Course Description
Landscapes are dynamic products of interactions between human activities and environmental elements and landscape archaeology is a discipline that investigates the ways past people formed and transformed their surroundings through time and space. In this seminar, we use an interdisciplinary approach and explore how landscapes have been constructed or influenced by both cultural and natural processes. We will overview the main theoretical perspectives and a wide range of methods used in landscape archaeology that can be applied to other disciplines as well. We particularly focus on technological applications including satellite remote sensing, Geographic Information Systems (GIS), geospatial analysis, methods in field survey, and archaeological site prospection. We will analyze multiple case studies from ancient Near East and other parts of the world and learn about settlement distribution, water management systems, and diverse land use strategies. Finally, by exploring issues of sustainability, productivity, and microenvironmental diversity, we discuss how archaeology benefits longer-term views of change.

Course Objectives
By the end of the course students will:

- Analyze contemporary and past landscapes
- Learn about geospatial technologies that are broadly applied in many fields and are transforming the ways in which we understand human history
- Explore theories, methods, and applications of landscape archaeology
- Apply critical thinking to reading and writing and advance presentation skills

Readings
There is no required textbook for this course. All required readings will be available on NYU Classes. Students are expected to read the assigned materials prior to each class and be prepared to discuss them.

Lab Activities
Some of the class sessions will be divided between discussion of weekly readings and in-class lab activities. Those sessions will be held in a computer lab and students may use their own personal computers or use the computers in the lab. Necessary software, particularly ArcGIS, will be provided by NYU Software Library.
**Assignments and Grading**
The final grade will be calculated as outlined below:

**Class Attendance and Participation (10%)**: Students are expected to attend all class sessions and actively engage in discussion of class readings. Class participation will be measured based on the quality of in-class contributions.

**Lab Activities (30%)**: Lab activities will provide hands-on training and offer opportunities to students to complete their data analysis for papers 1, 2, and the final paper. Students are encouraged to work in teams to complete their lab assignments. Necessary data and software will be provided.

**Papers 1 & 2 (10% each)**: Papers will be 5 pages each, exclusive of images and reference list. Topics will be announced in class at least two weeks prior to due dates. Each student must complete research and writing of these papers independently.

**Final Research Paper (30%) and Presentation (10%)**: For the final paper, students can choose a topic of their own choice related to class discussions and lab activities. Students should employ one or more of techniques discussed in class to perform an original analysis. Paper will be 10 pages, exclusive of images and reference list, and should include an overview of a specific research question, methods and techniques applied, and key results. More details will be discussed in class. Each student will present their paper during the last class day.

All the three papers should be typed double-spaced, with 1-inch margins. Papers must include in-text citations and a reference list and must be printed and submitted at the beginning of the sessions in which they are due. Late submissions will only be accepted if approved in advance. Papers will be graded based on clarity, critical discussion, data analysis (partly completed during lab activities), structure, and grammar. More details on grading criteria will be discussed in class.

**Academic Integrity**: Please visit the following website to familiarize yourself with NYU’s academic integrity policy prior to completing your assignments: [https://www.nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/academic-integrity-for-students-at-nyu.html](https://www.nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/academic-integrity-for-students-at-nyu.html)

**Disability Disclosure Statement**: Academic accommodations are available for students with disabilities. The Moses Center website is www.nyu.edu/csd. Please contact the Moses Center for Students with Disabilities (212-998-4980 or mosescsd@nyu.edu) for further information. Students who are requesting academic accommodations are advised to reach out to the Moses Center as early as possible in the semester for assistance.
Weekly Schedule

**January 27:** Introduction to Landscape and Environment and Course Overview

**February 3:** Defining Archaeological Landscapes

Required Readings:


**February 10:** Remote Sensing (Part 1): Seeing Past Landscapes by Aerial Imagery and CORONA Satellite Photographs

Required Readings:


Recommended: Look at aerial images in *Flights over ancient cities of Iran*: [https://oi.uchicago.edu/flights-over-ancient-cities-iran](https://oi.uchicago.edu/flights-over-ancient-cities-iran)

Lab Activity: Introduction of methods to recognize and interpret ancient remains on historical aerial and satellite imagery.

**February 17:** **No Class: President’s Day**

**February 24:** Remote Sensing (Part 2): Multispectral Satellite Imagery Applications in Archaeology
Required Readings:


Lab Activity: Image analysis using different satellite imagery datasets such as Landsat and Worldview and using Google Earth.

**March 2:** Introduction to Geographic Information Systems (GIS)

**Paper 1 Due**

Required Readings:


Lab Activity: Introduction to geospatial technologies and introduction to ArcGIS.

**March 9:** Using GIS for Mapping and Visualization

Required Readings:


**Lab Activity:** Working with digital spatial data in ArcGIS. Necessary data will be provided.

**March 16:** **No Class: Spring Recess**

**March 23:** Landscapes of Settlement: Sedentary and Mobile Populations

**Required Readings:**


**March 30:** Identifying Landscape Features by Remotely Sensed Data (part 1)

**Required Readings:**


Lab Activity: Exploring landscapes and identifying sites and settlement systems by remote sensing data.

**April 6: Identifying Landscape Features by Remotely Sensed Data (part 2)**

Required Readings:


Lab Activity: Exploring landscapes and identifying off-site features by remote sensing data.

**April 13: Surveying Landscapes**

**Paper 2 Due**

Required Readings:


**April 20: Management of Cultural Heritage Sites Using Remote Sensing Techniques**

Required Readings:


**April 27: Social and Political Landscapes**

Required Readings:


**May 4: Human-Environment Interactions: Case Studies of Historical Collapses from Around the World**

Required Readings:


**May 11: Seminar Wrap-Up and Student Presentations**

** Final Research Paper Due **