Instructor: Bojan Cukic  
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Required Textbook:  

Recommended Textbook:  

Additional Material:  
• A set of approximately 40 research papers will be distributed in class.

1. Objectives  
System reliability has been a major concern since the beginning of the computer age. As our dependence on computing systems continues to increase, the limits of our (in)ability to guarantee required levels of system reliability, availability, maintainability, etc, are being reached. In recent years, the number of reliability and redundancy techniques has continued to expand, along with the renewed emphasis on software techniques. The objective of this course is to introduce reliability concepts with emphasis on design techniques, modeling and analysis.

2. Tests and Homework  
A midterm test will be administered during the semester. In addition, there will be a final exam. The final exam will be comprehensive, that is, it will cover all the material taught throughout the semester. CS 791 students will have to solve additional problems. A couple of homework assignments can be expected during the course of the semester.

3. Presentation of Research Papers  
Each student is expected to individually present one or two research papers in the class. These presentations will be evaluated, and will contribute approximately 15% of the final grade.

4. Term Paper  
Each student is expected to develop a term paper and submit it to the instructor during the first week of December. The theme of the term paper will usually emerge from the presented research paper. Students are expected to independently search for additional references, read them and summarize the topic in, typically 10 - 15 pages (font 12, 1.5 interline spacing). The technical depth of CS 791 papers will be evaluated more rigorously, expected to be at the level of a conference publication.

5. Grading  
Midterm test and the final exam will count for approximately 50% of the final grade. 10% of the grade will be assigned through the homework assignments. The remaining 40% will be derived from presentations (15%) and term papers (25%). You must obtain a passing grade in both parts (tests/homework and presentations/term paper) in order to pass the course. Please, note that the final weights used in grading the class may be slightly different.

6. Expected workload  
CpE643/CS791 is a graduate level course, and the expected workload is relatively high. You must be prepared to dedicate approximately 5 working hours a week to this class (excluding the time spent in the classroom). A minimal prerequisite for the successful completion is good understanding of computer system design and architectures.
6. Academic Honesty
Students are encouraged to discuss class topics between themselves. **However, each student should develop the term paper and presentation individually.**

When writing a term paper, please do not copy from other papers, or from the material found on the Web. While you are encouraged to search for additional references, you are not supposed to copy sentences, paragraphs or figures from these papers, unless you explicitly mention the source (by quoting and/or referencing). I will run phrases from each submitted term paper through a Web search engine, and compare them with my private collection of manuscripts. In cases of copyright infringement, the term paper will be automatically be assigned a score of 0 points.

7. Social Justice Statement

West Virginia University is committed to social justice. I concur with that commitment and expect to foster a nurturing learning environment based upon open communication, mutual respect, and non-discrimination. Our University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color or national origin. Any suggestions as to how to further such a positive and open environment in this class will be appreciated and given serious consideration.

If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with Disability Services (293-6700).