1. Course number and name: CS 5800 – Database Systems
   Canvas and http://cs.usu.edu/people/CurtisDyreson/teaching/databases/192/
2. Credits: 3
   a. Class Meets: Tuesday and Thursday at 9:00-10:15, Geology 105
   b. Course Fee: There is no fee associated with this course
3. Instructor:
   Associate Professor Curtis Dyreson
   Office: Main 402A
   Phone number: 797-0742
   E-mail: Curtis dot Dyreson at usu dot edu
   Office Hours: Tuesday and Thursday at 8:00-8:50AM and 10:20-11AM or by appointment via e-mail
   ISBN: 9780133971330
   I have placed a copy on closed reserve in the library.
5. Specific Course Information:
   a. Course Description: Conceptual design, ER model, Relational model of data, SQL, query optimization, noSQL, data mining, normalization.
   b. Prerequisites: 2.0 GPA; grade of C- or better in CS 2420
   c. This course is an elective for Computer Science Majors
6. Specific goals for the course
   a. Course Objectives
      i. Develop a conceptual model of a database
      ii. Become familiar with a database management system
      iii. Build and query a database
   b. ABET Student Learning Outcomes
      • 1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
      • 2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program’s discipline.
      • 6. Apply computer science theory and software development fundamentals to produce computing-based solutions.
7. Brief list of topics to be covered
   a. Introduction of Database systems
   b. Database Design/ER model
   c. The relational model
   d. SQL
   e. Logical design
   f. Physical design
   g. Applications/noSQL/Data mining

Exams
There will be one mid-term exam and one final exam. The weights of the exams are 13% and 24% for a total of 37%.
Assignments
There will be six to seven homework assignments and four programming projects. The weight of the homework and programming assignments will total 63% of the grade.

Grading Policy
All grading will generally be marked within a week of the due date and returned to students in lecture or online. Additionally, some grades will be sent via e-mail. Assessment may be resubmitted for re-grading no later than one week after the assessment is returned. This is the only window of opportunity for re-grading. In order to submit a piece of assessment for re-grading, write or type a detailed explanation of the reasons for the re-grading. Then submit the re-grading to the professor.

Grievance Process
Students who feel they have been unfairly treated [in matters other than discipline, admission, residency, employment, traffic, and parking - which are addressed by procedures separate and independent from the Student Code] may file a grievance through the channels and procedures described in the Student Code: Article VII

Add policy
The last day to add this class is September 1, without instructor signature. Attending this class beyond that date, without being officially registered, will not be approved by the Dean's Office. Students must be officially registered for this course. No assignments or tests of any kind will be graded for students whose names do not appear on the class list.

Drop policy
The last day to drop this class without notation is September 16 by 5PM.

Withdrawal Policy and "I" Grade Policy
Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of extenuating circumstances, but not due to poor performance or to retain financial aid. The term 'extenuating' circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter a work schedule to secure employment, (4) change in work schedule as required by an employer, or (5) other emergencies deemed appropriate by the instructor.

Late policy
While you may turn in an assignment or homework late, 20% of the total points are deducted for each day late. Please start early and finish early.

Learning Aids
Lecture notes and other useful information will be available in electronic form on the class's section of the Canvas system or the class web page. Please check the class's news
and notes sections on a regular basis. The Computer Science Department is a member of the Microsoft’s DreamSpark program. Through this program, students in CS courses can obtain and use a number of Microsoft’s operating and software packages. If you are interested in downloading any of this software for your use, please follow the directions found on the department’s website.

**Academic Integrity – “The Honor System”**

Each student has the right and duty to pursue his or her academic experience free of dishonesty. The Honor System is designed to establish the higher level of conduct expected and required of all Utah State University students.

The Honor Pledge: To enhance the learning environment at Utah State University and to develop student academic integrity, each student agrees to the following Honor Pledge: "I pledge, on my honor, to conduct myself with the foremost level of academic integrity." A student who lives by the Honor Pledge is a student who does more than not cheat, falsify, or plagiarize. A student who lives by the Honor Pledge:

- Espouses academic integrity as an underlying and essential principle of the Utah State University community;
- Understands that each act of academic dishonesty devalues every degree that is awarded by this institution; and
- is a welcomed and valued member of Utah State University.

**Plagiarism and Cheating**

Plagiarism includes knowingly "representing, by paraphrase or direct quotation, the published or unpublished work of another person as one's own in any academic exercise or activity without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials." The penalties for plagiarism are severe. They include warning or reprimand, grade adjustment, probation, suspension, expulsion, withholding of transcripts, denial or revocation of degrees, and referral to psychological counseling.

This course adheres to the cheating policy for courses in the Department of Computer Science posted on the bulletin board outside the CS office on the 4th floor of Old Main and posted online at http://cs.usu.edu/htm/cheating-policy/.

**Students with Disabilities**

Students with ADA-documented physical, sensory, emotional or medical impairments may be eligible for reasonable accommodations. Veterans may also be eligible for services. All accommodations are coordinated through the Disability Resource Center (DRC) in Room 101 of the University Inn, (435)797-2444. Please contact the DRC as early in the semester as possible. Alternate format materials (Braille, large print, digital, or audio) are available with advance notice.

**Sexual Harassment**

Sexual harassment is defined by the Affirmative Action/Equal Employment Opportunity Commission as any "unwelcome sexual advances, requests for sexual favors, and other
verbal or physical conduct of a sexual nature." If you feel you are a victim of sexual harassment, you may talk to or file a complaint with the Affirmative Action/Equal Employment Opportunity Office located in Old Main, Room 161, or call the AA/EEO Office at 797-1266.

**Academic Freedom and Professional Responsibilities (Faculty Code)**
Academic freedom is the right to teach, study, discuss, investigate, discover, create, and publish freely. Academic freedom protects the rights of faculty members in teaching and of students in learning. Freedom in research is fundamental to the advancement of truth. Faculty members are entitled to full freedom in teaching, research, and creative activities, subject to the limitations imposed by professional responsibility. Faculty Code Policy #403 further defines academic freedom and professional responsibilities: USU Policies Section 403.