>Definition</i>	Holistic analysis of the entire human skeleton in a medicolegal context. This context often includes analysis of the crime scene itself and provenience of the body.	Analysis of only a specific biological material (e.g., cellular and tissue samples and physiological fluids) in a medicolegal context. This context is often limited to only the isolated biological material and rarely incorporates external context.
<i>Career Paths</i>	Forensic Anthropologist, Crime Scene Investigator, Medicolegal Death Investigator, Human Rights Forensic Specialist	DNA Analyst, Toxicologist, Forensic Laboratory Technician

Our proposed Forensic Anthropology major explicitly differs from the forensic biology concentration through the application of unique skillsets necessary to analyze decomposing or skeletonized human remains in crime scene and laboratory settings. In comparison, a forensic biologist specializes in analyzing elemental and trace substances (e.g., toxicology and DNA analyses) from the human body rather than the remains themselves. As a result, skillsets privy not only to forensic anthropologists but also to crime scene technicians are not currently offered outside of the Department of Anthropology. Skills gained via the Forensic Anthropology major will be applicable in providing training and education to relevant careers in the forensic sciences, including but not limited to death investigations, crime scene investigation, forensic photography, law enforcement, forensic pathology, and evidence processing. Graduates will be well prepared for embarking on either careers in forensic science or for beginning graduate studies in forensic or biological anthropology.

The Forensic Anthropology major has not been submitted for approval previously.

National and University Benchmarking

No US university currently offers a Forensic Anthropology major. We view this as a superb opportunity to meet a growing demand within an Ohio and across the nation. In order to prepare qualified practitioners, students require foundational knowledge in theory, research, methods, and practical training in forensic anthropology. The Ohio State University already has the resources needed to offer an elite program in forensic anthropology, and with the addition of a Forensic Anthropology major, our institution at once becomes the leader in undergraduate forensic anthropology education, able to set the standard for training future practitioners in the field of forensic anthropology.

A number of universities provide students the opportunity to focus on (but not major in) forensic anthropology at the undergraduate level through forensic anthropology specializations or “tracks.” These are typically associated with a more traditional anthropology degree program. Such tracks usually consist of training limited to a handful of courses offered within an anthropology department, a subset of those dealing specifically with the forensic arts and sciences. The goal of these courses and tracks is to introduce students to basic concepts and core ideas in forensic anthropology; however, due to their general nature, they are unable to offer the breadth or depth of dedicated forensic courses (i.e., they are embedded in or added as postscripts to other courses such as *Intro to Biological Anthropology* or *Skeletal Biology*). Anthropology majors with forensic tracks do not provide comprehensive understanding of theory and methods in forensic anthropology, nor do they offer hand on training/case work that can serve as a foundation for advanced graduate education or entry level positions in the medicolegal field.

Tracks in forensic anthropology are currently offered at the following universities: Kent State University, Western Carolina, University of West Georgia, Mercyhurst University, Eastern New Mexico University, Kennesaw State University, and Louisiana State University. Several universities offer a bachelor’s degree in Anthropology that may include forensic anthropology courses (Boston University, California State Chico, Colorado Mesa, Texas State University, and University of Indianapolis). Due to the lack of undergraduate forensic anthropology programs in the United States, many students pursue this specialized education abroad, specifically in the

United Kingdom. Education in forensic anthropology at the undergraduate level is of such high interest, that students are willing to leave the country at significant expense in order to gain this knowledge and experience. Once approved, the Ohio State University would be the first (and only) university to offer a major in Forensic Anthropology.

5. Student Enrollment

There are currently 80 students minoring in Forensic Science and three students pursuing the certificate in Forensic Anthropology. These are strong numbers considering there has been virtually no advertising of or investment in the programs, i.e., they are essentially invisible. We anticipate that with **aggressive advertising**, the program will grow quickly and that in the first two years of its offering, the Forensic Anthropology major will enroll between 30–40 students per year. As the program matures and we are able to advertise and actively recruit students, we expect enrollments to increase to 20–30 students per year with a reasonable plateau of between 150–200 students, given current personnel and resources.

Prior to the development of this proposal, the department assessed its ability to meet the increased demands the major will introduce. The Department of Anthropology has enjoyed significant growth over the past 10 years. The department currently has 18 full time faculty, we recently (October) hired a new forensic lecturer who will begin SP 2023, and we are in the midst of a search for a new anatomically oriented faculty position in biological anthropology (Fall 2023). Additionally, three persons with appointments in the College of Medicine, all with advanced degrees in anthropology (a skeletal biologist, a forensic anthropologist, and an anatomist) have adjunct positions in the Department of Anthropology. Faculty within the Department of Anthropology have extensive experience in working in and operating laboratories with specialties in forensic anthropology, anatomy, and injury biomechanics. Students and faculty will also be supported through the involvement and contributions of Dr. Sam Stout, recently retired Emeritus Professor in the Department of Anthropology and a board-certified forensic anthropologist. Based on the size of our faculty and our current undergraduate enrollments, we anticipate few problems meeting the needs of new B.S. forensic anthropology majors.

6. Curricular Requirements

- Courses that constitute the requirements and other components of the major (see also Appendix A.)
- Courses with pre-requisites are denoted with an *; see Appendix B for a list of pre-requisite courses
- Curricular map of B.S. in Forensic Anthropology provided in Appendix C.
- Courses satisfying *Embedded Literacies* are identified as such.

I. **Pre-Requisite Courses (10 hours)** – [The three courses are currently offered.]

- a) *ANTHROP 2200: Introduction to Physical Anthropology (4cr): A scientific examination of humans as a biological and cultural organism based on primate evolution from living and fossil evidence; evolutionary theory and population adaptability. This course includes laboratory activities. Pre-requisite: Biology 1101 or equivalent.
- b) ANTHROP 3504: Introduction to Anatomy (3cr): Introduction to human anatomy. Note that this course satisfies the *Technology Embedded Literacy* requirement.
- c) *STAT 1450: Introduction to the Practice of Statistics (3cr): Algebra-based introduction to data analysis, experimental design, sampling, probability, inference, and linear regression. Emphasis on applications, statistical reasoning, and data analysis using statistical software. Pre-requisite: Math 1116 or 1130 or above, or Math Placement Level L or M, or permission of instructor. Not open to students with credit for 1450, 1450.02, 2450, 2450.01, 2450.02, 2480, 2480.01, or 2480.02. Note that this course satisfies the *Data Analysis Embedded Literacy* requirement.

OR

*STAT 2450: Introduction to Statistical Analysis I (3cr): Calculus-based introduction to statistical data analysis. Includes sampling, experimental design, probability, binomial and normal distributions, sampling distributions, inference, regression, ANOVA, two-way tables. Pre-requisite: Math 1131, 1141, 1151, 1156, 1161.xx, or 1181H, or equivalent, or permission of instructor. Not open to students with credit for 2450, 2450.02, 2480, 2480.01, 2480.02, or 3202. Note that this course satisfies the *Data Analysis Embedded Literacy* requirement.

- II. **Introductory Courses (6 hours)** – [Both courses are currently offered]
- a) ANTHROP 3211: Introduction to Forensic Science (3cr): 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.
 - b) SOCIOL 2209: Introduction to Criminal Justice (3cr): Examination of the development and administration of criminal law and agencies (police, courts, corrections); emphasis on criminal proceedings and their justification.
- III. **Core Courses (9 hours)** – [All three courses are currently offered.]
- a) *ANTHROP 3301 Modern Human Physical Variation (3cr): Survey of modern human biological diversity; examination of the underlying evolutionary and adaptive mechanisms responsible; exploration of the interplay between biology and behavior in adaptation. Pre-requisite: ANTHROP 2200, or permission of instructor.
 - b) ANTHROP 3305: Introduction to Forensic Anthropology (3cr): An introduction to the field of forensic anthropology in which students will be introduced to basic methods used to analyze unidentified human skeletal remains.
 - c) ANTHROP 3604: Introduction to the Methods of Archaeological Science (3cr): Introduce students to the myriad of interdisciplinary techniques that allow us to understand the human condition. Reviewed methods and case studies include ancient DNA analysis, stable and radiogenic isotopes, zooarchaeology, paleoethnobotany, material science, remote sensing, etc.
- IV. **Practical Training Courses (6 hours)** – [Both courses are currently offered.]
- a) *ANTHROP 5607: Human Osteology (3cr): Study of human skeletal anatomy. Pre-requisite: 2200, or permission of instructor.
 - b) *ANTHROP 5644: Forensic Anthropology (3cr): Application of osteological and bioarchaeological methods in forensic science. Pre-requisite: 2200 and 5607 or equiv, or permission of instructor.

V. **Applications to Forensic Anthropology Courses (6 hours)** – [Students take two of the following courses related to applications in the field of forensic anthropology. All courses are currently offered.]

- a) *ANTHROP 3401: Fundamentals of Archaeology (3cr): Introduction to basic archaeological theory and practice including fundamental field and laboratory methods, principles of survey excavation, chronological analysis, typology, and paleoethnography. Pre-requisite: 2201, or permission of instructor. Note this course satisfies the *Advanced Writing Embedded Literacy* requirement.
- b) *ANTHROP 5603: Strategy of Archaeological Field Research (3cr): Detailed examination of selected topics concerning the recovery and analysis of archaeological data. Design of archaeological data recovery programs and their implementation through survey, excavation, and other methods. Pre-requisite: 3401. Note this course satisfies the *Advanced Writing Embedded Literacy* requirement.
- c) *ANTHROP 5608: Skeletal Biology (3cr): A survey of bone biology, including histogenesis, histomorphology, and physiology of bone; topics include bone structure, growth and development, physiology, and anthropological applications. Pre-requisite: 2200 and 5607, or permission of instructor. Not open to students with credit for HthRhSc 5608. Cross-listed in HthRhSc.
- d) *ANTHROP 5609: Dental Anthropology (3cr): Evolutionary anthropology of human and non-human primate teeth. Pre-requisite: 2200 or equiv, or permission of instructor. Not open to students with credit for 5643. Note this course satisfies the *Advanced Writing Embedded Literacy* requirement.
- e) *ANTHROP 5610: Bioarchaeology (3cr): Study of human remains from archaeological settings, with emphasis on relationship between biology, culture, health and behavior. Pre-requisite: 2200, or permission of instructor. Note this course satisfies the *Advanced Writing Embedded Literacy* requirement.
- f) *ANTHROP 5642: Growth and Development (3cr): The study of human ontogeny from various anthropological perspectives. Pre-requisite: 2200 or equiv, or permission of instructor. Note this course satisfies the *Advanced Writing Embedded Literacy* requirement.
- g) *ANTHROP 5651: Spatial Analysis for Anthropologists (3cr): Introduces the analysis of spatial data in anthropological research; data collection; analysis using GIS; theoretical and methodological issues pertaining to research

design. Note this course satisfies the *Advanced Writing Embedded Literacy* requirement.

- h) *ANTHROP 5685: Summer Field School in Archaeology (3cr): Practical experience in archaeological fieldwork including site survey, excavation, surveying and mapping, preservation, and other related methods and techniques of data recovery. Pre-requisite: Permission of instructor. Repeatable. Note this course satisfies the *Advanced Writing Embedded Literacy* requirement.
- i) ANTHROP 5686: Practical Training in Forensic Anthropology (3cr): Hands-on training in forensic anthropology including crime scene processing, evidence collection, and case development of testimony in court. Students process indoor and outdoor crime scenes where foul play is suspected to have occurred and then learn about expert testimony. Note this course satisfies the *Advanced Writing Embedded Literacy* requirement.
- j) ANTHROP 5700: Anthropology, Public Health, and Human Rights (3cr): This course provides an introduction to the relationship between medical anthropology and global public health with an emphasis on social justice and health as well as human rights. Health policy, evidence-based medicine, children's health, HIV, TB, chronic disease, citizenship and deservingness, and other health topics will be discussed and analyzed from a cross-cultural and ethnographic perspective. Note this course satisfies the *Advanced Writing Embedded Literacy* requirement.
- k) *EEOB 4510: Comparative Vertebrate Anatomy (3cr): Evolutionary trends within vertebrates will be revealed through a study of anatomical homology across representative taxa. Concepts will be expanded upon as students explore the hands-on methods of comparative anatomical study, including dissection and skeletal staining. Pre-requisite: 2 courses in Biological Sciences.
- l) *SOCIOL 4100: Criminal Investigation (3cr): Theory and practice of criminal investigation and prosecution in the U.S. Criminal Justice System with attention to: (1) the roles of the law enforcement officer, prosecutor, and court personnel; (2) familiarization with various investigative techniques; (3) the collection and preservation of physical evidence; and (4) constitutional limitations and ethical considerations. Pre-requisite: Enrollment in Criminology major or minor, or permission of instructor.

VI. **Interdisciplinary Research and Application Courses (6 hours)** – [Students will be required to select two courses dedicated to the development of educational and professional skills, both of which must be from outside the Anthropology department. All courses are currently offered]

- a) *AFAMAST 4921: Intersections: Approaches to Race, Gender, Class, and Sexuality (3 cr): Examines intersections of race, gender, class, and sexuality in various sites within American culture (e.g., legal system, civil rights discourse, social justice movements). Pre-requisite: One course in CompStd, WGSSSt, or AfAmASt. Not open to students with credit for CompStd 4921 or WGSSSt 4921. Cross-listed in CompStd and WGSSSt.
- b) *ANAT 4300: Human Anatomy with Dissection (4 cr): Advanced undergraduate study of the structure of the human body through regional dissection of a human cadaver and an introduction to histology, embryology, neuroanatomy, and medical imaging. Pre-requisite: 2300.xx or 3300, and permission of instructor.
- c) *ANAT 4700: Undergraduate Histology (4 cr): Systematic study of the basic microscopic structure of mammalian cells, tissues, and organs correlated with function. Pre-requisite: 2100, 2300, or 3300, or permission of instructor.
- d) COMM 4240: Science Communication (3 cr): Explores the structure, meanings and implications of “science communication” with an emphasis on how values, attitudes, social structure, and communication affect public perceptions of science and technology. Pre-requisites: Not open to students with credit for 4240H or 3240H.
- e) *COMPSTD 4921: Intersections: Approaches to Race, Gender, Class, and Sexuality (3 cr): Examines intersections of race, gender, class, and sexuality in various sites within American culture (e.g., legal system, civil rights discourse, social justice movements). Pre-requisite: One course in CompStd, WGSSSt, or AfAmASt. Not open to students with credit for AfAmASt 4921 or WGSSSt 4921. Cross-listed in AfAmASt and WGSSSt.
- f) *EARTHSC 4502: Stratigraphy and Sedimentation (4 cr): Principles of, and procedures in, stratigraphy and sedimentation, illustrated by field and laboratory studies of sedimentary rocks. Pre-requisite: 1100 or 1200 or 1121 prior to Au21, and 1122 or 2122.
- g) *EEOB 3520: Microscopic Anatomy (3 cr): Examination and analysis of the functional morphology of cells and tissues of vertebrate animals, with

emphasis on mammalian histology. Pre-requisite: Biology 1113, 1114, 1113H, or 1114H.

- h) *EEOB 5330: Population Genetics & Phylogeography (3 cr): An introduction to the basic concepts in population genetics and phylogeography. Topics include genetic variation, mutation, equilibrium models, population structure, gene flow, natural selection, historical demography, quantitative genetics, and inbreeding depression. Pre-requisite: 3310 or 3310.01 or 3310.02, or Grad standing.
- i) *ENGLISH 3305: Technical Writing (3 cr): Study of principles and practices of technical writing. Emphasis on style, organization, and conventions of technical and research reports, proposals, memoranda, professional correspondence, etc. Pre-requisite: 1110.01.
- j) *PHYSIO 3200: Human Physiology (5 cr): Teaches the physiology of human organ systems, including the following: nervous system, muscle, gastrointestinal, cardiovascular, respiratory, renal, endocrine, and reproductive systems. This course is designed for students who are planning careers in the health sciences. This is a one-semester course. Pre-requisite: 6 sem cr hrs in the biological sciences.
- k) POLITSC 4455: Human Rights (3 cr): Examines human rights, including the United Nations Declaration on Human Rights; coercive enforcement of rights; as well as hunger, violence, persecution, and economic rights.
- l) *RADSCI 3672: Radiologic Sectional Anatomy (3 cr): Identification of anatomic structures as seen in cadaver, CT, MR, and sonographic from multiple orientations, to include volumetric 3-D anatomical imaging. Pre-requisite: Enrollment in RadSci, or permission of instructor. This course is available for EM credit.
- m) *SOCIOL 4507: The Criminal Justice System (3 cr): Advanced study of the role and operation of the criminal justice system: police, courts, and corrections. Pre-requisite: Jr standing or above, or permission of instructor or department.
- n) *SOCIOL 5650: Presenting and Communicating Quantitative Data (3 cr): Course will broaden knowledge of social science data sources, sharpen analytic skills, utilize software to graphically present research findings, and develop skills in writing about quantitative research for professional and lay audiences. Pre-requisite: 3487 and 3549, and Jr standing; or permission of instructor.

- o) *STAT 5730: Introduction to R for Data Science (2 cr): Introduces underlying concepts of the R programming language and R package ecosystem for manipulation, visualization, and modeling of data, and for communicating the results of and enabling replication of their analyses. Pre-requisite: 1350, 1350.01, 1350.02, 1450, 1450.01, 1450.02, 1550, 2450, 2450.01, 2450.02, 2480, 2480.01, 2480.02, 3201, 3202, 3450, 3450.01, 3450.02, 3460, 3470, 3470.01, 3470.02, 4202, 5301, or 5302, or equiv, or permission of instructor.
- p) *WGSST 4921: Intersections: Approaches to Race, Gender, Class, and Sexuality (3 cr): Examines intersections of race, gender, class, and sexuality in various sites within American culture (e.g., legal system, civil rights discourse, social justice movements). Pre-requisite: One course in CompStd, WGSSt, or AfAmASt. Not open to students with credit for CompStd 4921 or AfAmASt 4921. Cross-listed in CompStd and AfAmASt.

The B.S. in Forensic Anthropology will require successful completion of 43 hours, which includes 33 major hours plus an additional 10 hours of pre-requisite coursework. In addition to these credit hours, the degree program will encourage undergraduate research, particularly among those with graduate or professional school aspirations.

- Sample 4-year student plan provided in Appendix D

7. Departments Responsible for the Major and Departments with Supportive Roles

- Department of Anthropology – Responsible for Forensic Anthropology Major
- Departments with Supportive Roles
 - i. School of Health and Rehabilitation Sciences
 - ii. Department of Statistics
 - iii. Department of Sociology
 - iv. Department of Evolution, Ecology, and Organismal Biology
 - v. Division of Anatomy
 - vi. Department of English
 - vii. School of Communication
 - viii. Department of Comparative Studies
 - ix. School of Earth Sciences
 - x. Department of Physiology and Cell Biology
 - xi. Department of Political Science

8. Total Costs Associated with Forensic Anthropology Major over the next 4 Years

We anticipate an annual cost of \$4,000–\$5,000 in supplies and services each of the next four years (Total = \$16,000–\$20,000). All other setup costs including forensic laboratory renovation have been covered.

APPENDIX A: FORENSIC ANTHROPOLOGY MAJOR CURRICULA B.S. DEGREE

- I. Pre-Requisites (10 hours)**
 - *^ANTHROP 2200: Introduction to Physical Anthropology
 - ANTHROP 3504: Introduction to Anatomy
 - *#STAT 1450: Introduction to the Practice of Statistics OR #STAT 2450: Introduction to Statistical Analysis I OR Equivalent as approved by the Department of Anthropology
- II. Introductory Courses (6 hours)**
 - ANTHROP 3211: Introduction to Forensic Science
 - SOCIOL 2209: Introduction to Criminal Justice
- III. Core Courses (9 hours)**
 - *ANTHROP 3301: Modern Human Physical Variation
 - ANTHROP 3305: Introduction to Forensic Anthropology
 - ANTHROP 3604: Introduction to the Methods of Archaeological Science
- IV. Practical Training Courses (6 hours)**
 - *ANTHROP 5607: Human Osteology
 - *ANTHROP 5644: Forensic Anthropology
- V. Applications to Forensic Anthropology Courses (6 hours)** – Choose 2 courses from the following list
 - *+ANTHROP 3401: Fundamentals of Archaeology
 - *+ANTHROP 5603: Strategy of Archaeological Field Research
 - *ANTHROP 5608: Skeletal Biology
 - *+ANTHROP 5609: Dental Anthropology
 - *+ANTHROP 5610: Bioarchaeology
 - *+ANTHROP 5642: Growth and Development
 - *+ANTHROP 5651: Spatial Analysis for Anthropologists
 - *ANTHROP 5685: Summer Field School in Archaeology
 - +ANTHROP 5686: Practical Training in Forensic Anthropology
 - +ANTHROP 5700: Anthropology, Public Health, and Human Rights
 - *EEOB 4510: Comparative Vertebrate Anatomy
 - *SOCIOL 4100: Criminal Investigation
- VI. Interdisciplinary Research and Applications Courses (6 hours)** – Choose 2 courses from the following list
 - *AFAMAST 4921: Intersections: Approaches to Race, Gender, Class, and Sexuality
 - *ANAT 4300: Human Anatomy with Dissection
 - *ANAT 4700: Undergraduate Histology
 - COMM 4240: Science Communication
 - *COMPSTD 4921: Intersections: Approaches to Race, Gender, Class, and Sexuality

- *EARTHSC 4502: Stratigraphy and Sedimentation
- *EEOB 3520: Microscopic Anatomy
- *EEOB 5330: Population Genetics & Phylogeography
- *ENGLISH 3305: Technical Writing
- *PHYSIO 3200: Human Physiology
- POLITSC 4455: Human Rights
- *RADSCI 3672: Radiologic Sectional Anatomy
- *SOCIOL 4507: The Criminal Justice System
- *SOCIOL 5650: Presenting and Communicating Quantitative Data
- *STAT 5730: Introduction to R for Data Science
- *WGSST 4921: Intersections: Approaches to Race, Gender, Class, and Sexuality

*Indicates the course has a pre-requisite, see Appendix B for list of specific pre-requisites for each course.

Satisfies ^*Technology* Embedded Literacy

Satisfies #*Data Analysis* Embedded Literacy

Satisfies +*Advanced Writing* Embedded Literacy

**APPENDIX B: PRE-REQUISITES FOR REQUIRED AND ELECTIVE COURSES FOR
THE B.S. IN FORENSIC ANTHROPOLOGY**

Course	Pre-requisite
AFAMAST 4921	One course in CompStd, WGSSt, or AfAmASt
ANAT 4300	Anatomy 2300.xx or 3300, and permission of instructor
ANAT 4700	Anatomy 2100, 2300, or 3300, or permission of instructor
ANTHROP 2200	Biology 1101 or equiv.
ANTHROP 3301	Anthropology 2200 recommended or permission of instructor
ANTHROP 3401	Anthropology 2201, or permission of instructor
ANTHROP 5603	Anthropology 3401
ANTHROP 5607	Anthropology 2200 recommended or permission of instructor
ANTHROP 5608	Anthropology 2200 recommended and 5607, or permission of instructor
ANTHROP 5609	Anthropology 2200 or equiv recommended, or permission of instructor
ANTHROP 5610	Anthropology 2200 recommended or permission of instructor
ANTHROP 5642	Anthropology 2200 or equiv recommended, or permission of instructor
ANTHROP 5644	Anthropology 3504 or 5607 or equiv., or permission of instructor
ANTHROP 5685	Permission of instructor
COMPSTD 4921	One course in CompStd, WGSSt, or AfAmASt
EARTHSC 4502	EarthSc 1100 or 1200 or 1121
EEOB 3520	Biology 1113, 1114, 1113H, or 1114H
EEOB 4510	2 courses in Biological Sciences
EEOB 5330	EEOB 3310 or 3310.01 or 3310.02, or Grad standing
ENGLISH 3305	English 1110.01 or equiv.
PHYSIO 3200	6 semester credit hours in the biological sciences
RADSCI 3672	Enrollment in RadSci or permission of instructor
SOCIOL 4189.03	Enrollment in Criminology major or minor, or permission of instructor
SOCIOL 4507	Jr standing or above, or permission of instructor or department
SOCIOL 5650	3487 and 3549, and Jr standing; or permission of instructor
STAT 1450	Math 1116 or 1130 or above, or Math Placement Level L or M, or permission of instructor
STAT 2450	Math 1131, 1141, 1151, 1161.xx, or 1181H, or equiv., or permission of instructor
STAT 5730	1350.xx, 1450.xx, 1550, 2450.xx, 2480.xx, 3201, 3202, 3450.xx, 3460, 3470.xx, 4202, 5301, or 5302, or equiv., or permission of instructor
WGSST 4921	One course in CompStd, WGSSt, or AfAmASt

APPENDIX C: CURRICULAR MAP OF B.S. IN FORENSIC ANTHROPOLOGY

	Program Goals				
	1	2	3	4	5
Pre-Requisites					
ANTHROP 2200	B	B			B
ANTHROP 3504		B	B		
STAT 1450 or STAT 2450		B	B		
Introductory Courses					
ANTHROP 3211	B	B	B	B	B
SOCIOL 2209	B		B		B
Core Courses					
ANTHROP 3301	B/ I	B/ I	B/ I	B/ I	B/ I
ANTHROP 3305	I	B/ I	I	B/ I	I
ANTHROP 3604	B/ I	I	B/ I	B/ I	
Practical Training Courses					
ANTHROP 5607	I/ A	A	A	I	I
ANTHROP 5644	A	A	A	A	A
Applications to Forensic Anthropology					
ANTHROP 3401	B/ I	I	I		
ANTHROP 5603	I	I/ A	A		
ANTHROP 5608	A	A	A	A	A
ANTHROP 5609	I	I	I		
ANTHROP 5610	I		A	I	
ANTHROP 5642	A	A	A		I
ANTHROP 5651	I	A	A	I	
ANTHROP 5685	I	A	A		I
ANTHROP 5686	A	A	A	A	A
ANTHROP 5700			I	A	
EEOB 4510	I	B/ I	I		
SOCIOL 4100	B/ I	B	I	B/ I	B
Interdisciplinary Research and Applications Courses					
ANAT 4300	I	I	A		
ANAT 4700	I	I	I		
COMM 4240		I	A	A	
COMPSTD/AFAMAST/WGSS 4921	I	I	I	I	
EARTHSC 4502	I	A	A		

EEOB 3520	I		I		
EEOB 5330	I	I	I		
ENGLISH 3305			A	A	
PHYSIO 3200		I	A		
POLITSC 4455	I		A	A	
RADSCI 3672	A	I	A	I	
SOCIOL 4507	I		I	I	I
SOCIOL 5650		A	A	A	
STAT 5730		A	A		

Learning Goals

1. Exhibit comprehensive knowledge of the field of forensic anthropology and acquire a grasp of the theoretical perspectives and concepts of the discipline
2. Understand and evaluate research methods, designs, and statistical procedures and have opportunities to conduct research
3. Demonstrate a strong educational and training foundation to support seeking employment or graduate/professional training
4. Demonstrate information and scientific literacy, as well as communication skills amongst peers, professionals, and individuals within and outside of the medicolegal community
5. Recognize the role of forensic anthropologists in the medicolegal community

Learning Levels

- B = Beginning, I = Intermediate, A = Advanced

Degree Plan Worksheet – Schedule

Major: Forensic Anthropology, BS

In the grid below, Ra = rationale (the reason you are taking the course). Use the following abbreviations for rationales:

Major = M

Minor = m

Required prerequisite = RP

Required Survey= R

GE = G

Elective = E

Degree Hours (transfer, AP, post-secondary) <div style="border: 1px solid black; width: 50px; height: 30px; display: flex; align-items: center; justify-content: center;">0</div>	Autumn 1		Hrs	Ra	Spring 1		Hrs	Ra
	1.	ARTSSCI 1100.xx (Survey)	1	R	1.	STAT 1450 or 2450	3	RP
	2.	MATH 1151	5	G	2.	ANTHROP 3504	3	RP
	3.	World Language 1101	4	ASC	3.	World Language 1102	4	ASC
	4.	ANTHROP 2200	4	G/RP	4.	Wrtg & Info GE	3	G
Upper Division Hours* <div style="border: 1px solid black; width: 50px; height: 30px; display: flex; align-items: center; justify-content: center;">0</div>	5.	GENED 1201	1	G	5.	ANTHROP 2201	3	G/RP
	AU 1 Degree Hours		15		SP 1 Degree Hours		16	
	Total Degree Hours		15		Total Degree Hours		31	
	AU 1 Upper Division Hours		0		SP 1 Upper Division Hours		3	
	Total Upper Div. Hours		0		Total Upper Div. Hours		3	

Summer 1		Hrs	Ra	Autumn 2		Hrs	Ra	Spring 2		Hrs	Ra
1.				1.	ANTHROP 3211	3	M	1.	ANTHROP 3305	3	M
2.				2.	ANTHROP 3301	3	M	2.	ANTHROP 3401(App to ForAn)	3	M/RP
3.				3.	World Language 1103	4	ASC	3.	Historical & Cultural Studies GE	3	G
4.				4.	SOCIOL 2209	3	M	4.	Race, Ethn & Gender GE	3	G
5.				5.	Literary & VPA GE	3	G	5.	Elective/Minor	3	E/m
SU 1 Degree Hours				AU 2 Degree Hours		16		SP 2 Degree Hours		15	
Total Degree Hours				Total Degree Hours		47		Total Degree Hours		62	
SU 1 Upper Division Hours				AU 2 Upper Division Hours		6		SP 2 Upper Division Hours		6	
Total Upper Div. Hours				Total Upper Div. Hours		9		Total Upper Div. Hours		15	

*Check the latest GE sheet for what constitutes Upper Division Hours for ASC.

Degree Plan Worksheet – Schedule

Major = M
Elective = E

Minor = m

Required prerequisite = RP

Required Survey= R

GE = G

Summer 2		Hrs	Ra	Autumn 3		Hrs	Ra	Spring 3		Hrs	Ra
1.				1.	Citizenship Theme	3	G	1.	Citizenship Theme	3	G
2.				2.	ANTHROP 5607	3	M	2.	ANTHROP 5644	3	M
3.				3.	ANTHROP 3604	3	M	3.	ANTHROP App to ForAnth	3	M
4.				4.	Elective/Minor	3	E/m	4.	Elective/Minor - Upper Div hrs	3	E/m
5.				5.	Elective/Minor	3	E/m	5.	Elective/Minor - Upper Div hrs	3	E/m
SU 2 Degree Hours				AU 3 Degree Hours		15		SP 3 Degree Hours		15	
Total Degree Hours				Total Degree Hours		77		Total Degree Hours		92	
SU 2 Upper Division Hours				AU 3 Upper Division Hours		6		SP 3 Upper Division Hours		12	
Total Upper Div. Hours				Total Upper Div. Hours		21		Total Upper Div. Hours		33	

Summer 3		Hrs	Ra	Autumn 4		Hrs	Ra	Spring 4		Hrs	Ra
1.				1.	Theme 2	3	G	1.	Theme 2	3	G
2.				2.	Interdiscip Research & App	3	M	2.	GENED 4001	1	G
3.				3.	Elective	3	E	3.	Interdiscip Research & App	3	M
4.				4.	Elective	3	E	4.	Elective	3	E
5.				5.	Elective	3	E	5.	Elective + Elective	6	E
SU 3 Degree Hours				AU 4 Degree Hours		15		SP 4 Degree Hours		16	
Total Degree Hours				Total Degree Hours		107		Total Degree Hours		123	
SU 3 Upper Division Hours				AU 4 Upper Division Hours		3		SP 4 Upper Division Hours		4	
Total Upper Div. Hours				Total Upper Div. Hours		36		Total Upper Div. Hours		40	

Degree Plan Worksheet – Schedule

Concurrences

A request for concurrence was sent to the Dept of Sociology on 11-16-22 (see attached).

- No official response from the Dept of Sociology was received so concurrence was assumed after two weeks. (Informally, Professor Paul Bellair—senior criminologist in the Dept of Sociology—expressed his support for the program.)
- CLSE provided concurrence on 1-18-23 (see attached).

From: [McGraw, Scott](#)
To: [Williams, Kristi](#); [Ridgway, Judy](#)
Cc: [Vankeerbergen, Bernadette](#); [Martin, Andrew](#); [Palazzo, Sarah](#); angela.harden2@osumc.edu; [Agnew, Amanda](#); [Guatelli-Steinberg, Debra](#)
Subject: Concurrence request
Date: Wednesday, November 16, 2022 2:54:20 PM
Attachments: [Forensic Anthropology Major Proposal.pdf](#)
[image001.png](#)

Dear Kristi and Judy,

Hope you both are well.

Attached is a proposal for a new major in Forensic Anthropology, an initiative that has been gestating for some time but is now seeing the light of day. We're excited and hope you will be too, as the program should complement yours in Criminology, Forensic Biology, etc.

Could you have a look and provide a concurrence statement within two weeks? I am happy to answer any questions you might have.

I appreciate your attention: many thanks in advance.

Best,
Scott



W. Scott McGraw

Professor and Chair

Department of Anthropology

4042 Smith Laboratory, 174 W. 18th Avenue

Columbus, OH 43210-1106

(614) 688-3794

Mcgraw.43@osu.edu

From: [Andrews, Adam](#)
To: [Vankeerbergen, Bernadette](#)
Cc: [Fisk, Harold](#)
Subject: Re: Concurrence request
Date: Wednesday, January 18, 2023 2:54:40 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)

Bernadette,

I appreciate the efforts of the Anthropology Faculty to clarify objectives in their proposal. While there exists the *potential* for significant overlap in the upper level course electives of the Forensic Anthropology and Biology with a Forensics Specialization, the foundational courses will vary sufficiently to distinguish the two Programs. We will have to rely on early-stage academic advising to help guide students toward a desired path.

The CLSE collegially grants Concurrence for this proposal.

Regards,
Adam



Adam L. Andrews

Assistant Director for Instruction

College of Arts and Sciences | Center for Life Sciences Education

President – Association for Biology Laboratory Education ([ABLE](#))

240D Jennings Hall, 1735 Neil Avenue, Columbus, OH 43210
(614) 247-6345 Office / (614) 292-4390 Fax
andrews.171@osu.edu clse.osu.edu

From: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>
Date: Monday, January 9, 2023 at 1:59 PM
To: Andrews, Adam <andrews.171@osu.edu>, Ridgway, Judy <ridgway.14@osu.edu>
Subject: FW: Concurrence request

I received a notice that my email did not reach Judy. I am resending & including Harold this time. Has Judy retired again?

Hello Judy and Adam,

I am following up on the email below. The Dept of Anthropology has tweaked the program

goals to make them more program-specific as you had suggested. See the attached document.

It would be helpful if you could have a look and provide concurrence within two weeks. Please let me know if you have any questions about the concurrence process. A simple email will suffice. Please note that if no response is received by January 23, concurrence will be assumed.

Many thanks,
Bernadette



Bernadette Vankeerbergen, Ph.D.

Assistant Dean, Curriculum

College of Arts and Sciences

306B Dulles Hall, 230 Annie & John Glenn Ave.

Columbus, OH 43210

Phone: 614-688-5679

<http://asccas.osu.edu>

From: Andrews, Adam <andrews.171@osu.edu>

Sent: Wednesday, November 30, 2022 6:06 PM

To: McGraw, Scott <mcgraw.43@osu.edu>

Cc: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>; Martin, Andrew <martin.1026@osu.edu>; Palazzo, Sarah <palazzo.66@osu.edu>; angela.harden2@osumc.edu; Agnew, Amanda <Mandy.agnew@osumc.edu>; Guatelli-Steinberg, Debra <guatelli-steinbe.1@osu.edu>; Ridgway, Judy <ridgway.14@osu.edu>

Subject: Re: Concurrence request

Dr. McGraw,

On behalf of the CLSE, I've reviewed the proposal, specifically with an eye toward the overlap with the Biology Major's Forensic Biology Specialization. The proposed Forensic Anthropology Major certainly offers a broader range of social science topics than the Forensic Biology specialization with the elective options. However, our required coursework asks students to choose three classes though from a list of ten, half of which are also options on the proposed Major (i.e. Anthro 5607, 5608, 5609, 5610, 5644), which leads to the potential for significant overlap. Students majoring in Biology could conceivably take three of these Anthro courses as their required courses, plus elect the same EEOB / Anatomy / Physiology you offer as elective options, resulting in a Program differing by only a couple of courses.

The knowledge outcomes listed in the proposal are generic (i.e. "Exhibit comprehensive knowledge of the field of forensic anthropology"). Perhaps it would be

helpful to articulate a specific set of content knowledge learning outcomes that might help distinguish the Forensic Anthropology Major from the Forensic Biology Major, for the sake of students who might be looking to decide between them, as well as any alleviating any concerns about the overlap.

Regards,

Adam



Adam L. Andrews

Assistant Director for Instruction

College of Arts and Sciences | Center for Life Sciences Education

President – Association for Biology Laboratory Education (ABLE)

240D Jennings Hall, 1735 Neil Avenue, Columbus, OH 43210

(614) 247-6345 Office / (614) 292-4390 Fax

andrews.171@osu.edu clse.osu.edu

From: McGraw, Scott <mcgraw.43@osu.edu>

Sent: Wednesday, November 16, 2022 2:54:15 PM

To: Williams, Kristi <williams.2339@osu.edu>; Ridgway, Judy <ridgway.14@osu.edu>

Cc: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>; Martin, Andrew

<martin.1026@osu.edu>; Palazzo, Sarah <palazzo.66@osu.edu>;

angela.harden2@osumc.edu <angela.harden2@osumc.edu>; Agnew, Amanda

<Mandy.agnew@osumc.edu>; Guatelli-Steinberg, Debra <[\[steinbe.1@osu.edu\]\(mailto:steinbe.1@osu.edu\)>](mailto:guatelli-</p></div><div data-bbox=)

Subject: Concurrence request

Dear Kristi and Judy,

Hope you both are well.

Attached is a proposal for a new major in Forensic Anthropology, an initiative that has been gestating for some time but is now seeing the light of day. We're excited and hope you will be too, as the program should complement yours in Criminology, Forensic Biology, etc.

Could you have a look and provide a concurrence statement within two weeks?

I am happy to answer any questions you might have.

I appreciate your attention: many thanks in advance.

Best,
Scott



W. Scott McGraw

Professor and Chair

Department of Anthropology

4042 Smith Laboratory, 174 W. 18th Avenue

Columbus, OH 43210-1106

(614) 688-3794

Mcgraw.43@osu.edu

Fiscal Unit/Academic Org	Anthropology - D0711
Administering College/Academic Group	Arts and Sciences
Co-administering College/Academic Group	
Semester Conversion Designation	New Program/Plan
Proposed Program/Plan Name	Forensic Anthropology
Type of Program/Plan	Undergraduate bachelors degree program or major
Program/Plan Code Abbreviation	
Proposed Degree Title	

Credit Hour Explanation

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours required for completion of program				33	
Required credit hours offered by the unit	Minimum			18	
	Maximum			24	
Required credit hours offered outside of the unit	Minimum			9	
	Maximum			15	
Required prerequisite credit hours not included above	Minimum			10	
	Maximum			10	

Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

Program Learning Goals

- Exhibit comprehensive knowledge of the field of forensic anthropology (human osteology, distinguishing human vs nonhuman remains, biological profile, trauma analysis, academic and case work applications, multidisciplinary application)
- Acquire foundational knowledge of the theoretical perspectives and concepts of the discipline as they pertain to skeletal research and forensic case work
- Foundational knowledge of concepts such as the development of a biological profile (e.g., assessment of age-at-death, population affinity, sex, stature) and analysis of skeletal trauma
- Understand and evaluate research methods (e.g., biological profile research), research designs (e.g., experimental vs case study approaches to skeletal trauma), and statistical approaches (e.g., different analytical methods used in forensic anth)
- Be provided with opportunities to conduct research relevant to forensic anthropology
- Demonstrate a strong educational and training foundation in forensic anthropology in support of search for employment or graduate/professional training.
- Demonstrate information and scientific literacy, as well as communication skills amongst peers, professionals, and individuals within and outside of the medicolegal community.
- Recognize the role of forensic anthropologists in the medicolegal community.

Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? Yes

Does the degree program or major have an assessment plan on file with the university Office of Academic Affairs? No

DIRECT MEASURES (means of assessment that measure performance directly, are authentic and minimize mitigating or intervening factors)**Classroom assignments**

- Embedded testing (i.e. specific questions in homework or exams that allow faculty to assess students' attainments of a specific learning goal)
- Pre- and post-testing
- Other classroom assessment methods (e.g., writing assignments, oral presentations, oral exams)

Evaluation of a body of work produced by the student

- Practicum, internship or research evaluation of student work

INDIRECT MEASURES (means of assessment that are related to direct measures but are steps removed from those measures)**Surveys and Interviews**

- Student survey
- Student evaluation of instruction

Additional types of indirect evidence

- Curriculum or syllabus review
- Grade review
- Outreach participation

USE OF DATA (how the program uses or will use the evaluation data to make evidence-based improvements to the program periodically)

- Meet with students directly to discuss their performance
- Analyze and discuss trends with the unit's faculty
- Analyze and report to college/school
- Make improvements in curricular requirements (e.g., add, subtract courses)
- Make improvements in course content
- Make improvements in course delivery and learning activities within courses
- Make improvements in learning facilities, laboratories, and/or equipment
- Periodically confirm that current curriculum and courses are facilitating student attainment of program goals

Program Specializations/Sub-Plans

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

Pre-Major

Does this Program have a Pre-Major? No

Attachments

- Forensic Anthropology Major Proposal Documents _Dec16_2022.pdf: Collection of Documents
(Program Proposal. Owner: Palazzo,Sarah Rose)
- Concurrence package.pdf: Concurrence requests and responses
(Support/Concurrence Letters. Owner: Vankeerbergen,Bernadette Chantal)

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Palazzo,Sarah Rose	12/16/2022 04:10 PM	Submitted for Approval
Approved	McGraw,William Scott	12/16/2022 04:12 PM	Unit Approval
Approved	Vankeerbergen,Bernadette Chantal	01/26/2023 11:51 AM	College Approval
Approved	Vankeerbergen,Bernadette Chantal	02/22/2023 05:01 PM	ASCCAO Approval
Approved	Martin,Andrew William	02/22/2023 08:34 PM	ASC Approval
Pending Approval	Reed,Kathryn Marie Greenbaum,Robert Theodore	02/22/2023 08:34 PM	CAA Approval

Subject: RE: Proposal for Forensic Anthropology major under review on CAA
Date: Thursday, April 6, 2023 at 5:32:05 PM Eastern Daylight Time
From: McGraw, Scott
To: Leite, Fabio
Attachments: image001.png

Dear Fabio,

Thanks for reaching out to me. I am most happy to clarify. My responses are highlighted below in red:

- On p. 20 of the combined pdf (p. 16 of the proposal document within it) it reads that "the degree program will encourage undergraduate research, particularly among those with graduate or professional school aspirations".
 - Could you please detail how this encouragement will be done? In other words, what are the envisioned action steps to provide the undergraduate students with access to research opportunities?
 - **Encouragement**
 - 1. Research is promoted with regular conversations with academic advisor,
 - 2. A link on our department's website --> Undergraduate tab, "Join a Research Team!" already exists, update to Undergraduate Research, add Interested in UG Research contact form - students enter name, contact info, program, expected graduation, and area of anthropology they are interested in conducting research in. Based on the area, emails are forwarded to faculty and staff
 - 3. We promote/highlight UG research every year during our Year in Anthropology event. This year's event is on May 3rd in Smith Lab: feel free to stop on by!
 - 4. Our department offers travel funds for undergraduates to present their research at a national conferences
 - 5. Research talks on current projects occur at our bi-monthly meetings of the Undergraduate Anthropology Club meetings (faculty/staff/UG students)
 - 6. Our faculty has a strong track record of student mentorship at all levels, including with research program in forensic anthropology. Next year we intend to hire an additional forensic anthropology faculty member. With graduate students working under the faculty's guidance, a tiered mentorship structure allows undergraduates the opportunity to work with faculty and PhD students alike to facilitate a variety of depth in research experiences.

■
"Be provided with opportunities to conduct research relevant to forensic anthropology" is listed as a Program Learning Goal (p. 7 and p. 36 of the combined pdf) but we could not find specific action steps. As our current and former undergraduate students continue to report significant hardships to find a faculty member willing to supervise them in research work, we will appreciate any details you can provide.

- As mentioned above, we have portal on our website for matching undergraduates with research mentors
- Semester Research Updates --> department wide email updates about current research projects that are looking for UGs to join their team
- A Forensic Anthropologist faculty member will manage the program and be expected

to offer research opportunities directly and/or facilitate other opportunities on campus with other faculty across related disciplines (e.g., in Medicine, HRS, sociology) that are conducting forensic anthropology related.

-
- How does that plan fit with the projected 4-year plan when the interdisciplinary research coursework is not expected to happen until Year 4?
 - Given that research projects often do not fit entirely within two academic semesters, would it be a consideration to have the coursework done in Year 3 (if pre-requisites would not be obstacles)?
 - Interdisciplinary Research and Applications courses are not pre-requisites for students to be involved in research. Ideally, the student (if pursuing research experience) talks to their academic advisor at the end of their first year or beginning of second year about their interest in research. (The earlier the better, in fact!) The student then joins a lab (the one in which they will be conducting research) in either Fall or Spring of their second year. This gives them time to get to know the lab, build up basic skills necessary for that lab, etc. They then work with their research advisor/faculty/staff/graduate students to identify and begin to develop a research project. By Fall of their 3rd year, they will have decided on a research project. The courses offered in the Interdisciplinary Research and Applications area of the degree, are meant to highlight other fields that are closely aligned with forensic anthropology for students to learn about and appreciate how their skills are applicable across scientific fields and how different disciplines can support each other in research, but are not a prerequisite to conducting their own research under faculty mentorship.

Additionally, we wondered about the specific action steps for the "aggressive advertising" mentioned on p. 13 (combined; proposal p. 9). Are there plans for it? If so, how does it compare to the strategies used for other major and minor programs in the department?

We have multiple Strategies and plans:

- Advertise on professional organization websites (American Academy of Forensic Sciences, American Association of Biological Anthropology)
- Promote through the major through our Anthropology Public Outreach Program (APOP): <https://u.osu.edu/apop/>
- OSU-wide email
- Anthropology Dept. email
- Featured on the Department of Anthropology website
- targeted emails soliciting students through forensic anthropology professional listservs and personal communications to colleagues

I hope these answers are sufficient. Please let me know if I can provide more information.

Best regards,
Scott

W. Scott McGraw

Professor and Chair
Department of Anthropology
4042 Smith Laboratory, 174 W. 18th Avenue
Columbus, OH 43210-1106
(614) 688-3794
Mcgraw.43@osu.edu

From: Leite, Fabio <leite.11@osu.edu>
Sent: Wednesday, April 5, 2023 4:54 PM
To: McGraw, Scott <mcgraw.43@osu.edu>
Cc: Reed, Katie <reed.901@osu.edu>; Andridge, Rebecca <andridge.1@osu.edu>
Subject: Proposal for Forensic Anthropology major under review on CAA

Dear Prof. McGraw,

I hope this email finds you well.

I write as Chair of the Council on Academic Affairs subcommittee reviewing the aforementioned proposal, the last step before we move it for discussion with the entire council. We are supportive of the proposal, with some questions around the research piece, which I believe you will be able to address and list below.

- On p. 20 of the combined pdf (p. 16 of the proposal document within it) it reads that "the degree program will encourage undergraduate research, particularly among those with graduate or professional school aspirations".
 - Could you please detail how this encouragement will be done? In other words, what are the envisioned action steps to provide the undergraduate students with access to research opportunities?
 - "Be provided with opportunities to conduct research relevant to forensic anthropology" is listed as a Program Learning Goal (p. 7 and p. 36 of the combined pdf) but we could not find specific action steps. As our current and former undergraduate students continue to report significant hardships to find a faculty member willing to supervise them in research work, we will appreciate any details you can provide.
 - How does that plan fit with the projected 4-year plan when the interdisciplinary research

coursework is not expected to happen until Year 4?

- Given that research projects often do not fit entirely within two academic semesters, would it be a consideration to have the coursework done in Year 3 (if pre-requisites would not be obstacles)?

Additionally, we wondered about the specific action steps for the "aggressive advertising" mentioned on p. 13 (combined; proposal p. 9). Are there plans for it? If so, how does it compare to the strategies used for other major and minor programs in the department?

We look forward to your clarifying thoughts and commend the department for planning this additional major program.

Best,
Fábio