



# INTERIOR ARCHITECTURE

**IA 322. Architectural Systems I.** 3 cr. Introductory aesthetic, technical, and sustainable analysis of architectural systems, including: structural systems, active and passive energy, systems, acoustics, materials, and best practices for resource utilization.

## Course Details

Semester: Fall 2016-2017  
Classroom: Room 323 CPS  
Door Code: 3+5, 2, 4  
Meeting times: Section 1: Tuesday/Thursday, 1:00 PM - 2:15 PM  
Professor: Nate Johnson  
Office: CPS 336B  
Phone: x 2451  
Email: [njohnson@uwsp.edu](mailto:njohnson@uwsp.edu)  
Office hours: Monday 1:00 PM - 4:00 PM  
Tuesday 9:00 AM - 12:00 PM  
or by appointment  
Website: Desire to Learn (D2L): <http://www.uwsp.edu/d2l/Pages/default.aspx>

## Required Textbooks

Author	Title
Ching	Building Construction Illustrated 5 <sup>th</sup> Edition (DUC Purchase)

## Description

This course is designed to introduce to you how the interior spaces you are designing function systemically and are constructed. In order to be an effective interior designer, basic knowledge of building systems and their related construction techniques is essential. This also applies to related careers many of you will pursue after graduation, including:

- working for home builders, where knowledge of small scale residential building systems is critical.
- working in sales of building materials, where the ability to discuss in detail with architects some of the materials, components, and systems we will be discussing is important.
- working in large AEC firms where you will be asked to help out with production from time to time in areas where someone with a formal training in architecture would typically work.
- going on to earn an advanced degree in architecture.

Instruction will be provided through lectures and discussions mostly based on the text book. There will be a degree of integration with IA 317, so it is important that you be aware of what we are discussing and how it relates to the projects you are working on in that course. There is also a planned tour of the new Science Building under construction here on campus. This tour will take place after 3:30 PM on a day we have class.

## Policies

**Due Dates:** Assignments are due **at the beginning of class** on the date and time specified. Assignments submitted to D2L will have specific submission requirements. **No late assignments will be accepted** and all work must be complete. Makeup work may be accepted at the instructor's discretion, depending on circumstances (see Absences).

**Attendance:** Attendance is required and will be recorded. Students are expected to arrive on time and stay for the entire class period. Once class has begun, do not leave the room and re-enter unless it is an emergency, as it is disrespectful and disruptive to the instructor and your fellow students. If you must leave the class early, please inform the instructor in advance.

**Absences:** Absences will be excused only when prior notice is given in cases of personal illness or emergency via email and you must personally make arrangements to discuss the situation during the instructor's office hours upon your return. If you need to be absent because of religious observances, you must inform me during the first couple of days of classes via email. Absences due to field trips or other campus activities must be validated with a formal excuse obtained from the instructor or sponsor of the activity. Please give notice prior to your absence to discuss any makeup work. **Unapproved makeup work or late work will receive no credit.**

**Technology:** Cell phones should be set to silent mode and not used during class unless: you are instructed to do so, you have informed me that you are an EMT or firefighter, or you have informed me that you are waiting for a personal emergency call. Cell phone use during quizzes and exams will be considered academic misconduct and will result in disciplinary action according to UW procedures. Laptops are not necessary and should not be used during class unless specifically requested in advance by the instructor. During any computer lab portions of the class, students must refrain from using the internet and computer programs other than those required by the Instructor. Students are expected to keep multiple backup copies of electronic files. It is recommended that students work from the myFiles drive and not unreliable thumb drives. Failed storage devices are not an excuse for late work.

**English as a Second Language:** If you are a student who needs language assistance for testing and lectures, please see me during office hours so that arrangements can be made. No interpretation devices are allowed during exams and quizzes.

**Learning Disabilities:** If you need extra time or special arrangements for taking exams because of a learning disability, be sure to go to the Disability Services Office and get an authorization form. Make sure to present it to the instructor during the first week of class. See the UWSP webpage for more information about disabilities and accommodations: <http://www.uwsp.edu/disability/Pages/default.aspx>

**Academic Honesty:** No plagiarism or other form of cheating will be tolerated. Using work submitted for credit in another class, either individual or group work, is not appropriate and is considered cheating. Any academic misconduct will result in a zero grade.

Plagiarism is the attempt to use another's language or major ideas as your own. It is copying somebody else's work (including drawings), sometimes with minor changes. To avoid plagiarism, either paraphrase, assimilate, synthesize, or give credit to the source for major ideas, information, definitions and quotes. Accuracy is essential. Enclose all quotes in quotation marks and copy word for word. Paraphrasing is thoroughly rewriting a sentence or paragraph, not just changing a word or two. This requires changing sentence structure, words and style to reflect your personal writing.

D2L's Dropbox is now integrated with [www.turnitin.com](http://www.turnitin.com), a plagiarism detection website. What that means is that ALL papers submitted to the Dropbox will be checked for plagiarism.

For more information on academic misconduct, please visit the following UWSP website: <http://www.uwsp.edu/dos/Pages/Academic-Misconduct.aspx>

## **Learning Outcomes (Knowledge, Skills, and Dispositions)**

### **Interior Architecture Division IA 322 Course Learning Outcomes**

*at the end of this course students will be able to:*

1. Identify and apply different building systems and their related components.
2. Identify general building laws, codes, rating systems and standards at an introductory level.
3. Identify and apply sustainable design principles to the built environment.
4. Demonstrate an understanding of construction detail documentation.

### **CIDA Professional Standards 2017**

*student learning expectations:*

Standard 4. Global Context:

- Students are aware that building technology, materials, and construction vary according to geographic location.

Standard 14. Environmental Systems and Comfort:

- Students are aware that design decisions relating to acoustics, thermal comfort, and indoor air quality have an environmental impact.
- Students understand:
  - the principles of thermal design.
  - how active and passive thermal systems and components impact interior design solutions.
  - the principles of indoor air quality.
  - how the selection and application of products and systems impact indoor air quality.

Standard 15. Construction:

- Students have awareness of the environmental impact of construction.
- Student work demonstrates understanding that design solutions affect and are impacted by:
  - base-building structural systems and construction methods.
  - interior systems, construction, and installation methods.
  - detailing and specification of interior construction materials, products, and finishes.
  - the integration of building systems including power, mechanical, HVAC, data/voice telecommunications, and plumbing.
  - monitoring systems including energy, security, and building controls systems.
  - vertical and horizontal systems of transport and circulation including stairs, elevators, and escalators.
- Students understand the formats, components, and accepted standards for an integrated and comprehensive set of interior construction documents.

Standard 16. Regulations and Guidelines:

- Students have awareness of the origins and intent of laws, codes, and standards.

## **Grading and Evaluation**

**Grades:** Course letter grades will be given according to the following percentages of total points at the end of the semester: 100-93%=A; 92-90%=A-; 89-87%=B+; 86-83%=B; 82-80%=B-; 79-77%=C+; 76-73%=C; 72-70%=C-; 69-67%=D+; 66-63%=D; 62% and below=F.

**Evaluation Criteria:** The following is a breakdown of the assignments this semester with the weight percentage. Grades for assignments will be posted on D2L.

Quizzes	48% (8 highest scored quizzes @ 6% per)
Projects (2@10% per)	20%
Exams (2@13% per)	26%
Course Participation	6%
Semester Total	100%

## Assignment Descriptions

Quizzes are timed, administered through D2L, and you will be allowed to use your books and notes. The midterm and final exams are timed, held in class, and books and notes are not allowed.

We will also be working on several small design projects based on your IA 317 projects that are related to different systems we will be covering. Some class time will be devoted to discussing projects with the instructor and working in class. Students should plan on bringing their laptop and printed work at the required scale to class so that they can receive feedback before the due date.

Participation will be assessed based on participation in any discussions, professionalism, and adherence to course policies.

## Schedule

**Schedule Policy:** The schedule below is to be considered an outline and is subject to change. Students will be expected to complete the readings from the book before they will be discussed in class. How quickly we move through the material is based on any in class discussions and planned integration with IA 317. Students are required to monitor D2L and listen for announcements in class on items related to: quiz availability, midterm date changes, and upcoming in class project work times. Please note that there will be no class on Thursday, November 24 due to the Thanksgiving Recess.

Dates	Topic	BCI Text Readings	Quiz #
9-6	Intro / Building Systems	2.02-7, A.2-5, A.8-13	1
9-8	The Building Site	1.02-38	
9-13	Materials and Fasteners	12.02-22, A.18	2
9-15	Structural Systems	2.08-30, A.6-7	
9-20	Foundations	3.02-26, 1.08-9	3
9-22			
9-27	Floors	4.02-40	
9-29			
10-4	Walls	5.02-50	4
10-6			
10-11	Roofs	6.02-30	
10-13	Moisture and Thermal Protection	7.02-50, 3.14, 1.20, 1.22	5
10-18			
10-20	Exam Prep and/or Project Work	-	-
10-25	<b>Midterm Exam</b>	<i>Material Covered To Date</i>	-
10-27	Metrication	BCI A.08-9 / Presentation and Readings	6
11-1	Doors and Windows	BCI 8.02-38	
11-3			
11-8	Special Construction	BCI 9.02-30	
11-10			
11-15	Finish Work	BCI 10.02-30	7
11-17			
11-22	Mechanical, Electrical, Plumbing, and Fire Protection	BCI 11.02-44	8
11-29			
12-1			
12-6	Sustainable Design	Presentation and Readings	9
12-8			
12-13			
12-15	Exam Prep and/or Project Work	-	-
12-21 12:30-2:30	<b>Final Exam</b>	<i>Material Covered After Midterm Exam</i>	-