CSC 2227S: Topics in the Design and Implementation of Operating Systems

Information Sheet

Instructor:
Prof. Angela Demke Brown Office: BA5228
Email: demke@cs.toronto.edu Phone: 416-946-8080
Course web site: http://www.cs.toronto.edu/~demke/2227S.14

Lectures:
Time: Mondays, 2-4pm
Place: BA 2195

Description:
This course examines the design and analysis of selected aspects of operating systems and distributed systems. It covers topics such as concurrency and distributed communication; fault-tolerance, availability, and persistence; and operating system structure. This is a seminar-style course based on occasional lectures, paper presentations by students, and discussions of readings. The focus is on the principles used in the design of operating systems and distributed systems, and algorithms and data structures used in their implementation. Readings include case studies, seminal papers, and recent conference and journal articles.

Requirements:

Paper Summaries
You will be expected to read approximately 2-3 papers each week, and produce a short (less than half a page) summary of each. Guidelines on preparing summaries will be given in class. Summaries are due at the beginning of class. Evaluation will be on a complete/incomplete basis; each summary is worth roughly 1%.

Project & Poster Session
The goal of the project is to have you design, construct and evaluate an interesting software system. The system should explore issues, solve problems or exploit techniques from classroom discussions or papers. Suggested project topics will be provided, however, you are encouraged to develop your own proposal. You will be asked to present the results of your project in a class poster session at the end of the term.

Paper Presentation & Discussion
Each student will present and lead the discussion of at least two papers during the term. Participation in class discussions is required.

Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
<td>55%</td>
</tr>
<tr>
<td>Summaries</td>
<td>20%</td>
</tr>
<tr>
<td>Paper Presentations</td>
<td>20%</td>
</tr>
<tr>
<td>Class Discussion</td>
<td>5%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>