MEDICINE, SCIENCE AND THE DAWN OF REASON

UF Quest 1/Nature and Culture IDS2935/16268 General Education: Humanities, Writing (2000 words)

[Note: A minimum grade of C is required for General Education credit]

FALL 2020, TIMES Wednesday 10-E1 Location: Turlington 2334

Class resources, announcements, updates, and assignments will be made available through the class

Canvas site: [URL]

Instructor	Teaching Assistant
Konstantinos Kapparis, Professor of Classics	NAME, TBA
Office: 135 Dauer Hall.	
Office Hours: Tuesday 4-5 pm; Wednesday 6-7	Office Hours: TBA
pm.	
Emailing for an appointment, even during office	
hours, will ensure that there will be no waiting	
time.	

Course Description

The creative period of Ancient Greek Medicine and Medical Ethics, from Hippocrates to Galen, defined and circumscribed medical science and ethics as we know them in the western tradition. The discourse which the Greek medical writes began on numerous issues, including medically assisted euthanasia, abortion, the economics of medical treatment, gendered approaches to medical practice, or the interactions between patient and health care provider, is ongoing with renewed impetus in recent years. This course will discuss these issues against their historical background and invite students to develop a more nuanced and historically informed perception on matters of modern medical ethics. The course is interdisciplinary by nature standing at the intersection between medical humanities and historical studies. As part of the "Nature and Culture" theme, part of it presents a historical narrative on the development of humanity and its passage from superstition and irrational belief to the era of reason and scientific inquiry. Another part of it asks important ethical questions and challenges students to consider these issues, but more importantly to appreciate and evaluate the processes involved in reaching safe, data-based, logical conclusions. Finally, the course offers a thorough exploration of the interactions between human and environment in the attempt to understand the natural world, unlock its rules and secrets, and seek treatments for disease in the informed and harmonious interaction between humanity and its environment.

QUEST 1 SLOS: Quest 1 and Gen Ed Descriptions and Student Learning Outcomes

- QUEST 1 DESCRIPTION: Quest 1 courses are multidisciplinary explorations of truly challenging questions about the human condition that are not easy to answer, but also not easy to ignore: What makes life worth living? What makes a society a fair one? How do we manage conflicts? Who are we in relation to other people or to the natural world? To grapple with the kinds of open-ended and complex intellectual challenges they will face as critical, creative, and self-reflective adults navigating a complex and interconnected world, Quest 1 students use the humanities approaches present in the course to mine texts for evidence, create arguments, and articulate ideas.
- QUEST 1 SLOs:

- Identify describe and explain the history, theories, and methodologies used to examine the dawn of Science and reason, and illustrate how they inform us about the human condition, and its subsequent development. (Content)
- Develop and present clear and effective responses to essential questions on Science, Medicine, and the intellectual atmosphere, which have allowed them to flourish and change the course of humanity. (Communication)
- Analyze and evaluate essential questions about the human condition using the development of scientific inquiry as a platform for such analysis. (Critical Thinking)
- Connect the strong links between science, its political background and its ties with humanities, with critical reflection on their intellectual, personal, and professional development at UF and beyond. (Critical Thinking)
- HUMANITIES DESCRIPTION: Humanities courses provide instruction in the history, key themes, principles, terminology, and theory or methodologies used within a humanities discipline or the humanities in general. Students will learn to identify and to analyze the key elements, biases and influences that shape thought. These courses emphasize clear and effective analysis and approach issues and problems from multiple perspectives.

HUMANITIES SLOS:

- o Identify, describe, and explain the history, underlying theory and methodologies used in the course (Content).
- Identify and analyze key elements, biases and influences that shape thought within the subject area. Approach issues and problems within the discipline from multiple perspectives (Critical Thinking).
- o Communicate knowledge, thoughts and reasoning clearly and effectively (Communication).
- WRITING DESCRIPTION: The Writing Requirement (WR) ensures students both maintain their fluency in writing and use writing as a tool to facilitate learning. The writing course grade assigned by the instructor has two components: the writing component and a course grade. To receive writing credit a student must satisfactorily complete all the assigned written work and receive a minimum grade of C (2.0) for the course. It is possible to not meet the writing requirement and still earn a minimum grade of C in a class, so students should review their degree audit after receiving their grade to verify receipt of credit for the writing component.

• WRITING EVALUATION:

- This course carries 2000 words that count towards the UF Writing Requirement. You must turn
 in all written work counting towards the 2000 words in order to receive credit for those words.
- The instructor will evaluate and provide feedback on the student's written work with respect to content, organization and coherence, argument and support (when appropriate), style, clarity, grammar, punctuation, and other mechanics, using the writing rubric below.
- More specific rubrics and guidelines for individual assignments may be provided during the course of the semester.

Writing Assessment Rubric:

	Satisfactory (Y)	Unsatisfactory (N)
CONTENT	Papers exhibit at least some evidence of ideas that respond to the topic with complexity, critically evaluating and synthesizing sources, and provide at least an adequate discussion with basic understanding of sources.	Papers either include a central idea(s) that is unclear or off-topic or provide only minimal or inadequate discussion of ideas. Papers may also lack sufficient or appropriate sources.
ORGANIZATION AND COHERENCE	Documents and paragraphs exhibit at least some identifiable structure for topics, including a clear thesis statement but may require readers to work to follow progression of ideas.	Documents and paragraphs lack clearly identifiable organization, may lack any coherent sense of logic in associating and organizing ideas, and may also lack transitions and coherence to guide the reader.
ARGUMENT AND SUPPORT	Documents use persuasive and confident presentation of ideas, strongly supported with evidence. At the weak end of the Satisfactory range, documents may provide only generalized discussion of ideas or may provide adequate discussion but rely on weak support for arguments.	Documents make only weak generalizations, providing little or no support, as in summaries or narratives that fail to provide critical analysis.
STYLE	Documents use a writing style with word choice appropriate to the context, genre, and discipline. Sentences should display complexity and logical sentence structure. At a minimum, documents will display a less precise use of vocabulary and an uneven use of sentence structure or a writing style that occasionally veers away from word choice	Documents rely on word usage that is inappropriate for the context, genre, or discipline. Sentences may be overly long or short with awkward construction. Documents may also use words incorrectly

	or tone appropriate to the context, genre, and discipline.	
MECHANICS	Papers will feature correct or error-free presentation of ideas. At the weak end of the Satisfactory range, papers may contain some spelling, punctuation, or grammatical errors that remain unobtrusive so they do not muddy the paper's argument or points.	Papers contain so many mechanical or grammatical errors that they impede the reader's understanding or severely undermine the writer's credibility.

Student Learning Outcomes

Reflecting the curricular structures of Quest 1 and these Gen Ed designations, after taking Science and the Dawn of Reason students will be able to:

- 1. Identify, describe, and explain the historical processes involved in the passage of humanity into the era of Reason, and of the history of Medicine and Science, Medical Ethics, scientific inquiry, rational quest, experimentation and the study of the natural world for the benefit of humanity, as well as humanity's place in the natural world. (Content SLOs for Gen Ed Hum, and Q1)
- 2. Analyze and evaluate some important culture texts from the early Greek scientists and natural philosophers, as well as some comparable texts from other ancient traditions such as Ancient Egyptian, Babylonian, Ayurvedic, or Chinese, using established practices appropriate to the arts and humanities (Critical Thinking SLOs for Gen Ed Hum, and Q1)
- 3. Analyze and evaluate how scientific methodologies and rational inquiry initially developed and explain how their employment changed the course of humanity's history (Critical Thinking SLO for Gen Ed Hum, and Q1)
- 4. Analyze and evaluate essential questions about the progress of humanity on the basis of reason (Critical Thinking SLO for Gen Ed Hum, and Q1)
- 5. Observe and evaluate the role arts and humanities play in the lives of individuals and societies and the role they might play in students' undergraduate degree programs. (Communication SLO for Gen Ed Hum, and Q1)
- Analyze, evaluate, and critically reflect on connections between course content and their intellectual, personal, and professional development at UF and beyond (Critical Thinking SLO for Q1)
- 7. Develop and present clear and effective responses to essential questions about the history of medicine, science, rational Inquiry, and other relevant humanities disciplines intersected during the course into the course (Communication SLO for Gen Ed Hum and Q1).

Grading Scale

I record your points on all assignments over the course of the semester in the Canvas gradebook, which translates total points into a letter grade using a standard grading scale:

A= 94-100% of points possible	A- =90-93%	
B+=87-89%;	B=84-86%	B- =80-83%

C+=77-79%	C=74-76%	C- =70-73%
D+=67-69%	D=64-66%	D- =60-63%
<60=F		

More information on UF grading policy is <u>available here</u>.

Required Books:

Required books for class and the recommended writing guide are available at the UF Bookstore. Recommended books are available in Library West, or they can be purchased from any retailer.

Vivian Nutton, Ancient Medicine, London: Routledge, 2013.

Strunk, William and White, E.B. The Elements of Style. 4th edition. Pearson Education Limited 2014.

Recommended Texts:

James Longrigg. *Greek Rational Medicine: Philosophy and Medicine from Alcmaeon to the Alexandrians*. London: Routledge, 1993

Helen King. *Greek and Roman Medicine*. Reprint. Classical World Series. Bristol, U.K.: Bristol Classical Press, 2002. xi + 73 pp. (a brief survey for basic understanding).

Lesley Dean-Jones, Women's Bodies in Classical Greek Science. Oxford: Clarendon Press, 1994.

Important Source Materials (available online at no additional cost; all links to source materials will be available on Canvas; the same applies to Powerpoints and other course materials):

- Homer, Iliad, Book 1
- The Ebers Papyrus (pdf file will be uploaded to Canvas)
- Extracts from the *Materia Medica* of Ayurveda
- Hippocrates The Oath, The Physician, On Decorum, The Sacred Disease, Nature of Man, Airs Waters Places, On Diet.
- Soranus: Gynaecology, The Best Midwife
- Thucydides Book 2: The Plague
- Extracts from Galen on Cosmetic Medicine
- Giovanni Boccaccio, *The Decameron*, Introduction: The Plague

List of Weekly topics:

WEEK 1. Introduction/Class Administration

Why is the study of ancient Greek medical literature and medical ethics still important in the 21st century.

2. Medicine Before Hippocrates

(We will explore practices in Folk medicine and traditional healing practices before the arrival of rational medicine in ancient Greece, Egypt, Babylon, India, China, and Rome).

Readings	:
Nutton, p	op. 37-52

The Ebers Papyrus

Homer, Iliad Book 1

3. The arrival of rational medicine

(This week we will look into some of the groundbreaking developments that led to the establishment of rational medicine, like the inquiries of the pre-Socratic natural philosophers, and how they culminated in the development of the theory of the Four Humors. We will also compare the Theory of the Four Humors with similar concepts in Ayurvedic and traditional Chinese medicine).

Readings:

Nutton 53-71

Extracts from the Materia Medica of Ayurveda

Hippocrates, Nature of Man (extracts placed on Canvas)

4. Medical practice in the Classical Greek World

(Following several studies in the Hippocratic corpus discussing the ideal physician, as well as of the appropriate conditions of practicing medicine will get some valuable insights into how the pioneers of medical science exercised their art)

Readings:

Nutton 87-103

Hippocrates The Physician

5. Medical Ethics in the Classical Period

(Here and will take a look into some import matters on ancient medical ethics, which is still a matter of intense debate, like abortion, contraception, euthanasia, finances, and gender)

Readings:

Hippocrates The Oath,

Hippocrates On Decorum

6. Plagues and Epidemics

(We will take a look into the theories on ancient epidemiology, will read the description of a major plague in classical Athens, and descriptions of diseases through the notes of the wandering physicians who wrote the books of the *Epidemics*)

Readings:

Thucydides Book 2: the Plague

Giovanni Boccaccio, The Decameron, Introduction: The Plague

7. Environmental medicine

(We will be examining the theories of Greek physicians about the influence of the environment on health and disease, as well as their often successful efforts in assisting patients with chronic diseases by simply suggesting improvements in their lifestyle and living conditions).

Readings:

Hippocratres Airs, Waters, Places

8. Diet and lifestyle as health concerns

(We will have the opportunity to study how ancient physicians successfully and significantly improved the health and well-being of their patients by offering sensible advice on diet and lifestyle)

Readings:

Nutton 254-279

Hippocrates On Diet

SPRINGBREAK (NO CLASS)

10. REVIEW AND MIDTERM EXAM

11. The learning process: Scientific Methodology and Health.

(Here will have the opportunity to study how the ancient physicians gained knowledge, what kind of methods they used in their attempts to understand disease, and how they applied such methods into the therapeutic regimes).

Readings:

Nutton 72-86, and 130-141

12. Antenatal life and biological theories about human life

(Here who will study some of the works on antenatal life, and ancient theories on how it was created, and what made a human being)

Readings:

Nutton 91-206

Soranus, *Gynaecology*: The best midwife

13. EXPERIENTIAL LEARNING WEEK

Theme: Circular Health, Past, Present and Future Location: UF One Health Center for Excellence (see below the relevant section for further details)

14. Nature's arsenal: the origins of pharmacology

(This week will discuss how natural substances were used by ancient pharmacology to create drugs intended to help the patient in distress, initially through simple recipes, but eventually through complex composite drugs).

Reading:

Nutton 174-190

15. The physician and the god of healing

(This week explores how rational medicine and faith worked hand by hand to improve a patient's chances of recovery in the Asklepeia, and other religious places which offered the hope of healing and recovery to patients).

Readings:

Hippocrates: The Sacred Disease

Nutton: 104-115

16. REVIEW AND FINAL EXAM

Assignments:

- 10 online quizzes = 40 % (Advances SLOs 1, 2, 3, 7)
 (12 quizzes will be offered, one for each week except week 1, Springbreak, week 9 and week 16; the 10 best will count).
- Midterm = 15 % (10% is based on multiple choice questions, and 5% on one essay-format question). (Advances SLOs 1, 2, 3, 4, 5, 7)
- Final = 15 % (10% is based on multiple choice questions, and 5% on one essay-format question). (Advances SLOs 1, 2, 3, 4, 5, 7)
- Paper (2000 words, <u>due by October 31; 2nd draft due by November 10; 3rd draft due by November 18</u>) = 20% (as described above) (Advances SLOs 1, 2, 3, 4, 7)

TOPIC: Taking into account the version of the Hippocratic Oath which UF medical graduates take, and comparing it with the original Hippocratic Oath, discuss the issues of Medical Ethics on which

the two texts diverge, and explain why these changes to the original text have been deemed necessary, in the light of modern discussions on relevant ethical issues in Medical practice.

Notes:

- 1. There is no expected right or wrong answer. All well-argued points are acceptable, and the objective is not so much to get to the "right" answer, but rather to develop a methodology of arguing a case, and to improve on writing skills. So, there is no need to be pedantic with your arguments. Be imaginative and creative.
- **2.** You MUST stick to the topic. This is very important because the skill to focus on a specific aspect of the subject is crucial for good writing.
- 3. A brief set of further instructions on how to complete your research and write your paper is published online. These are simply meant to be common-sense and easy to follow guidelines, NOT obligatory requirements. Here is the URL with my suggestions: http://web.clas.ufl.edu/users/kapparis/esinstructions.htm

Writing Resources: Students should consult the following book: Strunk, William and White, E.B. *The Elements of Style*. **4**th edition. Pearson Education Limited 2014. This is a very modestly priced, concise and useful book.

It is also highly recommended to take advantage of the rich resources offered by the **University Writing Studio**. The writing studio is committed to helping University of Florida students meet their academic and professional goals by becoming better writers. Visit the writing studio online (https://writing.ufl.edu/writing-studio/) or in 302 Tigert Hall for one-on-one consultations and workshops.

• Experiential Learning Component Report (c. 1000 words, due by November 5; 2nd draft due by November 16) = 10%

Experiential Learning Component Project

Contact: Dr. Sara Agnelli saraclassics@ufl.edu McCarty Hall D, Room G-047B P.O. Box 110135, Gainesville, FL 32611

https://onehealth.ifas.ufl.edu

THEME: Circular Health: Past, Present and Future

DESCRIPTION: The objective of this project is to invite students to learn about the concept of "Circular Health" and to interact with the One Health Center of Excellence.

The Director of the UF One Health Center of Excellence will be invited to give a lecture about "Circular Health". Following, students will attend a workshop where they will analyze real-world global health challenges by using the One Health approach. The workshop will be organized by Dr. Sara Agnelli and the team of the UF One Health Center. It will be worth 10% of the grade.

Purpose of experiential learning: Students will learn and use the One Health approach to better understand and address world challenges, such as climate change, poverty, and inequalities.

Considering that many students might be interested in a career in the health professions, this project is expected to offer valuable insights in the earlier years of their undergraduate studies, and advances SLOs 3, 4, 5, 6, 7.

WHAT IS ONE HEALTH

The One Health philosophy underlines the idea that the health of coexisting humans, animals, and plants in one environment is interconnected. Governing this interconnection is key to achieving the health of the whole system. The One Health Center at UF aims at expanding areas of knowledge on health interconnections with the goal of improving health as a system.

One Health is a conceptual framework aiming at understanding the links and dependencies between the health of humans, animals, plants and the environment. One Health strives to bring all the different disciplines and perspectives towards the optimization of health outcomes for humans, animals, plants and the environment.

PROJECT Learning Objectives: By the end of the process, students will:

- Describe the One Health philosophy
- Develop the language and leadership tools to communicate with different disciplines around
 One Health
- Identify novel areas of interface between human, animal, and environmental health and different disciplines

Class Policies

Class Attendance

Class attendance is expected. Students are allowed five discretionary absences (see "Attendance" under "Graded Work" above) to cover excused and unexcused absences. Additional absences that meet the standard of "excused" per UF's policies may be allowed, otherwise each absence beyond five will result in two points off of the final grade.

Making Up Work

Work is due as specified in the syllabus. Late work is subject to a 1/3 grade penalty for each 24 hour period it is late (e.g., a paper that would've earn an A if turned in in class on Monday becomes an A- if received Tuesday, a B+ if received Wednesday, etc, with the weekend counting as two days). To be excused from submitting work or taking an exam at the assigned time, you must give 24 hours advance notice and/or meet the UF standards for an excused absence.

Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing UF's standard <u>online evaluations</u> (summary results will be available to students <u>here</u>) as well as a course-specific evaluation that focuses on course content and the experience of the Quest curriculum. Class time will be allocated for the completion of both evaluations.

Class Demeanor

Students are expected to arrive to class on time, stay the full class period, and behave in a manner that is respectful to the instructor and to fellow students. Electronic devices should be turned off and placed in closed bags. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be kept to a minimum.

Materials and Supplies Fees

There are no additional fees for this course.

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code

(https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Counseling and Wellness Center

Contact information for the Counseling and Wellness Center:

http://www.counseling.ufl.edu/cwc/Default.aspx, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

COVID-19 Statement

Due to the unprecedented health emergency the lectures for the Falll of 2020 will be delivered online. The online environment aims to emulate as closely as possible in-person instruction, with synchronous lectures, questions, answers and discussions in real time. Current technologies allow us to deliver the content of the class safely and with minimal disruption. Students are encouraged to join the live class and participate actively in the discussion. Extra credit will be given to students who actively participate. Students who for some reason are unable to log in to the live class, can watch the recording which will be posted on Canvas the next day, and ask questions on difficult points via e-mail. The exact practicalities of these arrangements will be clarified on the first day of class. Stay safe.

Privacy Statement

Under the circumstances, and given the fact that students may occasionally face technology, personal or family issues which may prevent full attendance, it is highly recommended but not mandatory to log in to the live class. Students who are unable to attend need to watch the recording which will be posted on Canvas the next day. Since this is a secure site open only to instructors and students it does not raise additional privacy concerns. Students are not permitted to post any part of the recorded lectures on any other platform or share it with persons outside the class. Students are always welcome to discuss privacy issues with the instructor.