

Elizabethtown College
First Year Seminar FYS100 Section J
ORGANIC ARCHITECTURE and FRANK LLOYD WRIGHT (FLW)
Fall 2023

Basic principles of architecture and urban design including sustainable design and mitigating environmental impacts. Major emphasis on Frank Lloyd Wright's "Organic Architecture" and his life and selected works (from his ~500 built designs) in Wisconsin (mostly rural), Illinois (mostly Chicago), New York, Pennsylvania, California, Arizona, Japan (a major influence), and Italy (Tuscany). Born in 1867 soon after the Civil war, he lived through two World Wars and the Great Depression. He died in 1959 at the beginning of the Space Race. An Introduction to Site Analysis & Design, Landscape Architecture, Architecture Theory, Architectural Materials & Methods, and Passive Architectural Illumination, Solar, HVAC, and Acoustical Design.

Joseph T Wunderlich PhD

MONDAYS 11:00AM-12:20 in E273 WEDNESDAYS 11:00AM (see locations below) FRIDAYS 11:00AM-12:20 in E273

WEEK 1 (8/21-8/25)

- Mon: Review Syllabus
- Wed: *Roundtable #1 with peer Mentor in E273*
- Fri: "SKELETON BENEATH THE SKIN; The Bones of Barns and Farmhouses" PPTX-w/audio MP4 YouTube PDF

WEEK 2 (8/28-9/1)

- Mon: Watch first 15min of *Ken Burns Film On Frank Lloyd Wright Part 1* MASTER PLANS: Lancaster-County Etown-Borough Etown-College (VR Video)
- Wed: *Welcomes from Deans; look for announcement in email for location.*
- Fri: Minecraft Projects *Minecraft tutorial* ETOWN MINECRAFT for RAPID PROTOTYPING buildings, towns, and cultures in a SOCIAL NETWORK (with others)
- [1] Wunderlich, J.T. and Wunderlich, J.J. (2013). *Green architecture and environmental design using rapid-prototyping social-networking sandbox tools, followed by professional architectural software.* Asian Conference on Sustainability, Energy & the Environment (ACSEE 2013), June 6-9, Osaka, Japan. TALK PAPER
- [2] Wunderlich, J.T. and Wunderlich, J.J. (2014). *Crowdsourced Architecture and Environmental Design.* 2nd Int'l Conference on Emerging on Trends in Engineering and Technology (ICETET'2014) May 30-31, London England. TALK PAPER

WEEK 3 (9/4-9/8)

- Mon: LABOR DAY HOLIDAY
- Wed: *Roundtable #2 with peer mentor in E273*
- Fri: "FLW, AGE 0 TO 19 (1867-1886)" PPTX-w/audio MP4 YouTube PDF - Froebel methods, Homeschool like Montessori, Unitarian church, Origami, Nature

WEEK 4 (9/11-9/15)

- Mon: Guest Speaker on Automated Natural Ventilation
- Wed: "Exploration Station (Career Development Center & Academic Advising)" – look for announcement from Peer-Mentor for location.
- Fri: "FLW, AGE 20 TO 33 (1887-1900)" PPTX-w/audio MP4 YouTube PDF - Louis Sullivan, Starting a firm, Begins organic architecture, Chicago

WEEK 5 (9/18-9/22)

- Mon: GREEN ARCHITECTURAL ENGINEERING COURSE: "CLIMATE, SITE, and ARCHITECTURAL-DESIGN SUMMARY" PDF PPTX MP4 YouTube
- Wed: *Roundtable #3 with peer mentor in E273*
- Fri: "FLW, AGE 34 TO 41 (1901-08)" PPTX-w/audio MP4 YouTube PDF - Arts & Crafts, Prairie Style, Japan visit #1

WEEK 6 (9/25-9/29)

- Mon: Library session #1 in the LIBRARY (go directly there) – look for announcement from Librarian
- Wed: Watch VIDEOS (outside class): *Robie House Unity Temple Larkin Building Japanese Architecture & Prints*
- Fri: "JAPANESE URBAN DESIGN and ARCHITECTURE" PPTX-w/audio MP4 YouTube PDF

WEEK 7 (10/02-10/06)

- Mon: "Wunderlich Vlog of 31 FLW Chicago designs"
- Wed: Watch VIDEOS (outside class): *Falling Water Johnson Wax Building*
- Fri: FALL BREAK -- October 6 and 7

WEEK 8 (10/09-10/13)

- Mon: "FLW, AGE 42 to 47 (1909-14)" PPTX-w/audio MP4 YouTube PDF - Runs away to Italy, Taliesin Tragedy "ITALIAN ARCHITECTURE & URBAN DESIGN" Page MP4 YouTube PDF PPTX-w/audio
- Wed: *Departmental Advising and Majors/Minors Fair*
- Fri: "FLW, AGE 48 TO 62 (1915-29)" PPTX-w/audio MP4 YouTube PDF - Recovering from trauma, Living in Japan, Living in California, Marrying Olga -Tokyo Hotel (1,2)

WEEK 9 (10/16-10/20)

- Mon: "FLW, AGE 63 TO 78 (1930-45)" MP4 PPTX-w/audio YouTube PDF – Olga, Taliesin School; Wisconsin/Arizona
- Wed: *Roundtable #4 with peer mentor in E273*
- Fri: "FLW, AGE 79 TO 91 (1946-58+)" MP4 PPTX-w/audio YouTube PDF - Life-long adaptation, Legacy, Olga continues Taliesin Fellowship/School until 1985

WEEK 10 (10/23-10/27)

- Mon: *Revit Model of Past & Present Etown Campus, into Oculus Rift Virtual Reality* ADVISING
- Wed: *Roundtable #5 with peer mentor in E273*
- Fri: *Wunderlich book on Frank Lloyd Wright Building physical models 1,2,3,4* ADVISING

WEEK 11 (10/30-11/03)

- Mon: GREEN ARCHITECTURAL ENGINEERING COURSE: "LIGHTING DESIGN" MP4 PPTX-w/audio YouTube PDF ADVISING
- Wed: Watch VIDEOS (outside class): *Falling Water*
- Fri: Watch/Read (outside class): *Living 3 Years in Japan, Japanese Gardens, Engawa, PERSPECTIVE DRAWING*

WEEK 12 (11/06-11/10)

- Mon: ARCHITECTURE THEORY COURSE: "FORM & SPACE" PPTX-w/audio MP4 YouTube PDF REGISTRATION / ADVISING
- Wed: Watch VIDEOS (outside class): *Guggenheim Eight FLW buildings UNESCO World Heritage*
- Fri: "MANSIONS" PPTX-w/audio MP4 YouTube PDF

WEEK 13 (11/13-11/17)

- Mon: Library session #2 in the LIBRARY (go directly there) – look for announcement from Librarian
- Wed: Watch VIDEOS (outside class): *Form, Orientation, Sunlight Natural Light, When Trees meet Buildings*
- Fri: ARCHITECTURAL MATERIALS & METHODS COURSE: "SHELL / ENVELOPE A&E" MP4 PPTX-audio YouTube PDF

WEEK 14 (11/20-11/24)

- Mon: Watch Ken Burns Award-Winning Film On Frank Lloyd Wright *Part 1 Part 2*
- Wed: *No Class*
- THANKSGIVING BREAK

WEEK 15 (11/27-12/01)

- Mon: Projects
- Wed: Watch VIDEOS (outside class): *1957 Mike Wallace Interview of Frank Lloyd Wright*
- Fri: Projects

WEEK 16 (12/04-12/08)

- FINAL EXAM WEEK: Exam times for all courses: https://www.etown.edu/offices/registration-records/files/calendars/Final_Exam_Schedule_FA2023.pdf

PROFESSOR

Joseph T Wunderlich PhD

Associate Professor of Engineering and Computer Science

Coordinator of Computer Engineering and Architecture

A&E portfolio: [PDF PPTX-w/audio MP4 YouTube](#)

Offices: E284E and E273 Office Phone: 717-361-1295 Cell Phone: 717-368-9715

Email: wunderjt@etown.edu Website: <http://users.etown.edu/w/wunderjt>

	Monday	Tuesday	Wednesday	Thursday	Friday
10:30	10:30-11:00 OFFICE				
11:00	11-12:20 FYS100 in E273	11-12:20	11-11:50	11-12:20	11-12:20 FYS100 in E273
11:30	Organic Architecture & Frank Lloyd Wright		FYS Peer Mentor		Organic Architecture & Frank Lloyd Wright
12:00			OFFICE		
12:30	12:30-1:50 CS170 in E273	12:30-1:50	12:30-1:50 CS170 in E273	12:30-1:50	12:30-1:50 CS170 in E273
1:00	WHEN ANNOUNCED	MEETING	Computer Game Design		Computer Game Design
1:30		PERIOD	and Virtual Reality		and Virtual Reality
2:00	2-3:20 EGR434 in E273	2-3:20	2-3:20 EGR434 in E273	2:00-3:20	1:50-3:10
2:30	Robotics and Machine Intelligence		Robotics and Machine Intelligence		OFFICE
3:00	OFFICE	3:30-4:50	3:30-4:50	3:30-4:50	3:30-4:50
3:30	4-5:40 EGR495 in E273	MEETING		MEETING	
4:00	Architecture	PERIOD		PERIOD	
4:30	Design Studio I				
5:00					
5:30					

EGR401 Senior Projects at Arranged Times

ACADEMIC HONESTY

ELIZABETHTOWN COLLEGE PLEDGE OF INTEGRITY: ***"Elizabethtown College is a community engaged in a living and learning experience, the foundation of which is mutual trust and respect. Therefore, we will strive to behave toward one another with respect for the rights of others, and we promise to represent as our work only that which is indeed our own, refraining from all forms of lying, plagiarizing, and cheating."***

See the 2016-17 Elizabethtown College Catalog, "Standards of Academic Integrity" http://catalog.etown.edu/content.php?catoid=10&navoid=507#Academic_Judicial_System or Academic Integrity at Elizabethtown College, 11th ed. <https://www.etown.edu/offices/dean-of-students/files/academic-integrity-handbook.pdf>

ARTIFICIAL INTELLIGENCE USE

"In this course, students shall give credit to AI tools whenever used, even if only to generate ideas rather than usable text or illustrations. When using AI tools on assignments, add an appendix showing (a) the entire exchange, highlighting the most relevant sections; (b) a description of precisely which AI tools were used (e.g. ChatGPT private subscription version or DALL-E free version), (c) an explanation of how the AI tools were used (e.g. to generate ideas, turns of phrase, elements of text, long stretches of text, lines of argument, pieces of evidence, maps of the conceptual territory, illustrations of key concepts, etc.); (d) an account of why AI tools were used (e.g. to save time, to surmount writer's block, to stimulate thinking, to handle mounting stress, to clarify prose, to translate text, to experiment for fun, etc.). Students shall not use AI tools during in-class examinations, or assignments unless explicitly permitted and instructed. Overall, AI tools should be used wisely and reflectively with an aim to deepen understanding of subject matter."

Source: <https://ctl.utexas.edu/chatgpt-and-generative-ai-tools-sample-syllabus-policy-statements>

LEARNING OUTCOMES

- Demonstrate understanding of the academic expectations of college life.
- Demonstrate critical thinking, reading, and composing skills.
- Develop informative, inclusive public speaking skills and deliver an effective formal presentation.
- Apply introductory information literacy skills based on instruction by a librarian to course materials.
- Relate opportunities for learning outside the classroom to their academic courses, personal interests, and intended program of study.
- Frank Lloyd Wright's "Organic Architecture"
- Concepts of Architecture, Environmental Design, and Urban Planning
- Introductory Architectural Model-making
- Introductions to Architecture Theory, Materials & Methods, Illumination & Solar Design, and HVAC
- Architectural inspiration from case-studies
- Appreciate varied cultural and multi-disciplinary perspectives

GRADING

- 660 points Assignments
- 240 points Final Semester Architecture Design Project
- 100 points Comprehensive Final Exam in Canvas

ATTENDANCE

Class participation is part of your course grade. Also, exams may cover some material that is only presented in lectures.

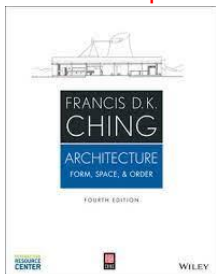
SCHOOL CLOSURE / CLASS CANCELLATION

Additional work assigned to cover any class cancellation.

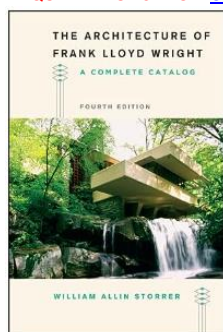
READINGS

Exerpts from the following are incorporated into lectures. Buy **"REQUIRED PURCHASES"** through bookstore or on-line, and **"Recommended Optional Purchases"** on-line.

- [1] AIA *Graphics Standards*, 10th Edition. <http://users.etsou.edu/w/wunderj/Architecture%20Lectures/AIA%20Chapter%20on%20Environmental%20Design.pdf>
- [2] Allan, Edward and Lana, Joseph, *Fundamentals of Building Construction: Materials and Methods*. Wiley, 7th edition (October 15, 2019).
- [3] American Institute of Architects. *AIA Guide to Chicago*. 2014.
- [4] Burns, Ken, and Novick, Lynn. *Frank Lloyd Wright: A Film by Ken Burns and Lynn Novick* DVD. PBS Home Video, August 28, 2001.
- [5] Bacon, Edmond. *Design of Cities*. Thames & Hudson Ltd, 1978.
- [6] **Recommended Optional Purchase:** Ching, Francis D.K. *Architecture: Form, Space, and Order*. 4th ed., Wiley, 2014. (several e-book licenses are available through the library)



- [7] Curtis, Stanley James. Friedrich Froebel; German educator. *Encyclopedia Britannica*, 2018. <https://www.britannica.com/biography/Friedrich-Froebel>
- [8] Fazio, M., Moffett, M., and Wodehouse, L. *Buildings Across Time: An introduction to world architecture*. 4th edition, McGraw-Hill, 2012.
- [9] Fici, Filippo. Frank Lloyd Wright in Florence and Fiosole. *Frank Lloyd Wright Quarterly*, Vol. 22 no.4, 2011.
- [10] *Find a grave:* William Carey Wright, 2018. <https://www.findagrave.com/memorial/55462361/william-carey-wright>
- [11] Frank Lloyd Wright Trust. *1905: Japan through the Lens of Frank Lloyd Wright*, 2017. <https://www.wrightsjapan1905.org/>
- [12] Frank Lloyd Wright Trust. *Unity Temple*, 2018. <https://flwright.org/researchexplore/unitytemple>
- [13] Froebel; *Brief History of the Kindergarten*. Froebel Gifts, 2013. <http://www.froebelgifts.com/history.htm>
- [14] Ho-o-Den, *An Illustrated Description of the Buildings Erected by the Japanese Government at the World's Columbian Exposition*. K. Ogawa publisher, Tokyo, 2018.
- [15] Hoffman, Anna. *Gustav Stickley: the American Arts & Crafts Movement*. Sept 16, 2010.
- [16] Huxtable, Ada Louise. *Frank Lloyd Wright*. New York Times, Oct. 31, 2004. <https://www.nytimes.com/2004/10/31/books/chapters/frank-lloyd-wright.html>
- [17] Kaufman, Clare. *The History of Higher Education in the United States*. WorldWideLearn. 2018. <https://www.worldwidelearn.com/education-advisor/indepth/history-higher-education.php>
- [18] Kitagawa, Joseph Mitsuo. *On Understanding Japanese Religion*. Princeton University Press, 1987.
- [19] Lechner, Norbert. *Heating, cooling, lighting*. Wiley, 4th edition, October 13, 2014.
- [20] *LEED (Leadership in Energy and Environmental Design)*, The United States Green Building Council, 2018. <https://new.usgbc.org/leed>
- [21] *Life of Olgivanna Lloyd Wright Reviewed by Architects and Artisans*. ORO Editions. Sep 12, 2017. <https://www.oroeditions.com/2017/09/12/the-life-of-olgivanna-lloyd-wright-reviewed-by-architects-and-artisans/>
- [22] Lynch, Kevin. *The Image of The City*. MIT Press, 1960.
- [23] *PENN Rare Book and Manuscript: Frank Lloyd Wright's Paternal Family*. Penn Library. University of Pennsylvania, Feb. 20, 2014. <http://www.library.upenn.edu/rbm/featured/mscoll822.html>
- [24] Pearson, David. *The Breaking Wave: New Organic Architecture*. Stroud: Gaia, 2001.
- [25] Siry, Joseph M. The Architecture of Earthquake Resistance. *Journal of the Society of Architectural Historians*, Vol 67 (1): pp78–105, 2008.
- [26] **REQUIRED PURCHASE:** Storrer, William Allin. *The Architecture of Frank Lloyd Wright, a Complete Catalog*, 4th edition. Chicago, University of Chicago Press, 2017.



- [27] Stevens, John L. *Incidence of travel in Yucatán*. Sastrugi Press, 2019.
- [28] Stevens, John L. *Incidence of travel in Central America, Chiapas, and Yucatán*. Dover Publications, 1969.
- [29] *Unity Chapel*, Unity Chapel Inc. 2018. <http://www.unitychapel.org/familyhistory/>
- [30] Vargas, A.P. and Schierle, G.G., The textile block system: seismic analysis and upgrading, *WIT Transactions on State of the Art in Science and Engineering*, Vol 62 WIT Press 2013.
- [31] Kim, Daeshick, and Back, Alan. *The Way to go: philosophy in martial arts practice*. Nanam Publishing House, 2000.
- [32] Wright, Frank Lloyd. *The Art and Craft of the Machine*, Vol. 8, No. 2 pp. 77-81, 83-85, 87-90, May, 1901. [tps://www.jstor.org/stable/pdf/25505640.pdf](https://www.jstor.org/stable/pdf/25505640.pdf)
- [33] Wright, Frank Lloyd. *In the Cause of Architecture*. Architectural Record, vol. XXIII, March 1908.
- [34] Wright, Frank Lloyd. *(1911 Wasmuth Portfolio) in Drawings and Plans of Frank Lloyd Wright: The Early Period (1893-1909)*. Dover Architecture 1983.
- [35] Wright, Frank Lloyd. *The Japanese Print, an Interpretation*. The Ralph Fletcher Seymour co., Chicago, 1912.
- [36] Wright, Frank Lloyd. *In the Cause of Architecture*; Second Paper. Architectural Record, May 1914.
- [37] Wright, Frank Lloyd. *The Natural House*. New York, Penguin Books, 1954.
- [38] Wright, Frank Lloyd. *Testament*. New York, Bramhall House, 1957.
- [39] Wright, Frank Lloyd. *The Natural House*. New York, Penguin Books, 1954.
- [40] Wunderlich, Joseph T, [Overview of upcoming book on Frank Lloyd Wright](#), 2008-Present.
- [41] **TYPICAL REQUIRED PURCHASE** for English 100: Sommers & Hacker, *A Pocket Style Manual*, 9th ed., 2021, Macmillan Learning. ISBN-13: 9781319169541

DISABILITY SERVICES, RELIGIOUS OBSERVANCES, and COVID EXPECTATIONS

https://elizabethtown-my.sharepoint.com/:w:/g/personal/ouimetc_etown_edu/EfZ-QooKt_VPjgwsWJz230wB3Rb6CIHsPvE0xuqWCpr-UA?e=4%3acZzjpW&at=9

DISABILITY SERVICES: Elizabethtown College welcomes otherwise qualified students with disabilities and is committed to providing access for all students to courses, programs, services, and activities. If you have a documented disability such as a learning disability or chronic illness or a new circumstance such as a concussion and would like to request accommodations please contact the Director of Disability Services by phone (717-361-1227) or e-mail (daviesl@etown.edu). The Office of Disability Services can provide resources to you and facilitate communication with faculty about reasonable accommodations. After meeting with the Office of Disability Services, please set up an appointment to meet with me, the instructor, to discuss the accommodations as they pertain to my class.

RELIGIOUS OBSERVANCES: The College is eager to facilitate individual religious beliefs and practices whenever possible while retaining course student learning outcomes. It is your responsibility to meet with the class instructor in advance to request arrangements related to your religious observances that may conflict with this class, and to make appropriate plans to make up any missed work.

COVID-RELATED EXPECTATIONS: All students are expected to adhere to the established community expectations around safety, including: daily digital health reporting, physical distancing, proper wearing of facial coverings within buildings and classrooms and when within six feet of individuals outdoors, frequent handwashing, and participation in cleaning and sanitizing protocols as requested. You will be turned away from class if you do not have a face covering. Students diagnosed with a health condition that precludes mask wearing can contact Lynne Davies in Disability Services (daviesl@etown.edu) to request remote learning as a reasonable accommodation. **If you are exhibiting any symptoms of COVID or fail to pass the daily health screen, do not come to class.** Failure to adhere to the established community expectations around safety will result in notification of Campus Security and application of the student conduct process for failure to comply, endangering the well-being of others, and/or disorderly conduct. The student code of conduct applies also to participation in all virtual activities, including Zoom sessions and discussion boards.

MENTAL HEALTH & COUNSELING RESOURCES

Counseling Services provides a broad range of counseling and mental health support services that facilitate our students' personal, social, and academic development. Our licensed mental health professionals provide short-term individual counseling, group counseling, crisis intervention, and consultation to currently enrolled students for no additional charge. Counseling services are provided in a confidential and diversity-affirming environment to help students address a variety of mental health, situational, and developmental concerns. Our office is located in the Baugher Student Center, Suite 216. Appointments can be made in person or by calling 717-361-1405. Urgent walk-in services are also available. To access our after-hours crisis services, please call the 24/7 Campus Security number of 717-361-1111. For more information, please visit www.etown.edu/offices/counseling.

SEMESTER DESIGN PROJECT HISTORY (see Canvas for this year's project assignments)

- Selected best past FYS Minecraft Architectural Computer Models: http://users.etown.edu/w/wunderjt/TSOJIN_ranks.pdf
 - Helpful videos for Minecraft: [Tutorial](#) [How to buy Minecraft](#)
- Best 2018 FYS student wood models: [by Kelli Garriott](#) [by Colton Shriner](#)
 - Helpful videos for making physical models: ["Tips & Tricks"](#) ["Material Selection"](#) ["Tools"](#) ["Model Bases & Scale"](#)
- Best past Etown Revit Computer Models (using Rhinoceros, Flamingo, Revit, Lumion, 3D-Studio-Max, and Oculus Rift Virtual Reality):
http://users.etown.edu/w/wunderjt/home_pageARCHITECTURE.html
 - Wunderlich Tutorials for making Revit computer models: [Intro](#) [Building Levels & Views](#) [Walls](#) [Library\(A, B\)](#)
 - ["REVIT VS. SKETCHUP 3D COMPUTER MODELING"](#) by J Wunderlich Jr
- Papers of Previous FYS's -- Just for Reference (not required in this course):
 - Best 2018 Paper: [by Nicole Greiner](#)
 - Best 2013 Paper (on slightly different FYS topics): [by Sammi Eisdorfer](#)