

CS 350 Tools and Technique of Computation

- **Goals:** The goals of this course are to provide students with an introduction to various tools and techniques that facilitate computation. Students will learn advanced applications that can interface with sensor / data devices, manipulate large quantities of data, rapidly prototype solutions, and analyze and interpret the results. The tools will include spreadsheets, databases, 4th generation languages as well as packages for analysis and visualization.
- * **Topics:**
 - ┆ Tools for data acquisition (e.g. LabView)
 - ┆ Tools for data manipulation (e.g. Excel, Access)
 - ┆ Tools and techniques for visualization (e.g. Matlab)
 - ┆ Modeling and Simulation (e.g. Excel / Matlab)
 - ┆ Techniques for displaying data for presentation/publication

Motivation

- CS 350 has grown out of discussions with representatives from all various science disciplines at WSU.
- The sciences want a tools oriented course that trains their students to apply computational techniques
- Choice of CS 350 allows for a CS 550 number for graduate students

Working DRAFT

Presented at Computer Science and Engineering
Department Meeting of May 5, 2006
Prof. Matt Rizki

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Prerequisites: Computer literacy

Textbook: Multiple books will be required

Workload:

3	Assignments	30%
5	Laboratory Exercises	20%
1	Examination	25%
1	Final Examination	25%

Grading: 90-100 A, 80-89.9 B, 70-79.9 C, 60-69.9 D, below 60 F

Topics:

1. Tools for data acquisition (e.g. LabView)
2. Tools for data manipulation (e.g. Excel, Access)
3. Tools for visualization (Matlab)
4. Modeling and Simulation (Excel / Matlab)
5. Tools for graphical display
6. Tools for publication

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