

FYS Organic Architecture and Frank Lloyd Wright (FYS 100)

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.

MONDAYS and FRIDAYS 11:00-12:20pm in E273 **WEDNESDAYS 11:00AM as shown below**

WEEK 1 (8/25-8/29)

- Mon: Review Syllabus and answer schedule questions (**REMINDER: LAST DAY TO ADD A COURSE IS FRIDAY, 8/29 AT 4:30pm**)
- Wed: *With Peer Mentor in E273, or at announced event*
- Fri: Watch first 15 minutes of *Ken Burns Film On Frank Lloyd Wright Part 1* MASTER PLANS: [Lancaster-County](#) [Etown-Borough](#) [Etown-College](#)

WEEK 2 (9/1-9/5)

- Mon: LABOR DAY HOLIDAY
- Wed: *With Peer Mentor in E273, or at announced event*
- Fri: "**SKELETON BENEATH THE SKIN; The Bones of Barns and Farmhouses**" [PPTX-w/audio MP4 YouTube PDF](#)

WEEK 3 (9/8-9/12)

- Mon: "**FLW, AGE 0 TO 19 (1867-1886)**" [PPTX-w/audio MP4 YouTube PDF](#) - Froebel methods, Homeschool, Unitarian church, Origami, Nature,
- Wed: *With Peer Mentor in E273, or at announced event*
- Fri: Library session #1 in the LIBRARY (go directly there) – look for announcement from Librarian

WEEK 4 (9/15-9/19)

- Mon: "**FLW, AGE 20 TO 33 (1887-1900)**" [PPTX-w/audio MP4 YouTube PDF](#) - Louis Sullivan, Starting a firm, Begins organic architecture, Chicago
- Wed: *With Peer Mentor in E273, or at announced event*
- Fri: "**FLW, AGE 34 TO 41 (1901-08)**" [PPTX-w/audio MP4 YouTube PDF](#) - Arts & Crafts, Prairie Style, Japan visit #1

WEEK 5 (9/22-9/26)

- Mon: Lecture on study Abroad
- Wed: *With Peer Mentor in E273, or at announced event*
- Fri: [Japanese Garden Design Video](#) [Japanese Prints Video](#)

WEEK 6 (9/29-10/3)

- Mon: "**Wunderlich Vlog of 31 FLW Chicago designs**"
- Wed: *With Peer Mentor in E273, or at announced event*
- Fri: **GREEN ARCHITECTURAL ENGINEERING COURSE: "CLIMATE, SITE, and ARCHITECTURAL-DESIGN SUMMARY"** [PDF](#) [PPTX](#) [MP4](#) [YouTube](#)

WEEK 7 (10/6-10/10)

- Mon: "**JAPANESE URBAN DESIGN and ARCHITECTURE**" [PPTX-w/audio MP4 YouTube PDF](#) [Living 3 Years in Japan](#) [The Engawa](#) [Robie House](#) [Unity Temple](#)
- Wed: *With Peer Mentor in E273, or at announced event*
- Fri: FALL BREAK -- October 9 and 10

WEEK 8 (10/13-10/17)

- Mon: "**FLW, AGE 42 to 47 (1909-14)**" [PPTX-w/audio MP4 YouTube PDF](#) –Lives in Italy, Taliesin Tragedy " **"ITALIAN ARCHITECTURE & URBAN DESIGN"** [Page](#) [MP4](#) [YouTube](#) [PDF](#) [PPTX-w/audio](#)
- Wed: *With Peer Mentor in E273, or at announced event*
- 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 (10/20-10/24)

- Mon: "**FLW, AGE 63 TO 78 (1930-45)**" [MP4 PPTX-w/audio YouTube PDF](#) – Olga, Taliesin School; Wisconsin/Arizona
- Wed: *With Peer Mentor in E273, or at announced event*
- 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 (10/27-10/30)

- Mon: Library session #2 in the LIBRARY (go directly there) – look for announcement from Librarian
- Wed: *With Peer Mentor in E273, or at announced event*
- Fri: ADVISING

WEEK 11 (11/3-11/7)

- Mon: ADVISING
- Wed: *With Peer Mentor in E273, or at announced event*
- Fri: ADVISING Building physical models 1,2,3,4

WEEK 12 (11/10-11/14)

- Mon: **WORLD ARCHITECTURE COURSE: "FORM & SPACE"** [PPTX-w/audio MP4 YouTube PDF](#) **REGISTRATION BEGINS**
- Wed: *With Peer Mentor in E273, or at announced event*
- Fri: **GREEN ARCHITECTURAL ENGINEERING COURSE: "LIGHTING DESIGN"** [MP4 PPTX-w/audio YouTube PDF](#)

WEEK 13 (11/17-11/21)

- Mon: "**MANSIONS**" [PPTX-w/audio MP4 YouTube PDF](#)
- Wed: *With Peer Mentor in E273, or at announced event*
- Fri: [Revit Model of Past & Present Etown Campus, into Oculus Rift Virtual Reality](#) **PERSPECTIVE DRAWING**
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 14 (11/24-11/28)

- Mon: Watch Ken Burns Film On Frank Lloyd Wright [Part 1](#) and [Part 2](#)
- Wed: *Nothing*
- THANKSGIVING BREAK

WEEK 15 (12/1-12/5)

- Mon: [Johnson Wax Building](#) [Falling Water](#) [Guggenheim](#)
- Wed: *Nothing*
- Fri: [1957 Mike Wallace Interview of Frank Lloyd Wright](#) [Eight FLW buildings UNESCO World Heritage](#) Wunderlich book on Frank Lloyd Wright

WEEK 16 (12/8-12/12)

- FINAL EXAM WEEK: Exam times for all courses: <https://www.etown.edu/offices/registration-records/calendar-OnCampus.aspx>

PROFESSOR

Joseph T. Wunderlich PhD, Associate Professor of Engineering & Computer Science (and Architecture)

3000 students, 43 courses (Etown, Purdue, Italy, U.Del., SFSU). IBM supercomputer R&D, Hospital Robotics, San Francisco Engineering, San Diego Urban Planning. Coordinated \$100M of Hi-Tech office-park & data-center A&E in Austin and San Diego. U. Del. Ph.D. Electrical Engineering (Digital), Penn State M.Eng. Engineering Science (Computer), U. Texas BS Architectural Engineering. Also, Penn State Architectural Engineering, UCSD Urban Design, and SFSU Physics. Independent A&E.

Office: E284E-office or E273-Lab/Studio
Office-phone:717-361-1295 Email: wunderjt@etown.edu
Office Hours: MONDAY 10:00-11:00am, 3:20-3:35pm WEDNESDAY 12:00-12:30pm,3:20-3:35pm FRIDAY 10:00-11:00am
[Website](#) [YouTube channel](#) [CV](#)



GRADING

- 600 points Assignments
 - 300 points Final Semester Architecture Design Project
 - 100 points Comprehensive Final Exam in Canvas
 - **Up to -5% of course grade for excessive absences from lectures and/or peer-mentor directed activities**
- Class participation is expected, and exam(s)/assignments may cover material that is only presented in lectures

TEXTBOOK

Buy hardcopy on-line, or rent through “Inclusive Access” in Canvas:

The Architecture of Frank Lloyd Wright, Fourth Edition: A Complete Catalog
ISBN: 9780226435893 By: William Allin Storrer
Inclusive Access
REQUIRED BY PROF.
\$48.25
Students can change their decision to opt in or out until September 5, 2025 11:59 PM.

Exherpts from the following incorporated into lectures:

- [1] AIA Graphics Standards, 10th Edition. <http://users.etown.edu/w/wunderjt/Architecture%20Lectures/AIA%20Chapter%20on%20Environmental%20Design.pdf>
- [2] Allan, Edward and Iana, 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] Ching, Francis D.K. *Architecture: Form, Space, and Order*. 4 ed., Wiley, 2014.
- [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] Stevens, John L. *Incidence of travel in Yucatán*. Sastrugi Press, 2019.
- [27] Stevens, John L. *Incidence of travel in Central America, Chiapas, and Yucatán*. Dover Publications, 1969.
- [28] *Unity Chapel*, Unity Chapel Inc. 2018. <http://www.unitychapel.org/familyhistory/>
- [29] 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.
- [30] Kim, Daeshick, and Back, Alan. *The Way to go: philosophy in martial arts practice*. Nanam Publishing House, 2000.
- [31] 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)
- [32] Wright, Frank Lloyd. *In the Cause of Architecture*. Architectural Record, vol. XXIII, March 1908.
- [33] Wright, Frank Lloyd. (1911 *Wasmuth Portfolio*) in *Drawings and Plans of Frank Lloyd Wright: The Early Period (1893-1909)*. Dover Architecture 1983.
- [34] Wright, Frank Lloyd. *The Japanese Print, an Interpretation*. The Ralph Fletcher Seymour co., Chicago, 1912.
- [35] Wright, Frank Lloyd. *In the Cause of Architecture*; Second Paper. Architectural Record, May 1914.
- [36] Wright, Frank Lloyd. *The Natural House*. New York, Penguin Books, 1954.
- [37] Wright, Frank Lloyd. *Testament*. New York, Bramhall House, 1957.
- [38] Wright, Frank Lloyd. *The Natural House*. New York, Penguin Books, 1954.
- [39] Wunderlich, Joseph T, *Overview of upcoming book on Frank Lloyd Wright*, 2008-Present.
- [40] Typical Purchase for English 100: Sommers & Hacker, A Pocket Style Manual, 9th ed., 2021, Macmillan Learning. ISBN-13: 9781319169541

COURSE MATERIALS

In addition to the course fee that you've already paid, which will provide you an abundance of model building tools and materials, you **MAY** want to buy a Minecraft account ("Java & Bedrock edition") for yourself for \$29.99 (or \$39.99 if you want the deluxe edition) ... to possibly use for an assignment

- Helpful videos for Minecraft: [Tutorials](#) [How to buy Minecraft](#)

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
- 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
 - "REVIT VS. SKETCHUP 3D COMPUTER MODELING" by J Wunderlich Jr
- Papers of Previous FYS's -- Just for Reference (papers not required for present FYS's, we now require presentation instead):
 - Best 2018 Paper: [by Nicole Greiner](#)
 - Best 2013 Paper (on slightly different FYS topics): [by Sammi Eisdorfer](#)

ARTIFICIAL INTELLIGENCE

"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>

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 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. <https://www.etown.edu/offices/dean-of-students/files/academic-integrity-handbook.pdf>

SCHOOL CLOSURE / CLASS CANCELCATION

Additional work will be assigned to cover any class cancellation; See announcements/assignments on Canvas

ACADEMIC CALENDAR & FINAL EXAM SCHEDULE

On the Registration and Records website: <https://www.etown.edu/offices/registration-records/calendar-OnCampus.aspx>

RESPECT FOR DIVERSITY

It is my intent that students from all backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength, and benefit. I also intend to present materials and activities that respect diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Please let me know if there are ways to further serve the diverse needs you or other students may have.

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 me 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. The following is a link from the Chaplain's Office website where a list of Religious Holidays needing accommodations (if requested) is posted: <https://www.etown.edu/offices/chaplain/index.aspx>

MENTAL HEALTH AND COUNSELING RESOURCES

Counseling Services provides a broad range of counseling and mental health support services that facilitate students' personal, social, and academic development. The 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. The office is located in the **Baughner 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 the 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

DISABILITIES -- per U.S. ADA (Americans with Disabilities Act: <https://www.ada.gov/>)

Elizabethtown College 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, chronic illness, or a new circumstance such as a concussion and would like to request accommodations, contact **Dr. Michele Moohr, Coordinator of Disability Services by phone (717-361-1227) or e-mail (moohrm@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, students must set up an appointment to meet with me, the instructor, to discuss the accommodations as they pertain to my class. Common accommodations may include extra time on exams, an alternate exam location, the ability to record class lectures, and access to content with a screen reader.

MODIFICATIONS FOR NON-NATIVE ENGLISH SPEAKERS

Elizabethtown College is committed to providing equitable access to all courses, programs, and services for non-native (international and domestic) English speakers. Students may request tutoring, learning resources, course modifications, and learning opportunities. Students interested in seeking a course modification should contact Ms. Maria Petty (pettym@etown.edu), **International Student Programs Advisor, at (717) 361-1594**.

Title IX

Elizabethtown College and its faculty are committed to creating a safe and open learning environment for all students. If you or someone you know has experienced sexual harassment, including sexual assault, dating or domestic violence, and stalking, please know that help and support are available. Etown strongly encourages all members of the community to take action, seek support, and report incidents of sexual harassment to the Title IX Office. You may contact the Title IX Coordinator at reedg@etown.edu or learn more by visiting <https://www.etown.edu/offices/diversity/titleix/index.aspx>. Please be aware that faculty members are required to disclose information about suspected or alleged sexual harassment or other potential violations of the College Sexual Misconduct Policies and Procedures to the Title IX Coordinator. If the Title IX Coordinator receives information about an incident, they will reach out to offer information about resources, rights, and procedural options as a member of the campus community. Community members are not required to respond to this outreach. If you, or another student you know, wishes to speak to a confidential resource who does not have this reporting responsibility, please contact Counseling Services at 717-361-1405.