



Course Syllabus

IA 324 - Architectural Systems II

Advanced aesthetic, technical, and sustainable architectural systems, including structural systems, active and passive energy systems, acoustics materials and best practices for resource utilization.

Prerequisites: IA 322. 3 cr.

Details

Semester:	Fall 2018 – 2019
Classroom:	Room 317 CPS
CPS Building Hours:	7:00 AM to 10:00 PM every day except breaks and holidays
Printer Code:	43243
Meeting times:	Section 1: Tuesday and Thursday 12:30 PM – 1:45 PM
Professor:	Nate Johnson
Office:	336B CPS
Phone:	(715) 346-2451
Email:	njohnson@uwsp.edu
Office hours:	Tuesday and Thursday 9:00 AM – 12:00 PM or by appointment
Course Website:	Desire to Learn (D2L): http://www.uwsp.edu/d2l/Pages/default.aspx

Required Textbooks

Author	Title
Francis D.K. Ching	Building Construction Illustrated 5 th Edition (DUC Rental or eBook) I strongly recommend that you purchase the text for use in other classes, internships, and studying for the NCIDQ exam.

Description

This course is designed to give you the ability to add an additional layer of development to the interior spaces you are designing to allow them to become real. To be an effective interior designer, basic knowledge of tectonics (i.e. the science of building systems and construction) is essential. This applies to varied career paths many of you will pursue after graduation, including:

- Working for home builders, where knowledge of small scale building systems is critical.
- Working in sales, where the ability to discuss in detail with architects and other professionals 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 or engineering would typically work.
- Going on to earn an advanced degree in architecture or interior architecture.

Instruction will be provided through lectures and discussions mostly based on the text book. There will be a degree of integration with IA 417, 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 Sentry Building under construction near campus. This tour will take place after 3:00 PM on a day we have class in late September or early October.

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.

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

Absences: Absences for illnesses are not excused unless you discuss the situation in person and provide a written excuse from your physician upon your return. If you need to be absent because of a funeral or religious observance, either you or your advisor must inform me **in advance** of the days you will be absent. Absences due to athletics or other school activities must be validated with a formal excuse from the professor, coach, or sponsor **prior to the activity**. **Unapproved makeup work or late work will not receive credit**. Absences for all other extenuating circumstances may be accepted at my discretion.

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. During any computer work portions of class, you must refrain from using the internet and computer programs other than those required by the Instructor. The use of headphones during work time portions of class is discouraged as it prevents you from hearing important information. You are expected to keep backup copies of electronic files. It is recommended that you work from the OneDrive and not unreliable thumb drives. Failed storage devices are not an excuse for late work. **Always expect the unexpected!**

Food and Beverages: No food is allowed during class, but you may have beverages.

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 for taking exams or any other arrangements because of a learning disability, be sure to go to the Disability Services Office and get an authorization form. Make sure you present it to the instructor during the first week of class. For more information about disabilities and accommodations, see <http://www.uwsp.edu/disability/Pages/default.aspx>

Emergency Procedures: For details on all emergency responses at UWSP, see <https://www.uwsp.edu/rmgt/Pages/em/procedures/default.aspx>

1. In the event of a medical emergency, call 911 or use a red emergency phone located in a hallway. Please assist if trained and willing to do so. Guide emergency personnel to victim(s).
2. In the event of a tornado warning, proceed to the lowest level interior room without window exposure. In general, avoid wide-span rooms and buildings.

3. In the event of a fire alarm, evacuate the building in a calm manner. Meet outside via the doors nearest to our classroom. Notify the instructor or emergency personnel of any missing individuals.
4. In the event of an active shooter, run/escape/hide/fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Follow instructions of emergency personnel.

Academic Honesty: Academic misconduct is not tolerated and will result in a zero grade. Plagiarism is the use of another’s language or major ideas as your own. It is copying somebody else’s work (including drawings), sometimes with minor changes. **Please be aware that no distinction is made between the party plagiarizing and the party voluntarily being plagiarized.** Both parties will receive a zero grade. Every attempt should be made to prevent someone from copying your work. For more information, see <http://www.uwsp.edu/dos/Pages/Academic-Misconduct.aspx>

Grading, Evaluation, and Criteria

Grading: Individual student grades are confidential and will be recorded in the D2L Grades section. Your cumulative grade to date will always be visible, so check the grade book frequently. Keep in mind that some grades are not entered immediately as they must be individually entered. Therefore, it may take several days to record. Grades not yet entered will be blank. **If you submitted no assignment, a zero will be entered as your grade.** If an entry error has occurred, you must report it promptly so that changes can be made in a timely manner. Do not wait until the final week of classes to report errors that occurred early in the semester.

Evaluation: Refer to the Assignment Descriptions and Schedule for more information. A grade sheet may be given in the form of a rubric with comments, or comments may be provided in D2L with the grade. Assignments typically have a value of 100 points and grades are expressed as percentages in D2L.

Criteria: Course Participation will be assessed based on participation in any discussions, professionalism, and adherence to course policies. The following is a breakdown of the assignments we will be working on this semester with the weight percentage:

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

Course letter grades are according to the following percentages of total points at the end of the semester:

100 – 93%	A	83 – 87%	B	73 – 77%	C	60 – 67%	D
90 – 92%	A-	80 – 82%	B-	70 – 72%	C-	59 – 0%	F
88 – 89%	B+	78 – 79%	C+	68 – 69%	D+		

Assignment Descriptions

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

There will be a tectonics design project where you will apply some of the knowledge gained in this course by adding an additional layer of development to your IA 417 office design project. Some class time may be devoted to discussing this project with the instructor and working in class. Students should plan on bringing their laptop and printed work at the required scale to class to so that they can receive feedback before the due date.

Schedule

The schedule below is 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 417. Students are required to monitor D2L News and listen for announcements in class on items related to: quiz availability, midterm date changes, and upcoming in class project work times.

Dates	Important Items	Topic	BCI Text Readings	Quiz #
9-4		Course Introduction	2.02-05, A.02-03	1
9-6		The Building Site	1.02-38	
9-11		Passive Design	Presentation and Readings	2
9-13				
9-18	Cynthia Leibrock Guest Lecture	Contract Design	-	-
9-20		Structural Systems	2.08-30, A.06-07	3
9-25		Foundations	3.02-26, 1.08-09	
9-27		Project Intro	-	-
10-2	Sentry Tour	Floors	4.02-40	4
10-4				
10-9		Walls	5.02-50	5
10-11				
10-16		Exam Prep/Project Work Time	-	-
10-18	Chicago Trip	<i>No Class</i>	-	-
10-23		Midterm Exam: In Class	<i>Material Covered to Date</i>	-
10-25		Moisture and Thermal Protection	7.02-50, 3.14, 1.20, 1.22	6
10-30				
11-1		Mechanical, Electrical, Plumbing, and Fire Protection	11.02-44	7
11-6				
11-8		Materials and Fasteners	12.02-22, A.18	8
11-13		Doors and Windows	8.02-38	
11-15				
11-20		Compartmentalization, Egress, and Acoustics	2.06-07, A.10-17	9
11-22	Thanksgiving	<i>No Class</i>	-	
11-27		Special Construction	9.02-30	
11-29				
12-4		Finish Work	10.02-30	10
12-6				
12-11		Metrication	Presentation and Readings	
12-13		Exam Prep/Project Work Time	-	-
12-17	Office Project Due at 11:59 PM	-	-	-
12-19		Final Exam: 10:15-12:15 PM	<i>Material After Midterm</i>	-