CS 295: Special Topics
Intro to Database Systems
Spring 2005
TR 6:30pm – 7:45pm
PH 117
http://www.cs.moravian.edu/cs295

CS 295. ST: Introduction to Database Systems
Database design; database applications; query languages; relational databases, algebra, and calculus; client-server models and applications; web programming. Prerequisite: CS 244.

Instructor
Stephen Corbesero
PHC 213, 610-625-7786
mesgc01@cs.moravian.edu
Office Hours: TR 1:30--2:30
W 11:10--12:00

Text
The text for the course is Database Systems: An Application-Oriented Approach, 2/e, by Kifer, Bernstein, and Lewis.
Although not required, the following quick reference guides by will prove very useful in the programming and project portions of the class.

- MySQL Pocket Reference by Reese.
- PHP Pocket Reference, 2/e, by Lerdorf.
- SQL Pocket Guide by Gennick.

Goals
- Learn the fundamental design and implementation issues of database system and database applications.
- Learn the correct principles of relational databases and their design.
- Learn the role and use of query languages, especially SQL, for accessing and manipulating database contents.
- Create a small but non-trivial database application.

Assignments, Programs, and Tests
Homework and programming assignments will database exercises and projects in SQL and other programming languages. One or more short papers may also be part of the homework grade. Tests will consist of two hour examinations and a final.

Computer Resources
The primary computer resources will be the Sun Solaris 2.x workstations in MoCoSIN. Unless otherwise indicated, all programs must compile and run on this platform.

Prerequisites
Students are expected to have a strong background in structured programming and basic data structures as covered in CS 120-121-244.

Grading Scale

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<tbody>
<tr>
<td>Homework and Quizzes</td>
<td>20</td>
</tr>
<tr>
<td>Hour Exams</td>
<td>25</td>
</tr>
<tr>
<td>Project(s)</td>
<td>30</td>
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<tr>
<td>Final Exam</td>
<td>25</td>
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<td><strong>Total</strong></td>
<td><strong>100 %</strong></td>
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Grading Policies
- Incomplete grades will not be assigned for failure to do the work as required during the semester.
- Attendance is very important, and pop quizzes, which would count in the homework category, may spontaneously occur. You are responsible for everything discussed in class.

Homework
Each homework (non-program) will be graded out of a possible 100 points. Late homework will be penalized with the same schedule as late programs (see below), unless the solution is discussed in class.

Programs and Projects
- Each program or project component will be graded out of 100 points, but may be weighted to
reflect its relative complexity. Programs will be graded on correctness (˜70%), style (˜20%), and documentation (˜10%). If an assignment is one class-day late, it will be penalized 10%. If it is up to one class-week late, it will be penalized by 30–50%. After one class-week, it will be worth no more than 20%.

- Unless explicitly stated otherwise, programs are due electronically on midnight on the due date.
- Failing to turn in correct assignments in a timely fashion is hazardous to your grade, directly and indirectly. If you start missing assignments, I may notify your academic advisor.

Keep in mind the following items about submitting programs and project components.

1. Source files must contain the program header in a comment section as well as a code section. This header consists of the program title, number, author, course, and due date.
2. Programs are collected electronically. Pay close attention to directory and files names, including case.
   - You must execute touch DONE in the proper directory.
   - A collect program will periodically look for these DONE files.
     - If the DONE file is found, the contents of the directory will be copied, a .collected file will be deposited, and a congratulatory email message will be sent.
     - If no DONE file is found, an email will be sent pointing out that no collection was done.
   - If you are asked to resubmit a program you must and touch DONE again.

Important Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
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<tbody>
<tr>
<td>Jan 10</td>
<td>M</td>
<td>First day of classes</td>
</tr>
<tr>
<td>Jan 17</td>
<td>M</td>
<td>M. L. King Day, no classes</td>
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<tr>
<td>Jan 18</td>
<td>T</td>
<td>Last Day to Add/Drop</td>
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<tr>
<td>Feb 24</td>
<td>R</td>
<td>Hour Exam 1</td>
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<tr>
<td>Feb 25</td>
<td>F</td>
<td>Mid-Term</td>
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<tr>
<td>Mar 5–13</td>
<td>S–U</td>
<td>Spring Recess</td>
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<td>Mar 25–28</td>
<td>F–M</td>
<td>Easter Break</td>
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<tr>
<td>Mar 31</td>
<td>R</td>
<td>Hour Exam 2</td>
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<tr>
<td>Apr 1</td>
<td>F</td>
<td>Last Day to Withdraw with a W</td>
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<td>Apr 22–23</td>
<td>F–S</td>
<td>CCSC-NE</td>
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<td>Apr 29</td>
<td>F</td>
<td>Last Day of Classes</td>
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<td>Apr 30–May 1</td>
<td>S–U</td>
<td>Reading Days</td>
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<tr>
<td>May 2–7</td>
<td>M–S</td>
<td>Final Examinations</td>
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<tr>
<td>May 14</td>
<td>S</td>
<td>Commencement</td>
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General

- Keep backups of all assignments, especially during program development.
- Special circumstances, will, of course, be considered on an individual basis. Please see us as soon as possible if any such circumstances arise.
- All work, unless explicitly stated in the problem definition, is to be an individual effort. Students are encouraged to discuss approaches so long as the final submission has a single, clearly identifiable author. Violations of this will be dealt with as a case of academic dishonesty, see below.

My Policy on Academic Dishonesty

Students are encouraged to read and understand the college policy on academic honesty. Violations of this policy will certainly result in reduced (0?) scores on the assignments and may result in a failure of the class.

Tests

No makeup exams will be given. Students missing one or more tests, in a properly excusable fashion, will be graded based on the available scores as the total score. The hour exams are open book and open notes, unless explicitly stated otherwise.