ANTHROPOLOGICAL ANALYSIS

ANT-4092, CRN No. XXXXX, 3 CREDIT HOURS, SPRING 2020 PROF. CLIFFORD T. BROWN, DEPARTMENT OF ANTHROPOLOGY, FLORIDA ATLANTIC UNIVERSITY

Place: SO190, **Time**: Monday 3:30-6:20 pm. Contact information: Office: SO172, Phone number: (561) 297-3232, E-mail: ctbrown@fau.edu, Web site: http://www.fau.edu/~ctbrown, Office hours: 9:20 am – 12:00 pm Tuesdays and Thursdays, and by appointment.

Catalog description: Introduction to the process of conducting quantitative research in anthropology. The course considers the types of questions anthropologists ask, the kinds of data they collect, and the kinds of analyses they carry out.

Objectives: The general goal of the course is to help students achieve basic statistical literacy and to familiarize them with statistical reasoning in anthropology so that they are prepared to read, analyze, and understand published research as well as to carry out their own. The course will emphasize concepts and approaches rather than rote calculations. The class introduces the process of conducting quantifiable research in the three branches of anthropology taught in the department: cultural anthropology, biological anthropology, and archaeology. The course is designed to help students learn the concepts, procedures, and techniques necessary to perform quantitative analyses, as well as introducing them to the quantitative ideas that they need to understand to read and evaluate statistical arguments in the anthropological literature. The course covers research design; sampling; measurement; data visualization; and descriptive, exploratory, and inferential statistics. The methods to be covered include a variety of distribution- and scale-free techniques as well as more conventional (parametric) statistics. There are no prerequisites.

Readings: Textbook: *Statistics for Anthropology, Second Edition* by Lorena Madrigal, Cambridge University Press, 2012. Additional readings will be assigned for discussion in class.

Accessibility Statement: "In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/."

Counseling and Psychological Services (CAPS) Center. Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to http://www.fau.edu/counseling/.

Assignments and grading: Homework assignments and quizzes will comprise 25% of the final grade. The midterm and final exams are each worth 25% of the final grade. The class project and paper will comprise the final 25% of your grade. The project will focus on the analysis of a published data set that you choose. You will explain in your paper the purpose of the analysis (i.e., the problem); state your hypotheses; describe the data including the types of variables and their distributions; explain and justify your statistical tests; and report the results, including your evaluation of the hypotheses. I encourage you to consult me about problems, data sources, data sets, and analytical approaches. Please use the *American Antiquity* or *American Anthropologist* style for formatting citations and references in written assignments.

The grading scale will be the one used by the University registrar, that is, A, A-, B+, B, B-, C+, C, C-, D+, D, D-, F.

Policies: Class attendance is mandatory and counts toward your grade. I reserve the right to reduce grades because of absences. I may make exceptions, at my discretion, in individual cases for reasonable cause if

you contact me in advance. I will not penalize you, of course, for officially excused or legally permitted absences, but you are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances, debate activities, and religious observances. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. If you are absent for a University-approved reason, I will afford you the opportunity to make up work missed without any reduction in your final course grade as a direct result of such absence. You should attend the lectures because I use them to share with you significant information that does not appear in the texts. My lectures will also highlight the most important ideas for you. Classes are also your best opportunities to ask questions. Poor attendance will affect your grade. Please come to class prepared to discuss the readings and ask questions.

The grades of papers turned in late may be reduced. Make-up exams for missed tests will not normally be given except in exceptional circumstances that can be clearly documented. Incomplete ("I") grades are reserved for students who are passing a course but have not completed all the required work because of exceptional circumstances.

Participation: Please participate by asking questions and offering comments. Please come to class prepared to discuss the readings, homework, and your project.

Electronic devices: Please comply with the University policy on the use of electronic devices, which states: "In order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular telephones and pagers, are to be disabled in class sessions."

Code of Academic Integrity policy statement. Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001.

No cheating or plagiarism will be tolerated. All work must be your own original work. Although students are more than welcome to study together, and I even encourage it, homework must reflect your own work.

Schedule and outline of course topics: Please note that the following schedule and outline is, like the federal budget, only a plan. Changes are likely, but we will discuss them in class in advance. Reading assignments are listed for week they should be done in anticipation of the next week when they will be discussed. They refer to the textbook unless otherwise noted.

Week 1 (1/7): Introduction to the course. History of quantitative analysis in anthropology. Research design: Theory, data and analysis in anthropology. Read "A Brief History of Statistics in Anthropology" and Chapters 1 and 2 in textbook.

Week 2 (1/14): Research design and projects. Measurement and scales of measurement. Find and submit data set for class project.

Week 3 (1/21): No class. Dr. Martin Luther King holiday

Week 4 (1/28): Data. Tables and graphs. Descriptive stats. Read Chapter 3.

Week 5 (2/4): Sampling and probability. Read Chapter 4.

Week 6 (2/11): Hypothesis testing. Read Chapter 5 and Chapter 7, Sections 7.1, 7.2 and 7.4.

Week 7 (2/18): Differences of means, t-test. Read Chapter 6 and Chapter 7, Section 7.3.

Week 8 (2/25): ANOVA. Midterm Review.

Week 9 (3/4): No class. Spring Break

Week 10 (3/11): Midterm. Read Chapter 8.

Week 11 (3/21): Hypothesis testing, Categorical data. Read Chapter 9.

Week 12 (3/28): Correlation. Read Chapter 10.

Week 13 (4/4): Regression. Read Chapter 11.

Week 14 (4/11): Spatial analysis and cluster analysis

Week 15 (4/18): Summary, conclusion, and review for Final exam. Project paper due.

Final exam scheduled by Registrar: Monday, April 29th, 1:15 pm-3:45 pm in SO190.

Disclaimer: This syllabus is not a contract. It does not create any right, benefit, or responsibility, substantive or procedural, enforceable at law by any party against FAU or the Instructor. The syllabus is subject to change without notice. It is intended only to assist in the internal management of the class.