

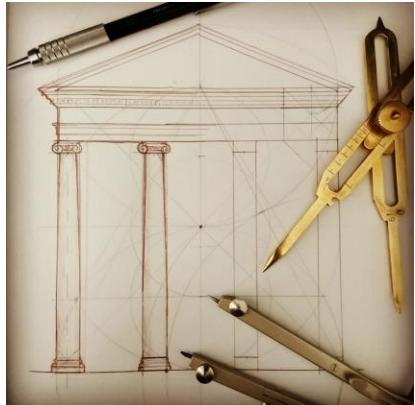
PROJECT 02

CLASSICAL FOUNDATIONS

ARC 1010 | Classical Architecture Workshop | Prof. Brandon Ro, AIA, NCARB

DESIGN BRIEF

See course website via Canvas for additional info



“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

“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.”

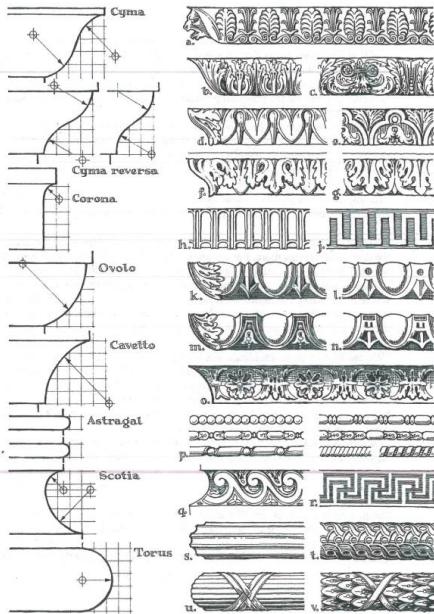
– George Gromort

ASSESSMENT

The project will be broken down into six sub-parts. The weight of each part of the project is broken down as follows:

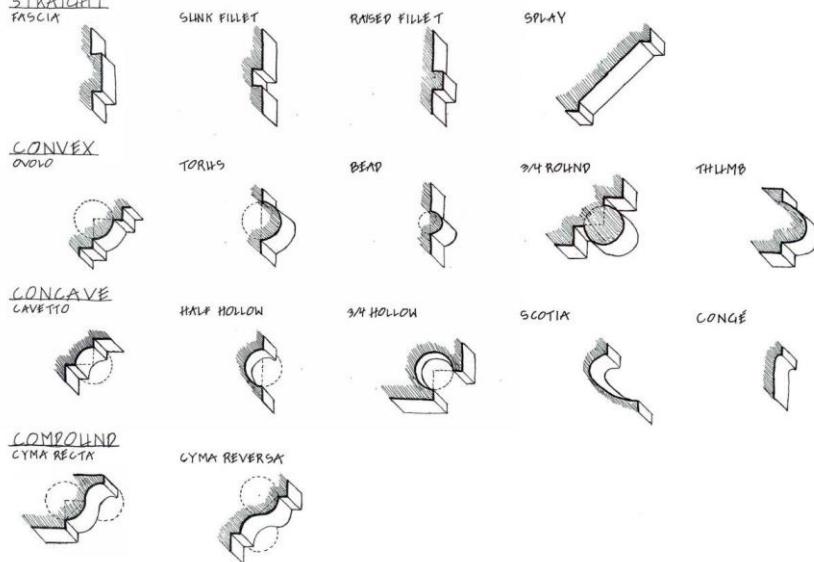
PROJECT 02: Classical Foundations	25%
Part A – Drawing of Classical Moldings	20 pts
Part B – Drawings of Doric Order	60 pts
Part C – Drawings of Ionic Order	60 pts
Part D – Drawings of Corinthian Order	60 pts
Part E – Precedent Analysis – Measured Drawing	30 pts
Part F – Precedent Analysis – Ornament	20 pts

PART A – CLASSICAL MOLDINGS



49. MOULDINGS AND THEIR ENRICHMENT

CLASSICAL MOLDINGS



PURPOSE

For Part A of the project, each student will study the atomic units of classical architecture which are called moldings. In particular, the classical moldings will be studied according to their organization in morphological categories, such as convex or concave. Learning these classical moldings is key to understanding how each classical order uses these small elements to create a larger whole.

WATCH

As part of this assignment, students are required to watch the following video lectures and tutorials:

- Brandon Ro, “Introduction to Classical Architecture: Understanding its Grammar and Syntax” <https://youtu.be/HkpUuBZuCac>
- Brandon Ro, “How to Draw Classical Moldings” <https://youtu.be/TvzTWNHojEs>

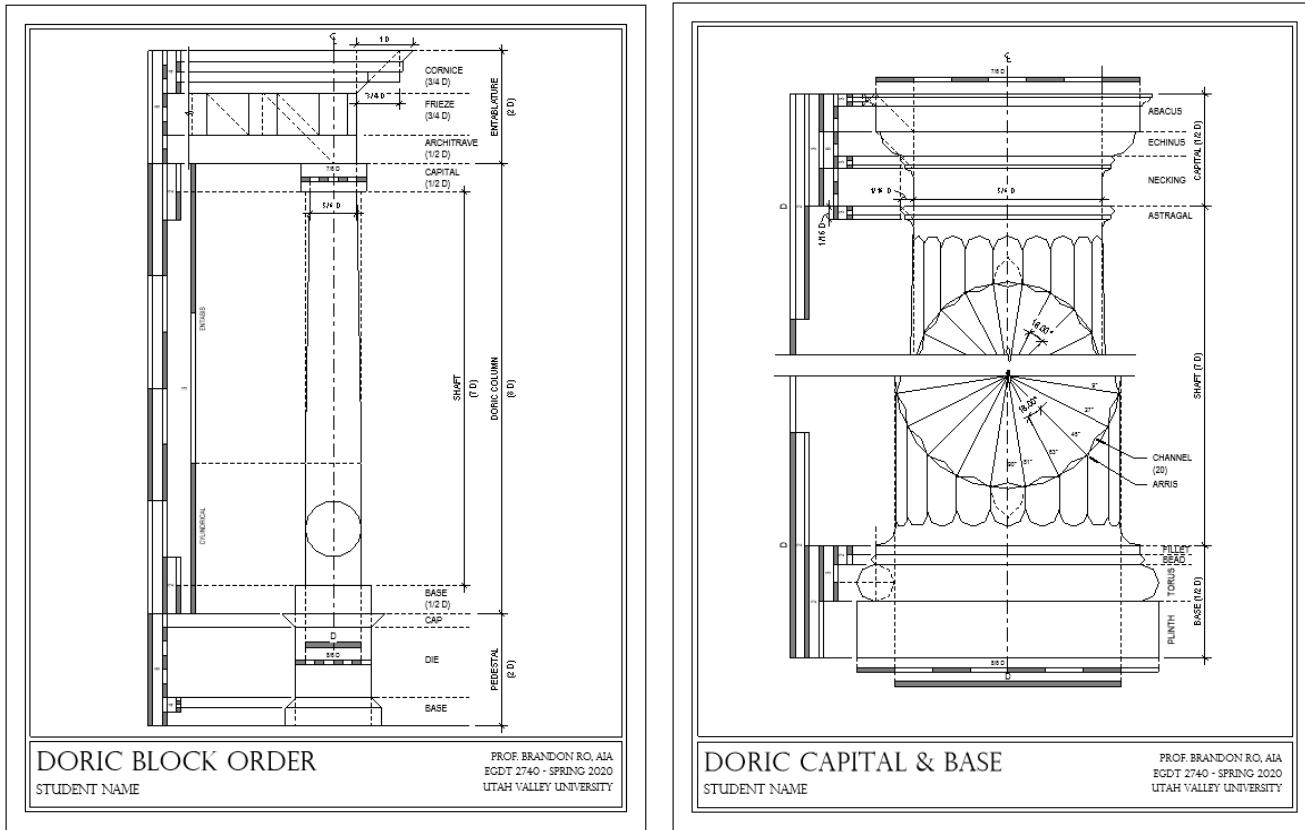
DELIVERABLES

Each student will draw the following classical moldings in their sketchbook as a three-dimensional oblique view which is known as an isometric drawing. The moldings are to be organized by their morphological types as outlined below:

- **Straight Moldings:** Fascia, Sunk Fillet, Raised Fillet, Splay
- **Convex Moldings:** Ovolo, Torus, Bead, 3/4 Round, Thumb
- **Concave Moldings:** Cavetto, Half Hollow, 3/4 Hollow, Scotia, Congé
- **Compound Moldings:** Cyma Recta, Cyma Reversa

The final drawing should be scanned and submitted digitally via Canvas.

PART B – DORIC ORDER DRAWINGS



PURPOSE

To achieve a successful design proposal, each student must first understand and gain mastery of the elements of architecture; for it is with the elements that we compose poetic and meaningful architecture. In order to familiarize oneself with the classical orders, however, it is important to draw each order with all of its component parts.

WATCH

As part of this assignment, students are required to watch the following video lectures and tutorials:

- Todd Murdock, “Understanding Classical Proportions”
<https://youtu.be/sgyMZApxwSE>
- Brandon Ro, “How to Draw the Doric Block Order”
<https://youtu.be/vqgsD1vqbHw>
- Brandon Ro, “How to Draw the Doric Column Base”
<https://youtu.be/WBU-PLEXWak>
- Brandon Ro, “How to Draw the Doric Column Capital”
<https://youtu.be/1NXx9gSLMiM>
- Brandon Ro, “How to Draw the Mutular Doric Entablature”
<https://youtu.be/-gKUuQzfSt0>

DELIVERABLES

Each student will learn the parts of the Doric order through the process of study, analysis, and drawing. In order to construct the complete Doric

order and its unique triglyph-metope rhythm, students will follow William Ware's *American Vignola* to produce the following drawings:

- B1 - Simplified overall block order
- B2 - Column base and capital
- B3 - Entablature

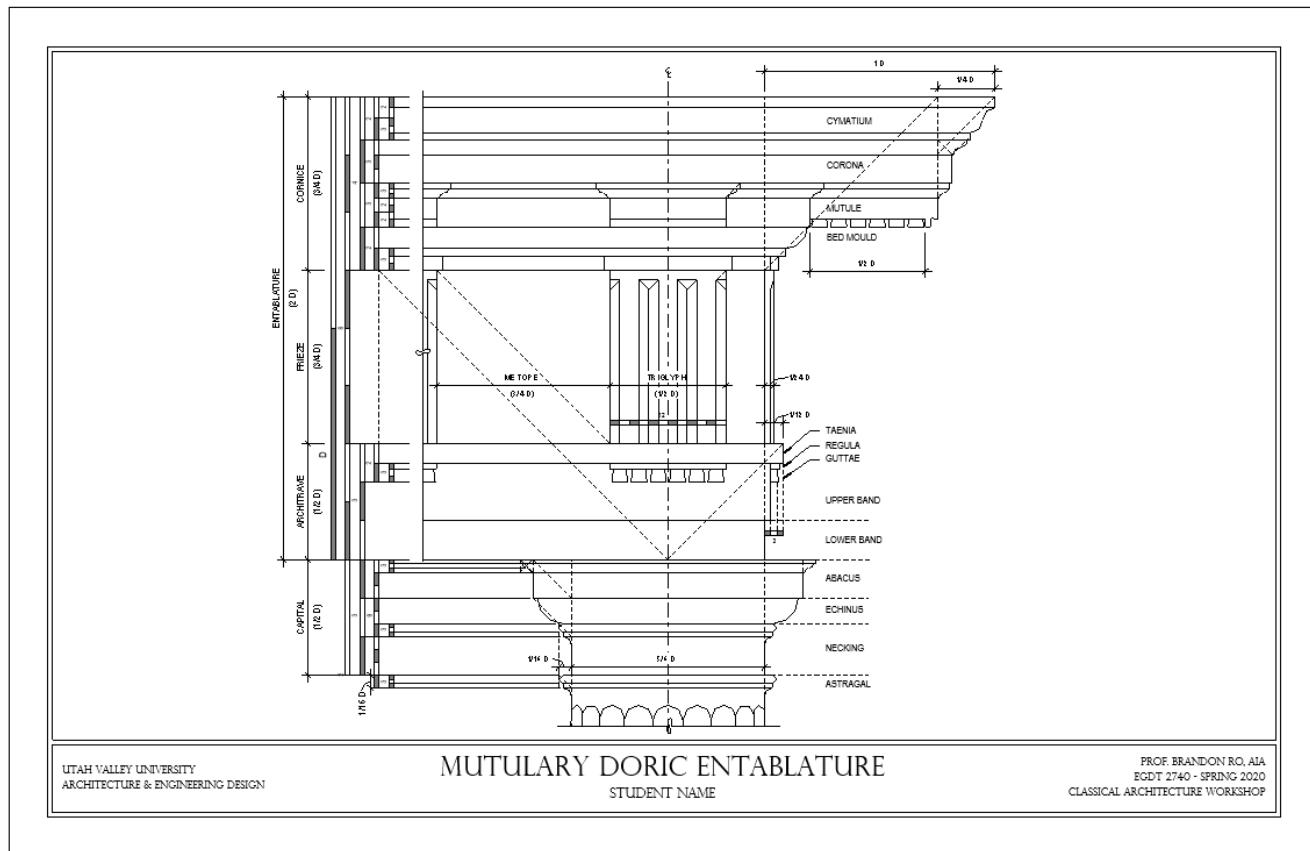
Each of these drawings will be produced in the student's sketchbook or on a separate sheet of paper except for the column base/capital. The drawings will be submitted as a color scan (150 dpi min) via Canvas.

READING

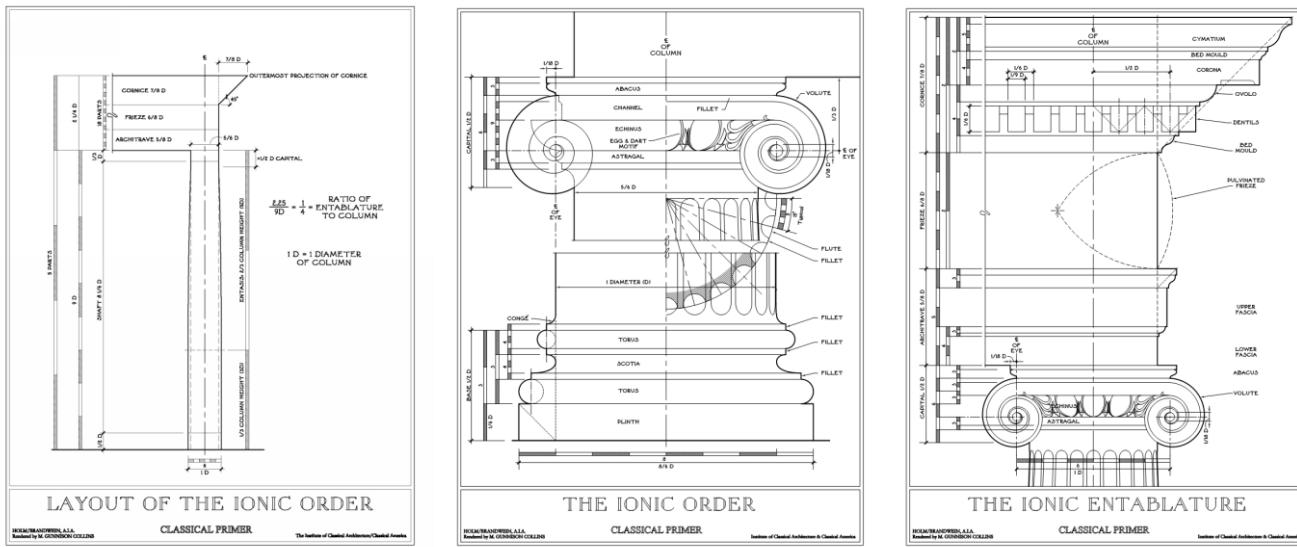
Ware, William R. *The American Vignola: A Guide to the Making of Classical Architecture*. New York: Dover, 1994. Older edition PDFs available online: (Book 1)

<https://archive.org/details/cu31924091026504/page/n1> (Book 2)

<https://archive.org/details/americanvignola00vignoog/page/n5>



PART C – IONIC ORDER DRAWINGS



PURPOSE

To achieve a successful design proposal, each student must first understand and gain mastery of the elements of architecture; for it is with the elements that we compose poetic and meaningful architecture. In order to familiarize oneself with the classical orders, however, it is important to draw each order with all of its component parts.

WATCH

As part of this assignment, students are required to watch the following video lectures and tutorials:

- Brandon Ro, “How to Draw the Ionic Block Order”
https://youtu.be/Cj031Ybzm_k
- Brandon Ro, “How to Draw the Ionic Column Base”
<https://youtu.be/5EqxArDJeAw>
- Brandon Ro, “How to Draw the Ionic Column Capital”
https://youtu.be/lkI6WVRK_1A
- Brandon Ro, “How to Draw the Ionic Entablature”
https://youtu.be/Lgq_Hbulkno

DELIVERABLES

Each student will learn the parts of the Ionic order through the process of study, analysis, and drawing. In order to construct the complete Ionic order and its unique volutes, students will follow William Ware's *American Vignola* to produce the following drawings:

- C1 - Simplified overall block order
- C2 - Column base and capital
- C3 - Entablature
- C4 – Volute (extra credit)

Each of these drawings will be produced in the student's sketchbook or on a separate sheet of paper. The drawings will be submitted as a color scan (150 dpi min) via Canvas.

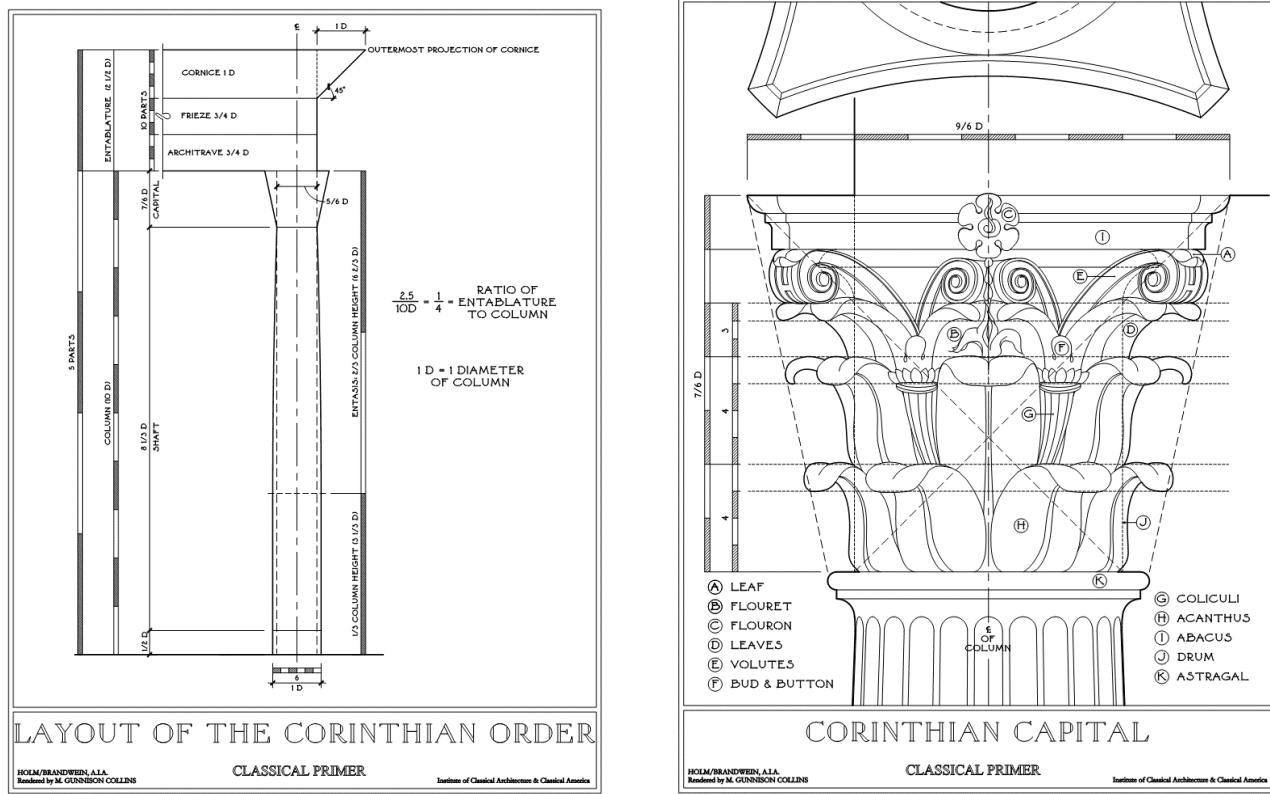
READING

Ware, William R. *The American Vignola: A Guide to the Making of Classical Architecture*. New York: Dover, 1994. Older edition PDFs available online: (Book 1)

<https://archive.org/details/cu31924091026504/page/n1> (Book 2)

<https://archive.org/details/americanvignola00vigngoog/page/n5>

PART D – CORINTHIAN ORDER DRAWINGS



PURPOSE

To achieve a successful design proposal, each student must first understand and gain mastery of the elements of architecture; for it is with the elements that we compose poetic and meaningful architecture. In order to familiarize oneself with the classical orders, however, it is important to draw each order with all its component parts.

WATCH

As part of this assignment, students are required to watch the following video lectures and tutorials:

- Brandon Ro, “How to Draw the Corinthian Block Order”
<https://youtu.be/VxaXK74uHFo>
- Brandon Ro, “How to Draw the Corinthian Column Base”
<https://youtu.be/sQyl5rXKTp4>
- Brandon Ro, “How to Draw the Corinthian Column Capital”
<https://youtu.be/xTWiab7Bwcc>
- Brandon Ro, “How to Draw the Corinthian Entablature”
<https://youtu.be/F2eIwvVePog>

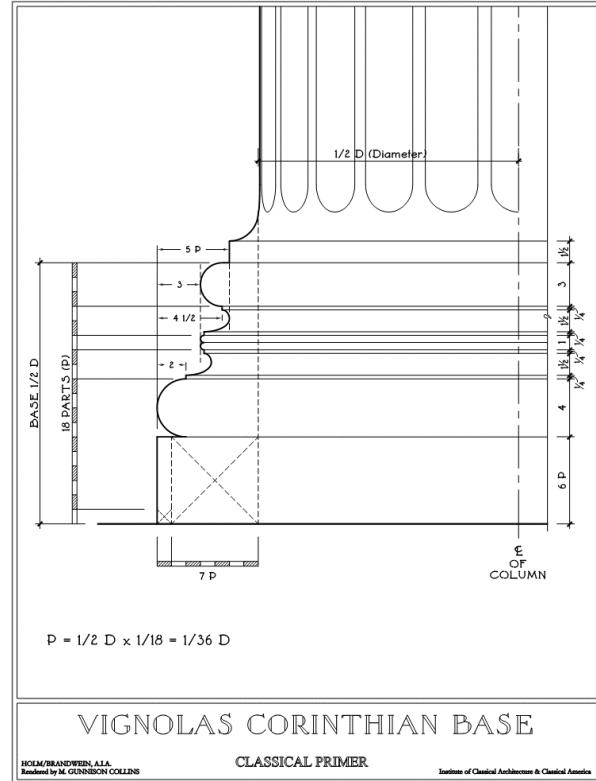
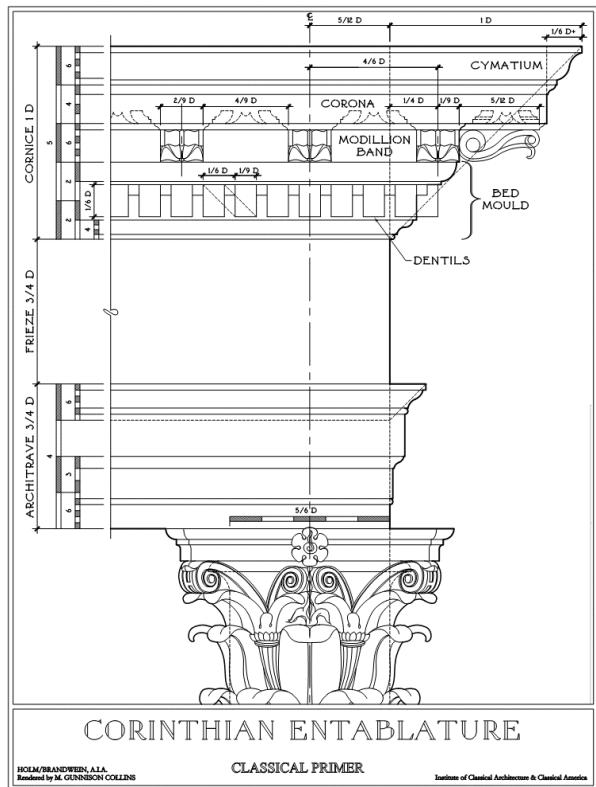
DELIVERABLES

Each student will learn the parts of the Corinthian order through the process of study, analysis, and drawing. In order to construct the complete Corinthian order and its unique modillions and acanthus leaf capital, students will follow William Ware’s *American Vignola* to produce the following drawings:

- D1 - Simplified overall block order
- D2 - Column base and capital

■ D3 - Entablature

Each of these drawings will be produced in the student's sketchbook or on a separate sheet of paper. The drawings will be submitted as a color scan (150 dpi min) via Canvas.



READING

Ware, William R. *The American Vignola: A Guide to the Making of Classical Architecture*. New York: Dover, 1994. Older edition PDFs available online: (Book 1) <https://archive.org/details/cu31924091026504/page/n1> (Book 2) <https://archive.org/details/americanvignola00vigngoog/page/n5>

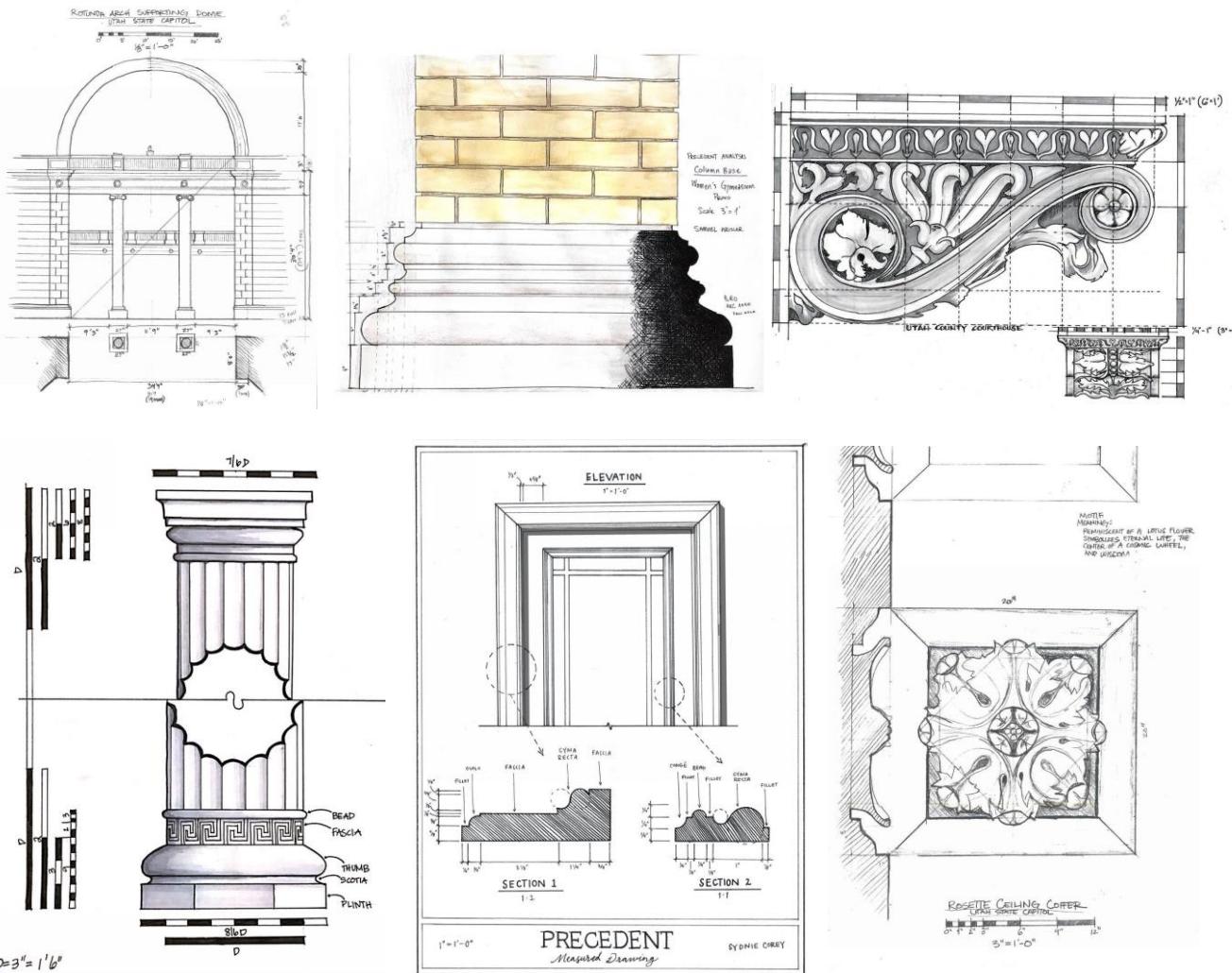
PART E – PRECEDENT ANALYSIS – MEASURED DRAWING



PURPOSE

For Part B of the project, each student will perform precedent analysis by visiting an existing classical building. Students will measure an architectural element of interest (such as a balustrade, column base/capital, entablature, ornament, door/window surround, etc.) and then produce a scaled measured drawing. This exercise is designed to help students understand the vocabulary of classical mouldings. Possible buildings to visit include:

- Utah State Capitol, SLC (interior/exterior)
- Church Administration Building, SLC (exterior)
- Joseph Smith Memorial Building, SLC (interior/exterior)
- Old Hansen Planetarium, SLC (exterior)
- Thomas S. Monson Center, SLC (exterior)
- Hope Gallery, SLC (exterior)
- Eagle Emporium Building – Zions Bank, SLC (exterior)
- Rio Grande Building, SLC (exterior)
- Meditation Chapel, Memory Grove, SLC (exterior)
- The Pagoda, WWI Memorial, Memory Grove, SLC (exterior)
- Frank E. Moss United States Courthouse, SLC (exterior)
- Commercial Club building, SLC (exterior)
- Salt Lake Stock and Mining Exchange, SLC (exterior)
- Boston and Newhouse Buildings, SLC (exterior)
- Anthony's Antiques and Fine Art, SLC (exterior)
- Libby Gardner Concert Hall, U of U, SLC (exterior)
- Kingsbury Hall, U of U, SLC (exterior)
- John R. Park Building, U of U, SLC (exterior)
- Utah County Historic Courthouse, Provo (interior/exterior)
- Historic BYU Women's Gymnasium, Provo (exterior)
- Pleasant Grove Tithing Office (exterior)
- State Bank of Payson – Wells Fargo (exterior)



WATCH

As part of this assignment, students are required to watch the following video lectures and tutorials:

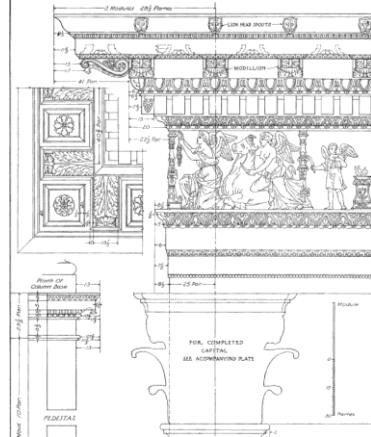
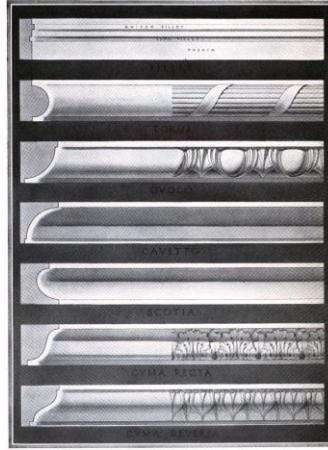
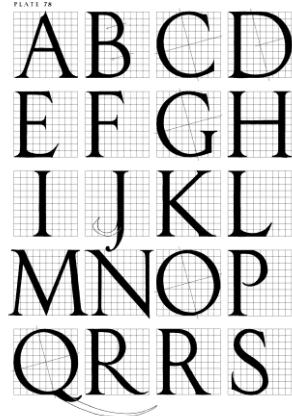
- G.S. Smith & F. Terry, “Classical Architecture in Modern Times” <https://youtu.be/FgMOSVjgQY>
- Brandon Ro, “Precedent Analysis for Architects: Understanding the Measured Drawing” <https://youtu.be/KMlj65libSE>

DELIVERABLES

Students will measure an architectural element of interest (such as a balustrade, column base/capital, entablature, ornament, door/window surround, etc.) and then produce a scaled measured drawing. The scale will vary based on the item being studied but will typically be around $3''=1'-0''$ scale or larger. The drawing should include a section or plan view showing the profiles of the moldings when the object is cut as well as an elevation view.

Each of these drawings will be produced in the student's sketchbook or on a separate sheet of paper. The drawings will be submitted as a color scan (150 dpi min) via Canvas.

PART B – PRECEDENT ANALYSIS – ORNAMENT



PURPOSE

For Part B of the project, each student will perform a type of precedent analysis that looks at architectural ornament. Students will learn how to draw three types of architectural ornament found in the frieze area of an entablature in preparation for their own design. The successful design and application of architectural ornament will be manifest particularly in the final analytique rendering.

Examples of classical frieze ornament can be viewed here:
<https://www.pinterest.com/birroarch/classical-frieze-ornament/>

WATCH

As part of this assignment, students are required to watch the following video lectures and tutorials:

- Brandon Ro, “Ornament in Architecture: A Brief Introduction”
<https://youtu.be/-0YWpMte2FY>

DELIVERABLES

Students will select three types of architectural ornament to draw that are typically found in the frieze of an entablature. These categories can include any of the following:

- vegetal
- geometric
- animal / human-form
- typography
- hybrid (combination of 2 or more of the above)

After selecting the examples from three categories, students will draw each ornamental pattern within a 2-inch-tall band representing a frieze. Shade and shadow must be applied. These will inform the final design of ornament for the monument.

Each of these three frieze band drawings will be produced in the student's sketchbook or on a separate sheet of paper. The drawings will be submitted as a color scan (150 dpi min) via Canvas.