ARCH 2310

# **CLASS PLANNER**

# CLASS MEETING SUMMARY:

Class Meeting	Date	Class Activity	
1	2016-02-01	Project 01 Introduction - Residential Space	
2	2016-02-03	Review Case Study Base Information and Reflection	
3	2016-02-08	House Plans, Sections, Elevations, Diagrams	
4	2016-02-10	Review House Plan, Section, Elevation, Diagrams	
5	2016-02-17	Review Spatial Model and Views	
6	2016-02-22	Project 01 Final Presentation and Reflection	
7	2016-02-24	Project 02 Introduction - Space and Structure	
8	2016-02-29	Review Climate Space Structure and Material Research	
9	2016-03-02	Parti Development	
10	2016-03-07	Parti Review #1	
11	2016-03-09	Parti Review #2	
12	2016-03-14	Parti Review #3	
13	2016-03-16	Drawing Development / Coordination	
14	2016-03-21	Drawing Development / Coordination	
15	2016-03-28	Project 02 Final Presentation and Reflection	
16	2016-03-30	Project 03 Introduction - Making Civic Space	
17	2016-04-04	Review of Civic Space Analysis	
18	2016-04-06	Review of Architect Design Analysis	
19	2016-04-11	Parti Development	
20	2016-04-13	Parti Review #1	

Class Meeting	Date	Class Activity
21	2016-04-18	Parti Review #2
22	2016-04-20	Site Plan + Site Sections
		SPRING RECESS
23	2016-05-02	Plan Development
24	2016-05-04	Section Development
25	2016-05-09	Section / Elevation Development
26	2016-05-11	Perspective Views
27	2016-05-16	Drawing Development / Coordination
28	2016-05-18	Presentation Mock up Review
29	2016-05-23	Project 03 Final Presentation and Reflection
30	2016-05-25	Portfolio Review

#### Notes:

COURSE GRADING AND POINT SYSTEM: All assignments are valued at 100 points total. To receive 100% of your earned points, you must be present and ready at the beginning of class for all reviews of the assignment. Students not meeting this requirement will have a 15% reduction on their score for the assignment.

REVIEWS: Pin-up reviews require printed or original drawing materials and models at the correct scale. Printing must NOT TAKE PLACE during CLASS TIME. Late printing will result in a deduction of points from the assignment grade.

ASSIGNMENT SUBMISSIONS: <u>ALL</u> assignment submissions must be uploaded to your e-portfolio on a page entitled Design III. A final grade will not be issued until the eportfolio includes all assignments and the final formal portfolio is submitted.

For each assignment, select one drawing, sketch, or model view to upload to the course OpenLab Site. Provide a hyperlink below your drawing to the Design III page of your e-portfolio. Be sure to check the appropriate CATEGORY tag for each post to the course site. <u>https://openlab.citytech.cuny.edu/montgomeryarch2310sp2016/</u>

E-PORTFOLIO REFLECTION: With each assignment submission, provide a written description of your assignment and a short reflection on how the assignment is helping you develop a design process.

#### 1 Project 01 Introduction - Residential Space

- i. Discussion: Project Description, OpenLab Orientation, Reflection on Design Process, Library Visit
- ii. Assignment A (100 points): Architect Design Analysis
  - 1. Check out a book from the Atrium Library that includes residential architectural projects. Select a house in the book that has significant information and drawings included. Research the architect and their approach to design. Find 5 architects that relate to your selected architect (architects that practiced at the same time, with a similar approach, who influenced the elected architect, that followed the selected architect.)
  - 2. Format onto a 17"w x 33" tall sheet the base drawings, images, and data about the house. Be sure to include the architect, year it was built, location, square footage, parti, sketches, plans, sections, 3d views, photos, and site plans. Bring prints for pin-up review class meeting #2. Include text description of architect's approach to design.
  - 3. Set up e-portfolio and new page for Design III. Upload all assignments to this page throughout the semester.
- iii. Tools: Illustrator, Scanner.

Rev	ew Case Study Base Information and Reflection 2016-02-03	
i.	Pin-Up Review Base Information and Parti Diagram	
ii.	Discussion: Spatial Qualities of Houses	
iii.	Studio Work: Select a residential space from the collection of photos on Prof. Montgomery's Pinterest Board: Interiors https:// www.pinterest.com/jason0888/interiors/ Develop hand drafted 1/2"=1'-0" plans, sections, and axon of selected space.	
iv.	Assignment B (100 points): Residential Space Analysis	
	a. Complete hand drafted 1/2"=1'-0" plan, section, and axonometric view of the residential space.	
	b. Diagram the qualities of the space (dimension, proportion, use, daylight, transparency, surface, structure) Overlay diagrams on base drawings. Describe the qualities of the space in a 100 word reflection.	
	c. Format drawings full size onto a presentation board. PRINT and prepare to present the assignment in class meeting #3.	
V.	Tools: Illustrator, Hand Drafting, Scanner.	

3	Hou	se Plans, Sections, Elevations, Diagrams	2016-02-08
	i.	Pin-Up Review Residential Space Analysis	
	ii.	Studio Work: Develop hand drafted plans, sections, and a for selected house from library book.	axon at 1/4"=1'-0'
	iii.	Assignment C (100 points): House Plans, Section, Axon, I	Diagrams
		a. Complete plans, sections, axon at 1/4"=1'-0"	
		b. Diagram in 3D the parti of the house using the axon These diagrams should speak for itself. One should understand the overall concept of the house based diagrams.	be able to
		<ul> <li>Scan and format drawings in Illustrator at full size. PR</li> <li>33" tall sheet and prepare to present the assignment</li> <li>#4</li> </ul>	

4

2

5

- i. Pin-Up Review House Plans, Section, Axons, Parti Diagrams
- ii. Studio Work: Refine the Parti Diagram for the House based on comments.
- iii. Assignment D (100 points): Residential Space Model and Views
  - a. Develop a 1/2"=1"-0" Card Model or 3-D Printed Model (extra credit) of Residential Space from Assignment B. Photo document model with at least 3 images shot with controlled background and lighting.
  - b. Develop a Rhino model of space. Develop 3 views from Rhino model.
  - c. Format model photos and Rhino views on a 17"w x 33" tall sheet. Bring model and printed sheet to class meeting #5.
- iii. Tools: Physical Model Making, Rhino, (Makerbot Optional.)

5	Review Spatial Model and Views	2016-02-17
---	--------------------------------	------------

- i. Pin-Up Review Residential Space Model and Views
- ii. Studio Work: Develop Rhino model of House from assignment C.
- iii. Assignment E (100 points): Final Presentation of House and Space
  - a. Complete Rhino model of House from assignment C.
  - b. Compile Project 01 drawings, model views, sketches, and diagrams into a formal presentation on 34"w x 55" tall sheets.
  - c. Provide clear text labels and graphics on final board so that the board can be understood without explanation.
- iv. Tools: Rhino, Illustrator, Photoshop, Scanner

#### 6 Project 01 Final Presentation and Reflection

2016-02-22

- i. Dress Code: Business Casual
- ii. Talking Points on Boards
- iii. Post a Reflection (100 word minimum) to the OpenLab Course site.

- i. Studio Work: Research climatic response design techniques in Ching's Building Construction Illustrated p.1.10-1.23. Prepare talking points for class discussion.
- ii. Discussion: Climate, Space, Structure, and Material
- iii. Assignment F (100 points): Sustainable Design Research
  - 1. Continue research on climatic response design techniques. Develop summary diagrams and notes of important strategies. Include the issues of solar heat gain and loss, and research the pro's and con's of glazing walls versus punched openings in solid walls.
  - 2. Research structural systems and materials selection strategies in relation to climate responses including bearing walls of concrete, masonry, or wood, as well as frame structures of heavy timber, steel, or concrete. Include in your research roofing system strategies and external envelop strategies for different climate zones.
  - 3. Format on 34"w x 55" tall sheets and PRINT and prepare to present the assignment in next class.
- iv. Tools: Illustrator

8	Review Climate Space Structure and Material Research	2016-02-29

- i. Pin-Up Review Climate, Space, Structure, and Material
- ii. Studio Work: Develop concepts for Modules for Living responding to assigned climate condition.
- iii. Assignment G (100 points): Site Model and Site Base Drawings
  - 1. Form 6 person teams.
  - 2. Each team is to produce the following:
    - a. A 1/4"=1'-0" Chip Board Topographic Site Model (using the laser cutter or cut by hand.) Trees to be included per base-plan.
    - b. A matching Rhino topographic model.
    - c. Base site section drawings in AutoCAD
- iv. Tools: Hand sketching/drafting, AutoCAD, Lasercutter, Rhino

#### 9 Parti Development

- i. Studio Work: Develop Hand drafted Plans, Sections, and Axons of Living Modules at 1/4"=1'-0.
- ii. Discussion: Parti Development: Modules to the Whole
- iii. Assignment H (100 points): Modules for Living
  - a. Develop a Model of Living Modules at 1/4"=1'-0" (at least one separate model for each requirement of residential architecture:
    - 1. lounge / space for relaxation + conversation
    - 2. eating
    - 3. cooking
    - 4. sleeping
    - 5. w/c+bath/shower+sink
  - b. Describe each module with 100 words minimum, including horizontal and vertical dimensional requirements, daylight requirements, view requirements, and spatial (volumetric) quality, and climate response.
  - c. Parti Concepts
    - 1. Develop (5) configurations of the modules. For each configuration, document with (3) photographs and (1) hand sketch diagram with annotations explaining the parti concept.
  - d. Bring all models and sketch diagrams to present in the next class.
- iv. Tools: Physical model making , Hand sketching, Camera, Illustrator

- i. Pin-Up Review Modules, Parti Configurations, and Sketch Diagrams
- ii. Studio Work: Study new configurations based on review comments.
- iii. Assignment I (100 points): Parti Concept Refinement
  - a. Develop (2) new configurations of the modules that best responds to the review comments and document each with (3) photos and a revised parti diagram, a floor plan, and a schematic site section for each configuration.
  - b. Develop a Rhino model of each configuration.
  - c. Bring all models and drawings to present in the next class.
- iv. Tools: Rhino, Hand Drafting, Camera, Illustrator

#### 11 Parti Review #2

#### 2016-03-09

- i. Pin-up Review of Rhino Models, Module Configurations, Parti Diagrams, Plans, and Sections
- ii. Studio Work: Study new configurations based on review comments.
- iii. Assignment J (100 points): Parti Concept Refinement
  - a. Develop a revised final configuration of the modules that best responds to the review comments and document in (3) photos and a revised parti diagram, and all floor plans. Develop (2) schematic site sections through the configuration. Either convert module configuration into a permanent final model or develop new final model.
  - b. Refine Rhino model of this configuration.
  - c. Bring all models and drawings to the next class.
- iv. Tools: Rhino, Hand Drafting, Physical model making.

# **REQUIREMENT for 100% Project Grade)** 2016-03-16 13 Drawing Development / Coordination i. Pin-Up Review Site Plan and Site Axon ii. Studio Work: Final Presentation Drawings iii. Assignment L (100 points): Final Presentation Drawings a. Develop in hand drafted Final Drawings over AutoCAD base drawings. b. Scan Final drawings and format into final boards in Illustrator. Prepare MOCK UP of final presentation. Print mock-up and bring to next class meeting. iv. Tools: Hand Drafting, Illustrator, Photoshop. 14 Drawing Development / Coordination 2016-03-21 i. Pin-Up Review Final Presentation Mock-Up ii. Studio Work: Final Presentation Drawings iii. Assignment M (100 points): Final Presentation Drawings a. Finalize Presentation based on comments and recommendations.

- ii. Studio Work: Develop a concept for a site plan for the final parti configuration.
- iii. Assignment K (100 points): Final House Design Development
  - a. Develop in AutoCAD base site plan, floor plans, (2) site sections, and (2) site elevations for final concept at 1/4'' = 1'-0''.
  - b. Develop a site plan and site axon showing interface of massing with topography and landscape. All trees are to be included on both drawings. Develop access to the house, garden space, and terraces for indoor/outdoor flow..
  - c. Print all base drawings to scale and bring to next class (CRITICAL

2016-03-14

12 Parti Review #3

i.

#### 15 Project 02 Final Presentation and Reflection

- i. Dress Code: Business Casual
- ii. Talking Points on Boards
- iii. Post a Reflection (100 word minimum) to the OpenLab Course site.

### 16 Project 03 Introduction - Making Civic Space2016-03-30

#### i. Site Visit

- ii. Discussion: Project Discussion, Civic Space (Exterior and Interior)
- iii. Assignment N (100 points): Civic Space Analysis
  - a. For your assigned Civic Space: Develop figure ground/nolli plan that includes context and approach to civic space, (2) site sections, "unfolded" elevation of perimeter buildings, and a digital model. Diagram dimension, land area, building and open space uses, proportion, hierarchy, geometry, architectural character, paving materials, landscape, lighting.
  - b. Generate (1) aerial view and (2) ground level views from digital model.
  - c. Format drawings and diagrams onto 34" wide and 55" tall sheet. Print and bring to next class meeting.
  - d. Site Base Drawings
    - 1. Generate an AutoCAD base site plan from NYC GIS database.
    - 2. Compile. enhance existing Rhino base model.
    - 3. Generate base site sections in AutoCAD.
    - 4. Print 11x17 drafts and bring to next class meeting.
- iv. Tools: Rhino, Illustrator, GIS, AutoCAD, Hand drafting

#### 17 Review of Civic Space Analysis

- i. Pin-Up Review of Civic Space Analysis
- ii. Discussion: Precedent Research and Design Narratives, Library Visit
- iii. Assignment O (100 points): Precedent Research
  - a. Check out a book that includes examples of libraries or small public buildings.
  - b. Diagram the buildings plans and sections based on the following criteria: structure, space, and circulation. Diagrams to be hand drafted overlays on drawings and photos of precedent. Scan and format diagrams in Illustrator.
- iv. Tools: Illustrator, Scanner

#### 18 Review of Architect Design Analysis 2016-04-06

- i. **OpenLab Review** Precedent Research
- ii. Studio Work: Develop a concept for Modules for a Library for major spaces.
- iii. Assignment P (100 points): Modules for a Library
  - a. Develop a physical model module for each major space described in the program at 1/8"=1'-0"
  - b. Describe each module with 100 words minimum, including horizontal and vertical dimensional requirements, daylight requirements, view requirements, and spatial (volumetric) quality.
  - c. Photo document each module model with at least 3 images shot with controlled background and lighting. Upload photos to e-portfolio.
  - d. Bring Modules to next class.
- iv. Tools: Hand Drafting, Physical Model, Camera, Writing

#### 19 Parti Development

2016-04-13

- i. Review Modules, Photos, and Descriptions
- ii. Studio Work: Study Configurations for Library Parti
- iii. Assignment Q (100 points): Parti Development
  - a. Configure Modules on Site Model, developing 5 strategies for parti.
  - b. Photograph each configuration from 3 different viewpoints with controlled background and lighting.
  - c. Develop plan and section diagrams for each strategy (5) describing structure, space, circulation.
  - d. Bring all models, drawings, and photos to present in the next class.
- iv. Tools: Physical Model, Hand Sketching / Drafting, Camera

20 Parti Review #1	
--------------------	--

- i. Review Parti Strategies on OpenLab and with Modules in Site Model.
- ii. Studio Work: Study New Configurations for Library Parti
- iii. Assignment R (100 points): Parti Concept Refinement
  - a. Develop (2) new configurations of the modules that best responds to the review comments and document each with (3) photos from 3 different viewpoints with controlled background and lighting.
  - b. Develop plan and section diagrams for each strategy (2) describing structure, space, circulation.
  - c. Develop a Rhino model of each configuration.
  - d. Bring all models, drawings, and photos to present in the next class.
- iv. Tools: Physical Model, Rhino, Hand Sketching / Drafting, Camera

# i. **Review** Parti Strategies on OpenLab and with Modules in Site Model.

- ii. Studio Work: Study New Configurations for Library Parti
- iii. Assignment S (100 points): Parti Concept Refinement
  - a. Develop (2) new configurations of the modules that best responds to the review comments and document each with (3) photos from 3 different viewpoints with controlled background and lighting.
  - b. Develop plan and section diagrams for each strategy (2) describing structure, space, circulation.
  - c. Develop a Rhino model of each configuration.
  - d. Bring all models, drawings, and photos to present in the next class.
- iv. Tools: Physical Model, Rhino, Hand Sketching / Drafting, Camera

#### 22 Site Plan + Site Sections

21 Parti Review #2

2016-04-20

- i. **Review** Parti Strategies on OpenLab and with Modules in Site Model.
- ii. Studio Work: Develop a concept for a site plan for the final parti configuration.
- iii. Assignment T (100 points): Site Plan and Site Section Development of Final Parti Selection
  - a. Develop a Site Plan showing the following: building footprints and shadows, trees, paving pattern, terraces, stairs, and garden areas.
  - b. Develop Site Sections though the civic space and the primary interior spaces of the library as well as through the existing buildings and civic space looking at the elevation of the library.
  - c. Bring all models and sketches to present in the next class.
- iv. Tools: AutoCAD, Rhino, Hand Sketching / Drafting, Illustrator

#### 23 Plan Development

- i. Pin Up Review of Site Plans and Site Sections
- ii. Studio Work: Plan development at 1/8"=1'-0"
- iii. Assignment U (100 points): Plan Development of Final Parti Selection
  - a. Develop all base floor plans and roof plan of design concept in AutoCAD. Finalize plan in Hand Drafted Overlay on AutoCAD base at 1/8"=1'-0"
  - b. Bring all drawings to the next class.
- iv. Tools: AutoCAD, Rhino, Hand Sketching / Drafting, Illustrator

#### 24 Section Development

2016-05-04

2016-05-09

- i. **Pin Up Review** of Plan Drawings
- ii. Studio Work: Section development at 1/8"=1'-0"
- iii. Assignment V (100 points): Section Development of Final Parti Selection
  - a. Develop all base sections (2) of design concept in AutoCAD. Finalize sections in Hand Drafted Overlay on AutoCAD base at 1/8"=1'-0".
  - b. Bring all drawings to the next class.
- iv. Tools: AutoCAD, Rhino, Hand Sketching / Drafting, Illustrator

#### 25 Section / Elevation Development

\_\_\_\_\_

- i. Pin-Up Review of Section Drawings
- ii. Studio Work: Finalize Section development at 1/8"=1'-0"
- iii. Assignment W (100 points): Elevation Development of Final Parti Selection
  - a. Develop all base elevations (2) of design concept in AutoCAD. Finalize elevations in Hand Drafted Overlay on AutoCAD base at 1/8"=1'-0"
  - b. Bring all drawings to the next class.
- iv. Tools: AutoCAD, Rhino, Hand Sketching / Drafting, Illustrator

#### 26 Perspective Views

2016-05-16

- i. Pin Up Review of Elevation Drawings
- ii. Studio Work: Perspective development.
- iii. Assignment X (100 points): Perspective View Development of Final Parti Selection
  - a. Develop all base perspective views (2) of design concept in Rhino.
     Finalize perspectives (2) in Photoshop including context, civic space, and landscape.
  - b. Bring all drawings to the next class.

27 Drawing Development / Coordination

iv. Tools: AutoCAD, Rhino, Hand Sketching / Drafting, Illustrator, Photoshop

i.	Pin Up Review of Perspective Drawings
ii.	Studio Work: Presentation Mock-up
iii.	Assignment Y (200 points): Final Presentation Development
	a. Scan all hand-drafted drawings (plans, sections, elevations)
	b. Format PRESENTATION MOCK UP in Illustrator with 3d views, site plan, site sections, model photos. Add drawing titles, color.

- c. Print half size prints for pin up review. Bring prints to next class.
- iv. Tools: AutoCAD, Rhino, Hand Sketching / Drafting, Illustrator, Photoshop

#### 28 Presentation Mock up Review

- i. Pin-Up Review Presentation Mock Up
- ii. Studio Work: Continue Presentation Development
- iii. Continue Assignment Y (200 points): Final Presentation Development
  - a. Scan all hand-drafted drawings (plans, sections, elevations)
  - b. Format in Illustrator with 3d views, site plan, site sections, model photos.
  - c. Add drawing titles, color
  - d. Print Formal Presentation Boards. All printing must be complete by 8:30am morning of final presentation.
- iv. Tools: AutoCAD, Rhino, Hand Sketching / Drafting, Illustrator, Photoshop

29 Project 03 Final Presentation and Reflection	2016-05-23
---	------------

- i. Dress Code: Business Casual
- ii. Talking Points on Boards
- iii. Assignment Z (100 points): Final Portfolio Compilation
  - a. Develop indesign compilation of all project work, sketches, model photos.
  - b. First page of portfolio: reflect on the design process used in the studio. Also reflect on overall studio experience, highs and lows.
  - c. Submit portfolio via dropbox folder or e-portfolio page.

# 30 Portfolio Review

2016-05-25

- i. Portfolio Review (Digital)
- ii. Wrap Up Discussion
- iii. Post Portfolio Reflection to the OpenLab Course site.

### 12 Parti Review #3

- i. Review Final Parti Configuration, Diagram, Models, and Drawings.
- ii. Assignment K (100 points)
  - a. Massing Study using the MakerBot
    - 1. Develop at least one final massing concept for the configuration.
    - 2. 3D Print at least one massing concept.
  - b. Extra credit (50 points) will be given for each additional alternative massing model developed and 3D printed.
  - c. Document each model with (3) photographs.
  - d. Bring all models to present in the next class.
- iii. Tools: MakeBot