

University of Mary Washington  
Department of Historic Preservation

American Building HISP 305-02  
Spring 2010  
Combs Hall #009  
12:00 – 12:50 pm MWF

Instructor: Mr. Spencer  
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Office hours:  
Monday, Wednesday, and Friday 1:00-3:00 pm  
Or by appointment

### **I. Course Outline:**

HISP 305, American Building, investigates the evolution of European-derived American building traditions from the colonial period up to the present day. The student will examine the changing relationship of building trades, architectural style, materials, and structural systems and relate them to the social, economic and intellectual development of the United States. American Building teaches the student to appreciate the built environment as fundamental to the cultural heritage of the nation and an integral part of the larger cultural heritage of the world. Each building or modification reflects its time, available techniques, and the intention of the builders and owners. To introduce the student to "real life" preservation, field work field trips will expand the classroom experience. Each student will carry out an on-site term project measuring, drawing and describing an historic resource in Virginia.

### **II. Texts and Equipment:**

#### **Required:**

Gabrielle M. Lanier and Bernard L. Herman. *Everyday Architecture of the Mid-Atlantic: Looking at Buildings and Landscapes*. Baltimore: Johns Hopkins University Press, 1997.

Carl R. Lounsbury, Vanessa Elizabeth Patrick, eds. *An Illustrated Glossary of Early Southern Architecture and Landscapes*. Charlottesville: University Press of Virginia, 1999.

Allen, Edward. *How Buildings Work: The Natural Order of Architecture*. New York: Oxford University Press, 1995.

**Recommended Text:**

Stephen Calloway and Elizabeth Cromley, *The Elements of Style*. Revised Edition. New York: Simon & Schuster, 1996.

Thomas C. Jester, ed. *Twentieth-Century Building Materials: History and Conservation*. New York: McGraw-Hill Companies, 1995.

Virginia McAlester and Lee McAlester. *A Field Guide to American Houses*. New York: Alfred Knopf, 1984.

Steven J. Phillips, *Old-House Dictionary: An Illustrated Guide to American Domestic Architecture*. New York: John Wiley & Sons, 1992.

Dell Upton, editor, *America's Architectural Roots: Ethnic Groups that Built America*. Washington, D.C.: The Preservation Press, 1986.

\*\*\*Class readings not found in your required text or distributed in class will be posted online through Blackboard (<http://blackboard.umw.edu>).

**Required Equipment:**

The Department will provide access to equipment necessary for the documentation assignment and its necessary completion. Any requests by property owners for drawings or images created by the students will be made at the Departments expense.

**Suggested Equipment:**

While equipment will be provided it is suggested that students purchase an architects rule (scale) and a good 30' measuring tape (preferably rubber encased).

**Department Policies for Use of Equipment:**

- Each student must be “logged-in” to the DHP equipment computer in the Department Office by the Department Secretary, or, in her absence by an on-duty student aide, in order to check out and use departmental equipment.
- No student may check out or return any equipment for any other student than him/her self for any reason whatsoever.
- No student is permitted to check out equipment and then loan it to another student and ask that student to check the equipment back in for them.
- No equipment may be checked out for more than 24 hours, except for weekends. Equipment checked out on Friday afternoon may be checked in again Monday morning. If equipment is needed for more than a 24 hour period the student must check the equipment in at the end of the 24 hour period and check it out again for no more than an additional 24 hours.

- All equipment must be checked in and returned directly to the Department Secretary, or, in her absence by an on-duty student aide, during normal working hours. Should the Department Secretary or an on duty student aide not be available, checked in equipment may be given to a faculty member.
- Any malfunctions or breakages must be reported to the Department Secretary or to an on duty student aide at the time the equipment is checked in and returned. No malfunctioning or broken equipment should be checked in without the problem being identified.
- The Department Secretary regularly checks the equipment roster on the computer and notifies both the student and their instructor when equipment has not been returned on a timely basis by the appropriate student.

### III. Grading Scale:

As prescribed by Mary Washington College:

A	“Unusual Excellence”	(93% or higher = A ; 90-92% = A-)
B	“Work Distinctly Above Average”	(87-89% = B+ ; 83-86% = B ; 80-82% = B-)
C	“Work of Average Quality”	(77-79% = C+ ; 73-76% = C ; 70-72% = C-)
D	“Work of Below Average Quality”	(67-69% = D+ ; 60-66% = D)
F	“Failure, No Credit”	(0-59% = F)

\*If at midterm a student has a grade of D (a 66% or less) a “U” (unsatisfactory) will be entered.

### IV. Assignments:

**Assignment #1, Documentation Project (due 3/29):** Buildings on the fieldwork experience of HISP 205. Each student as part of a team will be assigned a historic building and will produce thorough documentation of a portion of the building. Typically this will include a combination of two or three of the following, a floor plan, elevation, section, site plan, and detail drawings. These drawings can be completed using hard line drawing techniques or AutoCAD. Each student will also be required to document the structures features through black and white photography complete with photo log and HABS formatted labels. Accompanying the drawings and photographs will be a materials schedule and written description of the spaces and fabric of the building portion that was investigated by the student. This should be written in the style of a HABS description. Although the students will work in teams to gather the documentation, each student is required to make their own photographs and will turn in their own drawings and descriptions.

**Assignment #2, Construction Cost Estimation (due 4/12):** Assignment #2 is designed to bring the student knowledge of materials and finishes to completion by estimating the cost of construction of a brick house. The scope of work will be provided in class. The project will include a table showing the amounts of material and the costs of installation, but not the cost of hauling, using Albert West's *The Architect and Builder's Vade-Mecum and book of Reference*. Woodhouse and Parham: Richmond, Va., 1872.

**Assignment #3, Modern Materials Research and Presentation Project (due 4/19):** This assignment is a research project to assess the impact of modern materials on construction processes and the built environment. The student will choose one of the "new" building materials of the 20<sup>th</sup> century to research from the list provided, and inform the instructor of that decision by April 5<sup>th</sup>. Through library and web based research the student will develop a five minute oral report with illustrations describing the development of this material, its significance, and when it was/is most frequently employed. Students will be asked to turn in a complete bibliography of resources used as well as an outline of the oral report on April 19<sup>th</sup>.

**Laboratory Assignments (due throughout the semester):** Some Friday classes will be a laboratory experience on different materials or techniques important to architectural historical research. You will be completing a laboratory exercise and answering specific questions and writing your insights directly on the assignment. Laboratory assignments will be collected and evaluated the Wednesday after the site is visited.

\*\*\*While some of these assignments will require that students work in groups it is imperative that all students turn in their **own** work. That is to say measurements can be taken as a group but the field notes, hard line drawings and AutoCAD drawings should all be done individually. Tracing drawings and field notes from other team members is not permitted and constitutes an honor code violation.

#### **V. Tests and Examinations:**

Exams will consist of short answer, identification, visual analysis and sequencing questions.

**Mid-Term Exam (2/26):** There will be a mid-term exam that will cover everything up till February 24<sup>th</sup>.

**Final Exam (4/26):** The final examination will cover material from 3/8 - 4/23

\*All test questions that require writing will need to be written legibly, illegible work will be counted as incorrect. Illegible writing is any which the instructor cannot read.

## **VI. Participation:**

The participation component of this class goes hand in hand with attendance. If you are not at class you will not be able to participate. For definition purposes participation for this class is not limited to speaking but also includes participation through observation, listening, and being physically present. In order to assist students in maintaining their focus on the class and relevant readings, short, unannounced, in-class writing assignments will be required throughout the semester. These short assignments will help confirm the students ability to identify and describe structures and components as well as the retention and comprehension of assigned readings.

Students need to inform the instructor ahead of time should they need to miss a class for emergency purposes. Proper documentation of a missed class may be required and should not be taken by the student as a reflection on their character but rather as policy compliance.

## **VII. Attendance:**

Because the classes build on each other and due to the various field components attendance is mandatory. Missing class will severely hamper you're ability to achieve satisfactory results and in-class instruction/labs/observations will not be repeated unless the student has an **excused absence and notified and made arrangements with the instructor before class.**

## **VIII. Grading:**

Grading will be based on a number of factors in an effort to be fair, transparent, and to provide the best possible feedback to the student. Completeness and accuracy of the assignment will play a large factor in the final grade as will legibility.

## **IX. Late Assignments:**

Assignments are due at the beginning of class on the date noted in the syllabus. Unexcused late work will result in the loss of ten points (a full letter grade), if handed in after the start of class and an additional ten points for every 24 hrs overdue. **NO EXCEPTIONS.** Should a student be absent for whatever reason they will need to e-mail the assignment to the instructor before class begins on the date the assignment is due. The following class, or the next class they physically attend, they will need to hand in a **hard copy** of the assignment. An absence does not excuse a late assignment. No e-mailed assignments will be accepted from students present on the day an assignment is due. Excused late work is determined on a case by case basis by the instructor before the assignments due date. If you have a valid excuse and an assignment conflict please contact me as soon as possible. Documentation of your excuse may be required.

## **X. Final Grade:**

The final grade will be based on the following;

In-class writing exercises	5%
Laboratory Assignments	20%
Assignment #1	25%
Assignment #2	5%
Assignment #3	5%
Midterm examination	20%
Final examination	20%
<b>Total</b>	<b>100%</b>

## **XI. Honor Code:**

You are expected to follow this, no exceptions. All graded assignment should be pledged and signed. Please see me if you have any questions regarding what is and is not considered plagiarism or cheating.

## **XII. Classroom Behavior:**

Students **ARE** expected to participate in class discussions and lectures as well as treat both the teacher and students respectfully. All cell phones should be turned off and absolutely no text messaging, twittering or blogging. Furthermore, students should conduct themselves in a manner that promotes a good learning environment by refraining from actions that might disrupt the class. Some examples, although not exhaustive, of inappropriate behavior include sleeping during class, talking during class, loud outbursts, reading the newspaper, the use of profanity, and showing up to class intoxicated. Students may be asked to leave class should these rules not be followed.

## **XIII. Office of Disability Services:**

The Office of Disability Services has been designated by the University of Mary Washington as the primary office to guide, counsel, and assist students with disabilities. If you receive services through that office and require accommodations for this class, please make an appointment with me as soon as possible to discuss your approved accommodations. I will hold any information you share with me in strictest confidence unless you give me permission to do otherwise.

If you have not made contact with the Office of Disability Services and have reasonable accommodation needs, I will be happy to help you contact them. The office will require appropriate documentation of a disability.

Office of Disability Services  
203 George Washington Hall  
540-654-1266  
ods@umw.edu

**XIV. Class Schedule:**

<b>Date</b>	<b>Subject</b>	<b>Readings/Homework (due on date listed)</b>	<b>Assignments/Exams (due on date listed)</b>	<b>Other</b>
1/11	Distribute syllabus and review course requirements			
1/13	<b>Introduction to American Buildings: Understanding How Buildings Work</b>	Lanier pp. 1-9 “An Archaeological Approach”		
1/15	Building Site and Environment	Allen pp. 3-13 “The Outdoor Environment”		
1/18	<b><u>MLK Holiday No Class</u></b>			
1/20	Shelter: Human Needs and the Environmental Response	Allen pp. 14-26, 29-30 “The Human Environment”, “The Concept of Shelter”, and “Building Function”		
1/22	Plumbing and Climate Control	Allen pp. 31-42, 73-88 “Providing Water”, “Recycling Waste”, and “Controlling Air Temperature and Humidity”		
1/25	Electrical Systems (Illumination) and Human Scale	Allen pp. 133-152 “Providing Concentrated Energy” and “Fitting Buildings to People”		
1/27	Keeping Water Out: Roof and Truss Systems	Allen pp. 99-113 “Keeping Water Out” Lanier pp. 113-118 Comp pp. all “Bridge Truss Types: a guide to dating and identifying” <b>(reserve)</b>	<b>Assignment #1 made</b>	
1/29				Laboratory, TBA
2/1	Loads and Stresses	Ching pp. 2.10-2.13 “Loads on Buildings”, “Structural Forces”, and “Basic Structural Elements” <b>(reserve)</b> Allen pp. 153-181 ”Providing Structural Support”		
	Site Excavation and	Allen pp. 181-183 “Foundations”		

2/3	Foundations	Lanier pp. 61-69 “Underpinnings”		
2/5	Masonry Construction, Stone	McKee pp. 3-39 “An Introduction to Early American Masonry: Stone, Brick, Mortar and Plaster” (reserve) Lanier pp. 95-97		
2/8	Masonry Construction, Brick	McKee pp. 39-59 “An Introduction to Early American Masonry: Stone, Brick, Mortar and Plaster” (reserve) Lanier pp. 97-105		
2/10	Masonry Construction, Concrete, Mortar/Plaster	McKee pp. 61-90 “An Introduction to Early American Masonry: Stone, Brick, Mortar and Plaster” (reserve) Lanier pp. 105-111		
2/12				Laboratory, TBA
2/15	Frame Construction	William Graham pp. all “Pre-Industrial Framing in the Chesapeake” (reserve) Lanier pp. 61-118		
2/17	Wood as a Building Material	Nelson pp. all “Wainscoting in Historic Buildings” (reserve) Fred Lamb pp. all “Wood Identification” (reserve)		
2/19				Laboratory, TBA
2/22	Metal as a Building Material	Lee pp. all “Cast Iron In American Architecture: A Synoptic View” (reserve)		
2/24	Fasteners: Joints, Nails, Screws, and Hinges	Nelson pp. all “Nail Chronology as an Aid to Dating Old Buildings” (reserve)		Exam Review Distributed
2/26	<b><u>Mid-Term Exam</u></b>		<b><u>Exam</u></b>	
3/1 – 3/5	<b><u>Spring Break, No Class</u></b>			
3/8	<b>The Social Base of Architecture: Ideals, Trends, and Progress</b>	Hawkes pp. all “Economical Painting: The Tools and Techniques Used in Exterior Painting in the 19 <sup>th</sup> Century”		



		(reserve)		
3/10	Vernacular and Colonial Ideals and Trends	Lanier pp. 119-127 (style review)		
3/12	Early Republic Ideals and Trends	Lanier pp. 127-139 (style review)		
3/15	Picturesque and Victorian Era Ideals and Trends	Lanier pp. 139-165 (style review) Sutherland pp.27-52 “The Expansion of Everyday Life 1860-1876: Houses, Homesteads, andhovels” (reserve)		
3/17	20 <sup>th</sup> Century Ideals and Trends	Volz pp. 25-48 “The Modern Look of the Early-Twentieth-Century House: A Mirror of Changing Lifestyles” (reserve) Lanier pp. 165-176		
3/19				Laboratory, TBA
3/22	Vernacular Forms and Farming Landscapes	Lanier pp. 177-225, 278-315		
3/24	<b>How Design Affects Construction: From Concept to Building</b>	Lanier pp. 10-60	<b>Assignment #2 made</b>	
3/26	Vernacular and Settlement Era Processes: The Need for Codes	Reading TBA		
3/29	Building Trades and the Craftsmen: Contracts Specifications, and Agreements	Reading TBA	<b>Assignment #1 due</b>	
3/31	Role of the Architect and Contractor	Allen pp. 207-216 “Getting a Building Built” Reading TBA	<b>Assignment #3 made</b>	
4/2				Laboratory, TBA
4/5	Role of the Engineer	Reading TBA	<b>Decision on Assignment #3 Material Due</b>	
4/7	<b>Modern Era Materials and Buildings</b>	Johnson pp. 16-28 “Domestic Prefabrication Historic Context” (reserve)		

4/7	<b>Modern Era Materials and Buildings</b>	Johnson pp. 16-28 “Domestic Prefabrication Historic Context” <b>(reserve)</b>		
4/9	Metals	Jester pp. 46-79 “Metals” <b>(reserve)</b>		
4/12	Wood and Plastics	Jester pp. 120-149 “Wood and Plastics” <b>(reserve)</b>	<b>Assignment #2 Due</b>	
4/14	Flooring, Roofing, Siding, and Wall Finishes	Jester pp. 214-277 Flooring, Roofing, Siding and Wall Finishes” <b>(reserve)</b>		
4/16				Laboratory, TBA
4/19	Oral Presentations		<b>Assignment #3 Due</b>	
4/21	Oral Presentations			Exam Review Distributed
4/23	Course Review			