

REIMAGINING THE BASILICA OF SAN LORENZO

ARC 3210 | Architectural Design Studio IV | Prof. Brandon Ro, AIA, NCARB, ICAA

DESIGN BRIEF

See course website via Canvas for additional info



“Under no circumstances should you reject a good design solution for the sole reason that it is well-known, that it has been done before, or that it is not new.”

– George Gromort

“To design is to compose, but to compose one must have objects with which to compose; for the architect these are the 'elements of architecture.'”

– John F. Harbeson



“Authentic architecture is not the incarnation of the spirit of the age but of the spirit, full stop.”

– Leon Krier

“The task involved in bringing together the petrified remnants of yesterday and the life of today provides a vivid illustration of what tradition always means: not just the careful preservation of monuments, but the constant interaction between our aims in the present and the past to which we still belong.”

– Hans-Georg Gadamer

“A classical approach to design fulfills architecture’s most basic responsibility.”

– Allan Greenberg

THE UNFINISHED FAÇADE OF SAN LORENZO: A BRIEF HISTORY

The Basilica of San Lorenzo is one of the largest and oldest churches in Florence, Italy. Beyond its location at the center of the city’s main market district, the church is an important part of the history of Florence. Notably it serves as the burial place of principal members of the Medici family.

Originally consecrated in 393 CE, it served as the cathedral of Florence for nearly three-hundred years. The church was expanded in 1059 CE with a typical Romanesque configuration of the time. Then in 1419 an offer was made by Giovanni di Bicci de' Medici to finance a replacement of the church and the leading Renaissance architect, Filippo Brunelleschi, was selected for the design. Brunelleschi's untimely death did not permit him to see the construction to completion in the late fifteenth century. Although several proposals have been made to finish the façade, including one by Michelangelo, the main eastern rough-hewn façade has never been completed.

The Basilica of San Lorenzo is also part of a larger monastic complex that contains important architectural and artistic works. This includes the Old Sacristy by Brunelleschi, with interior decoration and sculpture by Donatello; the Laurentian Library by Michelangelo; the New Sacristy based on Michelangelo's designs; and the Medici Chapels by Matteo Nigetti.



Aerial photo of the Basilica of San Lorenzo, Florence, Italy

DESIGN CHALLENGE

Earlier this year, a private patron has come forward and pledged a large sum of money to construct a new Renaissance revival design for the unfinished façade of the Basilica of San Lorenzo. The association of the “Friends of the Elettrice Palatina” and the Comune of Florence have agreed to hold a design competition in search of a new design for the church façade.

Any proposal for the new façade must be designed using the classical canons and under the tutelage of a master architect from the Renaissance period. The design challenge is to solve the contradiction between the new Renaissance revival façade and the older Romanesque basilica structure with its high central nave and low side aisles. Designers may want to take note of the Corinthian order and $\sqrt{2}$ proportioning systems

used by Filippo Brunelleschi on the basilica's interior. Each proposal must keep intact the location and size of the existing entry doors.



View towards the main entry doors in the Basilica of San Lorenzo

Similar to the archaeology and measured drawing projects of the Beaux-Arts Institute, students will have the opportunity to apply their architectural skills and historical knowledge to reimagine the basilica of San Lorenzo based on existing conditions, historical context, precedent analysis, and research. The design challenge will be broken down into the following steps:

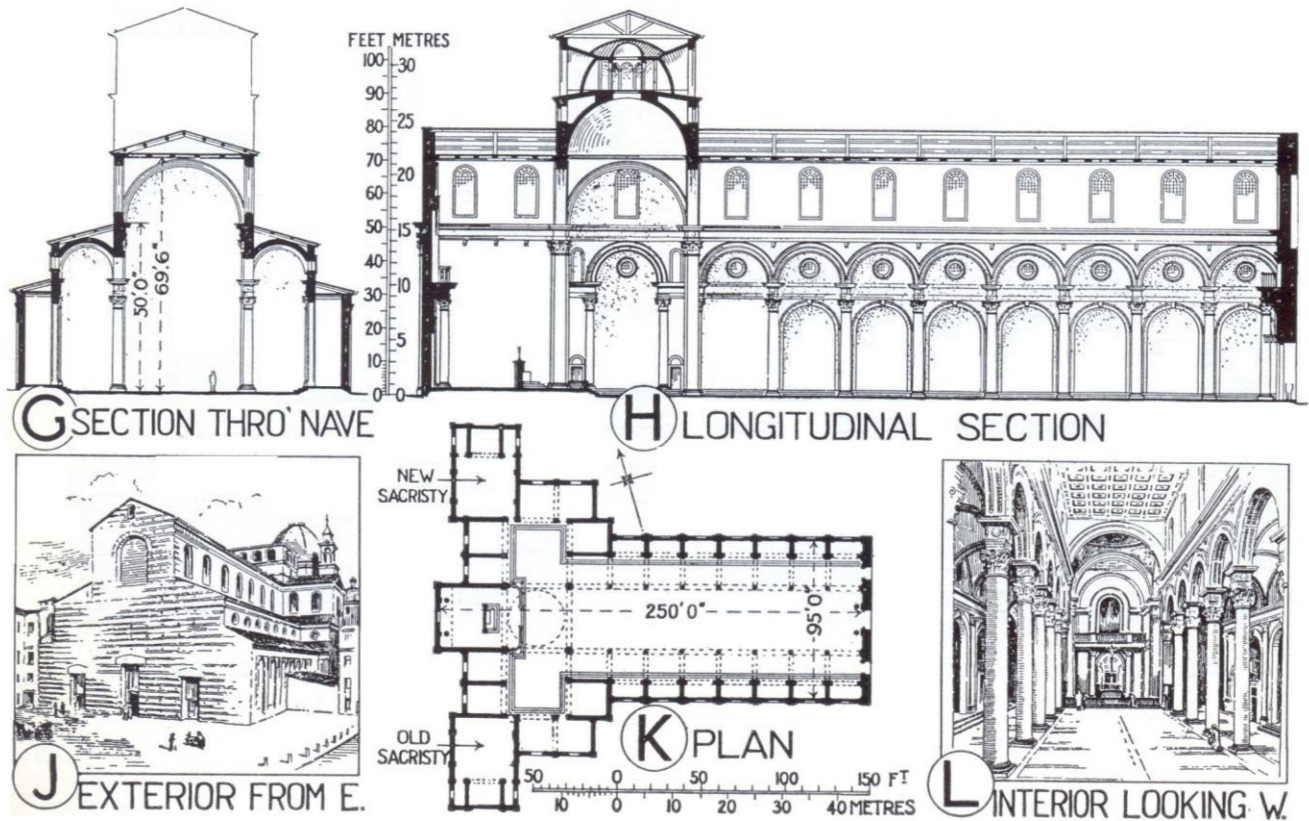
PART A: Pre-Design (Precedent Analysis):

PART B: Concept Development (Schematic Design):

PART C: Refinements (Design Development)

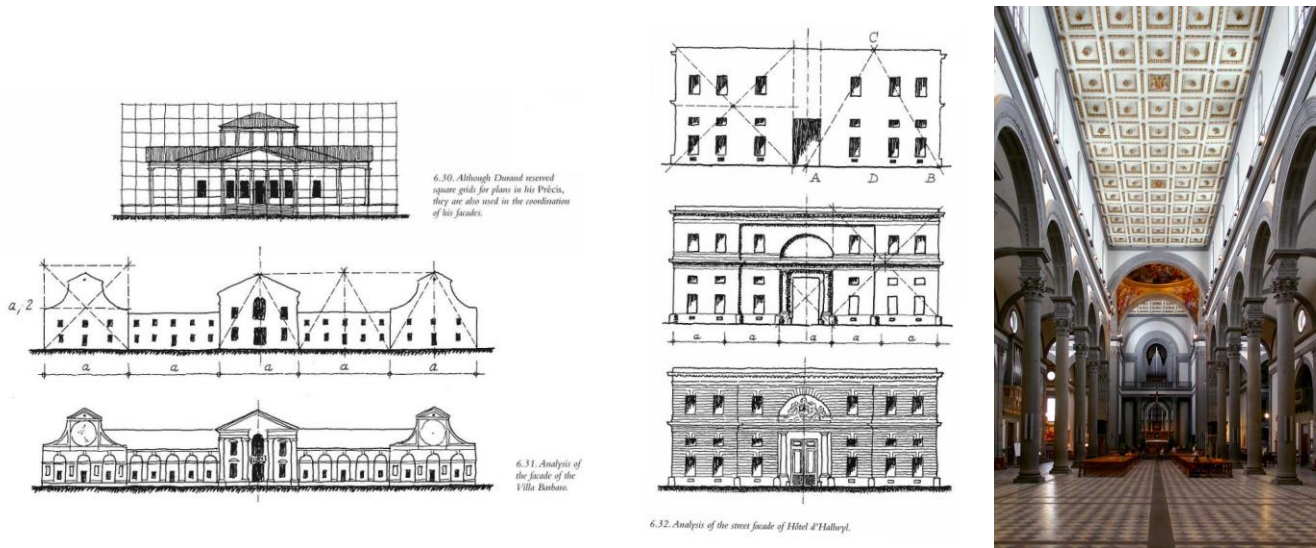
PART D: Final Presentation

S. LORENZO : FLORENCE



Drawings from Sir Banister Fletcher, *A History of Architecture on the Comparative Method*, 17th ed. (New York: Charles Scribner's Sons, 1946), p.676.

PART A – PRE-DESIGN (PRECEDENT ANALYSIS)



PURPOSE

Part A of the project is dedicated to helping the student familiarize themselves with Renaissance architecture and the existing conditions of the San Lorenzo Basilica. **Students will select an architect from the Renaissance period (1300-1600) as their mentor. After you have made your selection, the next step is to choose two buildings that your mentor architect designed. These can be either built or unbuilt.**

The two buildings you choose will serve as case studies or architectural precedents for your design. By studying, analyzing, and diagraming the precedents, students will be able to extract the design principles needed to inform their own design.

Below are a few possible Renaissance mentors to choose from:

- a. Filippo Brunelleschi (1377-1446)
- b. Leon Battista Alberti (1404-1472)
- c. Donato Bramante (1444-1514)
- d. Giuliano da Sangallo (1445-1516)
- e. Leonardo da Vinci (1451-1519)
- f. Michelangelo (1475-1564)
- g. Sebastiano Serlio (1475-1554)
- h. Baldassare Peruzzi (1481-1536)
- i. Raphael Sanzio (1483-1520)
- j. Antonio da Sangallo the Younger (1484-1546)
- k. Jacopo Sansovino (1486-1570)
- l. Giulio Romano (1499-1546)
- m. Giacomo Barozzi da Vignola (1507-1573)
- n. Andrea Palladio (1508-1580)
- o. Giorgio Vasari (1511-1574)
- p. Giacomo della Porta (1532-1602)
- q. Vincenzo Scamozzi (1548-1616)
- r. Inigo Jones (1573-1652)



DELIVERABLES

Students will create a series of drawings and diagrams in plan, elevation, section, perspective, etc. to communicate their analysis. Students should prepare their findings on a series of sheets. Students will present their preliminary findings to the instructor. Students will also share a shortened curated version of their precedent analysis findings during the project's final presentation.

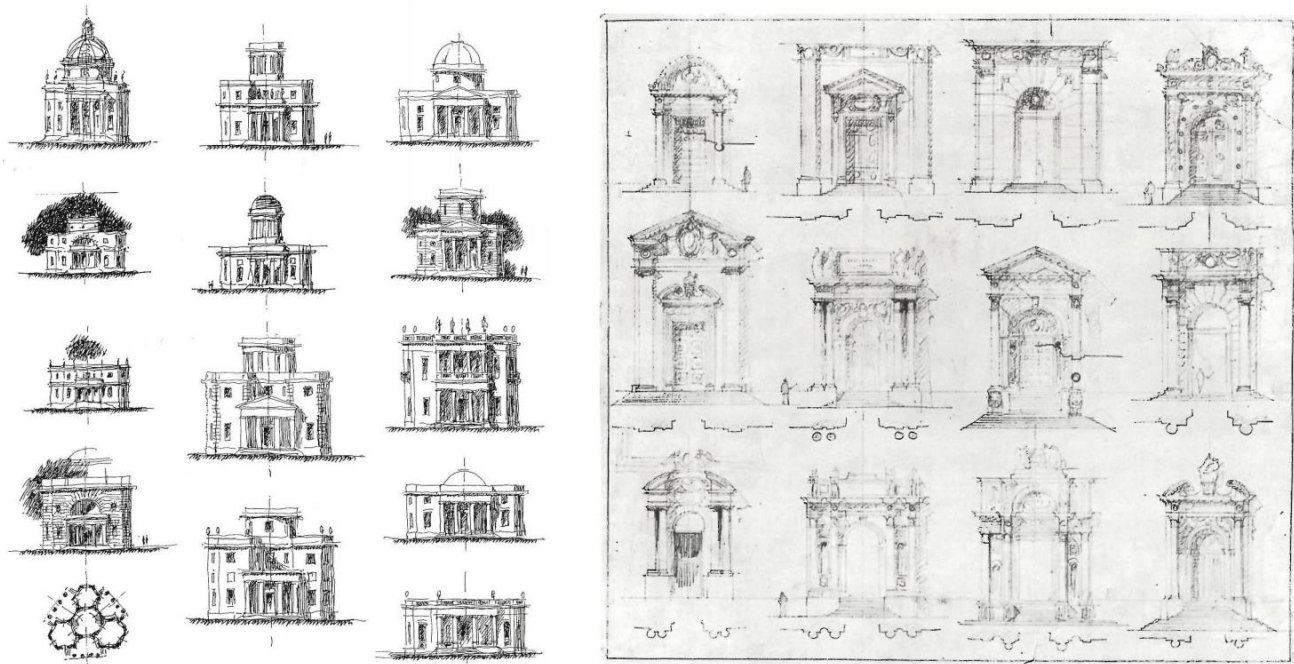
Students will analyze and study **two building precedents from your mentor** in order to better understand their specific design language (i.e., rules of composition, proportion, ordering systems, rhythm, parti, massing, etc.). Students will also study the **existing conditions and design of the San Lorenzo Basilica**.

All three buildings should be analyzed in the following ways:

- Façade Composition, Rhythm, Hierarchy, Fenestration pattern (Unit to Whole, Repetitive to Unique)
- Symmetry, Tripartition, Scale, Classical ordering, Geometry
- Proportional analysis (Duality, Punctuation, Differentiation)

Precedent analysis will be compiled on two ARCH D size (24"x36") sheets of paper. Submit PDFs to Canvas and bring physical prints to class for review with the instructor.

PART B – CONCEPT DEVELOPMENT (SCHEMATIC DESIGN)



PURPOSE

Part B of the project is where students develop and refine design concepts into several design options. In terms of the architectural design process, we call this phase schematic design. Embedded in the Ecole des Beaux-Arts curriculum was the *esquisse* – a French word for sketch. The *esquisse* is a preliminary sketch showing the main ideas of your solution to the design challenge and problem explained above. It is done in a short fixed amount of time, usually anywhere from a couple of hours to nine hours. Your final design for the project will be founded on your *esquisse*.

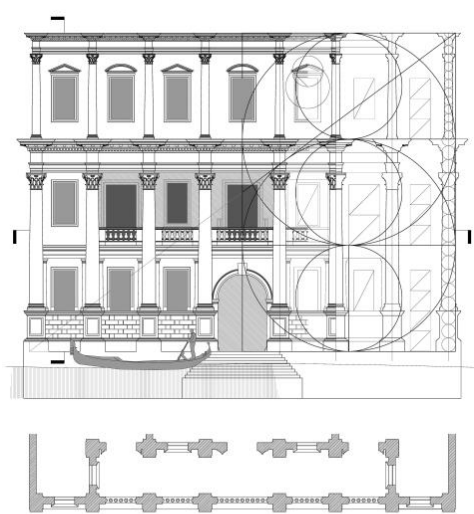
As part of this design process, each student will create a series of quick sketch proposals for the design of San Lorenzo's façade. This design will be informed based on your findings from your precedent analysis of your mentor as well as your analysis of the existing church. Remember that the key is to design the façade as if you were working in the office of your Renaissance architect.

DELIVERABLES

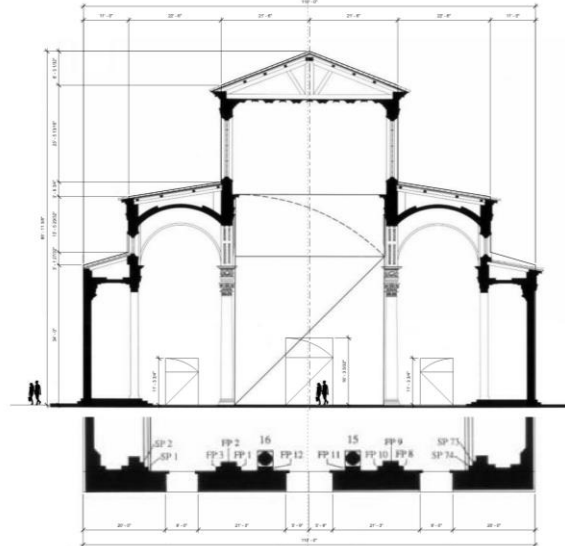
Students will create a total of **six (6) design proposals**. Each sketch proposal will include the **main elevations and a partial plan at 1/16"=1'-0" scale; this will result in twelve (12) drawings**. The design decisions should be informed by the findings from each student's precedent analysis.

Submit concept sketches to Canvas and bring your physical drawings to class for review.

PART C – REFINEMENTS (DESIGN DEVELOPMENT)



PALLADIAN PALAZZO
GRAND CANAL IN VENICE, ITALY



SAN LORENZO FACADE STUDY
Florence, Italy

PURPOSE

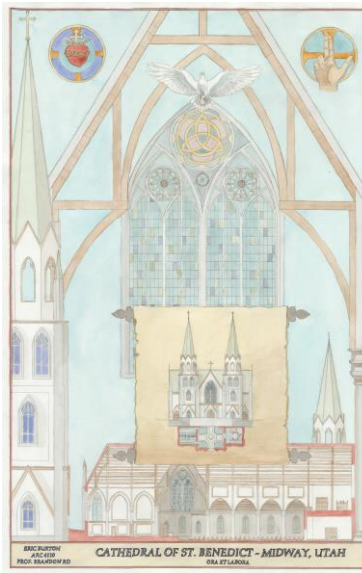
Part C of the project is where students develop and refine design concepts into several design options. This includes selecting one or more of the options from Part B and further refining the design in elevation and plan at a larger scale. There will be evidence of attention to details, such as stone joint patterns, lines of molding profiles, column capital details, etc.

DELIVERABLES

Students will create a total of **two (2) refined design proposals** based on their 1-2 favorite esquisse concepts. Each sketch proposal will include the **main elevation and a partial plan at 1/8"=1'-0" scale; this will result in twelve (4) drawings**. These refined drawings are produced at a larger scale and should include more detail, such as stone coursing, moldings, ornament, etc.

Submit PDFs to Canvas and bring your physical drawings to class for review.

PART D – FINAL PRESENTATION



TOPIC

Students will select one of their Part C design options to use for the final presentation. The majority of the efforts for this stage will be devoted to producing the final presentation drawings. The drawings should demonstrate a high level of quality. Special note should be taken to use appropriate line weights, poche techniques, shades/shadows, etc. The main final drawings (Board C) can be created by either analog or digital means, such as hand drafting or computer aided drafting techniques. The final analytical rendu, however, must be hand drafted and watercolored in grayscale.

DELIVERABLES

The final drawings will be compiled on several drawing sheets. Below is a breakdown of the specific drawing requirements for the project and the four ARCH D (24"x36") presentation boards that will be used.

BOARD A – Precedents

- Mentor Precedent analysis (diagrams, photos, plans, etc.)
- San Lorenzo analysis

BOARD B – Design Process

- Schematic Design esquisse concepts
- Design Development Refinements

BOARD C – Final Design

- Site plan showing ground plan of church at 1"=50'-0" scale (illustrate figure ground similar to Nolli map of Rome)
- Longitudinal section at 1/16"=1'-0" scale (include silhouette people for scale)
- Cross section at 1/16"=1'-0" scale (include silhouette people for scale)
- Front elevation at 1/8"=1'-0" scale (include silhouette people for scale, shadows)

- Floor plan several bays deep at 1/8"=1'-0" scale (include silhouette people for scale)
- Geometry / proportional diagrams of façade composition

BOARD D – Watercolor Analytique

- Composition composed of enlarged order, main elevation, plan, wall section through facade, details, etc.

The final presentation and associated files will be uploaded to Canvas. You will present your final project to the jury.

ASSESSMENT

The weight of the project will be broken down as follows:

PROJECT 01: Basilica of San Lorenzo	20%
Part A: Pre-Design Phase (Precedent Analysis)	20 pts
Part B: Concept Development (Schematic Design)	30 pts
Part C: Refinements (Design Development)	50 pts
Part D: Final Presentation	100 pts

RECOMMENDED READING

- “Basilica of San Lorenzo,” WikiArchitectura, <https://en.wikiarquitectura.com/building/basilica-of-san-lorenzo/>
- Cohen, Matthew A. “Conclusion: Ten Principles for the Study of Proportional Systems in the History of Architecture.” *Architectural Histories*, 2, no.1 (2014): pp. 1-15, https://www.researchgate.net/publication/307704991_Conclusion_Ten_Principles_for_the_Study_of_Proportional_Systems_in_the_History_of_Architecture
- Cohen, Matthew A. *Beyond Beauty: Reexamining Architectural Proportion Through the Basilicas of San Lorenzo and Santo Spirito in Florence* (Venice: Marsilio, 2013). https://www.academia.edu/33044621/Beyond_Beauty_Reexamining_Architectural_Proportion_through_the_Basilicas_of_San_Lorenzo_and_Santo_Spirito_in_Florence_2013_Full_Text_Winner_of_the_James_Ackerman_Award_in_the_History_of_Architecture
- Cohen, Matthew A. “Appendices,” in *Beyond Beauty: Reexamining Architectural Proportion Through the Basilicas of San Lorenzo and Santo Spirito in Florence* (Venice: Marsilio, 2013). https://www.academia.edu/25844754/Appendices_Beyond_Beauty_and_How_Much_Brunelleschi
- Ge, Mae. “Basilica di San Lorenzo,” in *The Incomplete Façade of Italian Churches: The Case Study of Milan Cathedral*, thesis, (Politecnico di Milano, 2017), pp. 16-27.
- Alexandra Korey, “The Debate to Finish the Façade of San Lorenzo,” February 18, 2007. ArtTrav.com. <https://www.arttrav.com/florence/the-debate-to-finish-the-facade-of-san-lorenzo/>
- “La Basilica di San Lorenzo,” Opera Medicea Laurenziana. <https://sanlorenzofirenze.it/en/the-basilica-of-san-lorenzo/>
- Wallace, William E. *Michelangelo at San Lorenzo: The Genius as Entrepreneur* (New York: Cambridge University Press, 1994).

- Wallace, William E. "San Lorenzo 1520," in *San Lorenzo: A Florentine Church*, eds. Louis A. Waldman and Robert Gaston (Cambridge: Villa I Tatti, Harvard University Press, 2017), p.427-449. https://www.academia.edu/34008879/San_Lorenzo_1520
- "Model for the Facade of San Lorenzo," *Fondazione Casa Buonarroti*.
<https://www.casabuonarroti.it/en/museum/collections/michelangelos-works/model-for-the-facade-of-san-lorenzo/>