Nashville State Community College
Computer and Engineering Technologies Division
Computer Information Systems

Master Course Syllabus

Course Title Database Concepts
Credits 3
Class Hours 4 (2 Lecture – 2 Lab)

An introduction to the concepts and syntax of relational database management systems (DBMS). Topics include data modeling, database design concepts including normalization, and their application through the creation of; tables, queries using both QBE and SQL, forms and reports using the tools provided in a relational DBMS.

Pre-requisite: None

Instructor Information:
Name:
Email:
Office Phone:
Office Location:
Office Hours:

Textbook and Other Materials:
Raymond Frost, John Day, Craig Van Slyke, Pearson Publishing
Reference Materials: Microsoft Access 2013 Help
Lab Software: Microsoft Access 2013

Course Outcomes:
Upon successful completion of this course, students should be able to:

• Perform research and analyze requirements for a database application using database design tools and principles.
• Translate client/user requirements into a data model.
• Develop physical database characteristics and define user interface to implement data model using Access 2010.
  o Correct data types are identified for attributes
  o Table and file names follow naming conventions
  o Tables are normalized through third normal form
  o Entities are uniformly and logically linked throughout the database structure
  o User interface meets client/user requirements (forms)
  o Reports provide useful information required by client/user
Database characteristics and user interface are well documented

**Course Competencies:**
The following are detailed course competencies intended to support the course outcomes

- Write basic SQL commands to create and maintain databases and program single/multi table queries.
- Create Access 2013 forms as an on-screen presentation of selected data and menus in an application.
- Create Access 2013 reports to format the information needs of an application.
- Write Access 2013 Macros to automate tasks within an application.

**Course Assessments:**
The following performance assessments will be used to demonstrate students’ understanding, knowledge and skills:

- Students will complete a series of tests to demonstrate their individual competency in the application of database design concepts.
- Students will design/model a database application using a Case study.
- Students will implement their design using Access.
- Students’ ability to understand how to evaluate user requirements, incorporate business rules into the design and effectively apply design using the software will be measured through a series of assigned exercises completed both individually and in teams within required specifications. Criteria for evaluation of performance will include accurate and efficient application of technical skills and knowledge as well as appropriate behaviors and attitudes. For example, students will be observed to determine the degree to which they ask relevant questions, remain open to ideas, think critically, adapt what they know to new information, approach work with inventiveness and enthusiasm, use precise language when communicating, set and meet deadlines, and so on. Participation points will result from these observations.

**Grading Policy**
- All exercises will have an assigned deadline
- To receive full credit, all exercises must:
  - Be correct and meet the required specifications when turned in for credit.
  - Include appropriate documentation (comments)
- Assignments should be emailed to the instructor as a Word document or a zipped .accdb depending on the assignment.
- Students are expected to do their own work on assigned individual exercises
- Extra points may be earned on some exercises for successfully completing additional specifications
- Points for exercises done as a member of a team will be determined by the teams members themselves
- Tests will be comprised of short answer/true false questions/multiple choice questions and hands-on sections where the student will have to manipulate a test database.
Grading Scale:
Grades will be determined as follows (Average = Total points earned / Total points):

<table>
<thead>
<tr>
<th>Tests</th>
<th>Points</th>
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<tbody>
<tr>
<td>Module Tests (8 @ 100)</td>
<td>600</td>
</tr>
<tr>
<td>Final</td>
<td>100</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Exercises Points</th>
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</thead>
<tbody>
<tr>
<td>Chapter Exercises (8 @ 20 Points Each)</td>
<td>160</td>
</tr>
<tr>
<td>Case Study</td>
<td>100</td>
</tr>
<tr>
<td>Participation Grade</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total points</strong></td>
<td><strong>1220</strong></td>
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<table>
<thead>
<tr>
<th>Grade</th>
<th>Average</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>89.5 - 100</td>
<td>1092 - 1220</td>
</tr>
<tr>
<td>B</td>
<td>79.5 - 89</td>
<td>970 - 1091</td>
</tr>
<tr>
<td>C</td>
<td>69.5 - 79</td>
<td>848 - 969</td>
</tr>
<tr>
<td>D</td>
<td>59.5 - 69</td>
<td>726 - 847</td>
</tr>
<tr>
<td>F</td>
<td>&lt;= 59</td>
<td>&lt;= 720</td>
</tr>
</tbody>
</table>

Topics to Be Covered:

- The Relational Model
- Structured Query Language
- Data Modeling and the Entity-Relationship Model
- Database Design
- Database Administration
- Database Processing Applications
- Database Processing for Business Intelligence Systems

Attendance Policy
A student is expected to attend all scheduled classes and laboratories. Each instructor will formulate an attendance policy and provide it on the course syllabus. Absences are counted from the first scheduled meeting of the class, and it is the responsibility of each student to know the attendance policy of each instructor in whose class he/she is enrolled. If a student is absent from a class, he/she should give an advanced explanation to the instructor. Absences in a course may affect a student’s final grade. The student is responsible for all assigned work in the course regardless of excused or unexcused absences. Tardiness may also affect a student’s final grade.
Failure to attend class will result in a final course grade of “FA” or “FN” (see explanation below) depending on the individual instructor’s course policy.

FA = failure, attendance-related (unofficial withdrawal) Last recorded date of attendance required.
FN = failure, never attended class (unofficial withdrawal)

**Student Communication Channels**

It is the student’s responsibility to check D2L and MyNSCC email on a regular basis. These are the official communication channels between the college and students. Students are responsible for the information communicated through those channels. D2L contains specific course information and MyNSCC contains information important for other purposes.

**Early Warning System**

Nashville State Community College has implemented an Early Warning System to notify students via e-mail about academic problems such as poor classroom attendance, poor performance on assignments/tests, poor communication skills, late/missing assignments, and/or lack of classroom participation. Please note that Early Warning Alerts do not affect a student’s academic standing.

**ADA Compliance Statement**

Nashville State complies with the Americans with Disabilities Act. If you wish to request any special accommodations for any courses in which you are enrolled, contact the Student Disabilities Office at 353.3721.

**Classroom Misconduct**

Nashville State Community College has a zero tolerance policy for disruptive conduct in the classroom. Students whose behavior disrupts the classroom will be subject to disciplinary sanctions. Please consult your Student Handbook for more specific details.

The instructor has primary responsibility for control over classroom behavior and maintenance of academic integrity. He/she can order temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or in conduct which violates the general rules and regulations of the College.

Disruptive behavior in the classroom may be defined as, but is not limited to, behavior that obstructs or disrupts the learning environment (e.g., offensive language, harassment of students and professors, repeated outbursts from a student which disrupt the flow of instruction or prevent concentration on the subject taught, failure to cooperate in maintaining classroom decorum, etc.), the continued use of any electronic or other noise or light emitting device which disturbs others (e.g., disturbing noises from beepers, cell phones, palm pilots, lap-top computers, games, etc.).

Please be aware that children are not allowed in class or unattended on campus.

**Academic Dishonesty (Honor Code)**

Any form of academic dishonesty, cheating, plagiarizing, or other academic misconduct is prohibited. “Plagiarism may result from: (1) failing to cite quotations and borrowed ideas, (2) failing to enclose borrowed language in quotation marks, and (3) failing to put summaries and paraphrases in your own words (A Writer’s Reference 331). Academic dishonesty may be defined as, but is not limited to, intentionally trying to deceive by claiming credit for the work of
another person, using information from a web page or source without citing the reference, fraudulently using someone else’s work on an exam, paper, or assignment, recycling your own work from another course, purchasing papers or materials from another source and presenting them as your own, attempting to obtain exams/materials/assignments in advance of the date of administration by the instructor, impersonating someone else in a testing situation, providing confidential test information to someone else, submitting the same assignment in two different classes without requesting both instructor’s permission, allowing someone else to copy or use your work, using someone else’s work to complete your own, altering documents, transcripts or grades, and forging a faculty/staff member’s signature.

In addition to other possible disciplinary sanctions that may be imposed through regular college procedures as a result of academic dishonesty the instructor has the authority to assign an “F” or a “Zero” for the exercise, paper, or examination or to assign an “F” for the course. Students may appeal through the appropriate college grade appeal procedures.

Inclement Weather Policy

In the event of an inclement weather event, check the Nashville State web site home page at www.nscc.edu for announcements on campus closures. Campus closures will also be announced on local television stations (channels 2, 4, 5, and 17).

When classes are cancelled, an online assignment will be posted in NS Online. Check your NS Online email for a message from your instructor regarding your online assignment requirements. Even though classes may be cancelled, some areas, i.e. Testing Center, may be open. However, you should check before commuting to campus.

The Vice President for Academic Affairs and the Director of Security are responsible for cancellation decisions during an inclement weather event for the Nashville State main campus and the Southeast campus. Cookeville, Waverly, and Dickson Campus Directors will make class cancellation decisions based on conditions in their respective areas. Decisions about class cancellations are based on actual conditions, not forecasts. The perspective used for making decisions is that of the college as an employer, not as a K-12 institution. Students should use their own best judgment in determining whether to report to campus during inclement weather when classes are not cancelled.

NOTE: This syllabus is meant simply as a guide and overview of the course. Some items are subject to change or may be revised at the instructor’s discretion. Each instructor will further clarify their criteria for grading, classroom procedures, attendance, exams and dates, etc. on his/her course syllabus.