Course Overview

“Hello, Susan Lang. We have recommendations for you.” So reads the top line of my amazon.com home page. Immediately below it, there are such links as “Susan’s Amazon.com,” Your Browsing History,” and “Improve Your Recommendations.” This single page represents one example of how we use information to understand and forecast behaviors and actions of individuals and/or entire systems. Often, we are aware that our actions are being documented and stored in a database; what we are less aware of is how that information is being analyzed, repurposed, and used to understand or encourage subsequent behavior.

This course will introduce students to the theory and practice of working with relational databases for research, assessment, and programmatic decision-making. After initial overviews of databases, text mining, and data mining, we'll examine the use of relational databases for both inductive and deductive projects, that is, understanding how to work with a dataset to build hypotheses and how to approach the dataset with a previously structured hypothesis. We will also cover such relevant topics as IRBs and intellectual property issues that arise from working with datasets. The final portion of the course will deal with the design and construction of relational databases.

Students will have access to a variety of datasets throughout the course.

Learning Outcomes

By the end of the course, students will have:

- Read from a variety of texts to understand definitions, theory and application of datasets, data mining, and text mining
- Interacted with one or more datasets to construct hypotheses about behaviors indicated by the data or to test hypotheses
- Constructed the framework of a relational database designed to measure particular tasks and behaviors

Course Components

These are the major components you will use to participate and complete assignments for the course:

- **Course Web site.** Descriptions of weekly topics, assignments, syllabus, supplementary course materials, found at [http://english.ttu.edu/lang/5377](http://english.ttu.edu/lang/5377).
- **Course texts.** Primary course content, available from me or through E-reserve online at [http://library.ttu.edu](http://library.ttu.edu), click on Course/E-Reserve link.
- **MOO.** Synchronous weekly class sessions held Thursdays, 6:00pm-7:30pm Central time, at [http://moo.engl.ttu.edu:7000/](http://moo.engl.ttu.edu:7000/) (Lang’s Classroom).
• **WebBoard.** Asynchronous discussion board for weekly discussion questions accessible online at [http://wb.engl.ttu.edu/~Lang5377_Spring09](http://wb.engl.ttu.edu/~Lang5377_Spring09).

• **Trillian (supports Yahoo or AIM).** Synchronous office hours. Be sure to setup an ID at [http://messenger.yahoo.com](http://messenger.yahoo.com) or AIM and add susan_lang2003 or docs-langttu to your list of contacts.

• **Email.** Asynchronous general questions. I normally check email daily and respond within 24 hours.

### Required Course Texts

- Materials will either be distributed by me or placed on e-reserve for English 5377 at [http://library.ttu.edu/ul](http://library.ttu.edu/ul).
- Links to publically available pages will also be listed on the course website.

### Description and Guidelines for Assignments

Assignments will include two shorter data analyses, one project proposal, weekly discussion postings, and a final project. All work submitted must be original and not part of previously completed work for other courses or projects and should use standard file formats (i.e., DOCX, PDF, PPT, HTM). All major assignments must be submitted in order for a student to receive a passing grade in the course.

#### Discussion Board Postings, 20% (due Weekly)

Most weeks, you will post short responses to 2-3 discussion questions posted on the WebBoard and course Web site. Discussion posts are worth 2% points each and ten posts are required. For each question, post a 1-2 paragraph response. Each week a posting is due, login to the class WebBoard at [http://wb.engl.ttu.edu/](http://wb.engl.ttu.edu/) and post your responses. Questions will be posted on Thursday of each week and be due by the following Tuesday, 5pm Central time.

**First Brief Analysis, 15% (Feb 13)**

This project will represent your first attempt to work with a dataset to either 1) develop a hypothesis from the initial data or 2) begin to test a hypothesis. See the [Grading Rubric](http://library.ttu.edu/ul) section below for ideas on methods of writing and development.

**Final Project Proposal, 10% (Mar 6)**

You will develop a 750-1000 word project proposal that explains the rationale for your project and outlines its major components. Your proposal should include a rationale or justification for your project, initial research questions, location of a proposed dataset, and a task-based timeline for the work.

**Initial Results, 15% (April 3)**

You will write a 1500-2000 word paper which should attempt to describe your initial analysis of your dataset. See the [Grading Rubric](http://library.ttu.edu/ul) section below for ideas on methods of writing and development.

**Final Project, 30% (due April 24)**

This project should demonstrate your ability to synthesize and/or apply written scholarship from materials covered in the course. The project can be theoretical (paper) or practical (project), but must be approximately 20 pages in length. As a final component of this assignment, you will give a 10-minute presentation of your project on the final day of class. The final project will take the place of a written final exam.

**Participation, 10% (due Weekly)**

Your participation grade will be based on active and quality participation in class discussions, including completion of all class readings.
Methods of Assessment
Here’s what you can expect as far as grades and typical characteristics for individual grades:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
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<tbody>
<tr>
<td>A 90-100</td>
<td><strong>Professional quality work</strong>&lt;br&gt;Appropriate for workplace distribution, with minimal or no revision. Exceeds assignment requirements using a creative or challenging approach in its style, development and/or delivery. The work demonstrates superior organization, research, visual design and editing.</td>
</tr>
<tr>
<td>B 80-89</td>
<td><strong>Adequate quality work</strong>&lt;br&gt;Pending some revision, would be appropriate for professional distribution. Meets assignment requirements, following typical genre and style conventions. The work’s research, development, organization, style, and visual design demonstrate adequate effort, but with problems in some areas.</td>
</tr>
<tr>
<td>C 70-79</td>
<td><strong>Low quality work</strong>&lt;br&gt;Requires subsequent development and review before consideration for professional distribution. Meets most of the assignment requirements, yet the work demonstrates more obvious problems in the development, organization, style, visual design and editing.</td>
</tr>
<tr>
<td>D 60-69 F 0-59</td>
<td><strong>Poor quality work</strong>&lt;br&gt;Fails to complete many of the minimum assignment requirements. The work is lacking in research and development and has serious problems with the organization, visual design and editing. This grade is also reserved for plagiarized work.</td>
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Attendance
If you are going to be absent, send me an email notification in advance. Since we only meet once per week, you are permitted to miss one class over the duration of the course, but are encouraged not to do so. If you miss a class, you will be required to submit a 1000-word summary of the material assigned that day. Failure to do so will result in a 10% reduction of the final course grade. Each subsequent absence (in any circumstance) will result in an additional 10% reduction of your final course grade.

Late Work
Generally, late work is not encouraged. However, if you have an exceptional circumstance that may require you to be late with an assignment, you are permitted one late exception. To qualify, you must submit an email to me no later than the original due date, requesting a late exception. Once approved, the extended deadline will be seven (7) calendar days from the original due date. Subsequent late work will be assessed a 10% penalty per calendar day late. Work due on the last day of class may not qualify for a late exception.

Academic Conduct
Each day of class, I expect you will have completed all scheduled readings and actively participate in class discussions. Your participation and interaction with class members should also reflect appropriate respect for all individuals. In addition, all submitted assignments should be your original work and offer proper citations where appropriate. Refer to the *Bulletin of Texas Tech* for specific guidelines regarding academic integrity and conduct.

Plagiarism
Plagiarism is defined as the improper use of someone else’s text, graphics, coding, or ideas, without proper citation. This includes the use of phrasing, direct quotes, paragraphs, or other textual or graphic content without proper citation or documented permission. When in doubt, the best course of action is to always cite your sources. Assignments that plagiarize will always receive a grade of F (zero points), regardless of the originality of the design or other aspects, and depending on the severity, failure of the course and possible referral for academic suspension.

Special Accommodations
Any student who because of a disability may require special arrangements in order to meet course requirements should contact me as soon as possible to make any necessary accommodations.