Design Studies 501 : Wearable Computing **FALL 2013**

Tuesday 12:05PM - 12:55PM | BABCOCK 119
Friday 8:50AM - 1:00PM | NANCY NICHOLAS HALL 3245

Instructors:
Kevin Ponto kbponto@wisc.edu
Emelia Haglund eehaglund@wisc.edu

Office Hours:
By appointment

Course Objectives:
This class is meant to give students hands-on experience in building wearable computing platforms. Students will learn fundamentals of both AC and DC circuitry, weaving, basic microcontroller programming, techniques of sensor integration and interfacing for external machines. Students will produce a final project that will be showcased to the public.

The class is designed for students who:

- Have a background in textile and apparel design and are looking to take their work in new directions
- Have a background in computer science or engineering and are looking to explore new interface technologies.
- Have a background in media arts or robotics and have experience interfacing with microcontrollers and sensors

TextBook: This class will not have a textbook. All course readings will be posted online

PreReqs: This course has no official pre-requirements. Students will be learning new skill sets and will be expected to be strongly motivated.

Course Fee: There is no course fee. Students will be expected to provide their own materials. Students should plan to spend $100-$200 dollars over the course of the semester.

Anticipated Audience: Students may have backgrounds in Design Studies, Computer Science, Art, Electrical / Computer Engineering, Mechanical Engineering, Industrial Engineering, and Theater.

Course Format: The course will blend the lecture and studios styles. The Tuesday class will target lectures over the subject matters such as electronics, sensors, and microcontrollers. Additionally, class discussion and viewings will occur during this timeslot. The Friday classes will be setup as studio session in which students will have hands-on learning and dedicated time to develop their projects. Final projects will showcased in a public forum.

POLICIES:

More than two absences (during the entire semester) *WILL LOWER* your earned final grade by one letter grade (a will become ab).
Every absence after the third will lower your grade by one letter grade. (Seven absences = F)
Three late arrivals equal one absence.
All projects are to be finished by critique date and must be present at the *start* of the class.
Late work will NOT be accepted. (Grade will be 0)

Please notify your instructor via email in case of extended illness or any other problem that may interfere with class attendance. Send your work with another student if you are ill on the day of the critique.

Accommodation of any special needs (recognized disabilities, absences for athletic meets, etc.) must requested of each instructor by the end of the second week of each module. Students must also inform the instructor in advance of days they will be absent for religious holidays. Instructors will try to make reasonable accommodations in accordance with university policies.

If problems come up during the course of the semester, be sure to let your instructor know. This might relate to matters of health, approaches to your work, etc. We will try to help you find solutions, but will be more helpful and much more flexible if you talk to us before issues become crises. We will maintain the confidentiality of any information you share with us.

GRADES:

For each module you will receive a grade from the instructor with whom you worked. Your final grade in this class will be calculated on the following formula:

30% Final Project
15% Weekly Updates
15% In-Class Presentation
15% Tutorial Tasks
10% Assignments
15% Quizzes

The percentage breakdown for final grade calculation:

93-100	=	A
90-92	=	AB
83-89	=	B
80-82	=	BC
70-79	=	C
60-69	=	D

Information on UW-Madison's grade calculation can be found at this website:
http://registrar.em.wisc.edu/students/acadrecords/grades_and_policy/grades_and_gpa.php

STUDENT ASSISTANCE AND SERVICES:
There are many services on campus that can help students who are having difficulties. Here are a few helpful links to useful resources:

Master list of student services (including counseling, learning support, McBurney Center, safety department and SAFE nighttime services, LGBT campus center, Dean of Students office, financial aid, etc.) http://www.wisc.edu/studentLife/studentServices.php

University Health Service: http://www.uhs.wisc.edu/home.jsp?cat_id=36

GUTS (Greater University Tutoring Service) http://guts.studentorg.wisc.edu/index.asp

Tutoring help and other assistance for SoHE classes through Sohe Student Academic Affairs Office, 262-2608 acadaffairs@mail.sohe.wisc.edu

Important deadlines set by the registrar:
http://registrar.wisc.edu/deadlines.php?term=1082

Please contact your instructors via email if you should become sick. If possible, send your work with another student in the class or a friend if you have a project due.

Support your own good health with frequent hand-washing and by trying to avoid touching your eyes, nose and mouth. Influenza virus spreads through close contact with respiratory droplets, which generally means touching a contaminated surface with your hands and then touching your hands to your face. These hygiene measures are among the most powerful precautions you can take for yourself, as it will be impossible for every surface to be disinfected every time anyone touches it.