

# ILLINOIS VALLEY COMMUNITY COLLEGE



## COURSE OUTLINE

**DIVISION: Workforce Development**

**COURSE: CSD 1210 - Comprehensive Microsoft Access**

Date: Spring 2005

Credit Hours: 3

Prerequisite(s):

Delivery Method:  **Lecture**                      **2 Contact Hours** (1 contact = 1 credit hour)  
 **Seminar**                              **0 Contact Hours** (1 contact = 1 credit hour)  
 **Lab**                                              **2 Contact Hours** (2 contact = 1 credit hour)  
 **Clinical**                                      **0 Contact Hours** (3 contact = 1 credit hour)  
 **Online**  
 **Blended**

Offered:  **Fall**     **Spring**     **Summer**

IAI Equivalent –**Only for Transfer Courses**-go to <http://www.itransfer.org>:

### CATALOG DESCRIPTION:

In this comprehensive course in Access students will learn basic concepts and continue through advanced database topics. They will use Access to create and maintain databases. Queries, SQL, and database relationships will be covered. Students will also create mailing labels, input masks, validation rules, and work with forms.

## GENERAL EDUCATION GOALS ADDRESSED

*[See the last page of this form for more information.]*

### Upon completion of the course, the student will be able:

[Choose those goals that apply to this course.]

- To apply analytical and problem solving skills to personal, social and professional issues and situations.
- To communicate orally and in writing, socially and interpersonally.
- To develop an awareness of the contributions made to civilization by the diverse cultures of the world.
- To understand and use contemporary technology effectively and to understand its impact on the individual and society.
- To work and study effectively both individually and in collaboration with others.
- To understand what it means to act ethically and responsibly as an individual in one's career and as a member of society.
- To develop and maintain a healthy lifestyle physically, mentally, and spiritually.
- To appreciate the ongoing values of learning, self-improvement, and career planning.

### EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:

**Outcome 1** – Upon successful completion of the course, the student will understand basic database principles.

Competency 1.1 – Students will understand basic database terminology.

Competency 1.2 – Students will understand what database management is.

Competency 1.3 – Students know understand relational databases are.

**Outcome 2** – Upon successful completion of the course, the student will be able to create and use tables.

Competency 2.1 – Students will be able to create, open, and close tables.

Competency 2.2 – Students will be able to define, add, and change fields.

Competency 2.3 – Students will be able to add, edit, and delete records.

Competency 2.4 – Students will be able to locate, order, and filter records.

Competency 2.5 – Students will be able to restructure a table.

Competency 2.6 – Students will be able to specify default values and formats.

Competency 2.7 – Students will be able to use validation rules.

Competency 2.8 – Students will be able to create single and multiple field indexes.

Competency 2.9 – Students will be able to use date, memo, OLE, and hyperlink fields.

Competency 2.10 – Students will be able to change row/column spacing.

**Outcome 3** – Upon successful completion of the course, the student will be able to to create and use queries..

Competency 3.1 – Students will be able to create, run, print, close, and clear queries.

Competency 3.2 – Students will be able to use text, wildcards, numeric data, and comparison operator (and/or).

Competency 3.3 – Students will be able to sort query results.

Competency 3.4 – Students will be able to create parameter queries.

Competency 3.5 – Students will be able to join properties and tables in a query and restrict records in a join.

Competency 3.6 – Students will be able to filter a query record set.

Competency 3.7 – Students will be able to calculate statistics and use graphing with statistics.

Competency 3.8 – Students will be able to create a SQL query.

**Outcome 4** – Upon successful completion of the course, the student will be able to use forms and reports.

Competency 4.1 – Students will be able to create a report and print it.

Competency 4.2 – Students will be able to create use grouping and subtotals in reports.

Competency 4.3 – Students will be able to change headings on a report.

Competency 4.4 – Students will be able to use the form window and move fields on a form

Competency 4.5 – Students will be able to place a calculated field, a title, and change colors on a form.

Competency 4.6 – Students will be able to view data using a form

Competency 4.7 – Students will be able to create and use a form with a subform.

Competency 4.8 – Students will be able to add a single field control to a form.

Competency 4.9 – Students will be able to create mailing labels.

Competency 4.10 – Students will be able to add page numbers and a date.

Competency 4.11 – Students will be able to add, modify and move a sub report.

**Outcome 5** – Upon successful completion of the course, the student will be able to administer a database.

Competency 5.1 – Students will be able to compact a database.

Competency 5.2 – Students will be able to convert a database to an earlier version.

Competency 5.3 – Students will be able to use table analyzer, performance analyzer and documenter.

Competency 5.4 – Students will be able to set startup options.

Competency 5.5 – Students will be able to encrypt a database.

Competency 5.6 – Students will be able to specify referential integrity options.

Competency 5.7 – Students will be able to open a database in exclusive mode.

Competency 5.8 – Students will be able to create a replica.

**Outcome 6** – Upon successful completion of the course, the student will be able to customize forms using Visual Basic for Applications (VBA), charts, and pivot table objects.

Competency 6.1 – Students will be able to add a command button to a form, and modify the VBA code associated with that button.

Competency 6.2 – Students will be able to add a combo box and modify its properties.

Competency 6.3 – Students will be able to add a chart to a form.

Competency 6.4 – Students will be able to create a pivot table form.

**Outcome 7** – Upon successful completion of the course, the student will be able to create and use macros.

Competency 7.1 – Students will be able to create and run a macro

Competency 7.2 – Students will be able to add actions and comments to a macro.

Competency 7.3 – Students will be able to copy a macro.

## **COURSE TOPICS AND CONTENT REQUIREMENTS:**

Introduction and requirements  
Maintaining a database  
Querying a database  
Creating forms and reports  
Creating more advanced queries and custom forms  
Customizing reports and integrating access with other programs  
Automating Tasks with Macros  
Using and Writing Visual Basic for Applications code

## **INSTRUCTIONAL METHODS:**

- Lecture
- Lab – hands-on training
- Testing
- Programming assignments
- Teacher demonstration
- Group work

## **INSTRUCTIONAL MATERIALS:**

Computer Lab  
**Microsoft Access 2000**, Joseph J. Adamski, Kathleen T. Finnegan, Charles Hommel –  
Course Technology  
Computer Projection System  
Floppy Disks  
Microsoft Office 2003 Professional

## **STUDENT REQUIREMENTS AND METHODS OF EVALUATION:**

Lab Assignments

Hands-on tests

Objective tests

Develop an understanding and/or a comprehensive knowledge of the items listed as course content.

1. **Read** required material on the topic
2. **Attend** class on current topic
3. **Complete** all tests and homework
4. **Ask** questions about any misunderstood area either in class, during office hours, or of the tutor
5. **Join** in discussions

### **Grading Scale**

A	90-100%
B	80-89%
C	70-79%
D	60-69%

## OTHER REFERENCES

# Course Competency/Assessment Methods Matrix

CSD 1210 – Microsoft Access		Assessment Options																																		
For each competency/outcome place an "X" below the method of assessment to be used.	Assessment of Student Learning	Article Review	Case Studies	Group Projects	Lab Work	Oral Presentations	Pre-Post Tests	Quizzes	Written Exams	Artifact Self Reflection of Growth	Capstone Projects	Comprehensive Written Exit Exam	Course Embedded Questions	Multi-Media Projects	Observation	Writing Samples	Portfolio Evaluation	Real World Projects	Reflective Journals	Applied Application (skills) Test	Oral Exit Interviews	Accreditation Reviews/Reports	Advisory Council Feedback	Employer Surveys	Graduate Surveys	Internship/Practicum /Site Supervisor Evaluation	Licensing Exam	In Class Feedback	Simulation	Interview	Written Report	Assignment				
	Assessment Measures – Are direct or indirect as indicated. List competencies/outcomes below.	Direct/ Indirect	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	I	I	I	I	D	D										