SYLLABUS (FALL 2009)
CPSC 421: Database Management Systems

Time and Place: Herak 257, Tuesday/Thursday 2:40pm–3:55pm

Prerequisites: CPSC 223 (Algorithms & Abstract Data Structures), or consent of instructor

Instructor: Shawn Bowers
   Email: bowers@gonzaga.edu
   Office: Herak 309C
   Phone: (509) 313-5712

Office Hours: 1:30pm–2:30pm M/Tu/Th/F. I will also be available after class, and am happy to arrange other times to meet. You can also just drop by my office. In general, the fastest way to contact me is through email.

Course Webpage: http://www.cs.gonzaga.edu/~bowers/courses/cpsc421

Required Textbook:

Course Materials: Lecture notes, reading assignments, homework, announcements, and general class information will be made available on the course webpage. The blackboard system will also be used (http://blackboard.gonzaga.edu) for assignments, grades, etc. Please be sure to check the course webpage and the blackboard system often.

Course Description: The goal of this course is to provide a detailed introduction to topics in data management as well as hands-on experience working with database systems. Topics covered include the relational data model, query languages (relational algebra, SQL), database design (conceptual modeling, integrity constraints, normalization), storage and file structures, query processing and optimization, and transaction management. This course has a strong design and engineering emphasis that includes a number of assignments and a group project in which students design and develop an end-to-end database application.

Grading:
   (30%) Assignments
   (15%) Group Project
   (15%) Class Participation, Quizzes
   (20%) Midterm Exam (Oct. 13)
   (20%) Final Exam (Dec. 16, 10:30–12:30)

There will also be opportunities throughout the course for extra credit. Assignments will generally be a mix of written exercises and hands-on activities (e.g., using SQL). Letter grades will be assigned based on the conventional percentage scales (A: 90-100%, B: 80-89%, C: 70-79%, etc), however, exact break points for grades will depend upon the overall class results.
Course Policies:

Reading Assignments. Reading assignments are required (unless otherwise noted). Each reading assignment should be completed before the following class meeting.

Homework and Project Assignments. All homework and project assignments should be turned in by the given due date. Late assignments will be assessed a penalty of 10% for each day late. If an extraordinary situation (medical, personal, work-related, or other emergency) prevents you from working for a period of time, contact me as soon as possible to discuss your situation and arrange a special schedule. It is expected that you work on homework assignments individually and that you turn in your own work. For the course project, you will work together with other students in groups, and each group will turn in a single copy of project assignments.

Exams and Quizzes. Makeup exams will only be given in cases of medical, personal, work-related, or other emergencies. If an emergency arises and you are going to miss an exam, contact me as soon as possible to arrange an alternative exam time. Quizzes will only be given at the beginning of the class. No makeup quizzes will be given. Exams and quizzes are open book and open note. Quizzes are generally worth 10 points each, and your lowest quiz score will not be counted in your final grade. Quizzes are worth 10% of your final grade.

Attendance. Please see the Student Handbook\textsuperscript{1} for the Class Attendance Policy. This policy states that students that miss more than 6 class hours (in this case, 4 Tu-Th classes or 2 weeks of classes) receive a “V” grade. Alternatively, in this course if you miss 4 classes (without prior arrangement), then you will receive one grade lower (e.g., an A becomes a B). For every subsequent 2 missed classes your letter grade will be dropped one grade lower. Please notify me as soon as you can if you are sick. Sick days will not be counted as (unexcused) absences.

Academic Honesty: You are expected to follow the departmental policy on academic honesty:

\url{http://www.cs.gonzaga.edu/courses/policies/honesty.html}

Please read this policy prior to the next class meeting. All homework assignments, quizzes, and exams you turn in must be your work and your work alone. Similarly, each assignment turned in for the group project should be the work of the group and the group alone. Examples of academic dishonesty from the department’s policy include: “when a student turns in the work of another student and represents it as his or her own work; when a student knowingly permits another to turn in his work; when a student copies code from the work of another student; etc.” Please note that you can still have general discussions about assignments, e.g., concerning requirements, general implementation strategies, debugging approaches, etc. When in doubt about the policy, please ask for clarification.

If the departmental committee decides that a violation has occurred, then the following actions will be taken. If it is a first offense, a 50% point reduction on the assignment will be assigned to all students involved (i.e., “copier” and “copy-ee”). If it is a second offense, the students will receive an “F” for the course.

Disability Support: Students with disabilities in need of academic accommodations should contact me as soon as possible to arrange support. Students are encouraged to contact the Disabilities Resources, Education and Access Management office in the Foley library to develop accommodation strategies. I am happy to implement any plan that you work out with this office.

\textsuperscript{1}\url{http://www.gonzaga.edu/Student-Life/Student-Handbook/2008-2009-Student_Handbook.pdf}