

CSCI 335H; HONORS Computer Architecture and Operating Systems

<p>Honors Contract Topic: “Enrichment in Computer Architecture and Operating Systems”</p>	<p>Summarize this project and explain how it individualizes the course. My project will explore various aspects of computer architecture and operating systems, outside of the regular class work. Since class time is limited, we will not have enough time in class to cover all aspects of computer architecture or operating systems in depth. Twice during the semester, I will research certain aspects of computer architecture and operating systems that were covered either lightly or not at all in class. For the computer architecture topic, I will research memory systems for parallel and distributed architectures and investigate the cache coherence and cache consistency problems. For the operating systems topic, I will research various methods for process synchronization, including semaphores, monitors, and atomic transactions. To summarize my results, I will write one paper for each topic. Each research paper will be reported to the class via an oral presentation. In addition to enhancing my knowledge of computer architecture and operating systems, this project will give me the chance to improve my writing and oral presentation skills.</p>
<p>Methodology/Approach:</p>	<p>List the activities the student will do to complete the project. I will meet with the instructor to discuss the topics I will research and receive help as needed. Each presentation will be approximately 10 minutes long. The presentation may include discussion, handouts, PowerPoint, etc. Each paper will be 5-7 pages.</p>
<p>Resources:</p>	<p>List specific resources for gathering information for the project. I will research both topics through books, journal articles, and the World Wide Web. The primary journals to be used are <i>IEEE Computer</i> and <i>Communications of the ACM</i>.</p>
<p>Evaluation:</p>	<p>Explain the standards for grading the student’s work and percent of the semester grade for the project. Please detail how the course grade will be determined for both non-honors and honors students. Presentations will be evaluated on organization, accuracy of information, and delivery. Papers will be graded on content, organization, grammar, and understanding of the topic.</p>

<u>Point Distribution</u>	<u>Non-honors</u>	<u>Honors</u>
Class Participation	5%	5%
Exams (3)	45%	45%
Homework	25%	15%
Oral presentations	0%	5%
Research Papers	0%	5%
Final Exam	25%	25%
	<hr/> 100%	<hr/> 100%