

CS 378H-1 – How to Make Darn-Near Anything Syllabus

Last Update: 08 Feb 2021

Time & Location: 6:30-9:30pm, W. Johnston 304/308
Instructor: Peter A. Tucker, ptucker@whitworth.edu
Office Location: Johnston Science Building, room 307
Contact Info: Phone: 777-4664
Office Hours: MWF 9:30-11:30, 1:00-3:00
TA: TBD
Text:



Required

30 Weeks, The Blueprint, Version 1.0, 2015

URL: <https://www.30weeks.com/>

Description: Have you ever had a great idea for a product? Have you ever wanted to be part of a startup technology? Students in this course learn the steps and skills needed to design, build, and market a new product based on their own interests. Topics include programming skills, user experience design, testing, marketing, and promotion.

Department Goals Addressed:

- Develop the proficiency for software engineering.
- Cultivate problem solving and critical thinking skills.
- Learn interpersonal skills and develop the ability to effectively function in teams.
- Demonstrate proficiency in communication skills - written, verbal, and presentation.
- Understand the need for sound ethical decision-making and consider how faith and/or worldview can inform ones vocation and professional practices.

Overview of Topics:

- The Internet and Cloud
- Programming Techniques and Languages
- User Experience
- Using Database Systems
- Software Development and Production
- Ethical considerations in creating software

Requirements:

- Attend class meetings regularly and consistently. Since much of your work will be done in a group setting, attendance is especially important.
- Turn homework in by 11:59 pm on the designated due date. Expect to spend a minimum of 3 hours outside of class for each hour spent in class.
- No late homework will be accepted after six school days.
- Students will participate in group projects, class discussions and presentations.

Grading: To receive an A for the course, you must either do everything required extraordinarily well, or, you must do more than required (for example, extra credit problems, related but more challenging problems, etc.). "A" students seek out ways to extend their learning and understanding of Software Engineering.

Course Component	Weight
Homework, Labs, Research Papers, Reading Responses, etc.	40%
Sprint Demos/Reports	20%
Group Project, Final Presentation	30%
Attendance and Participation	10%

Total % Earned	Grade
90% - 100%	A- to A
80% - 89%	B- to B+
70% - 79%	C- to C+
50% - 69%	D- to D+
0% - 49%	F

- Expectations:**
- I save homework assignments and session notes to OneDrive for our class. You should have received an invite. It's easier to synchronize directly on OneDrive than to have to post everything to Blackboard. Grades are posted on Blackboard. It is the student's responsibility to consult online postings if they miss a class.
 - Students are encouraged to consult with one another and the instructor.

Academic Honesty Policy: Please note the university's policy on academic honesty (available in the Whitworth Catalog and the Student Handbook). Consequences for any form of dishonesty may range from a failing grade on a specific assignment to a failing grade in the course. Violations of the academic honesty policy become part of your educational record.

Accommodations (ADA/504) Whitworth University is committed to providing its students access to education. If you have a documented physical or mental/psychological impairment that impacts your ability to learn and perform to your potential in the classroom, contact the Office of Educational Support Services (ESS) in Student Life to identify accommodations that can help mitigate barriers to your success. Students must contact ESS each term in order for faculty/staff to be notified of your accommodations. Services are not retroactive.

To request accommodation, fill out an application on the ESS webpage:
<https://www.whitworth.edu/cms/administration/educational-support-services/>

Contact Information

Katie McCray, Coordinator for Educational Support Services

Phone: 509.777.3380

Email: kmccray@whitworth.edu

Title IX: Whitworth University faculty members are committed to the well-being of each student. It is common for students to discuss non-course related issues with faculty and, when possible, faculty will keep such conversations strictly confidential. However, because federal law views faculty members as mandated reporters of any incidents of sexual misconduct, if a student informs a faculty member of an issue of sexual harassment, sexual assault, or discrimination, the faculty member is required by federal law to bring it to the attention of the Title IX Coordinator, Rhosetta Rhodes. The Title IX Coordinator will make the student aware of all options and resources available to them under Whitworth University policies and under the law.

There are Whitworth University employees whom federal law does not view as mandatory reporters, to whom a student could speak without the conversation being

reported to the Title IX Coordinator. These include counselors in Counseling Services, health center staff, and any of the university chaplains on the staff of Campus Ministries.

Contact Information

Rhoseita Rhodes, Title IX Coordinator, Vice President for Student Life and Dean of Students

Phone: 509.777.4536; Email: titleixcoordinator@whitworth.edu

Counseling Center: 509-777-3259; Schumacher Hall

Campus Ministries: 509-777-4345; Beeksma Family Theology Center

Health Center: 509-777-3259; Schumacher Hall

Non-Discrimination: Whitworth University is committed to delivering a mission-driven educational program that cultivates in students the capacity to engage effectively across myriad dimensions of diversity. Whitworth University is committed to the fair and equal treatment of all students in its educational programs and activities. The University does not discriminate against students based on race, color, national origin, sex, gender identity, sexual orientation, religion, age, or disability and complies with all applicable federal or state non-discrimination laws in its instructional programs.

Fair and Equal Treatment: Whitworth University professors strive to treat all students fairly and equitably, applying the same rigorous standards and expectations to each of our students and working to invite students from all backgrounds into the challenges and rewards of our academic disciplines. Students who have concerns about classroom fairness should contact Associate Provost Brooke Kiener, McEachran Hall 220, 509.777.4657, bkiener@whitworth.edu.

Safety Information: Whitworth University cares about your welfare in the event of an emergency. During the first week of this course, please familiarize yourself with safety information posted in this classroom. Please visit <https://www.whitworth.edu/generalinformation/health&safety/index.htm> if you have further questions.

Solving Difficult Problems: During the course of the semester you will encounter difficult and challenging problems. You may not be able to solve all problems by yourself. Use the following guide to help you approach these types of problems:

1. Read the problem statement carefully (2-3 times).
2. Refer to the class handout for problems that may be similar to the problem you were given. Read the handout carefully and the assigned reading carefully.
3. Refer to any additional materials that your instructor provides.
4. Attempt to solve the problem by yourself.
5. If you still have problems, discuss the problem with your fellow students. We encourage you to form "study discussion groups" to discuss possible solutions (at a high level) to the programming problems, but we discourage "group programming" or sharing code except on specific group projects when specified.

If you still have difficulties seek out your instructor.

Tentative Schedule

<u>Date</u>	<u>Topic</u>	<u>Readings</u>	<u>Notes</u>
10 Feb	Intro, Web pages		Speed dating
17 Feb	People, Programming Concepts	30Weeks Chap 3.1 The Scrum Primer	HW1 due
24 Feb	Process, Designing and Programming	30Weeks Section 3.2	HW2 due
03 Mar	Place, Database Systems	30Weeks Section 3.3 Dave Parker	HW3 due
10 Mar	Product, User Experience	30Weeks Section 3.4	HW4 due
17 Mar	Leveraging Existing Code		HW5 due
24 Mar	Software Development: Testing		
31 Mar	Software Development: Teams		HW6 due
07 Apr			
14 Apr			
21 Apr			HW7 due
28 Apr	Demo 1 Day		
05 May			HW8 Due
12 May			HW9 Due
19 May	Finals		Final presentations