

KENT STATE UNIVERSITY
School of Library and Information Science Workshop

**Database Design and Applications II:
Issues, Principles, and Intermediate Skills with Microsoft Access**

SYLLABUS

Instructor:

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Credit: One

Maximum attendants: 14 at Columbus; 20 at Kent

Intended Audience:

MLS/MLIS students, librarians, information specialists, and anyone interested in understanding the key issues and principles of database design and mastering the intermediate skills of using Microsoft Access to build a database system. Attendants should have attended the workshop Database Design and Applications I, or have the equivalent knowledge.

Goals and Objectives:

- To help attendants understand the key issues and principles of database design.
- To provide a working knowledge of the intermediate skills of using Microsoft Access to build a database with 1) more advanced queries and custom forms; 2) customizing reports and integrating Access with other programs; and 3) using the World Wide Web and hyperlink fields.

Benefits:

Attendants will gain a good understanding of the principles of designing a sound database system and obtain the intermediate skills to build a database system in practice. Successful attendants will be able to use Microsoft Access to build an enhanced database system integrated with other applications, such as Microsoft Word, Microsoft Excel, and Web browsers, to support advanced queries, forms, and reports.

Instructional materials and textbooks:

- Required Textbook:
Adamski, J.J. & Finnegan, K.T. (2002). New perspectives on Microsoft Access 2002—
Comprehensive. Cambridge, MA: Course Technology. (ISBN: 0-619-02089-X)
- Additional detailed handouts will be provided during the workshop.
- Student disks: Each student needs a USB quick/flash drive for assignments and project.
- The files for Access hands-on exercises and assignments are available from:
<http://www.slis.kent.edu/~yinzhang/workshops/>

Explanation of study/lab hours required outside of regular class time:

Class time will be 15 hours.

OUTSIDE ASSIGNMENTS WILL TOTAL APPROXIMATELY 23 HOURS OF WORK:

1. Pre-workshop reading and preparation: 8 hours.
2. One take-home final project that applies the knowledge and skills learned from the workshop to build a real database with Microsoft Access: 15 hours

(15 + 23 = 38 hours for 1 credit)

Method of evaluating participants:

Attendants for graduate credit should finish all assignments and one final project.
Attendants for Undergraduate/Post Undergraduate credit should finish all assignments.
Attendants should achieve at least 70% correct answers to be awarded a Satisfactory grade.

You may not have enough time to finish the assignments during this workshop, but it should be very clear to you how to do these assignments after the workshop. All assignments and final project are due on the date specified in your assignments handout.

Students with Disabilities:

In accordance with University policy, if a student has a documented disability and requires accommodations to obtain equal access for a course or workshop, he or she is responsible for notifying the instructor at the beginning of the course or workshop in which an accommodation is required. Please note that it is necessary for the student to first verify his/her eligibility for requested accommodations through the Office of Student Accessibility Services (SAS) located on the ground floor of the DeWeese Health Center at the Kent Campus (330-672-3391). To do this, he or she must schedule an appointment with an SAS staff member and provide the SAS office with appropriate documentation of his or her disability. Upon verification, the SAS staff member will present the student with "accommodation letters" to give to his or her instructors.

Technological Competencies

Students must be familiar with basic computer operations (e.g., copying and printing files, moving among directories and subdirectories), logging on to a network, using a modem and/or an Internet Service Provider, and using a word processor.

Attendance Policy:

Students who are not officially enrolled are not eligible for course credit. Students may not enroll after official deadlines for the workshop unless there is proof of University error.

Students **MUST** attend the entire two days of a workshop in order to receive credit. If your schedule does not allow you to attend the full-day workshop on both days, then please do not register for the workshop. If you miss "just the morning" or "just the afternoon" of a workshop, you will receive a grade of NF (Never Attended--F).

Policy on Incomplete Grades

A complete statement on INCOMPLETE grades is available upon request. In summary, it states that the student must be earning a "C" (2.0) grade or better and be unable to complete the work before the end of classes due to extenuating circumstances. The student must initiate the request, provide appropriate documentation, and make arrangements to make up the incomplete work. For undergraduate students, Incompletes must be made up by the end of the following semester, and for graduate students, Incompletes must be made up within one calendar year, or an extension granted, otherwise a default grade of "U" will be assigned.

Cheating and Plagiarism

Both cheating and plagiarism are prohibited. See the University Policy Register for additional details on cheating or plagiarism: <http://www.kent.edu/policyreg/archive.asp?ChapterID=4> – see section 3342-3-07.

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WORKSHOP OUTLINE

Pre-workshop readings and preparation (8 hours):

- Read “Appendix: Relational Databases and Database Design” in Textbook
- Review “Microsoft Access 2002—Level 1 Tutorials” in Textbook
- Read level II tutorials: Tutorial 5 to Tutorial 7
- Obtain a USB quick/flash drive for assignments and project

Day 1:

- Database design issues and principles
 - Redundancy
 - Normalization
 - Functional dependencies
 - Normal forms
 - First normal form
 - Second normal form
 - Third normal form

Assignment 1: Normalization of Database Tables
- Access Tutorial 5: Enhancing a Table’s Design, and Creating Advanced Queries and Custom Forms

Assignment 2: Review Assignments

Day 2:

- Access Tutorial 6: Creating Custom Reports

Assignment 3: Review Assignments
- Access Tutorial 7: Integrating Access with the Web and with Other Programs

Assignment 4: Review Assignments
- Review of the workshop and discussion of post-workshop project