070:386:B1 **(or other)**

**Advanced Issues in Evolutionary Anthropology (Chemical Archaeology)**

***T TH 2:00 to 5:40 pm, BIO 302***

**INSTRUCTOR:** Rene Studer-Halbach

Office: Biosciences Building 306, Douglass Campus

Office hours: TBD, or by appointment

Email: rks109@rci.rutgers.edu

**COURSE DESCRIPTION**: *Chemical Archaeology* is a lecture/seminar style course. It provides students with a survey of current research on stable isotope and aDNA analysis, along with the background knowledge required to understand and engage with that research.

**COURSE OBJECTIVES:** Students will become familiar with the academic literature dealing with stable isotopes and aDNA analysis. Students will also develop a strong background in both analytical techniques. This will include an understanding of the specific information generated by these methods, the interpretation of relevant scholarly articles, and the limitations of both methods.

**LEARNING GOALS:**

* Understand what specific data are generated by stable isotope and aDNA analyses, and how
* Develop inferences about past individuals and populations from those data
* Understand the limitations of these quantitative techniques
* Become familiar with the ongoing research using these methods
* Understand how these methods contribute substantively to broader anthropological research

**PREREQUISITE:** ***070:102 Introduction to Human Evolution***, ***070:105 Introduction to Archaeology****,* or equivalent.

**ABSENCES**: Because of the condensed schedule of summer courses, we will cover much more material on any given day than during the regular academic year. As such, a strict policy on absences will be enforced. If you will miss a class, you must notify me prior to the absence and **documentation** must be available after the absence. Please note that notification of the absence must be ***prior to the absence and retroactive notifications are not acceptable. Without notification (before) and documentation (after), a missed lecture or seminar will not be excused.***

**ACADEMIC INTEGRITY**: All students must strictly adhere to the Rutgers Academic Integrity Policy, which identifies and defines violations including cheating, fabrication, facilitating academic dishonesty, plagiarism, and denying others access to information or material. Full definitions of each of these violations, as well as the consequences of violating the Academic Integrity Policy, are available as part of the student handbook. For details see: <http://academicintegrity.rutgers.edu/academic-integrity-policy/>. ***You are responsible for knowing what constitutes plagiarism and academic dishonesty.***

**ACCOMMODATIONS:**

Students with disabilities requesting accommodations must follow the procedures outlined at <https://ods.rutgers.edu/students/registration-form>. Full disability policies and procedures are at <https://ods.rutgers.edu/>.

**GRADING:**

Research Paper: 40%

Presentation: 15%

Midterm Exam: 20%

Leading Discussion: 10%

Participation: 15%

**Research Paper:** You may choose any topic relevant to this course, subject to my approval. This is an academic research paper. You must use scholarly sources from peer-reviewed journals, and cite them appropriately. The paper should be 15-20 pages in length. Papers that are longer than 20 pages will be penalized by an amount proportionate to the amount they exceed the page limit.

**Presentation:** During the final meeting period, you will give a presentation to the class on the topic of your research paper. This presentation should last ~15 minutes, after which you will answer questions from your classmates and instructor. This grade will also be affected by how well you pay attention to your classmates’ presentations, and whether you ask them relevant questions.

**Midterm Examination:** This exam will take place near the beginning of the course, not at the half way point. It will mark the end of the “lecture-like” portion of the class, and the turn towards the “seminar-like” portion. It will deal with all of the material discussed in the lecture portion of the course, as well as any assigned readings to that point.

**Leading Discussion:** During the first meeting, we will divide the topics of the course amongst the students. On your assigned day, you are responsible for leading the discussion of the readings. You should prepare a list of talking points, and questions to pose to your classmates. You should work on the assumption that your classmates have read the assigned material. **The schedule is flexible**, and if you have an interest in a topic not on the list, speak with me and I may be able to accommodate you.

**Participation:** The majority of this course is a discussion-based seminar. **You are expected to complete the readings for each class before the class.** Readings will be examined thoroughly in class. When it is not your turn to lead the discussion, you are still expected to do the readings, and come prepared to discuss them and ask questions. Note that your participation during each class will reflect on your classmate who is leading the discussion.

**REQUIRED READINGS:**

Readings for each session will be posted on the course Sakai site. The course is heavily discussion based, and you are **expected** to complete all readings before each course meeting.

**SCHEDULE**:

May 31: Introduction, stable isotope lecture.

June 2: Finish stable isotope lecture, begin article discussion.

June 7: Midterm exam, article discussion.

June 9: Stable Isotope Articles

June 14: Stable Isotope Articles

June 16: Stable Isotope Articles

June 21: Stable Isotope Articles

June 23: aDNA Articles

June 28: aDNA Articles

June 30: aDNA Articles

July 5: aDNA Articles

July 7: Presentations, discussion.

**STUDENT WELLNESS SERVICES**

[**Just In Case Web App**](http://m.appcreatorpro.com/m/rutgers/fda9f59ca5/fda9f59ca5.html)

<http://codu.co/cee05e>

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

**Counseling, ADAP & Psychiatric Services (CAPS)**

**(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/** [**www.rhscaps.rutgers.edu/**](http://www.rhscaps.rutgers.edu/)

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students’ efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

**Violence Prevention & Victim Assistance (VPVA)**

**(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 /** [**www.vpva.rutgers.edu/**](http://www.vpva.rutgers.edu/)

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

**Disability Services**

(**848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 /** [**https://ods.rutgers.edu/**](https://ods.rutgers.edu/)

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus’s disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

**Scarlet Listeners**

**(732) 247-5555 /** [**http://www.scarletlisteners.com/**](http://www.scarletlisteners.com/)

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.