COSC 3353--Survey of Programming Languages

Course Description: A study of selected programming languages for students familiar with programming. Students will write programs in a variety of languages.


Learning Objectives: Upon successful completion of this course, the student will:

- Have a higher-level understanding of traditional and non-traditional programming languages.
- Have an understanding of and be able to program in a functional programming language (Scheme)
- Have an understanding of and be able to program in an imperative programming language (C#)
- Have an understanding of and be able to program in Web/scripting programming languages (Perl, JavaScript)

Assessment of Objectives: Assessment of objectives will be conducted through homework, exams, programming assignments, and class presentations.

Instructional Methods and Activities: The methods and activities for instruction will include:

- Presentation of new material and concepts in the classroom through the use of lecture, tutorials, and sample programs.
- Classroom discussion using problem solving techniques.
- Programming assignments to review and reinforce topics covered in the classroom.
- Student presented material on course concepts
- Optional one-on-one discussion as needed between the student and instructor outside regularly scheduled class time.

Class Supplies: A flash drive to archive your programs

Prerequisite: Successful completion of Data Structures (COSC 2437)
Student Expectations:

- Students are expected to be in attendance, punctual, and prepared for class and labs.
- Assigned readings, as found on the instructor’s web page, should be completed before coming to class.
- Please ask questions on any material that you do not understand, if I cannot explain it to your satisfaction, please see me during my office hours.
- Demonstrate integrity, maturity, and ethical behavior

Course Grades:

- Exam 1 & 2: 15% each
- Final Exam: 20% (comprehensive)
- Programming Assignments: 15%
- Class Presentations: 20%
- Class Assignments, Attendance & Quizzes: 15%

Grade Ranges:

- A: 90 - 100%
- B: 80 - 89%
- C: 65 - 79%
- D: 55 - 64%
- F: Less than 55%

Class Policies:

Attendance: Success in this course depends on your attendance and participation. I normally take attendance every day the class meets. If you are not in the room and in your seat before I start lecturing, you will NOT be counted as present that day. Attendance and active participation is included as part of your grade and are essential to successfully completing this course. You are expected to know all material presented in class. **Turn off all cell phones and beepers when you enter the classroom!**

Reading: Class topics will follow the order of topics in the schedule. You should read ahead and be prepared for each class. Be prepared to study and complete assignments for 1 - 2 hours for every hour you spend in class/lab.

Email: Each student is required to monitor the university provided email account. This is the only account that I will send email to. Forwarding this account to another account is acceptable, as long as you receive the information. Students are required to check their email account on a regular basis (before each class/lab). Class announcements, changes in schedules, feedback on assignments, clarifications on assignments, and other important information will be communicated via email. Please feel free to send questions to me on the class or subjects we are covering in class; at my discretion, I may forward the question and my reply to all class members. Not checking your designated email account is an unacceptable excuse for not receiving this information.

Academic Integrity/Plagiarism: University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all
forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity, copying a program from the Internet or other students, or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in the student or students receiving a zero on that assignment. Group interactions, investigations, and studying are encouraged; however, duplicative work, in which more than one student claims credit for essentially the same material, will be treated as cheating and will receive a grade of zero. This includes sharing code for the individual lab assignments! If you feel uncertain about a particular activity, please speak to me BEFORE problems arise. In addition, you are responsible for obtaining and retaining original copies of graded material for the entire semester. The instructor reserves the right to run programs through electronic verification designed to find plagiarism.

**Dropping a Class** I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with me before you decide to drop to be sure it is the best thing to do. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. November 4, 2011 is the last day to drop a class with an automatic grade of “W” this term.

**Assignments:** Class work will be assigned on a regular basis. Please refer to the assignment schedule for specific information and instructions about the assignments. Late assignments will be accepted, but the grade may be reduced by 20% for each day late.

**Programming Assignments:** This class requires that you complete multiple programming assignments, which demonstrate your knowledge of programming languages. These are individual assignments. Late assignments will be accepted, but the grade will be reduced by 20% for each day late.

**Class problems:** You will be asked to work in groups in class to solve problems similar to those that will appear on exams. You are expected to actively participate in these activities. In addition, you will be asked to write answers to group problems on the board.

**Class presentations:** You will be assigned to make individual presentation on assigned topics.

**Exams:** You MUST know the assigned programming languages to do well in this class. Most of the learning of these languages will be done outside class. Be sure to keep ALL graded material. Makeup exams will be different from the regular exams and typically more difficult. The final examination is comprehensive, but will focus on the last half of the class.

**Makeup Exams:** Makeup exams will not be given under normal circumstances. If you notify me immediately that serious, unavoidable, documentable (e.g., with a letter from your doctor) circumstances have arisen, I will discuss options for replacing the missing grade. Excused absences due to school sponsored activities, religious observations, family events, etc. should be discussed in advance.

**Academic Advising:** The College of Science and Technology requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. The College's Academic Advising Center is located on the third floor of the Center for Instruction and can be reached at 825-6094.

**Classroom/Professional Behavior.** Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of
the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

**Grade Appeals.** As stated in University Rule 13.02.99.C2, Student Grade Appeals, 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 Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html). For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

**Disabilities Accommodations.** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call or visit Disability Services at (361) 825-5816 in Driftwood 101.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.
Tentative Class Schedule: This is my planned schedule, but changes are expected. We will use most Fridays for class presentations. The official schedule is on my web site and that schedule will be updated as changes occur.

<table>
<thead>
<tr>
<th>Class Week</th>
<th>Subject</th>
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<tbody>
<tr>
<td>January 23</td>
<td>Course Introduction &amp; Preliminaries</td>
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<tr>
<td>January 28</td>
<td>Scheme Basics</td>
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<tr>
<td>February 4</td>
<td>Scheme</td>
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<tr>
<td>February 11</td>
<td>Scheme</td>
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<tr>
<td>February 18</td>
<td>Scheme</td>
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<tr>
<td>February 25</td>
<td>C# &amp; Exam</td>
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<tr>
<td>March 4</td>
<td>C#</td>
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<tr>
<td>March 18</td>
<td>C#</td>
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<td>March 25</td>
<td>C#</td>
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<tr>
<td>April 1</td>
<td>C#</td>
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<tr>
<td>April 8</td>
<td>Web/Scripting Languages &amp; Exam</td>
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<td>April 15</td>
<td>Web/Scripting Languages</td>
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<td>April 22</td>
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<td>April 29</td>
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<td>May 6</td>
<td>Web/Scripting Languages</td>
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<tr>
<td>Monday, December 13, 8:00 – 10:30 AM</td>
<td>Final Exam</td>
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Assignments: There will be multiple homework and programming assignments. The exact contents and schedule is unknown at this time. Full details are provided on the course web pages.