



University of Prince Edward Island
Special Topics BIO 4090 / HIST4090

**The Roots of Western Medicine: The Legacy of
Innovators at Padua and Bologna**
Course Instructors: Dr. Christian Lacroix / Dr. James Moran

Anatomical Theatre,
University of Padua
(Italy)

<https://www.italymagazine.com/sites/default/files/feature-story/gallery/anatomicopadova.jpg>

Course Description:

This is an interdisciplinary course in the history of western medicine. It is being taught in the first summer session as a 3 credit (unit), one semester course.

Course instructor Dr. Christian Lacroix's research highlights relationships between morphologically different plant structures that share similar developmental pathways. His current research interests include leaf complexity in seed-bearing plants, developmental aspects of floral organ identity, and the biology of the Gulf of St. Lawrence Aster. Dr. James Moran's research explores the intersections of government policy, medicine, health, disease, mental illness, and social history. His current research explores mental illness and civil law in transatlantic context, and the history of 18th century disease along the St. Lawrence River valley.

Both professors have previously taught courses in the history of science and medicine at UPEI.

This course takes students to Padua and Bologna in Italy to view historic collections at medical universities to gain an appreciation of the foundations that shaped the future of modern western medicine. Many of the roots of our medical knowledge and practices are European in origin. In fact, institutions in Padua and Bologna in Italy, and Montpellier in France, dominated the practice of medicine in the later Middle Ages, and Renaissance periods. The early days of formal anatomy teaching and hands-on dissections and operations were pioneered as innovative methods at those institutions. Andreas Vesalius, professor at Padua, was considered "*the most outstanding of the innovators*" during his time there. The University of Padua hosted Renaissance visionaries Nicolaus Copernicus and Galileo Galilei who contributed to the climate of scientific and medical innovation. English physician William Harvey's revolutionary ideas about blood circulation were also shaped by his education at Padua. The Padua Botanical Gardens were instrumental in the development of medicine at the University and in the region (<https://www.ortobotanicopd.it/en/university-padua-botanical-garden>). At the university of Bologna, the anatomical theatre of the Archiginnasio was the focus of dissections and a level of anatomical learning similar to that occurring in Padua. This

dissection room, built in 1637, was destroyed during WWII and painstakingly reconstructed after the war. Other important sites of medical science in Bologna are the Museum of Palazzo Poggi, (<https://sma.unibo.it/en/the-university-museum-network/museum-of-palazzo-poggi/museum-of-palazzo-poggi>) where 18th century collections in human anatomy and obstetrics are located, and the Luigi Cattaneo Anatomical Wax Collection (<https://sma.unibo.it/en/the-university-museum-network/luigi-cattaneo-anatomical-wax-collection/luigi-cattaneo-anatomical-wax-collection>), which houses an extensive 18th and 19th century collection of wax models of human pathology.

The Renaissance era in medicine led to more accurate and advanced knowledge of the human body and new discoveries (e.g., Fallopian tubes, named after another famous Italian anatomist, Gabriel Fallopius). The legacy of these innovations, available as historical records and anatomical collections, forms the focus of this course. The fieldwork of the course includes guided instructional tours of the Faculties of Medicine (and their historical collections) at the universities of Padua and Bologna in Italy.

In this course students will consider the intersections of medical knowledge and society. Specifically, students will gain an appreciation of the historical contexts within which the practice of western medicine emerged; why the medical innovations of the Renaissance period were controversial at the time that they were being made; how this field evolved over time; and current institutional practices of collecting, identifying, classifying, and preserving specimens and artifacts related to the history of medicine.

Schedule:

Early May (6-9pm)	Introduction and briefing sessions
May xx - May xx	Site visits in Padua and Bologna / seminar discussions
May xx – June xx	Major research project work and submission

Marking:

Field journal assignment		20%
Field presentations / discussions	2 X 10	20%
Research project		40%
Participation (during field trip)		20%

Participation:

Students are evaluated in part on their participation at various stages of the course. Seminars are conducted during our stay abroad that discuss and assess students’ research experiences. This experiential learning includes guided tours by collection curators at the institutions, and students’ own research at those locations. The course instructors add scientific and historical expertise to these student experiences. Students’ participation includes oral reports of their research progress and contributions to the seminar discussions.

Preliminary readings for historical context:

Bruzzone, Raffaella. Kyle, Saray, “Medicine and Humanism in Late Medieval Italy: The ‘Carrara Herbal’ in Padua “ in Bruzzone, Raffaella (ed.) *Medicine in the Medieval Mediterranean* (London: Routledge, 2017.)

Canalis, Rinaldo F., and Massimo Ciavolella. *Andreas Vesalius and the Fabrica in the Age of Printing : Art, Anatomy and Printing in the Italian Renaissance*. Edited by Rinaldo F. Canalis and Massimo Ciavolella. Turnhout: Brepols, 2018.

Cuir, Raphael. *The Development of the Study of Anatomy From the Renaissance to Cartesianism: Da Carpi, Vesalius, Estienne, Bidloo*. Lewiston, N.Y.: Edwin Mellen Press. (e-book, Robertson Library, 2009.

Dacome, Lucia. *Malleable Anatomies: Models, Makers, and Material Culture in Eighteenth-Century Italy*. Oxford: Oxford University Press, 2017.

Martin, Craig. “Medicine and the Heavens in Padua’s Faculty of Arts, 1570-1630.” *The British Journal for the History of Science*, 2022, 1–15.

Minelli, Alessandro. *The Botanical Garden of Padua, 1545-1995*. Venice: Marsilio, 1995.

Park, Katharine. *Secrets of Women : Gender, Generation, and the Origins of Human Dissection*. New York: Zone Books, 2010.

Robison, Kira. *Healers in the Making : Students, Physicians, and Medical Education in Medieval Bologna (1250-1550)*. Leiden: Brill, 2021.

Shackelford, Joel. *William Harvey and the Mechanics of the Heart*. Oxford Portraits in Science. Oxford: Oxford University Press, 2003. (e-book, Robertson Library)

Strocchia, Sharon T. *Forgotten Healers: Women and the Pursuit of Health in Late Renaissance Italy*. Vol. 24. Cambridge: Harvard University Press, 2019.

Stolberg, Michael. “Bedside Teaching and the Acquisition of Practical Skills in Mid-Sixteenth-Century Padua.” *Journal of the History of Medicine and Allied Sciences* 69, no. 4 (2014): 633–61.

Zampieri, F. – Zanatta, A. – Elmaghawry, M. – Rippa Bonati, M. – Thiene, G. (2013), *Origin and Development of Modern Medicine at the University of Padua and the Role of the “Serenissima” Republic of Venice*, “Global Cardiology Science and Practice”, 3, 21, pp. 1-14.
https://www.qscience.com/content/journals/10.5339/gcsp.2013.21#html_fulltext

Video Backgrounder:

The Renaissance: When the World was Reborn (Academic Video Online - <https://video-alexanderstreet-com.proxy.library.upei.ca/watch/the-renaissance-when-the-world-was-reborn?context=channel:academic-video-online>) Part of UPEI’s online collection.