UCSD, Winter Quarter 2006 HISC 169/269. Topics in Ancient and Medieval Science (colloquium) Professor Luce Giard (*emeritus, CNRS-EHESS, Paris, France*) Wed 9 a.m. – 11:50 a.m., HSS 3086 Office: HSS 6024. Phone: (858).822.4012 Office hours: Wed 12 – 1 p.m., Th 11 a.m. – 12, and by appointment. Igiard@ucsd.edu [e-mail not yet reconnected]

This colloquium will focus on Aristotle and Aristotelianism, in order to explore the main characteristics of Aristotle's works, his categories and conceptual instruments. We will study his natural philosophy and his ambitious research programme. Then we will give some attention to the long-range transmission of the Aristotelian system, the reasons of its central role in the Christian educational system throughout the Middle Ages, its effects, the transformations brought to it in the medieval University curriculum from the 13<sup>th</sup> to the 15<sup>th</sup> centuries, the ways it was criticized in the 16<sup>th</sup> century until it was to fall apart, piece by piece, in the Renaissance period before the so-called Scientific Revolution.

This study will give us access to some major issues, still debated at the present time in history of science and science studies seminars, about the relationship between science and philosophy, the functioning of human cognition, its powers and limits, its achievements and illusions. It will also tell us much about the status granted by social powers and institutions to learning and intellectual activity, from the time of ancient Greece to the Renaissance in Western Christian Europe. We will learn how Greek scholars and their medieval imitators practised science and philosophy, how they debated about controversial issues, which problems were selected, which questions were put apart, which results were accepted and validated, which hypotheses were discarded, how scholars reported about the history of their own discipline and dealt with their predecessors' theories. We will do our best to reach some deeper understanding of how Aristotle and his followers, from late Antiquity Greek commentators to medieval Christian scholars, struggled to handle an elaborate tradition about method, evidence, experience, sense perception, theoretical models, proofs, demonstration, plausibility and reliability. All of that will be done through a close reading of two major books from Aristotle: De Anima (On the Soul, which English title is misleading, because the book concerns the functioning of the mind and sense perception), and Physics (an other misleading title, because this work discusses the great topics and categories on which any natural philosophy is to be built, such as time, place, causes, the infinite, etc.)

A colloquium is a team work in which every enrolled student accepts to take an active part. Weekly attendance is a must, every absence is to be explained. For the same reason, **all assigned reading** must be completed according to the seminar schedule, in order for students to participate in an informed way to the seminar discussions. Each week, some students will give an **oral presentation** on chapters from the assigned reading. On that day, they will give me a **short written version** (1 or 2-page long) of their oral reports, which will be returned to their authors on the following week with some written comments. Every student is to give one oral presentation on a primary source, his/her other presentation will concern a secondary source.

No exam, but a final **research paper** (10-page long), based on primary sources, and whose topic will be defined with me, according to the special interests of every student. This paper will be due on **Wednesday March 22 at 10 a.m.** (exam week) in my mail box (Dept of History, HSS Building, 5<sup>th</sup> Floor). No recycling of an oral presentation will be accepted. This research paper must be a piece of every student's own writing, all quotations being precisely acknowledged and referenced. Grades will be equally based on the three kinds of work done in the seminar: class discussions, two oral presentations, a final research paper.

## Required Reading. All books are available at the Price Center Bookstore

\* Aristotle, De Anima (On the Soul), transl. Hugh Lawson-Tancred, Penguin Classics, 1986.

\* Joe Sachs, Aristotle's Physics: A Guided Study, Rutgers Univ. Press, 1995.

\* Jonathan Barnes, Aristotle, Oxford Univ. Press, 1982.

\* David Ross, Aristotle, introd. John L. Ackrill, 6<sup>th</sup> ed., Routledge, 1995.

\* Edward Grant, The Foundations of Modern Science in the Middle Ages: Their Religious,

Institutional and Intellectual Contexts, Cambridge Univ. Press, 1996.

## **Additional Bibliography**

\* John Haywood, *Historical Atlas of the Classical World 500 BC- AD 600*, Barnes and Noble, 2000.

\* M.C. Howatson and Ian Chilvers eds, *The Concise Oxford Companion to Classical Literature*, Oxford Univ. Press, 1993.

\* Graham Speake ed., The Penguin Dictionary of Ancient History, Penguin, 1995.

\* F.E. Peters, *Greek Philosophical Terms: A Historical Lexicon*, New York Univ. Press, 1967.

\* L.D. Reynolds and N.G. Wilson, *Scribes and Scholars: A Guide to the Transmission of Greek and Latin Literature,* 3<sup>rd</sup> ed., Clarendon Press, 1991.

\* Helen S. Lang, *Aristotle's Physics and its Medieval Varieties*, State Univ. of New York Press, 1992.

## **Class Schedule**

Week 1. General introduction to ancient Greece science and philosophy.

Week 2. Read Barnes, Ross ch. 1 (Life and Works) and 2 (Logic), plus De Anima Book I.

Undergraduates might pass Ross to focus on Barnes and De Anima..

Week 3. Read Ross, ch. 4 (Biology), and De Anima Book II.

Week 4. Read Ross, ch. 5 (Psychology), and De Anima, Book III.

Week 5. Read Ross, ch. 3 (Philosophy of Nature), and Physics, Books I-II.

Week 6. Read Physics, Books III-IV.

Week 7. Read Physics, Books V to VIII.

Week 8. Read Grant, ch. 3 to 5.

Week 9. Read Grant, ch. 6 and 7.

Week 10. Read Grant, ch. 8. General conclusions: Aristotle's conceptual achievement, the presence of Aristotelianism in early modern science and philosophy.