# CSE 3392-101 Special Topics
# Assistive Technologies in Health and Environment
# Summer 2013

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**Office Hours:** Tuesday, Thursdays, 10:00-12:00 am

**Section Information:** CSE 3392-101
**Time and Place of Class Meetings:** ERB 313, Times to be announced.

**Description of Course Content:**
A special topics course for the development of computer research, application.

- Students would become involved with Assistive Technology for Health, including: human interaction, activity recognition, wearable sensors, wireless sensor networks, or motion capture.
- Students would become acquainted with Assistive Technology for the Environment, apply computing techniques to the data results of field study involving marine and terrestrial habitats.

**Course Description:**
The class begins with reviewing papers on Assistive Technologies and Environmental studies. After the review period, students will begin a project based on their readings for the second phase of the course. This second phase includes creating an application or an experiment based on the research material. The third phase of the course will include writing up the results in an academic format and presenting the findings.

**Student Learning Outcomes:**
- Interdisciplinary activity between scientists and engineers
- Introduction to research and research methods
- Deliverables including a project report, presentation, and/or poster for conferences, journals, and symposiums.
- Publication: Students may submit their paper to the Computer Science Journal for Undergraduate Research. (csurj.org)
- Technical Elective Credit: Students may submit an abstract and perform a demonstration of their work for evaluation for technical elective credit. Any project submitted for Technical Elective Credit must be worthy of a 4000 level Computer Science course.

**Requirements:**
Students must be computer literate. Students applying for a technical elective must have completed enough of their pre-professional studies to produce a worthy project.

**Required Textbooks and Other Course Materials:**
Students will be supplied with materials including proceedings of the PETRA 2013 conference. In addition, materials from past projects will be made available to the students for study and for project selection.

**Descriptions of major assignments and examinations with due dates:**
Orientation for this course begins on May 20st, 2013.
The course will be in three phases:
- Phase 1: Research and Review: The first two weeks of June students will be assigned papers and projects to read. They will be expected to have a written reviews for the instructor by June 21$^{st}$.
- Phase 2: Projects and Experiments: Students will describe their project at the beginning of phase 2, with a proposal about their research. Students may either work on their own, or they can choose to be part of a team. Main experiments for the project should be completed by August 1$^{st}$
- Phase 3: Report and Presentations: Students will have to write a report of their project in ACM style, and prepare a presentation on their work. Copies of the report and the presentation must be turned in by August 13$^{th}$.
- Dates and times subject to change as needed, but all material will be complete by the end of the 11-Week Summer Semester.

**Grading Policy:**
The grades for the course will be on a standard scale A, B, C, D, or F, including student evaluation, deliverables, meeting goals, and making deadlines.

**Attendance Policy:** Students are expected to attend the orientation at UTA, and are expected to meet with Dr. Becker twice a week.

**Major Assignments:**
- Research Review of selected papers. (25%)
- Project with Experiments. (25%)
- Final Report (25%)
- Presentation. (25%)

**Grade Grievance Policy:**
If a student believes a mistake has been made in grading an assignment, the student has one week after an assignment is returned to resubmit an assignment for re-grading if they believe there is an error.

**Updates:**
The class policies, syllabus, assignments, schedule, and other material will be available on the website as they are developed during the course.

**Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late

registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. Contact the Financial Aid Office for more information.

**Americans with Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the Americans with Disabilities Act (ADA). All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

**Academic Integrity:** All students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

*I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*

*I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*


Instructors may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

**Student Support Services Available:**The University of Texas at Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. These resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals to resources for any reason, students may contact the Maverick Resource Hotline at 817-272-6107 or visit www.uta.edu/resources for more information.

**Electronic Communication Policy:** The University of Texas at Arlington has adopted the University MavMail address as the sole official means of communication with students. MavMail is used to remind students of important deadlines, advertise events and activities, and permit the University to conduct official transactions exclusively by electronic means. For example, important information concerning registration, financial aid, payment of bills, and graduation are now sent to students through the MavMail system. All students are assigned a

MavMail account. Students are responsible for checking their MavMail regularly. Information about activating and using MavMail is available at http://www.uta.edu/oit/email/. There is no additional charge to students for using this account, and it remains active even after they graduate from UT Arlington.

To obtain your NetID or for logon assistance, visit https://webapps.uta.edu/oit/selfservice/. If you are unable to resolve your issue from the Self-Service website, contact the Helpdesk at helpdesk@uta.edu.

**Final Review Week:** A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. Classes are held as scheduled during this week and lectures and presentations may be given.