Research Methods in Computer Science, COSC 5393  
School of Engineering and Computing Sciences  
Spring 2015

A. COURSE INFORMATION
   Course number/section: COSC 5393.001
   Class meeting time: TR 11:00-12:15
   Class location: BH 201
   Course Website:  [http://sci.tamucc.edu/~amahdy/Teaching/Spring15/cosc5393/cosc5393.html](http://sci.tamucc.edu/~amahdy/Teaching/Spring15/cosc5393/cosc5393.html)

B. INSTRUCTOR INFORMATION
   Instructor: Dr. Ahmed Mahdy
   Office location: CI 324
   Office hours: TR 12:30-2:30
   Telephone: 825-3172
   e-mail: ahmed.mahdy@tamucc.edu
   Appointments: Please email for appointments

C. COURSE DESCRIPTION
   Catalog Course Description
   This course provides students with a range of experiences in conducting and communicating research. Students will learn major research methods and techniques. Experiences will be gained in all stages of research: reviewing literature, writing a proposal, designing an approach, and reporting results. Critical reading/writing assignments and weekly class discussions on state-of-the-art research in Computer Science will provide students with major research aspects.

D. PREREQUISITES AND COREQUISITES
   Prerequisites
   Only Graduates

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES
   Optional Textbook(s) or Other References
   • Fundamentals of Educational Research, Anderson and Arsenault, Falmer Press, 1st Ed.
   • Instructor’s handouts and research papers
F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

By the end of this course, students should be able to:

1. Demonstrate understanding of the research fundamentals and ethics
2. Practice surveying a research area and choose a research topic
3. Practice how to write a thesis/project proposal
4. Practice how to effectively communicate research ideas and present research results in oral and written formats
5. Recognize state-of-the-art research in Computer Science

G. INSTRUCTIONAL METHODS AND ACTIVITIES

This class will mostly employ interactive and independent learning strategies. Students will be engaged in frequent class discussions led by the instructor. Independent study will include researching state-of-the-art topics in computer science.

H. MAJOR COURSE REQUIREMENTS AND GRADING

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
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</thead>
<tbody>
<tr>
<td>Research Papers (multiple; check schedule)</td>
<td>50</td>
</tr>
<tr>
<td>Presentations (multiple; check schedule)</td>
<td>35</td>
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<tr>
<td>Quizzes and Class Participation</td>
<td>15</td>
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I. COURSE CONTENT/SCHEDULE

Please refer to the course website for an up-to-date schedule.

Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

J. COURSE POLICIES

- Submitted Work
  - Assignments are due at the beginning of the class on the due date. Late submissions will be graded at 50% of the maximum score. Under no circumstances, submissions will be accepted after 24 hours of the due date.
  - Assignments must be submitted in a neat computer-generated format. Handwritten submissions will not be accepted.
  - Assignments can only be submitted in class; email submissions will be discarded unless instructed otherwise. In case of late submissions, please stop by my office. If I am not available, ask the secretary to date and time your submission and put it in my mailbox.
  - Graded work can only be discussed after 48 hours and no later than one week of releasing the scores.
  - In case of programming assignments, submissions that do not compile will receive no credit.
  - Start working on your assignments early; last day questions that show carelessness will not be responded to.
  - It is always recommended to keep your graded work.

- Exams and Quizzes
  - Exams and quizzes are NOT open-book unless instructed otherwise.
  - Not all quizzes times will be announced; pop-up quizzes are likely.
  - NO makeup exams or quizzes will be allowed unless I have agreed prior to the exam or quiz time and been provided with official supporting documents.

- Class Participation
  Class discussions and information provided in class are considered regular course material; it is your responsibility to take appropriate notes. You are expected to attend lectures and actively participate in class discussions. I will be frequently taking attendance. You are also required to turn off your cell phone and/or pager in class and pay attention to class discussions. Use of laptops and other electronic devices is restricted to taking notes. Unethical behavior will result in final grade deduction or an automatic F.

- Announcements
  Announcements will be made available in class, on course web page, and/or through email. It is your responsibility to regularly check for announcements.
K. COLLEGE AND UNIVERSITY POLICIES

- **Academic Integrity (University)**
  It is expected that university students will demonstrate a high level of maturity, self-direction, and ability to manage their own affairs. Students are viewed as individuals who possess the qualities of worth, dignity, and the capacity for self-direction in personal behavior.
  See Full University Policy at [http://catalog.tamucc.edu/content.php?catoid=10&navoid=313#Academic_Integrity](http://catalog.tamucc.edu/content.php?catoid=10&navoid=313#Academic_Integrity)

- **Classroom/Professional Behavior**

- **Deadline for Dropping a Course with a Grade of W (University)**
  The grade of W will be assigned to any student officially dropping a course by Friday, April 10, 2015. No student is eligible to receive a W without completing the official drop process by this deadline. Visit the Office of the University Registrar for the Course Drop Form that must be submitted. After April 10, 2015 a student will not be allowed to drop a course.

- **Grade Appeals (College of Science and Engineering)**
  As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html), and the College of Science and Engineering Grade Appeals webpage at [http://sci.tamucc.edu/students/GradeAppeal.html](http://sci.tamucc.edu/students/GradeAppeal.html). For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

- **Disability Services**
  Disability Services (DS) is the hub for coordinating services and accommodations to ensure accessibility and utilization of all programs for all Texas A&M University-Corpus Christi students with disabilities. Our services are designed to meet the unique educational needs of enrolled students with documented permanent or temporary disabilities. DS provides intake and consultation services to students seeking to register with our office. DS reviews an individual’s documentation of
disability and assesses eligibility for services and the determination of reasonable accommodations. For more information visit the Disability Services Office at 116 Corpus Christi Hall or go to http://disabilityservices.tamucc.edu/

GENERAL DISCLAIMER
I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.