

BDC 1350

Syllabus

**High School**: Bountiful High School
**WSU Concurrent Adjunct Instructor**: Erick Winkler

**High School Course Name**: PLTW Civil Engineering and Architecture (Fall)

 (CAD Architectural Design 2 CE)

2020-2021

(Attention: Contact the College or University you wish to attend to make sure that these Concurrent Enrollment courses will meet your goals for fulfilling General Education requirements or will count toward your chosen major).

**Concurrent Adjunct Instructor’s Office Hours:**

TBD

**Concurrent Adjunct Instructor’s phone and email:**

801.402.3940

ewinkler@dsdmail.net

**Prerequisite High School Courses if any:**

none

**WSU Department Name:**

Building Design & Construction

**WSU Course Number & Listing:**

BDC 1350: [Residential](https://catalog.weber.edu/search_advanced.php?cur_cat_oid=15&search_database=Search&search_db=Search&cpage=1&ecpage=1&ppage=1&spage=1&tpage=1&location=33&filter%5Bkeyword%5D=bdc+1040&filter%5Bexact_match%5D=1) Design & Codes/ CAD ARCH II

**Course Description:**

An introductory course in Building Design & Construction to explore emerging CAD/BIM tools to design code compliant homes. Course content includes instruction in 2D and 3D Computer Design (CAD) software to design and model a small residential home with an emphasis on residential methods and materials of construction, codes, and Building Information Modeling (BIM).

As a Community Engaged Learning Class, students will reflect on their experience interacting with HFH representatives throughout the semester to design their next home build. These reflections will equate to 10% of the final grade and will be submitted periodically throughout the semester. A minimum of 4 reflections will be required to assess their Civic Knowledge and Skills to solve the design problem presented by HFH. It is estimated that each student will submit 40+ hours of service with HFH, a minimum of 8 must be through “A brush with Kindness”, Home Builds, or Restore hours. The remaining hours will be completed through the amount of time spent designing the semester long project for consideration of being the plan selected to be built.

**Learning Outcomes:**

Upon successful completion, student will be able to:

* Understand architectural design fundamentals to design historically consistent exterior elevations of an architectural style of choice
* Understand room and space planning
* Design and Document a code compliant home using the latest version of the International Residential Code
* Understand and demonstrate CAD/BIM techniques to create architectural drawings to a professional standard
* Understand how to identify, draw, and label the components of a rambler style home with a basement from the bottom of the footings to the top of the roof.
* Articulate systemic causes for social issues surrounding housing for low income households and civic engagement strategies to solve these issues.
* Articulate how one’s frequent involvement in the community through Habitat for Humanity efforts address low income housing and home maintenance.

**Textbooks/ Online Resources:**

* Canvas embedded e-chapters and associated resources
* Building Code Basics, Residential: Based on the 2012 International Residential Code (International Code Council Series) (ISBN 978-1133283362)
* (Optional) Solid Professor access to online video tutorials
* (Optional) Residential Design Using Autodesk Revit 2017 (ISBN 978-1-63057-029-3)

**Resources Needed:**

* Adobe PDF Reader & Print to PDF capability (cute pdf writer is a free driver online)
* File Storage (online preferred, box, google drive, dropbox, Autodesk 360)
* Headphones to use in the lab

**Course Administration:**

Lectures and in class discussion will concern the body of knowledge or "theory" needed to complete the learning outcomes. Demonstrations will cover specific operations and techniques. Students are expected to be at all class sessions. It is the responsibility of the students to secure all materials and information presented in class. ***Lectures will not be repeated***. Lectures may be taped recorded with the professor's permission.

* BDC students are considered professionals and are responsible for directing their own education. As such, the decision to attend class is at each student's personal discretion.
* Absences CAN affect student grades if they do not understand the material or are not aware of changes to the class that can include (but are not limited to) the scheduling of quizzes, exams, assignments, projects, and extra credit. The instructor has the right to alter the course at his own discretion, so students missing class may not be aware of important information.
* Students are responsible for the body of information in the lectures, labs, and assigned reading materials. Students who do not attend class will not be given makeup lecture sessions or notes by the instructor. Similarly, makeup tests and quizzes will also not be given. If a student misses a class, it is up to them to make sure they acquire the relevant material from another source. Do NOT send the instructor an e-mail asking "did we cover anything important today" or ask to explain the contents of a missed lecture or lab.
* Students are expected to attend class for mandatory events such as tests and quizzes, and it is up to the individual student to know when those events are. Ignorance of these events is not an excuse, and any student who wants current information is expected to attend class.
* Outside work will be necessary. Students will NOT be able to do well in this course if they work only in regularly scheduled class sessions.
* As in the AEC industry, the instructor has the right to make changes to many portions of the curriculum due to the ever-changing nature of technology; certain information on Canvas may be obsolete or out-of-date. As such, it is up to the student to confirm this information by either attending class or obtaining the information from another source.
* In the event of a major campus emergency; course requirements and deadlines are subject to change that may be necessitated by a revised semester calendar or other circumstances.
* Students are expected to attend class for mandatory events such as tests and quizzes, and it is up to the individual student to know when those events are. Ignorance of these events is not an excuse, and any student who wants current information is expected to attend class.

**Grading Policy:**

*Grades will be given using the following total earned percentages. (See the weighted assignment groups in canvas under the course syllabus)*

94-100% = A
90-93% = A-
87-89% = B+
84-86% = B
80-83% = B-
77-79% = C+
74-76% = C

*You must get a "C" or better in order for this to class to count towards graduation.*

**Student Conduct Policy:**

* No swearing, or derogatory comments about, or towards, any member of the class will be tolerated in any class period.
* No food or drinks of any kind will be allowed in any lab sessions.
* Students are expected to arrive on time for all class and lab sessions.
* Late assignments will not be accepted unless prior arrangements have been made with the Instructor and because of extreme circumstances. (Not coming to lab, or forgetting, doesn't rate as an extreme circumstance.)
* No student will be allowed to make up any written exam, lab practical, exam, or quiz unless they have an official or medical excuse.
* Any student found participating in cheating, plagiarism, copying material from another person's disk, using illegal cribs or other materials during a written examination, lying to course instructors and lab assistants about his or her own work, stealing tests, quizzes, or answer keys, and any such activities will be considered in conflict with the printed academic honesty guidelines as set out by Weber State University. In such cases the matter will be reported to the Office of the Dean and the appropriate Weber State University administration officers for consideration and possible disciplinary action.
* Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in room 181 of the Student Service Center. SSD can also arrange to provide course materials (including this syllabus) in alternative formats if necessary.
* It is permissible to bring a laptop (notebook, tablet etc.) computer to class for the purpose of taking notes. Turn the sound OFF--- the clicking, clacking, or sound effects distracts other students. Similarly, there will be no tolerance for beeping, chirping, ringing (or any other sound) from a cell phone in class. If students must use your cell phone for any reason, they must leave the room.
* WSU Student Code of Conduct <http://www.weber.edu/deanofstudents/judicial.html>
* Students with Disabilities <http://www.weber.edu/ssd>

**Computer Lab Policy:**

* The computer labs are restricted to ONLY those students registered in the current semester for a class in the Engineering Technology or Construction Management Technology departments within the College of Applied Science and Technology.
* NO food or drinks are allowed in the computer labs. DO NOT INSTALL ANY PROGRAMS ON THE MACHINES IN ANY OF THE LABS.
* Viewing or use of ANY PORNOGRAPHIC MATERIAL IS STRICTLY PROHIBITED! Anyone caught viewing pornographic material will not only be asked to leave but will have their lab privileges REVOKED.
* No one should ever abuse the equipment in any way.
* No one should use any command or function to copy or backup licensed software from any WSU computer. It is a violation of Federal Copy Right Laws to possess pirated software. Anyone who is found guilty of such violations will be expelled from the College of Applied Science and Technology and Weber State University.
* Do not disconnect or connect any devices in the lab. If you are having problems with any device, please immediately notify the lab aide on duty.
* When in the labs please keep your level of noise down. Other students may be working and may not appreciate your conversation from across the room. Please take social conversations outside the labs.
* No speakers are provided, if you need to listen to music or videos please use your personal headphones.
* The computers shut down after 30 minutes of "inactivity". (No mouse movement or keystrokes) All program changes, internet browsing, temporary files, and your saved files on the C: drive, including viruses is removed when the computer is shut down. Always shut down the computer you used before you leave.
* The D: drive is not protected, nor does it get erased on these computers after shut down or restart. It is a local drive only seen on the computer you are working on. Use it while you are working or have forgotten your flash drive. This drive gets whipped every semester so don't forget to get the information you have saved to the D: drive.

**Course Schedule:**

The course schedule is found online. Due to the ever-changing nature of software and course materials to cover those, I will update and post modules two weeks out. Please check Canvas daily to see what you should be coming to class prepared to discuss.

***No learning takes place until a question is posed or a personal need is discovered!***

***Start Asking Questions!!!!!!!***

***My job is to create the “NEED” to know information, your job is to “LEARN”***

**Students with Disabilities:** PPM 3-34 notes: “When students seek accommodation in a regularly scheduled course, they have the responsibility to make such requests at the Center for Students with Disabilities before the beginning of the quarter [semester] in which the accommodation is being requested. When a student fails to make such arrangements, interim accommodations can be made by the instructor, pending the determination of the request for a permanent accommodation.” **Weber State University Concurrent Enrollment** **students** who have a pre-established 504 Plan or IEP may continue using the accommodations established therein during CE courses, provided that the accommodations have proven effective and are reasonable for a university level course. Faculty, staff, parents, and students may contact WSU Disability Services at any point to discuss or verify accommodations for CE classes. CE students should discuss their accommodation needs with faculty as soon as possible. Most questions or situational issues can be discussed and subsequently resolved to meet the students’ needs. Students should provide faculty with written (print or email) requests of accommodations for their approved 504 or IEP plan.