UNIVERSITY OF MARYLAND
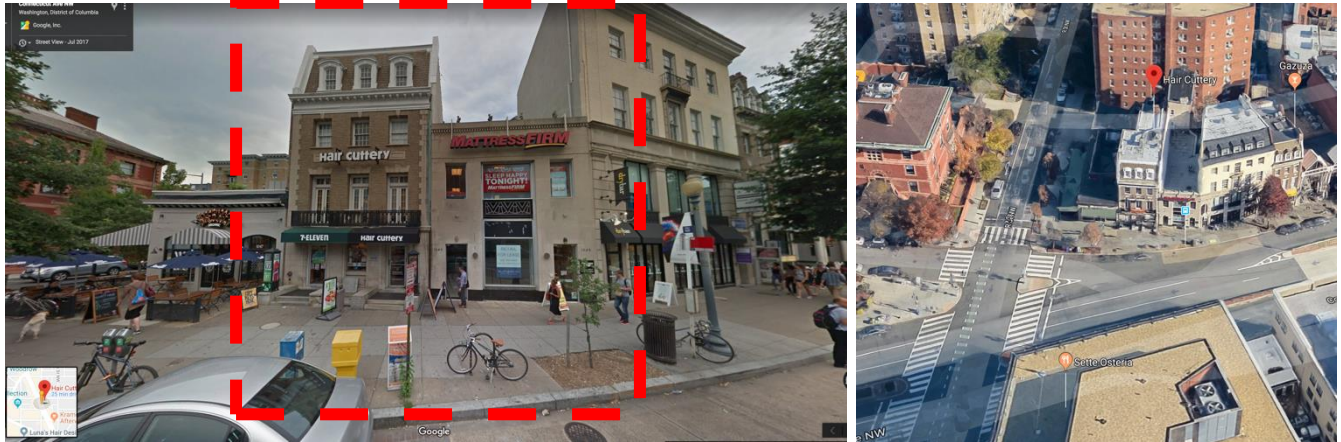ARCHITECTURE PROGRAM
ARCH 401 –   FALL 2019

INSTRUCTORS: Michael Abrams, Georgeanne Matthews, Danielle Alexander,
        Douglas Crawford and Joseph McKenley

PROJECT 3: <u>Design a Special Library Building</u>

LOCATION   1643-45 Connecticut Ave NW (DuPont Circle)
                Washington, DC

INTRODUCTION
"The Library as a 'third place' between home and work" – Ken Worpole

With regard to the public library, there has been a dramatic programmatic transformation from a building designed almost exclusively to house a collection of books and other research materials for public access, to a building which emphasizes its social role as a hub of self-learning and enquiry, as a meeting place for groups and individuals, and as a venue for talks and discussions about literature, ideas, professional developments, and even job opportunities. The modern day library has truly become a community center with enormous architectural implications. Many new libraries are no longer neo-classical buildings with an imposing façade and entrance hall, but are sequences of brightly lit spaces, some highly public, others discreet and personal.

A **Special Library** is a library that provides specialized information resources on a particular subject, serves a specialized and limited clientele, and delivers specialized services to that clientele. Special libraries include corporate libraries, government libraries, architecture libraries, music libraries, science libraries, children libraries, art libraries, law libraries, medical libraries, museum libraries, news libraries, rare books libraries, and nonprofit libraries. Special libraries also exist within academic institutions, including law school libraries and architecture school libraries.

This project is a culmination of the Level 1 experience, incorporating and developing the issues addressed throughout the year. Principles of processing and space making, functional organization, climate design, and room and façade design, are explored in an urban context. Thus it should be kept in mind that each of the projects over the course of the year has introduced new issues, which are relevant to the successful completion of this project.

GOALS/INTENTIONS
1. To understand basic compositional strategies for an infill type of building;
2. To understand the relationship of building and context;
3. To understand the relationship between compositional strategy and tectonic type;
4. To be able to manipulate architectural elements and compositions as they relate to iconographic/symbolic intentions, as well as notions of public and private realms;
5. To understand and be able to manipulate the idea of program as it relates to building organization and image, as well as the role of the façade in the city and on the street.
6. To understand and apply basic building code and ADA requirements.

Project 3 is divided into two parts: precedent analysis & the design of an infill special library; the duration of the entire project will be EIGHT weeks.

October 18, 2019	3A assigned
October 25/28, 2019	3A reviewed
October 28, 2019	3B assigned
November 11, 2019	3B Mid-review
December 9, 2019	3B Final review

GRADING

3.A	10% of project grade	(analysis and documentation)
3.B	<u>40% of project grade</u>	(design)
total	**50%** Project 3 grade	

RESOURCES
Modern Architecture 1851- 1919 and 1920-1945, Frampton
The Ecole Des Beaux Arts, Drexler
Louis I Khan, 1983 Architecture and Urbanism Monograph
The Architecure of McKim, Mead & White, Intro by Richard Guy Wilson
H.H. Richardson, Complete Architectural Works, Jeffrey Oschsner
Alvar Aalto, Architectural Monograph 4, published by Rizzoli
Michael Graves – Buildings and Projects, 1966 – 1981, published by Rizzoli
"An Intimate Sequence of Spaces" (Michael Graves' San Juan Capistrano Library)
        In Architecture Magazine, December 1989
The Architecture of Frank Furness, O'Gorman
Book Shops: long-established and most fashionable, Markus S. Braun, 2012
Contemporary Library Architecture: a planning and design guide, Ken Worpole, 2013

PROJECT 3A: <u>SITE ANALYSIS</u>

October 18, 2019   3A assigned
October 25, 2019   Site Analysis reviewed

GOALS/INTENTIONS

Each section will focus on a particular topic for their Site Analysis participation. It is the goal of this exercise for students in this team to collaborate with other sections. The final graphics should be organized in a cohesive manner. Diagrams can be made created either by hand or computer or both. Each Site Analysis team will research one of the following topics and present in DIGITAL format (Power-point):

Historical (Abrams)	Ecological (Alexander)	Analytical (Crawford)	Perceptual (Matthews)	Neighborhood (McKenley)
Site evolution / development timeline	Landscape topography	Zoning map	Perspectives	Significant Buildings: Govmn't, Museums, Embassies, etc.
Neighborhood	Vegetation / built / materials	Figure/ground & inverse	Spatial Sequences	Bookstores (neighborhood)
Settlement / growth / ownership	Pervious / impervious	Height of Structures	Threshold Moments	Libraries (neighborhood)
Reference maps (Sanborn, etc.)	Tree cover / plantings	Transit	Movement of people (am/pm)	Community/Cultural Centers (neighborhood)
Historic districts / sites	Rain / runoff / water utilities	Pedestrians	Materiality	The role of libraries in DC
Styles / materials	Noise / Sound	Axes & cross-axes	Street Art	The role of libraries in other US cities
Parking / alley system	Demographics	Monumental vs mundane	Building frontage	The role of libraries in other cities (outside the USA)
Below ground construction / utilities	Solar path / shadow	Edges of streets / facades	Views	Places to study
Past users / programs	Wind patterns	Landmarks + Nodes	Rooftops	Proximity to schools
	Cleaning / trash patterns			Location of schools

Each Site Analysis team should have approx. 4-5 students from each section. Some diagrams may require different scale sizing. Include photographs to support your diagrams.

Websites with site information

Cad files:	https://cadmapper.com/
Geographic information:	http://atlasplus.dcgis.dc.gov/
3D maps / sun light effects on site:	http://maps.dcoz.dc.gov/
Historic maps (Sanborn maps):	https://www.loc.gov/collections/sanborn-maps
Demographics:	https://wdcep.com/

PROJECT 3A: <u>SITE DOCUMENTATION</u>

October 18, 2019   3A assigned
October 28, 2019   Site Documentation reviewed

GOALS/INTENTIONS
Each section will create their own site documents using Sketch-Up, Revit and Rhino programs. However, it is highly encouraged that each Site Documentation team collaborates and verifies their dimensions with other sections. Each Site Documentation team should have approx. 4-5 students. The Site Documentation team will present in DIGITAL format (Power-point):

Location Map Map of DC with site highlighted (NTS)

Block Plan   DuPont Circle neighborhood
Must include north arrow.
Scale: 1/64"=1'-0" and 1/32"=1'-0"

Site Plan   Must include North arrow, section tags, trees, sidewalk, and streets.
Call out our site
Various scales: 1/16"=1'-0" and 3/16" =1'-0"

Site Elevations
1 Front Elevation (Connecticut Ave.) and 1 Back Elevation (alleyway).
Show trees and adjacent buildings (with doors, openings & rooftops).
Include existing facades of the buildings in our site.
Scale: 3/16"=1'-0"

Site Sections 1 longitudinal + 1 cross-section through site.
Must show adjacent buildings, sidewalk, street, alleyway, trees, and people.
Do not *poché* walls, leave them blank.
Scale: 3/16"=1'-0"

PROJECT 3A: <u>SITE MODEL</u>

October 18, 2019   3A assigned
October 28, 2019   Site Model reviewed

GOALS/INTENTIONS
Each section will create a site model using cardboard and wood (base). It is highly encouraged that the Site Model team collaborates and verifies their dimensions with the Site Documentation team and other sections. The site model must show streets, sidewalks, alleyways, adjacent buildings with facades, and basic information (e.g., North arrow, scale, ARCH 401, Prof. Name).   The Site Model team should have approx. 4-5 students. Scale of site model: 3/16"=1'-0"

PROJECT 3A: <u>PRECEDENT ANALYSIS</u>

      October 18, 2019   3A assigned
      October 28, 2019   Precedent Analysis reviewed

GOALS/INTENTIONS
Each student will analyze a library and examine the basic principles, physical attributes and structural system. Create a diagram for each topic listed below. The lessons learned from the analysis will be applied to one's own design and inform the final design product. Diagrams can be created either by hand or computer or both.

- Photocopied plans, sections, elevations, and other images
- **Figure/ground** of site context, showing space/promenade/room as a *nolli* plan:
- **Spatial hierarchy** in plan and section diagrams;
- **Spatial sequence** (circulation) in plan and section diagrams;
- **Program diagram**: including public reading spaces, staff spaces, café, archives, etc. in plan and section or axonometric view (use a key or legend; you may use color);
- *Parti* **diagram** of library;
- **Massing diagram**: highlighting the public, semi-public, semi-private and private realms of the library (in axonometric view).
- **Structural system diagram** in plan and section (or in axonometric view)
- **Natural light** diagrams in section
- Other diagrams as needed to explain the building

Each student will research one of the following libraries and present on a 24"x 36" board, plus in DIGITAL format (Power-point—save as a PDF file):

PRECEDENTS LIST
(Students may select a library not included on the list)

Daniel Shaw Library, Washington DC
Tenley Friendship Library by Phil Freelon, Washington DC
George Peabody Library, Johns Hopkins University, Baltimore, Maryland
Riggs Library, Georgetown University, Georgetown, Washington, D.C
Harvard Library, Harvard University, Cambridge, Massachusetts

Phillips Exeter Academy Library (Louis I Kahn), Exeter, New Hamshire
Renwick Library (James Renwick), Washington DC
Library of Congress, Washington, DC
Folger Library (Paul Cret), Washington, DC

Beinecke Rare Book and Manuscript Library, Yale University, New Haven, Connecticut

Bapst Library, Boston College, Chestnut Hill, Massachusetts
Powell Library, UCLA, Los Angeles, California
San Juan Capristrano Public Library (Michael Graves), San Juan Capistrano, CA
Laurentian Library, Florence, Italy
Trinity College Library, Dublin, Ireland
Biblioteca Geral, University of Coimbra, Coimbra, Portugal

Pontifical Lateran University Library, Pontifical Lateran University, Rome, Italy
Philological Library, Free University, Berlin, Germany
Stuttgart City Library - Contemporary public library, Stuttgart, Germany
Vennesla Library and Culture House, Norway
Library of the Vienna University of Economics, Austria

Bishan Public Library, Singapore
LiYuan Library, China
Katiou Library, Burkina Faso
Library of Muyinga, Burundi
Cooroy Library, Australia

Seinajoki Town Library (Alvar Aalto), Seinajoki, Finland
Turku City Library, Finland
University of Aberdeen New Library, Scotland
Maranello Library, Italy by Andrea Maffei
Thomas Fisher Rare Book Library, Canada

University Of Versailles Science Library, France
Biblioteque Sainte Genevieve (Henri Labrouste), Paris, France
Ballyroan Library, Ireland
Biblioteca José Vasconcelos, D.F., Mexico
Biblioteca España (Spain Library), Medellin, Colombia

Black Diamond Library, Denmark
Utrecht University Library, The Netherlands
Delft Library University of Technology, The Netherlands by Mecanoo
São Paulo Library, Brazil by Aflalo and Gasperini
Livraria Cultura (Culture Bookshop) Sao Paulo, Brazil
Livraria da Vila, Sao Paulo, Brazil

Surry Hills Library and Community Centre, Australia
Nam June Paik Library, South Korea
Daegu Gosan Library, South Korea
Musashino Art University Museum & Library, Tokyo, Japan

Kid's Republic Book Store in Beijing, China by Sako Architects

Cook & Book, Brussels, Belgium
Selexyz Dominicanen Bookstore, Maastricht, The Netherlands
Hertziana Library, Rome, Italy
The Bridge Arts Centre and Library, Glaskow, UK

Huntingdon Library and Archives, UK
Jubilee Library, Brighton, UK
Peckham Library, London, UK
Swiss Cottage Library, London, UK

Jaume Fuster Library, Barcelona, Spain
Amsterdam Public Library, Amsterdam, The Netherlands
Peckham Library
New York Public Library
Seattle Public Library

National Library of France
Exeter Library Louis Kahn
Cambridge Public Library
Calgary Public Library by Snohetta
Seed Collection by Thomas Heatherwick

Ames Free Library by HH Richardson
Winn Memorial Library by HH Richardson
Thomas Crane Public Library by HH Richardson
The Anacostia Library by Phil Freelon
Hunters Point Library by Steven Holl
Northside Library by NBBJ

Cleveland Park Library, Perkins Eastman
Turku City Library, JKMM Architects
Stockholm Public Library, Gunnar Asplund
Morgan Library Expansion, Renzo Piano Building Workshop
University of Helsinki, City Campus Library, Anttinen Oiva Arkkitehdit

Bishan Public Library (Singapore), LOOK Architects
Library of Muyinga (Burundi), BC Architects
Woodbridge Library (Washington, DC), Bing Thom
Lateran University Library (Italy), King Roselli Architects

SCHEDULE

Monday	Wednesday	Friday
14 Oct FINAL Review: Project 2 (MID-TERM)	16 Oct **2pm: Site Design Lecture** -Prof. Matthews (auditorium) 3-6pm: Document projects 1 and 2 (scan drawings, photograph models, etc.) 3-6pm: Woodshop tutorial	18 Oct **2pm: Urban Theory Lecture**-Prof. Alexander **3pm: 3.A starts** (auditorium) 4-6pm: Woodshop tutorial cont'd (4p: Crawford section; 5p: McKenley section)
21 Oct **Project 3 site visit:** 2pm: 1643-45 Connecticut Ave NW- DuPont Circle (DC)* Bring sketchbooks, measuring tape, comfortable shoes and camera. *After site visit, we will visit Cleveland Park Library	23 Oct **2pm: Building Typology Lecture** - Prof. Matthews (auditorium) **3-6pm: Project 3.A** Team cont'd research and crits	25 Oct **2pm: <u>Project 3.A</u>: Site Analysis** (auditorium) <u>Lecture</u>: Zena Howard 4:30-6pm Great Space
28 Oct **2pm: Student-Faculty Retrospective** (Great Space) **3pm: <u>Project 3.A</u>: Site Documentation, Site Model and Precedent Analysis review** **5pm: <u>Project 3.B</u> starts** (auditorium)	30 Oct **2pm: Library talk (Cindy)** 3-6pm: Desk crits 6pm: AIAS Portfolio Workshop (Great Space)	1 Nov **2pm Program Design Lecture** - Prof. Crawford (auditorium) 3-6pm: Desk crits

PRESENTATION REQUIREMENTS/LIMITATIONS

All work will be presented as a Power-Point presentation, with the exception of the *Site Model* team. The *Site Analysis* team from each section will present together to the entire Studio 2 cohort (Nov25). The *Site Documentation* and *Precedent Analysis* teams will present to their section only (Nov28). Each section must craft a Site Model.

GRADING

Every member of each team: Site Documentation, Site Analysis and Site Model, will receive the same grade as every other member of their team (one grade per team). Precedent Analysis will be an individual grade.

ADDITONAL NOTES

The brief for part 3B will be given on October 28th, 2019. The brief will include the following information: programmatic requirements, structural considerations, code and accessibility requirements, schedule, and final project requirements.