

Kai Labs Student Forum

Spring 2017

INTRODUCTION:

This student forum will serve as an incubator for projects and products that address the needs of a Wesleyan department or campus problem. Students will choose their projects, work closely with their clients, and develop their skills and knowledge in a learn-by-doing approach. Student leaders have already reached out around campus to compile a list of projects and will guide their students through the innovation and implementation process. Student leaders will also hold regular workshops throughout the semester to teach skills and knowledge related to software engineering, product design, and project management as well as invite guest speakers working in the technology industry.

INSTRUCTORS:

Engineering: Daichi Onda '17 (donda), Tim Kim '18 (tkim)

Design: Mikaela Reyes '17 (moreyes), Pi Areepipatkul '17 (pareepipatku)

Management: Alex Garcia '17 (asgarcia), Cindy Horng '17 (yhorng)

SEMESTER SCHEDULE:

Classes will happen every Tuesday from 7 - 10PM.

Classrooms: FISK 122 and FISK 208

Week 1: Pitch projects and form teams.

Weeks 1 - 5: Learn basic skills while developing project.

Week 5: Hackathon Weekend + Demo Prep

Week 6: First Iteration Demo + Guest Speaker

Week 7 - 10: Work on Projects/Additional Topics

Week 11: Second Iteration Demo

Weeks 12 - 14: Work on Projects/Additional Topics

Week 15: Projects Due, Final Demo Day

Note: We will be inviting more guest speakers as the semester progresses.

SKILLS YOU WILL LEARN:

Engineering:

Web Application Development, Ruby on Rails, HTML, CSS, Javascript, Agile Development, Design Patterns, Testing (Cucumber & RSpec), Git, Unix, Relational Databases, Cloud Deployment, Test Driven Development, Behavior Driven Development, Debugging, Pair Programming

Design:

Human-Centered Design/Design Thinking Process, UX/UI Design, Wireframing, Low-fi and Hi-fi Prototyping, User Research (Tools, User Stories, Surveys and Focus Groups, Affinity Diagrams, Sitemapping), Testing (User/Usability Testing, A/B Testing Basics), Web Design (HTML/CSS/JS), Visual Design Tools and Basics (Sketch, Photoshop, Psychology of Design, Design Aesthetics)

Management:

Product Roadmapping, Creating Feature Specifications/Requirements , User Research, Design Process, A/B Testing Basics, Product Metrics, Project Phases and the Project Life Cycle, Project Stakeholders, Organizational Influences, Key General Management Skills, Integration Management, Scope Management, Time Management, Cost Management, Quality Management, Human Resource Management, Communications Management, Risk Management

CONCRETE THINGS YOU'LL GET OUT OF THIS COURSE:

- Medium posts documenting process of development
- Product to add to portfolio
- Github repository of a product
- Client references (potential)
- Formal peer evaluations and feedback
- Real world skills (team-building, project management, etc.)
- Chance to work with other engineers, designers and managers

REQUIREMENTS:**Individual:**

Final Reflection (on Medium)

Feedback forms (as the semester progresses)

Peer evaluations (part of participation score)

Group:

Project Sustainability Plan

Product Features Deliverable

Post a Week (on Medium, 15 total per group, to be scheduled after group formation)

Final product deployed and ready for use by client

Iteration Reflections (2)

Midterm Iteration Demo Presentations (2)

Final Presentation

ACCOUNTS & COMMUNICATION CHANNELS:

Google Drive: <https://drive.google.com/open?id=0B6kWEFM2NSyla2xLX0s3ZUFwMnM>

Slack: kailabs.slack.com

Medium: medium.com/kai-labs

Github: github.com/KaiLabs

EXPECTATIONS, ASSIGNMENTS & GRADING:

This course counts as a full credit and is Pass/Fail. We expect that students will actively participate in the student forum throughout the semester. You will be evaluated based on your submitted requirements, teamwork/effort within your group, and overall attendance, enthusiasm and participation in class. If an important submission is missed or if we feel your participation is subpar, we will be giving you the deserving grade.

Every week, we will be assigning homework to allow students to delve deeper into their craft, be it design, engineering or management. While some of these will be important readings/videos, most will be hands-on, experiential assignments that require output.

We expect all students to come to all our class sessions, submit assigned homework and assignments promptly and show their enthusiasm throughout the semester. We hope that students are intrinsically motivated in class discussions, team meetings, projects and activities and own the learning process in the best way they can. We hope that the pass/fail structure motivates students to enjoy the process for what it is, embrace failure and iteration, and look beyond grades as an end.

LEARNING TOGETHER:

The students in this course have had significant experience in the engineering, design and management realms. However, do note that this is only our second time at this program and we are still constantly learning, pivoting and using your feedback to make our teaching better. As such, please note that we are learning alongside you and that we value any constructive advice on how we can make our work better. Please do not hesitate to reach out to us with suggestions on how we can continue improving the course.

HONOR CODE:

In accordance with the Honor Code, submitting another person's work as your own constitutes plagiarism and will not be tolerated. To put this in colloquial terms, unless you personally came up with the solutions and words that you are attaching your name to, it is not your work. If you have any questions about the application of the honor code, please contact us.

STUDENTS WITH DISABILITIES:

Wesleyan University is committed to ensuring that all qualified students with disabilities are afforded an equal opportunity to participate in and benefit from its programs and services. To receive accommodations, a student must have a documented disability as defined by Section 504 of the Rehabilitation Act of 1973 and the ADA Amendments Act of 2008, and provide documentation of the disability. Since accommodations may require early planning and generally are not provided retroactively, please contact Disability Resources as soon as possible. If you believe that you need accommodations for a disability, please contact Dean Patey in Disability Resources, located in North College, Room 021, or call 860-685-5581 for an appointment to discuss your needs and the process for requesting accommodations. Information can be found at <http://www.wesleyan.edu/studentaffairs/disabilities/>.

MISSED ASSIGNMENTS:

Should a personal emergency necessitate missing a scheduled deadline, contact us as soon as possible prior to the deadline date to arrange for an alternative. Any such absence requires written certification from the Deans' Office.