

GONZAGA-IN-FLORENCE SYLLABUS

Course: BIOL 199: Renaissance Biology
3 Credits
Instructor: Robert Prusch



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The focus of this course is to gain an understanding of the development of our understanding of life processes up to the period of the Renaissance. This will begin with an overview of the historical development of biological concepts beginning with Aristotle until the Middle Ages. The course will then explore a variety of biological issues as they were understood and practiced in the Renaissance. The contribution of Italian scientists, especially those from Florence, during this period will also be examined. The question of the impact of the advances in the biological sciences during the Renaissance on the future development of the life sciences will also be explored. This course is designed to explore a number of biological issues of the time and the application of these insights into our own time. The course will consist of a series of lectures, readings from selected materials, quizzes, two hourly and a final exam. In addition, students will have the opportunity at the end of the course to participate in group presentations of aspects of Renaissance Biology of their own interest.

First Week

- Session 1: Introduction
 - History of Biology
- Session 2: Aristotle to the Middle Ages
 - The Arab World

Second Week

- Session 1: Science in the Renaissance
 - Scientific Method
 - Role of the Church
- Session 2: Medici Effect
 - Role in the sciences

Third Week

- Session 1: Leonardo de Vinci
 - Contributions to biology
- Session 2: First Exam

Fourth Week

- Session 1 & 2: Sex in the Renaissance
 - Reproduction
 - Attitudes
 - Marriage

Fifth Week

- Sessions 1 & 2: Sex in the Renaissance
 - Birth control
 - Homosexuality
 - Prostitution

Sixth Week

- Sessions 1 & 2: Medicine & Disease
 - The Plague
 - Renaissance medicine

Seventh Week

Sessions 1 & 2: Medicine & Disease
Women and medicine
Ambroise Pare

Eighth Week

Session 1: Diseases of the Medici family
Genetics
Session 2: Second Exam

Ninth Week

Session 1 & 2: Agriculture
Farming in general
Wine making

Tenth Week

Session 1 & 2: Waste management
History
Roman contributions

Eleventh Week

Session 1 & 2: Florentine Biologists
Francesco Redi
Pier Antonio Micheli

Last two Weeks

Session 1 & 2: Student Presentations

Overview and Conclusion

Final Exam

Bibliography

- Boccaccio, G. (1353) Introduction to the *Decameron*
- Cantor, N. (2001) *In the wake of the plague : the Black Death and the world it made* New York : Free Press
- Capra, F. (2007) *The Science of Leonardo*, Doubleday, N.Y., 329 pp.
- Carmichael, A. G. (1986) *Plague and the Poor in Renaissance Florence*, Cambridge: Cambridge University Press
- Cohn, S. K. (2002) *The black death transformed : disease and culture in early Renaissance Europe*, Arnold, London
- Debus, A. G. (1999) *Man and Nature in the Renaissance*, Cambridge University Press, U.K/
- Hall, M. B. (1994) *The Scientific Renaissance 1450-1630*.Dover Publications, Mineola, N.Y.