

Schedule and Readings  
**Mediterranean Trivium: Earth, Sea, and Culture**  
**SAIL: Seminars in Advanced Interdisciplinary Learning**

**Day 1 June 25**

Palatine and Capitoline hills, and the Forum.

Readings: selections from Livy *History of Rome* book I

Ovid, *Fasti* entries for Jan 11, Feb 15, Feb 17, Feb 21, Feb 23, Mar intro, Mar 15, Apr 21, May 9, May 14, June 9 [in translation: <http://www.poetryintranslation.com/PITBR/Latin/Fastihome.htm>]

Juvenal *Satire* 3 [in translation: <http://www.poetryintranslation.com/PITBR/Latin/JuvenalSatires3.htm>]

--or-- Jackson, Marie D. "Vulcan's Masonry," *Natural History*, 116 (2007): 40-45.

Alvarez W., 2009, *The Mountains of Saint Francis* (Part II), W.W. Norton, 288 p.

Heiken G. et al, 2005, *Seven Hills of Rome* (Chapters 1-2), Princeton University Press, 245 p.

Vitruvius, *de architectura* bk 2 chap.3-7 (inclusive), bk 3 chap. 2-4 (inclusive), book 4 chap. 4-6 (inclusive), bk 5 (all)

DiRita, D. & Giampaolo C., 2006, Ancient Rome was built with volcanic stone from the Roman Land, in <http://specialpapers.gsapubs.org/content/408/127.citation>

**Day 2 June 26**

(a) Rome: The Pantheon: 8:30-9:30

(b) Disruptive nature #1: Introduction to the environs around Vesuvius, look at urban planning of sites, archaeology, history, art history, anthropology, economics. Professor Thakur will discuss the history of the cities of Herculanium and Pompeii, the eruption of 79 A.D., and discuss issues of site preservation and management. Professor Siddoway will talk about the geology of the site, the geological principles of uniformitarianism vs. catastrophism, and the effects of active volcanism on communities.

Readings:

Braudel, F. *The Mediterranean and the Mediterranean World in the Age of Philip II*: Preface to the first edition; Parts I, II, and IV.

Horden, Peregrine & Nicholas Purcell: *The Corrupting Sea* (London: Blackwell, 2000): Part 1, Chapter 1, *A geographical expression*, pp. 9-25 and Part 2, 'Short Distances and Definite Places,' pp. 53-172.

Poehler, E. (2012) "The drainage system at Pompeii: mechanisms, operations and designs," *Journal of Roman Archaeology* 25: 95-120.

Wayman, Erin, 2007, The Secrets of Ancient Rome's Buildings, *Smithsonian Magazine*, <http://www.smithsonianmag.com/history-archaeology/The-Secrets-of-Ancient-Romes-Buildings.html>

Wallace-Hadrill, A. (2011) "The monumental centre of Herculanium: in search of the identities of public buildings" *Journal of Roman Archaeology* 24: 121-160.

Vitruvius, *de architectura* book 6 (all)

**Day 3 June 27**

Disruptive nature #2: Mt. Vesuvius, including a climb to the caldera. Professor Siddoway will discuss the scope of volcanism, how the active volcano has helped to shape the communities which have and continue to live in the shadow of the volcano and the surrounding areas.

Readings:

Horden and Purcell *The Corrupting Sea*, Part 3, Chapter 8, *Mediterranean Catastrophes*, Section 2, *An unstable world*, pp. 304ff.

Pliny *Letters* 6.16 and 6.20

Stewart, Doug, 2006, Resurrecting Pompeii, *Smithsonian Magazine*, [www.smithsonianmag.com/history-archaeology/pompeii.html?c=y&page=5](http://www.smithsonianmag.com/history-archaeology/pompeii.html?c=y&page=5)

#### **Day 4 June 28**

8:30-12:30 Florence: --the city, its location, the Arno river. Professor Ashley will lead a walking tour of Florence, concentrating on the high medieval/ Renaissance periods. We will discuss the relationship between the city's lay out and its location in a flood plain and address the Arno's role in shaping the city's history.

Readings:

Masters, R., *Fortune Is a River : Leonardo da Vinci and Niccolò Machiavelli's Magnificent Dream to Change the Course of Florentine History*, (New York: Free Press, 1999) Chapter 2.

Bruni, Leonardo, *Panegyric to Florence*, in Kohl, B. G. and R. G. Witt, *The Earthly Republic: Italian Humanists on Government and Society* (Philadelphia: University of Pennsylvania Press, 1978).

Malesani et al. 2003, *Episodes*, Geolithology and provenance of materials of some historical buildings and monuments in the centre of Florence, [www.episodes.co.in/www/backissues/263/16Malesani.pdf](http://www.episodes.co.in/www/backissues/263/16Malesani.pdf)

Caporali E. et al., 2005, The Arno River Floods, *Giornale di Geologia Applicata*, 1, 177-192.

Montgomery, D. *The Rocks Don't Lie*, 2012 (Ch. 3-4), W.W.Norton, 302 p.

#### **Day 5 June 29**

Florence: landscape and the imagination. We will look at how people envisioned nature by examining portrayals of landscape in paintings in the Uffizi museum. We will then examine how people put the natural elements to use in cultural representations. (examples of Etruscan bronze sculptures and tools at the Archeological Museum).

Readings:

Burckhardt, Jacob., *The Civilization of the Renaissance in Italy*, Pt. 4, *The Discovery of the World and of Man* (parts 1-3). Several copies available on line. For example, Project Gutenberg (<http://www.gutenberg.org/cache/epub/2074/pg2074.html>)

Alberti, Leon Battista. *On Painting*, Prologue, Books 1-3. Cambridge Books on line (<http://ebooks.cambridge.org/ebook.jsf?bid=CBO9780511782190>)

DaVinci, Leonardo, *On Painting* (edited by Martin Kemp), 1989. Part IV, The Depiction of Nature, pp 159-191.

Cosgrove, Denis, "The geometry of landscape: practical and speculative arts in sixteenth-century Venetian land territories," 254-276 in Cosgrove, Denis and S. Daniels, eds., *The Iconography of Landscape*, 1988.

David Branagan, 2006, Geology and the artists of the fifteenth and sixteenth centuries, mainly Florentine, in Battista Vai, Gian and Caldwell, W. Glen E., *The Origins of Geology in Italy*, GSA Special Paper 411, p. 31-42.

#### **Day 6 June 30**

Hills: Orvieto as an example of the relationship between topography and city planning

Readings: Geology

del Monaco et al. 2011, Field Guide to Orvieto, Civita de Bagnioreggio, & Ancona, 2<sup>nd</sup> World Landslide Forum, p. 1-17. [www.wlf2.org/home/field-trips/Field%20Trip%20ORVIETO%20CIVITA%20ANCONA.pdf](http://www.wlf2.org/home/field-trips/Field%20Trip%20ORVIETO%20CIVITA%20ANCONA.pdf)

Morello N., 2006, Steno, the fossils, the rocks, and the calendar of the Earth, in Vai GB et al. *The Origins of Geology in Italy*, GSA Special Paper 411, p. 31-42.

Readings: Broader approaches to interdisciplinary learning.

Fink, L. Dee, Integrated Course Design, IDEA Paper #42,  
[www.theideacenter.org/sites/default/files/Idea\\_Paper\\_42.pdf](http://www.theideacenter.org/sites/default/files/Idea_Paper_42.pdf)

Wiggins G. and McTighe J., 2001, Understanding by Design, Chapter One (pdf)

Mansilla, Veronica B. (2005). Assessing Student Work at Disciplinary Crossroads, *Change* 37 (1), pp. 14-21.

### **Day 7 July 1**

Mountains: “Virtual” geology: Geospatial analysis of the Apennines using GeoMapApp and GoogleEarth

Resources and Readings:

GoogleEarth geospatial resource, free download: <http://earth.google.com/download-earth.html>

GeoMapApp geospatial resource, free access: [www.geomapapp.org/](http://www.geomapapp.org/)

Tarquini S. et al. 2007, TINITALY/01 digital elevation model of the whole Italian territory,  
<http://tinitaly.pi.ingv.it/> : *Annals of Geophysics*, 50, 407-425.

Alvarez, W., 2009, *The Mountains of St. Francis* (Part IV). Norton Press, 288 p.

Tewksbury B. (ed.), Teaching Geologic Map Interpretation Using Google Earth,  
[http://serc.carleton.edu/NAGTWorkshops/structure/teaching\\_geo\\_map\\_interp.html](http://serc.carleton.edu/NAGTWorkshops/structure/teaching_geo_map_interp.html)

Cowie P & Tucker T (accessed Feb. 2013), Landscape Evolution in Response to Active Tectonics: The Italian Apennines, [www.geos.ed.ac.uk/research/globalchange/group3/Apenninesproj/Naps.html](http://www.geos.ed.ac.uk/research/globalchange/group3/Apenninesproj/Naps.html)

### **Day 8 July 2**

Pisa and the Arno River valley: the ecology of the Tuscan countryside, the relationship of Pisa to the sea, the valley of the Arno and Florence, and the coastal environment. Emphasis on current issues of urban development, agriculture, and flood control. Contributions from local experts.

Readings:

Sarti, Giovanni, Bini M. & Giacomelli S., 2010, Correlations between landscape, geology and the growth and decline of Pisa (Tuscany, Italy) up to the Middle Ages. *Il Quaternario – Italian Journal of Quaternary Sciences*, v. 23, p. 311-322.

Slayman A, 1999, A Cache of Vintage Ships, v. 52, <http://archive.archaeology.org/9907/etc/pisa.html>

Whallon, Robert, 1974, Spatial analysis of occupation floors, *American Antiquity*. v. 39, pp. 16-34  
[www.jstor.org/stable/279216](http://www.jstor.org/stable/279216)

Masters, R. 1999, *Fortune is a river: Leonardo Da Vinci and Niccolo Machiavelli's Magnificent Dream to Change the Course of Florentine History*, Chapters 1, 3-11, Plume Press, 278 p.

Cosgrove, Denis, Platonism and practicality: hydrology, engineering, and landscape in sixteenth-century Venice, in Cosgrove D. and Pitts G., *Water, Engineering, and Landscape*, 1990.

with Cosgrove, Denis, “The geometry of landscape. . .” on Day 5

### **Day 9 July 3**

**All day curriculum planning and review: (a) Culminating session to review curricular development ideas and accomplishments; (b) Finalize team and individual projects.**

### **Day 10 July 4**

In Rome, visit Piazza Navona and St. Peters to summarize the new perspectives gained in the seminar. Begin with Piazza Navona, then visit St. Peters, including the Scavi Vaticani and the Roman necropolis beneath the basilica, the Basilica itself, and a climb to the top of the cupola to view the contemporary city from its highest point.

Frontinus, *de aquis* book 1.1-23

Vitruvius, *de architectura* book 8 (all)

Heiken G. et al, 2005, *Seven Hills of Rome* (Chapters 1-2), Princeton University Press, 245 p.  
Bozzano F. et al. 2000, A geological model of the buried Tiber River valley beneath the historical centre of Rome, *Bulletin of Engineering Geology and the Environment*, v. 59 ( 1), pp 1-21.

**July 5 Participants leave for the United States**