**Course Content**

Laboratory projects based on B-E of expanded description of course content for ANTH 1. Projects cover methods, techniques, and procedures used in biological/physical anthropology research. Emphasis on skill demonstrations and problem solving.

A. Students will demonstrate knowledge in the following areas:
   1. Mendelian genetics
   2. Population genetics
   3. Human variability
   4. Forensics
   5. Medical anthropology
   6. Epidemiology
   7. Hominin dietary patterns
   8. Non-human primates
   9. Primate dental and skeletal anatomy
   10. Fossil hominins
   11. Chronometric dating
   12. Environmental challenges to hominins
   13. Environmental impact of hominin behavior
   14. General methodologies utilized in physical anthropological research
   15. The general study of hominins as bio-culturally adapting animals

B. Students conducting laboratory research will gain proficiency in the following areas:
   1. Instrumentation such as microscopes and centrifuges
   2. The appropriate handling of human remains
   3. Crime scene investigation techniques
   4. Data gathering and analysis using current statistical and mapping programs
   5. Graphing and interpretation of data using scientific methodology

**Lab Content**

Lab content may include but is not limited to:

A. Scientific Method exercises
   1. Field study using Method
   2. Microscope training
B. Darwin's Natural Selection
   1. Examples from nature
   2. Cellular transformation
C. Genetics
   1. Field study of phenotypic traits
D. Biological classifications
   1. Taxonomy
E. Primate osteology
   1. Lab training with primate skeletons
F. Human osteology
   1. Skeletal anatomy
   2. Primate behavior
   1. Field project on human primates
H. Early primates and hominins
   1. Fossil collection study
I. The Genus Homo
   1. Anthropometrics
   J. Forensics and variation (Metric/Non-Metric)
   1. Cranio metric and osteometric studies
   2. Blood group work
   3. Finger prints
K. Forensics and skeletal abnormalities
   1. Gun shot wounds
   2. Trephination
   3. Antemortem, perimortem and postmortem analysis
L. Sociobiology and human bio-cultural adaptations
M. Our past 10,000 years: agriculture, population and biology

**Special Facilities and/or Equipment**
A. Anthropology laboratory equipped with appropriate materials to instruct the lab sections.
B. Internet connection required to conduct enhanced learning assignments.

**Method(s) of Evaluation**
Methods of Evaluation may include but are not limited to the following:

Methods of evaluation may include:
A. In-class projects
B. Lab reports submitted the following week
C. Quizzes and exams
D. Skill demonstrations or problem solving
   1. Class performances
   2. Field work
   3. Performance exams
E. Group project scientific research and presentations

**Method(s) of Instruction**
Methods of Instruction may include but are not limited to the following:

Methods of instruction may include:
A. Lecture
B. Discussion
C. Cooperative learning exercises
D. Field work
E. Oral presentations
F. Laboratory methods and exercises
G. Multimedia presentations
H. Demonstrations

**Representative Text(s) and Other Materials**

**Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments**
Examples of required reading, writing and outside class assignments may include:
A. Required readings from the lab textbook or academic journals.
B. Completion of exercises in the workbook.
C. Lab report write-ups.

**Discipline(s)**
Anthropology