

CLCV 2305/TSES 2305 Fall 2025 **AND** Winter 2026

Ancient Science and Technology

Class information

Modality: Online

Class Times: asynchronous

Class Location: none

Prerequisites: no prerequisites

Brightspace link: <https://brightspace.carleton.ca/d2l/home/372992>

Course instructor

Name: HARRISON, George William Mallory

Gender pronouns: no preference

How to address me: Dr H.

Email: GeorgeHarrison@cunet.carleton.ca

Phone: none; email preferred

Office Location: 547 Herzberg

Note: If you have a question or would like to talk with me, you can send an email, visit me during student ZOOM hours.

Student Hours

Times: Monday, 10:00 am – 11:00 am

Location: Zoom link -- <https://applications.zoom.us/jti/rich/home/meeting/schedule>

Passcode

830505

Other times by appointment

Course Teaching Assistants

Fatima Karim; she/her

fatimakarim@cmail.carleton.ca

Tamara Donnelly; she/her

tamaradonnelly@cmail.carleton.ca>

Welcome to this Course!

This class looks at 16 topics over two terms whose embrace of time is massive – from paleolithic through to around AD 800, and so embraces the beginning of the Middle Byzantine Period, the Caliphate through the Abbasids in the east and in the west, the rise of

Charlemagne, Vikings, and the Angle and Saxon settlement of the British Isles (with their conversion to Christianity, ie., Arhtur).

First assignment – dismantle an essay or short, short biography by Plutarch. My first, most important, question of any ancient author is 'Is this someone I would enjoy having dinner with'?

Dec MidTerm – multiple choice; 70 mins; online

Second assignment – read a book (two choices, both about 150 pages) – write a paper or why not do a video, either individual or as a small group book club or game show or vote the book off the island...!?!

Third assignment – course essay PLENTY of choices (or you and I can arrive at one of your choice)

April MidTerm – multiple choice; 70 mins; online

Do all five and I will grade the four highest (or do 4 of your choice)

Course Schedule

 first quarter of class

Weeks 1- 3 [8-27 Sept]:

Origins of Technology

Ceramics and Glass

Weeks 4-6 [29 Sept-18 Oct]:

Carpentry

Metals

FALL READING WEEK – 20-24 October

 second quarter of class

Weeks 7-9 [27 Oct-10 Nov]:

Agriculture, Basic Principles

Agriculture, Mediterranean Triad

Weeks 10-12 [12 Nov-1 Dec]:

Agriculture, Planting, Harvesting, Processing

Animal Husbandry

DECEMBER BREAK – 21 December – 4 January

third quarter of class

Weeks 1-3 [5-24 Jan]:

Death in Rome

Gladiators and Other Spectacles

Week 4-6 [26 Jan-9 Feb]:

Dry Set Construction

Concrete

WINTER READING WEEK – 16-20 February

last quarter of class

Weeks 7-9 [23 Feb-14 March]:

Water Use Technology

Water Transport and Harbours

Weeks 10-12 [16-30 March]:

Music and Dance

Magic

Course Level Learning objectives

1. As a two-term course, we can leverage our time together to maximize the enhancement of your critical reading, research, and writing skills.
2. Learn to love the joy of a close reading of ancient (in translation) sources and modern scholarship with tonnes of visual material
3. Learn to separate fact from factoids, evidence from opinion.
4. Deconstruct arguments to see which ones are tenable because they are evidence-based and the argument is logical and coherent.
5. Do not be satisfied with ‘encyclopedia superficiality’ (Alexander von Humboldt) but see how amazing deep analysis of texts and contexts and issues is.
6. Quickly and effectively evaluate resources in relation to a specific problem
7. Puzzle out to how to arrange data and arguments and communicate results as forcibly and clearly as possible.

8. Come to appreciate one how good and dependable a friend is the MacOdrum Library. It is shockingly good and as a university library almost everything is peer reviewed.
9. Some ancient writers got it wrong sometimes (and some got it wrong more than sometimes). You get to say/write that, and then give examples/show proof.
10. HAVE FUN doing all this.

Inclusive Teaching Statement

A 'university' by its name means everything, and everyone, in the universe. This is a good start.

By law in Canada any written work can be submitted in English or in French. I can also read work submitted German, Greek or Italian.

Territory Acknowledgement

Carleton is on unceded territory of the Algonquin Anishnaabeg people.

Community Guidelines/Academic Integrity

The four ancient cardinal virtues were justice, moral courage, moderation, and wisdom. They have not always been observed but they have never gone out of fashion.

By common sense they imply, as well, honesty, responsibility, respect, fairness, trust.

These cornerstones apply to all of us – the professor, TAs, learners.

Generative AI use

AI is a research tool and as such has great value. Like any research, it needs to be acknowledged or it is a form of plagiarism as defined by Carleton.

AI is not a writing tool, writing supplement, or substitute for writing up your results on your own. To do so is a form of plagiarism as defined by Carleton.

Infractions will be sent to the Assistant Dean, Faculty of Science.

Learning Materials

Book (your choice of one of two) for the Modern Book Assignment

Daum, Andreas W. 2024. *Alexander von Humbolt: A Concise Biography*.
Princeton, Princeton University Press.
ISBN: 978-0-691247366
224 pages
\$24.25 (USD); Kindle \$14.72
[NOT in Carleton Library]

Klavan, Spencer A. 2021. *Music in Ancient Greece: Melody, Rhythm and Life*.
London, Bloomsbury.
ISBN: 978-1-350119925
172 pages
\$24.25 (USD); Kindle \$23.24
[NOT in Carleton Library]

Technology Checklist:

internet-enabled computer (laptop/desktop)

Zoom software installed on computer (can also install on phone as backup!)

Access to reliable internet

Assessment in this Course

FOUR of your choice from the following, and so each worth 25% of the grade:

Ancient Source Assessment (an essay or short biography of Plutarch)

Modern Book Evaluation (Alexander von Humbolt [ecologist] or Ancient Music)

Course Essay (essay from pre-approved list or by agreement with professor)

December MidTerm

April Final

Grade Breakdown

Each assignment is worth 25%

Do all five and I will record marks for the four highest

Written Assignments

9 – 10 – 11 rule is in force – first assignment has 9 FULL pages of text minimum; second assignment has 10 FULL pages of text minimum; third assignment has 11 FULL pages of text minimum

There are 3 written assignments in this course:

Ancient Source (25%)

Due Date to be graded as on time: *Friday, 18 October before 11:59 PM (9 pp. min. text)*

Late submission can be accepted, with increasing penalty, until Friday, 10 April 11:59 PM

Plutarch is the most important Greek biographer and a major essayist on numerous topics, philosophical, scientific, natural sciences, physics. You choose one from a list in class site to read and analyze.

Modern Book (25%)

Due Date to be graded as on time: *Friday, 9 January before 11:59 PM (10 pp. min text)*

Late submission can be accepted, with increasing penalty, until Friday, 10 April 11:59 PM

There are four options for delivery of this assignment; group videos are encouraged and have been the most popular option. One book is on a subject related more closely to literature and the arts, psychology, sociology and anthropology and the other is geared towards lab sciences, ecology, geology, geography, and architecture. You choose one.

Course Essay (25%)

Due Date to be graded as on time: *Friday, 20 March, 11:59 PM (11 pp. min. text)*

Late submission can be accepted, with increasing penalty, until Friday, 10 April 11:59 PM

Any topic relevant to Mediterranean antiquity, even if comparative of other cultures and times is allowed. Essay does not need to be tied to material presented in the lectures. A file with pre-approved topics

Consult folders within class site for details

December MidTerm and April Final

December MidTerm and April Final are online in BrightSpace (Tools > Quizzes). The dates and times for opening and closing are by University regulation. Within those windows you have 70 minutes to complete the test. Choose what 70 minutes works best for you.

December MidTerm (25%)

OPENS: Monday, 8 December 10:00 am

CLOSES: Saturday, 20 December 5:00 PM

33 questions

70 Minutes
Multiple choice
Based on eight classes September through December

April Final (25%)

OPENS: Saturday, 11 April 10:00 am

CLOSES: Thursday, 23 April, 5:00 PM

33 questions

70 Minutes

Multiple choice

Based on eight classes January through April

Extension on April Final only by permission of the Office of the Registrar

Help for studying for tests: [Centre for Student Academic Support](#) and [Science Student Success Centre \(SSSC\)](#)

Consult folders within class site for details

Carleton Grading Scheme

In accordance with the Carleton University Undergraduate Calendar Regulations, the letter grades assigned in this course will have the following percentage equivalents:

A+ = 90-100%	A = 85-89%	A- = 80-84%
B+ = 77-79%	B = 73-76%	B- = 70-72%
C+ = 67-69%	C = 63-66%	C- = 60-62%
D+ = 57-59%	D = 53-56%	D- = 50-52%
F = <50%		

ACCOMMODATIONS

Academic Accommodations and Regulations (incl. Plagiarism)

Carleton University is committed to providing access to the educational experience in order to promote academic accessibility for all individuals.

Academic accommodation refers to educational practices, systems and support mechanisms designed to accommodate diversity and difference. The purpose of accommodation is to enable students to perform the essential requirements of their academic programs. At no time does academic accommodation undermine or compromise the learning objectives that are established by the academic authorities of the University.

University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the [Academic Regulations](#) website.

Academic Accommodation for Illness and Wellness

Being able to drop one writing assignment or test gives flexibility should it not be possible to complete one of the assignments

Illness

Consult with the professor (not TAs) as soon as you think there might be an issue.

Wellness/Mental Health

If you are struggling, please do not hesitate to reach out. I am happy to listen, and/or direct you to resources that might help. In terms of class, if you need extra help or missed a lesson, don't stress! Email me and we will set a time to meet. I'll work with you, I promise. Remember that Carleton also offers an [array of mental health and well-being resources](#) for you.

Consult with the professor (not TAs) as soon as you think there might be an issue.

Academic Accommodations for Students with Disabilities

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. For more details, visit the [Paul Menton Centre](#) website.

Addressing Human Rights Concerns

The University and all members of the University community share responsibility for ensuring that the University's educational, work and living environments are free from discrimination and harassment. Should you have concerns about harassment or discrimination relating to your age, ancestry, citizenship, colour, creed (religion), disability, ethnic origin, family status, gender expression, gender identity, marital status, place of origin, race, sex (including pregnancy), or

sexual orientation, please contact the [Department of Equity and Inclusive Communities](mailto:equity@carleton.ca) at equity@carleton.ca.

Religious Obligations

Please contact me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, please review the [Student Guide to Academic Accommodation \(PDF, 2.1 MB\)](#).

Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit the [Sexual Violence Prevention and Survivor Support](#) website.

Accommodations for Missed Work

Carleton recognizes that students may experience unexpected, temporary incapacitation (for example: illness, injury, or extraordinary circumstances outside of a student's control). As a result, Carleton has put into place a protocol for students to apply for accommodations using a self-declaration form in the event of missed work.

The form can be filled out on the [Academic Consideration for Coursework Form](#) webpage. Note that these forms should be used for short-term concerns related to missed work; if you are experiencing chronic, ongoing challenges which necessitate a broader solution, I recommend reaching out to the Paul Menton Centre and/or the Care Support team.

- Deferred/missed term work for short-term accommodation (5 days or less): [stipulate the process by which the student may gain informal accommodation for short term incapacitation (i.e., via submitting a self-declaration form, a written email to the professor, TA, etc.), and the appropriate accommodation (e.g., extension, alternate assignment, etc.).]
- Deferred/missed term work for longer term incapacitation (5 days or longer); [It would be helpful to include a statement to indicate to the student to email you (the instructor) for guidance. The student will need to go to the Registrar's Office for support, but it is important that the instructor is apprised of the long-term accommodation needs.] If you require accommodations for this course that are longer than the 5-day (short-term) period, please email me to discuss how/whether accommodation needs could be met for this course.

Pregnancy

Please contact me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, please review the [Student Guide to Academic Accommodation \(PDF, 2.1 MB\)](#).

Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see the [Senate Policy on Accommodation for Student Activities \(PDF, 25KB\)](#).

REGULATIONS

Academic Integrity

Academic misconduct undermines the values of honesty, trust, respect, fairness, and responsibility that we expect in this class. Carleton University provides supports such as academic integrity workshops to ensure, as far as possible, that all students understand the norms and standards of academic integrity that we expect you to uphold. Your teaching team has a responsibility to ensure that their application of the Academic Integrity Policy upholds the university's collective commitments to fairness, equity, and integrity. (Adapted from [Carleton University's Academic Integrity Policy](#), 2021).

Examples of actions that do not adhere to Carleton's Academic Integrity Policy include:

- Plagiarism
- Accessing unauthorized sites for assignments or tests
- Unauthorized collaboration on assignment and exams

Sanctions for not abiding by Carleton's Academic Integrity Policy

A student who has not upheld their responsibilities under Carleton's Academic Integrity Policy may be subject to one of several sanctions. Details about this process can be found on [the Faculty of Science Academic Integrity website](#). Students are expected to familiarize themselves with and follow the Carleton University [Student Academic Integrity Policy](#). The Policy is strictly enforced and is binding on all students.

Student Rights and Responsibilities

Students are expected to act responsibly and engage respectfully with other students and members of the Carleton and the broader community. See the [7 Rights and Responsibilities Policy](#) for details regarding the expectations of non-academic behaviour of students. Those

who participate with another student in the commission of an infraction of this Policy will also be held liable for their actions.

Student Concerns

If a concern arises regarding this course, your first point of contact is me. Email or drop in during student hours, and I will do my best to address your concern.

If I am unable to address your concern, the next points of contact are (in this order): Undergraduate Chair, Department; Department Chair or Director; and Office of the Dean of Science.

Note: You can also bring your concerns to [Ombuds services](#).

Assistance for Students

- [Paul Menton Centre](#)
- [Academic Advising Centre \(AAC\)](#)
- [Centre for Student Academic Support \(CSAS\)](#)
- [Academic Advising Centre \(AAC\)](#)
- [Math Tutorial Centre](#)
- [Science Student Success Centre](#)
- [Mental Health and Wellbeing](#)
- [Health and Counselling Services](#)
- [Equity and Inclusivity Communities](#)