

**King Fahd University of Petroleum & Minerals**  
Department of Information and Computer Science  
**ICS 500: Research Methods and Experiment Design in Computing**  
**Term Paper Guidelines**

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**Weight: 50% (10% SLR & 40% experiment)**

**Term Paper General Guidelines:**

- Each group should conduct an in-depth study of an advanced topic in computer science or software engineering of their selection. The findings should be reported in the form of a publishable work.
- Each team must submit his proposed *topic* to the instructor.
- Use recent publications as references.
- Teams should consist of 3 members.

**Submission Guidelines:**

The following are the major phases of the term paper:

- **Phase zero:**
  - ✓ Each group must discuss their idea with the instructor for initial approval.
- **Phase 1: Proposal**
  - ✓ A one-page proposal that includes an introduction to the topic with general problem statement and research objectives, proposed methodology, research questions, the expected contributions, and the initial set of references.
- **Phase 2: Systematic Literature Review**
  - ✓ Conduct a systematic literature review related to your proposed topic.
- **Phase 3: Experiment**
  - ✓ Conduct an experiment and report the following
    - a. Design of the experiment
    - b. Data description
    - c. Execution of experiment
    - d. Analysis of results and interpretation
    - e. Threats of validity
    - f. Conclusion
- **Phase 4: Final Report**
  - ✓ The final form of the term paper should include: abstract, introduction, motivation, background, literature review, methodology, experiment details, results, evaluation, threats to validity, conclusion, and future work.
- **Phase 5: Presentation**
  - ✓ You are expected to present and discuss your findings.

**Grading Policy:**

Phase	Submission	Points	Submission deadline
Phase 1	Proposal	0%	W04: February 7, 2024
Phase 2	SLR	10%	W08: March 6, 2024
Phase 3	Experiment	20%	W12: April 24, 2024
Phase 4	Final Report	15%	W14: May 6, 2024
Phase 5	Presentation	5%	W14&15: May 6,8,13 & 15, 2024