Introduction to Research in Computer Science

Syllabus

◆ **Course Title:** *Introduction to Research in Computer Science*

◆ **Instructor:** Dean F. Hougen <hougen@ou.edu>

◆ **Class Hours:** T, Th, 4:30-5:45

◆ **Location:** SEC P209

◆ **Required Textbook:**

◆ **Required Readings:**

◆ **Supplementary Textbooks:**

◆ **Additional Readings:**
  ◦ Students will be assigned and will select additional readings based on their research areas.

◆ **Expectations and Goals:**
  ◦ This course is intended for computer science graduate students beginning their graduate careers or undergraduate students considering graduate school or research careers. Students need graduate standing or instructor permission to take this course.
  ◦ This course will provide students with a broad background in computer science research and dissemination.

◆ **Topics Covered:**
  ◦ Computer Science as a Discipline
  ◦ Research Philosophy, Goals, and Methods
  ◦ Types of Research
- Research Life Cycle
- Research Ethics
- Research Proposals
- Literature Search
- Evaluating Sources
- Critical Analysis of Technical Literature
- Comparisons of Approaches/Methods
- Developing Research Questions
- Developing Manageable Units
- Conducting Research
- Evaluating Research Results
- Making and Supporting Claims
- Communicating Evidence Visually
- Assessment Reports
- Writing Technical Papers
- Publication Process
- Presenting Technical Material
- Attending Conferences
- Technology Transfer
- Financial Issues
- Professional Development

**Requirements:**
- The graded assignments in the course and their contributions to student grades are given in the table below.

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Contribution to Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homeworks</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>Exam</td>
<td>2</td>
<td>30%</td>
</tr>
<tr>
<td>Literature Search</td>
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<td>10%</td>
</tr>
<tr>
<td>Paper Summaries and Reviews</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Paper Presentations</td>
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<td>10%</td>
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<tr>
<td>Research Proposal</td>
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</tr>
<tr>
<td>Research Report</td>
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<td>10%</td>
</tr>
<tr>
<td>Class Participation</td>
<td></td>
<td>10%</td>
</tr>
</tbody>
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