Logical Foundations of Computer Science

Syllabus

Instructors

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Office hours of Martine Ceberio: TR 2:00-2:30 + upon appointment
Office hours of Tanja Magoc: MW 12:30-1:30 + upon appointment
Classes: TR 3:00-4:20pm, in room 321

Textbook

There is no required textbook. However, you may want to read parts of the following books as we cover the corresponding topics in class.


1 Course description

This course offers a presentation of fundamental tools required in advanced computer science. The main topics covered in this class include propositional and first-order logic, recursion, proofs, other kinds of logic.

2 Homework, exams, etc.

Homework, quizzes

Students will be given homework and quizzes on a regular basis. Homework may not be graded all the time, but students are expected to work hard on them because they
constitute a good training for succeeding at the exams. Homework can also be given in the form of small projects.

Quizzes are likely to be unannounced, so students are expected to work on the lecture material on a regular basis to make sure they come prepared to classes.

There will be NO make-up quiz.

Projects

During the semester, the students will have to work on an individual project involving logic. Over the semester, they will have to:

1. Submit a proposal for the work to be carried out in their project: this proposal will be submitted to approval by the instructor(s) (15%);
2. Submit a report (along, when relevant, with their implementation) of their project (60%);
3. Give a presentation about their project (25%).

Mid-terms and final exams

There will be 2 “mid-terms” during the semester. The tentative schedule is as follows:

1. 1st mid-term around the 5th week of classes
2. 2nd mid-term around the 12th week of classes

During the week of the finals (May 11-15), at the time of the final exam, students will give presentations about their projects.

3 Grading

The semester grade will be based on a combination of quizzes, project, midterms, and a final exam. The approximate percentages are as follows:

<table>
<thead>
<tr>
<th>Combination of grades:</th>
<th>Letter grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>30% Homework / Quizzes</td>
<td>≥ 85% is an A</td>
</tr>
<tr>
<td>40% Mid-terms (2 mid-terms, 20% each)</td>
<td>75 – 84% is a B</td>
</tr>
<tr>
<td>30% Project</td>
<td>65 – 74% is a C</td>
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</tbody>
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4 Course policies

Communication

Students are required to check their e-mail and visit the webpage of the class (reachable from http://www.cs.utep.edu/mceberio/), to keep up to date about possible new announcements, on a daily basis.
Standards of conduct

Students are expected to conduct themselves in a professional and courteous manner, as prescribed in the Standards of Conduct:

http://it.utep.edu/hoop/Student_Affairs_Index_Page_HOP.htm

Graded work, e.g., homework and tests, is to be completed independently and should be unmistakably your own work (or, in the case of group work, your team’s work), although you may discuss your projects or homework with other students in a general way. You may not present as your own work material that is transcribed or copied from another person, book, or other source, e.g., a web page. Professors are required to - and therefore will - report academic dishonesty and any other violation of the Standards of Conduct to the Dean of Students (http://studentaffairs.utep.edu/Default.aspx?alias=studentaffairs.utep.edu/dos).

In addition to this, note that eating or drinking in the classroom will not be tolerated.

Attendance policy

At most three absences are allowed. Students are expected to be on time. Three tardies will count as one absence, and will be recorded each time a student shows up ten minutes after the start of class. Above three absences, the final grade will be lowered by one point for each unexcused absence.

Disabilities

If you feel that you may have a disability that requires accommodation, contact the Disabled Student Services Office at 747-5184, go to Room 106 E Union, or e-mail dss@utep.edu.

Additional information

1. During the semester, students will be regularly informed about the grades they obtain for quizzes, homework, project material, midterms. Therefore it is expected that they will be able to understand their standing in the class by themselves, just by applying the percentages given earlier in this syllabus.

   In particular, the students should be able to have a clear understanding of their standing in the class and be able to make their own decision about dropping the class if need be. If need be, the instructor can advise students about the best decision to take.

2. Students are encouraged and welcome to contact the instructor(s) for further explanations to ensure their full understanding of the material covered in class. However, they also have to demonstrate that they regularly do the homework, participate in the class, as doing so is essential for them to understand the material and succeed in the class.
3. Students are responsible for working regularly on their assigned project. Having other projects to work on during the semester (for other courses) is not an excuse for not working on the project for cs5303. Turning any class material late will be penalized by 5 points a day during the first 5 days of lateness, and 10 points a day after that, no exceptions.

4. Students should know that grades will be given fairly and never according to special issues such as "I need an A to keep my visa", etc.

5. For the sake of fairness, no extra assignment will be given to any specific student to improve their grade. If extra credit is proposed, it will be proposed to all students, and will definitely never be offered after the end of the semester to make up for a bad grade.