



SAS – SCHOOL OF ARTS AND SCIENCES

SCHOOL OF LIFE STUDIES AND HUMAN SCIENCES / LIBERAL ARTS
DEPARTMENT OF HEALTH HUMANITIES
COURSE TITLE: HISTORY OF WESTERN MEDICINE
COURSE CODE: LSHHWM200 / LAHSWM200
3 Semester Credits

1. DESCRIPTION

In this course, students will be guided through a study of the evolution of Western medicine over the centuries, investigating the stories and histories which have framed it. Students will become familiar with the important ideas, instruments, and individuals which shaped the progression of medical traditions, from classical antiquity to modern day. This course will also explore the spaces, often unexpected or unique, in which the scientific art was practiced - such as universities, apothecaries, battlefields, monasteries, and convents. This course will give students the tools needed to analyze the intersection between the field of medicine and those of law, religion, art, and culture. Particular focus will be given to medical practices and advancements made in Italy over the centuries.

2. OBJECTIVES

Upon successful completion of this course, students will:

- Display knowledge of key themes in the history of medicine, healing, and public health.
- Analyze primary and secondary historical sources.
- Gain knowledge enabling them to situate current medical issues in a wider historical perspective.
- Discuss the problem of cultural and historical relativity of health and disease.
- Situate past and present medical practices in a social, political, economic, technological and ethical context.

3. REQUIREMENTS

There are no prerequisites for this course.

4. METHOD

This course consists of lectures, class discussions, projects, and site visits within the local community. Mediums for instruction used will include, but are not limited to, interactive and hands-on activities which challenge thought processes, academic texts and studies, videos, slides, guided problem solving, and experiential and/or field learning activities where applicable.

5. TEXTBOOK – FURTHER READINGS – RESOURCES

TEXTBOOK (Copy available at the university library):

- Cavallo, Sandra and David Gentilcore. *Spaces, Objects and Identities in Early Modern Italian Medicine*. Blackwell Publishing, 2008.

The textbook is mandatory for successful completion of the course.

Where applicable, additional materials, handouts and/or notes will be provided by the instructor.

FURTHER READINGS

- Altford, John. "Medicine in the Middle Ages: The Theory of a Profession," in *The Centennial Review*, Vol. 23, No. 4, pp. 377-397, 1979. Available online here: <https://www.jstor.org/stable/pdf/23738754.pdf>
- Gregory, Andrew. 'William Harvey'. *Encyclopedia Britannica*, 2022. <https://www.britannica.com/biography/William-Harvey>.
- Hennis, Joseph. 'Medicine: History of Medicine: The Most Important People and Discoveries Through the Ages Including: Alternative Medicine, Remedies, Nursing, Modern Cancer Treatments & Anti-Aging', *CreateSpace*, 2017.
- Holomanova A, Ivanova A, Brucknerova I, Benuska J. "Andreas Vesalius – The Reformer of Anatomy, Bratisl Lek Listy" (2001); 102 (1):48-54.
- Nutton, Vivian. "The Reception of Fracastoro's Theory of Contagion: The Seed that Fell among Thorns?," in *Osiris*, 1990, Vol. 6, Renaissance Medical Learning: Evolution of a Tradition (1990), pp. 196-234. Available online here: <https://www.jstor.org/stable/pdf/301787.pdf>
- Pasipoularides, Ares. "Galen, Father of Systematic Medicine. An Essay on Evolution of Modern Medicine and Cardiology," in *International Journal of Cardiology*, 172 (2014) 47–58. Available online here: https://d1wqtxts1xzle7.cloudfront.net/49736973/j.ijcard.2013.12.16620161020-6526-cn13kz-libre.pdf?1476960633=&response-content-disposition=inline%3B+filename%3DGalen_father_of_systematic_medicine_An_e.pdf&Expires=1717670706&Signature=gWiutqf-l2eQ--UeL1OzjL46VurWf-IRjkuS-jvYDIrxhGoEHAEdA-bP7GCgniYSV61yq2aNZBGNgNBwYGSRBxLwDGYQqkreziv0Y9QrF2nvEsj0VZHMtaqgBcE3Wn6k-QrO8VhVeifNj1YUCTGQJwVqeHKL66q36wxfMcNeEK8-g5MTZriGngZO7wlhmSbqFnwRIFHCiL7p7onEIFZEda9EsM0xKfGta-awMGZrXMYuL6Nvlz6mWs59E59QNqu8c2qr--sOjWim2KaAfr9BMD5hKjHtvEK48W4CxQTxVCVvXenc0CcPF642vBzPHLWZfigVHNCc1LrFCnzPsdSA_&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA
- Ribatti, Domenico. "William Harvey and the discovery of the circulation of the blood," in *Journal of Angiogenesis Research* 2009, 1:3. Available online here: <https://link.springer.com/content/pdf/10.1186/2040-2384-1-3.pdf>
- Shen, James T et al. "Ambroise Paré (1510 to 1590): A Surgeon Centuries ahead of his Time," (2014). Department of Surgery Gibbon Society Historical Profiles. Paper 41. Available online here: https://jdc.jefferson.edu/cgi/viewcontent.cgi?article=1033&&context=gibbonsocietyprofiles&&sei-redir=1&referer=https%253A%252F%252Fscholar.google.com%252Fscholar%253Fstart%253D40%2526q%253Dambroise%252Bpare%252Bfather%252Bof%252Bsurgery%2526hl%253Den%2526as_sdt%253D0%252C5#search=%22ambroise%20pare%20father%20surgery%22
- Weiss, Robin. Robert Koch: The Grandfather of Cloning?, *Cell*. 123: 539–542, 2005. <https://core.ac.uk/download/pdf/81947684.pdf>

LIBRARIES IN FLORENCE

Please consult the posted schedules for official opening times of the university library. Also note that the library is for consultation only and it is not possible to borrow materials. The library is equipped with a scanner and internet access so that you may save or email a digital copy of the pages needed.

Students may also utilize additional libraries and research centers within the local community:

BIBLIOTECA PALAGIO DI PARTE GUELFA

Located in Piazzetta di Parte Guelfa between Piazza della Repubblica and Ponte Vecchio. Please consult the library website for hours of operation:

http://www.biblioteche.comune.fi.it/biblioteca_palagio_di_parte_guelfa/

BIBLIOTECA DELLE OBLATE

Located in via dell'Oriuolo 26. Please consult the library website for hours of operation:

www.bibliotecadelleoblade.it

THE HAROLD ACTON LIBRARY AT THE BRITISH INSTITUTE OF FLORENCE

Located in Lungarno Guicciardini 9. Please consult the library website for hours of operation. This library requires a fee-based student membership. For information: www.britishinstitute.it/en

6. FIELD LEARNING

Please consult your Official Registration for any mandatory field learning dates. Field Learning Activities cited in Official Registrations are an integral part of the course and also include an assignment that counts towards your final grade, details will be provided on the first day of class.

7. COURSE MATERIALS

No additional course materials are necessary.

8. COURSE FEES

Course fees cover course-related field learning activities, visits, and support the instructor's teaching methodologies. Book costs are not included in the course fee. The exact amount will be communicated by the instructor on the first day of class.

9. EVALUATION – GRADING SYSTEM

10% Attendance

10% Class Participation and Assignments

15% Online Discussion Board

20% Midterm Exam

20% Research Paper (and History of Medicine Timeline)

25% Final Exam

A = 93-100 %, A- = 90-92%, B+= 87-89%, B = 83-86%, B-=80-82%, C+ = 77-79%, C=73-76%, C- =70-72%, D = 60-69%, F= 0-59%, W = Official Withdrawal, W/F = Failure to withdraw by the designated date.

10. ATTENDANCE – PARTICIPATION

Academic integrity and mutual respect between instructor and student are central to the academic policy and reflected in the attendance regulations. Student presence is mandatory and counts toward the final grade.

Absences are based on academic hours: 1 absence equals 3 lecture hours.

Two absences: 6 lecture hours, attendance and participation grade will be impacted.

Three absences: 9 lecture hours, the final grade may be lowered by one letter grade.

Four absences: 12 lecture hours, constitutes automatic failure of the course regardless of when absences are incurred.

Please note:

- The above hours refer to lecture hours. Please note that the contact / credit hour policy in

the academic catalog includes additional distribution ratios according to delivery category. Ex: 1 absence equals 6 FL/SL/Lab hours or 9 EL hours.

- Hours may be distributed in different formats according to the academic course schedules.

LATE ARRIVAL AND EARLY DEPARTURE

Arriving late or departing early from class is not acceptable. Two late arrivals or early departures or a combination will result in an unexcused absence. Travel is not an exceptional circumstance.

TRAVEL (OR DELAYS DUE TO TRAVEL) IS NEVER AN EXCUSE FOR ABSENCE FROM CLASS.

It is the student's responsibility to know how many absences are incurred. If in doubt, speak with your instructor!

Participation: Satisfactory participation will be the result of contributing to class discussions by putting forth insightful and constructive questions, comments and observations. Overall effort, cooperation during group work, proper care of work space and tools, responsible behavior, and completion of assignments will be assessed. All of the above criteria also apply to Field Learning and site visits.

11. EXAMS – PAPERS – PROJECTS

The **Online Discussion Board** aims at documenting your knowledge and understanding on specific aspects relating to the course topic and count for a 15% of the final grade. After each lecture, a question will be posted on the course's blog page relating to the next lecture. Students are expected to contribute a short (between 300-500 words), thoughtful response. Responses must be posted before the start of the next lecture (all posts are time stamped, late postings (after 9 am) will not be accepted). Be creative, in addition to your short text you can post pictures and videos.

Class Participation and Assignments

Along with participation, assignments accounts for 10% of the final course grade. Regular reading quizzes have been designed to ensure that you are completing the reading and engaging in active learning and critical thinking about course concepts outside of class. They are also designed to help you prepare for the final exam in manageable increments. Quizzes will be open-note, which means you may use your notes to assist you in taking the quiz. Notes must be originals (not photocopied) and in your own handwriting. Quizzes will not be open book. Quizzes will typically be multiple-choice.

The **Research Paper and History of Medicine Timeline** counts for a 20% of the final course grade. Students will complete a research paper on a topic assigned by the instructor. The paper will encourage students to synthesize what they have learned and demonstrate knowledge in the history of medicine. Students' paper should engage with methods and theories related to the major themes and to relevant problems/issues of concern to professionals in the discipline of health and medicine as discussed in class. Students should also demonstrate critical and analytical skills, weighing up the particular arguments and evidence for and against an idea; identify others' positions and evaluate the evidence for all arguments. In addition to the paper, students will create a history of medicine timeline.

The timeline must include:

- The names of 25 people, their contribution to medicine and the year of that contribution.
- 20 important dates in the history of medicine.

Note for students: make sure your paper conforms to academic standards in terms of style and register. Your paper must include citations and quotations from scholarly books, journals, or articles. Your paper must be properly referenced and include a bibliography. Include a word count at the end of the paper. The word limit is 1500 words, you may go 10% above or below the word limit.

The **Midterm Exam** counts for 20% of the final course grade. Format: the exams is divided in three sections:

- Part I: Multiple-choice questions.
- Part II: Short-answer questions requiring students to answer with concise explanations of main ideas, key words and concepts, based on readings from the course and lesson material.
- Part III: Essay questions requiring a depth and width of analysis and not simply the description of factual occurrences.

Each correct and complete answer will be marked with the relevant points, summing up to 100 points in case of all perfect answers. A complete answer consists in accurate and complete factual explanations, analysis or definitions, clear expression of personal opinions with appropriate language style, correct spelling and punctuation.

The **Final Exam** counts for 25% of the final course grade. Format: the exams is divided in two sections:

- Part I: Short-answer questions requiring students to answer with concise explanations of main ideas, key words and concepts, based on readings from the course-pack and lesson material.
- Part II: Essay questions requiring a depth and width of analysis and not simply the description of factual occurrences.

12. LESSONS

Lesson 1	
Meet	In class
Lecture	Course overview, assignments and expectations. Introduction: What we mean when we say medicine has a history. Medicine in ancient Greece. Hippocrates and Metrodora.
Objectives	Explore the classical view of medicine and the body. Display knowledge of seminal physicians in classical Greece, namely Hippocrates and Metrodora. Display knowledge of so-called Hippocratic Oath.
Readings/ Assignments	<i>Medicine: History of Medicine</i> , Chapter 1. Book available in the FUA library. Online Discussion Board submission.

Lesson 2	
Meet	In class
Lecture	Galen of Pergamon, medical research in classical antiquity.
Objectives	Display knowledge of the Theory of Humourism and the Miasma Theory. Display knowledge of the debate between rationalist and empiricist medical sections.
Readings/ Assignments	Read: <i>Spaces, Objects and Identities in Early Modern Italian Medicine</i> , pp.1-32. Read: Pasipoularides, Ares. "Galen, Father of Systematic Medicine. An Essay on Evolution of Modern Medicine and Cardiology" Online Discussion Board submission.

Lesson 3	
Meet	In class
Lecture	Medieval medicine of Western Europe: medicine, diagnosis and treatment in the Middle Ages. The role of the Christian Church and of occult healing in medical theory and practice.
Objectives	Display knowledge of medieval medical practices such as bloodletting and theories

	<p>such as so-called zodiac man.</p> <p>Establish how the Black Death advanced medical science (literary focus on Boccaccio's <i>Decameron</i>).</p> <p>Recognize the interrelation of medicine and religion.</p>
Visit	Officina Santa Maria Novella.
Readings/ Assignments	<p>Read: Altford, "Medicine in the Middle Ages: The Theory of a Profession"</p> <p>Read: <i>Spaces, Objects and Identities in Early Modern Italian Medicine</i>, pp. 33-49</p> <p>Online Discussion Board submission.</p>

Lesson 4	
Meet	In class
Lecture	Ambroise Paré, father of surgery and modern forensic pathology.
Objectives	<p>Display knowledge of Ambroise Paré and establish his contribution to the development of forensic science and surgical techniques.</p> <p>Establish the development of battlefield medicine.</p> <p>Display knowledge of the Bezoar stone experiment.</p>
Readings/ Assignments	<p>Read: Shen, "Ambroise Paré (1510 to 1590): A Surgeon Centuries ahead of his Time"</p> <p>Read: <i>Spaces, Objects and Identities in Early Modern Italian Medicine</i>, pp. 50-78.</p> <p><i>Medicine: History of Medicine</i>, Chapter 10. Book available in the FUA library.</p> <p>Online Discussion Board submission.</p>

Lesson 5	
Meet	In class
Lecture	Andreas Vesalius and the new anatomists.
Objectives	<p>Establish Vesalius contribution to the development of modern human anatomy.</p> <p>Display knowledge of Vesalius's seminal <i>De Humani Corporis Fabrica</i> (1543).</p>
Readings/ Assignments	<p>Read: Holomanova, "Vesalius – The Reformer of Anatomy"</p> <p>Read: <i>Spaces, Objects and Identities in Early Modern Italian Medicine</i>, pp. 79-95.</p> <p>Online Discussion Board submission.</p>

Lesson 6	
Meet	In class
Lecture	Girolamo Fracastoro and the Germ Theory of Disease.
Objectives	<p>Display knowledge of Girolamo Fracastoro's work and contribution to the development of the Germ Theory Disease.</p> <p>Display knowledge of the struggle against syphilis with reference to Fracastoro's <i>Syphilis Sive Morbus Gallicus</i> (1530).</p>
Readings/ Assignments	<p>Read: Nutton, "The Reception of Fracastoro's Theory of Contagion: The Seed that Fell among Thorns?"</p> <p><i>Spaces, Objects and Identities in Early Modern Italian Medicine</i>, pp. 96-114.</p> <p>Online Discussion Board submission.</p>

Lesson 7	
Meet	In class
Lecture	MIDTERM EXAM

Lesson 8	
NA	ACADEMIC BREAK

Lesson 9	
Meet	In class
Lecture	William Harvey “discovery” of the circulatory system.
Objectives	Display knowledge of Harvey’s work and contribution to the discovery of the circulatory system with reference to his <i>De Motu Cordis</i> (1628). Establish Harvey’s role in the struggle to end witchcraft and witch-hunts.
Readings/ Assignments	Read: Ribatti, “William Harvey and the Discovery of the Circulation of the Blood” Research about witch-hunt in Tuscany, establishing links with medicine and religion.

Lesson 10	
Meet	In class
Lecture	The significance of the scientific model and Galileo Galilei. The age of Enlightenment and the birth of the scientific process.
Objectives	Define the scientific revolution and the birth of the scientific method with reference to René Descartes and his <i>Discours de la Méthode</i> (1637). Explore how the essential uniqueness of an individual in humoral medicine began to be replaced with the understanding of a standardized body in modern scientific medicine.
Visit	Walking Tour of ancient hospitals – Santa Maria Nuova, Ex Monastero delle Oblate, Biblioteca delle Oblate, Ospedale degli Innocenti) and some Galileo landmarks – Palazzo dei Cartelloni, Florentine House, Galileo Museum (outside).
Readings/ Assignments	<i>Medicine: History of Medicine</i> , Chapter 4. Book available in the FUA library. Online Discussion Board submission.

Lesson 11	
Meet	In class
Lecture	The history of vaccination from Thucydides to the eradication of smallpox.
Objectives	Display knowledge of Edward Jenner and his role in the development of the modern concept of vaccination. Display knowledge of how the first vaccinations were created and used against diseases such as rabies, tetanus, and diphtheria.
Readings/ Assignments	<i>Medicine: History of Medicine</i> , Chapter 2. Book available in the FUA library. Online Discussion Board submission.

Lesson 12	
Meet	In class
Lecture	From the discovery of first antibiotics until the present day.
Objectives	Explore how ancient people all over the world used plants and herbs to treat sickness. Retrace the evolution in the creation of the first antibiotics and medicines. Identify Alexander Fleming’s seminal role in identifying penicillin.
Readings/ Assignments	<i>Medicine: History of Medicine</i> , Chapter 3. Book available in the FUA library. Online Discussion Board submission.

Lesson 13	
Meet	In class
Lecture	The birth of modern medicine: Louis Pasteur and Robert Koch.
Objectives	Establish how the population growth and the invention of modern communication improved our ability to diagnose and cure diseases.

	Explore medical milestones during the 19th Century with a specific focus on Louis Pasteur and Robert Koch.
Readings/ Assignments	Weiss, Robin. <i>Robert Koch: The Grandfather of Cloning?</i> Article available online. Online Discussion Board submission.

Lesson 14	
Meet	In class
Lecture	The birth of modern medicine: importance of sanitation and hygiene, hospital planning, and education.
Objectives	Identify Florence Nightingale's contribution to the development of modern medicine. Display knowledge of Nightingale's <i>Notes of Nursing</i> (1860). Display knowledge of Elizabeth Blackwell's role in promoting the education of women in medicine.
Readings/ Assignments	<i>Medicine: History of Medicine, Chapter 8</i> . Book available in the FUA library. Online Discussion Board submission. Research Paper and History of Medicine Timeline submission.

Lesson 15	
Meet	In class
Lecture	FINAL EXAM