Renaissance Architecture, Civil Engineering and Design from Brunelleschi to Leonardo and Michelangelo
Spring Semester 2017
Francesco Vossilla Ph.D.

Between the 14th and the 16th centuries, European humanists attempted to revive the culture, art and architecture of the ancient world. This new tendency encouraged a reassertion of individual and innovative achievements to begin again where the Roman Empire had left off. To help society over the cultural deficiency of the medieval era, Italian architects and designers proposed to study and even to copy the works of the ancients, so that their own modern projects would acquire some of the desirable ancient qualities. They were to abolish preordained explanations of reality and understand their fields on the basis of their own observations. At the same time they were willing to accept the doctrines of the ancients as truths more worthy than those their medieval fathers had perpetuated.

In other words, a new type of architecture, design and civil engineering was born as the achievement-vocation of the independent architect: a witty man like Filippo Brunelleschi who was to marry new data with ancient wisdom and a novel technical awareness.

This seminar on Renaissance Architecture, Civil Engineering and Design will introduce Gonzaga-in- Florence students to the interdependence of such applied fields to Florentine Humanism. To study the Renaissance City we will focus on architect and artists who shaped not only the outlook of the city of Florence but also the development of European Modernity: Brunelleschi, Alberti, Leonardo da Vinci, Michelangelo.

We will visit local building, churches and museums to promote sensitivity and active perception of Renaissance Architecture and Design in the original and historical cradle: Firenze.

**Course Objectives**
1. To familiarize the student with the principal achievements of Renaissance Architecture, Engineering and Design.
2. To present a historical understanding of those works in their social and cultural contexts.
3. To help the student acquire and develop the fundamental critical tools of visual and historical interpretation.
4. To teach the student to think critically about the aspirations, constraints, tools, and choices involved in all architectural design, Renaissance or present.

**Course requirements**
All students, whether enrolled for credit or audit, are expected to submit two essays.

For the first one students will write about the history of a Florentine building. Possible choices: Palazzo Vecchio, Duomo, San Lorenzo, Palazzo Rucellai, Palazzo Medici, Santa Maria Novella, The New Sacristy and the Biblioteca Laurenziana of San Lorenzo.

The second essays/project could be labeled The city of Florence as a museum for Renaissance architecture. A fundamental aspect of Florence is the peculiar relationship between landmarks (such as the architectures in Piazza della Signoria), Italian history and local economy. The project calls for sensitivity and active perception of urban space in its original and historical cradle.

Choose 2 items from around Florence (building, fountain, bridge, a statue, a square, whatever strikes you) that represent to you the Gonzaga-in-Florence experience. Take pictures, print or develop them, and write a short text for any image as if the photos and your writing were going to be a part of an exhibit on Florence as a museum-city for the Renaissance. Mount the photos on paper with the printed comments beneath the photo. The text for each of the comments should be no less than 90 words. Write 2 pages as an introduction for your own selection.

All academic work must be completed on time. No work will be accepted late or after the programs ends. On the delivery date hard copies typed in standard format are to be handed in to the professor at the end of class. Standard format: Title, minimum 6 pages, Times New Roman, 12, 2 line spacing, Notes and Bibliography.

Essays submitted late will receive a grade penalty as follows: 1 day—1 letter grade (e.g., A- to B-), 2 days—2 letter grades (e.g., A- to C-), more than 2 days—grade of 0 / F on the assignment.

A plagiarized assignment/paper, research project, etc will be graded 0 (zero) and sent to the Main Campus accompanied by a report.
We will have 2 exams, midterm and final, both concentrated on important examples of Renaissance Architecture, Civil Engineering and Design.

Final examinations must be administered only during the week indicated in the GIF Academic Calendar (April 18-21), and only on the day and at the time indicated in the Final Exam Schedule, which will be published by the Registrar’s Office.

A list of reading assignments will be handed weekly.
A detailed list of images will be handed at the beginning of the semester.

There is to be no eating during class. Cell phones must be switched off. Laptop computers may not be used during class to take notes

Grading System
Research papers 30%
Midterm Exam 20%
Final Exam 40%
Attendance and Participation 10%

Course Contents

Week 1 (Jan 9-11)
Florence in the first half of the XV century. The Tuscan gothic in religious and civil architecture: Arnolfo di Cambio.

Visit to Piazza della Signoria and Orsanmichele

Week 2 (Jan 16-18)
Masons at work. The medieval workshop. Designing the house of God. Filippo Brunelleschi (1): from sculpture to architecture.

Week 3 (Jan 23-25)
Filippo Brunelleschi (2). il Duomo: a huge building without centering. Materials, models, tools, new machineries.
The notion of space and city in Brunelleschi’s innovation. Perspective
Week 4 (Jan 30-Feb 1)

Humanist ideas and Renaissance tendencies.
The social position of the artist in High Renaissance. Filippo Brunelleschi and Leon Battista Alberti as humanists.  
Visit to piazza del Duomo

Week 5 (Feb 6-8)

New scientific achievements and religion
Visit to Piazza SS. Annunziata

Week 6 (Feb 13-15)

Leon Battista Alberti: theories and buildings.
The language of the orders.
Visit to Santa Maria Novella and Palazzo Rucellai

Week 7 (Feb 20-22)

Florence: city of workshops. Il disegno The interior of the Renaissance home
Midterm.

Week 8 (March 6-8)

Furniture and ceramics for a new society
Visit to Palazzo Davanzati

Week 9 (Mar 13-15)

The ordeal of Sculpture from Pliny to Michelangelo. Statues as monuments in the ancient city. Carving a masterpiece from sketches to the block.
The limits of the marble block. Models and tools.
Week 10 (Mar 20-22)
The sculptor as an architect and as a designer.
Visit to the Museo Nazionale del Bargello: Michelangelo’s Bacchus

Week 11 (Mar 27-29)
Michelangelo’s David from Santa Maria del Fiore to Piazza della Signoria.

Week 12 (Apr 3-5)
Visit to San Lorenzo and Sacrestia Nuova

Week 13 (Apr 10-12)
Final Exams