ILLINOIS VALLEY COMMUNITY COLLEGE

COURSE OUTLINE

DIVISION: Workforce Development

COURSE: CSD-1210 Comprehensive Access

Effective Date: Fall 2025   **Submitted Date: August 2024**

Credit Hours: 3   **IAI Number (if applicable): N/A**

Complete all that apply or mark "None" where appropriate:

Prerequisite(s): None.

Enrollment by assessment or other measure? ☐ Yes   ☒ No

If yes, please describe:

Corequisite(s): None.

Pre- or Corequisite(s): None.

Consent of Instructor: ☐ Yes ☒ No

Delivery Method: ☒ **Lecture**   **2 Contact Hours** (1 contact = 1 credit hour)
                             ☐ **Seminar**   **0 Contact Hours** (1 contact = 1 credit hour)
                             ☒ **Lab**   **2 Contact Hours** (2-3 contact = 1 credit hour)
                             ☐ **Clinical**   **0 Contact Hours** (3 contact = 1 credit hour)
                             ☐ **Practicum**   **0 Contact Hours** (2-4 contact = 1 credit hour)
                             ☐ **Internship**   **0 Contact Hours** (5-10 contact = 1 credit hour)

Offered: ☒ **Fall**   ☐ **Spring**   ☐ **Summer**

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 and reports.

ACCREDITATION STATEMENTS AND COURSE NOTES:
None

COURSE TOPICS AND CONTENT REQUIREMENTS:
I.   Introduction and requirements
II. Maintaining a database
III. Querying a database
IV. Creating forms and reports
V.   Creating more advanced queries and custom forms
VI. Customizing reports and integrating access with other programs
VII. Automating Tasks with Macros

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

EVALUATION OF STUDENT ACHIEVEMENT:
1. Lab Assignments
2. Simulation Testing
3. Database Construction and Maintenance

INSTRUCTIONAL MATERIALS:
Textbooks
Microsoft Access 365: In Practice 2021 Edition/Annette Easton, Randy Nordell
ISBN 978-1-226-7741-0
McGraw Hill (2023)
Resources
Computer Lab
Microsoft Access 365/2021 Downloadable from Microsoft with IVCC account
Course Technology
Computer Projection System

LEARNING OUTCOMES AND GOALS:
Institutional Learning Outcomes
☐ 1) Communication – to communicate effectively.
☒ 2) Inquiry – to apply critical, logical, creative, aesthetic, or quantitative analytical reasoning to formulate a judgement or conclusion.
☐ 3) Social Consciousness – to understand what it means to be a socially conscious person, locally and globally.
☐ 4) Responsibility – to recognize how personal choices affect self and society.

Course Outcomes and Competencies

1. **Upon successful completion of the course, the student will understand basic database principles.**
   1.1. Students will understand basic database terminology.
   1.2. Students will understand what database management is.
   1.3. Students know understand relational databases are.

2. **Upon successful completion of the course, the student will be able to create and use tables.**
   2.1. Students will be able to create, open, and close tables.
   2.2. Students will be able to define, add, and change fields.
   2.3. Students will be able to add, edit, and delete records.
   2.4. Students will be able to locate, order, and filter records.
   2.5. Students will be able to restructure a table.
   2.6. Students will be able to specify default values and formats.
   2.7. Students will be able to use validation rules.
   2.8. Students will be able to create single and multiple field indexes.
   2.9. Students will be able to use date, memo, OLE, and hyperlink fields.
   2.10. Students will be able to change row/column spacing.

3. **Upon successful completion of the course, the student will be able to create and use queries.**
   3.1. Students will be able to create, run, print, close, and clear queries.
   3.2. Students will be able to use text, wildcards, numeric data, and comparison operator (and/or).
   3.3. Students will be able to sort query results.
   3.4. Students will be able to create parameter queries.

3.5. Students will be able to join properties and tables in a query and restrict records in a join.
3.6. Students will be able to filter a query record set.
3.7. Students will be able to calculate statistics and use graphing with statistics.
3.8. Students will be able to create a SQL query.

4. **Upon successful completion of the course, the student will be able to use forms and reports.**
   4.1. Students will be able to create a report and print it.
   4.2. Students will be able to create use grouping and subtotals in reports.
   4.3. Students will be able to change headings on a report.
   4.4. Students will be able to use the form window and move fields on a form
   4.5. Students will be able to place a calculated field, a title, and change colors on a form.
   4.6. Students will be able to view data using a form
   4.7. Students will be able to create and use a form with a sub-form.
   4.8. Students will be able to add a single field control to a form.
   4.9. Students will be able to create mailing labels.
   4.10. Students will be able to add page numbers and a date.
   4.11. Students will be able to add, modify and move a sub report.

5. **Upon successful completion of the course, the student will be able to administer a database.**
   5.1. Students will be able to compact a database.
   5.2. Students will be able to convert a database to an earlier version.
   5.3. Students will be able to use table analyzer, performance analyzer and documenter.
   5.4. Students will be able to set startup options.
   5.5. Students will be able to encrypt a database.
   5.6. Students will be able to specify referential integrity options.
   5.7. Students will be able to open a database in exclusive mode.
   5.8. Students will be able to create a replica.

6. **Upon successful completion of the course, the student will be able to customize forms, charts, and pivot table objects.**
   6.1. Students will be able to add a command button to a form.
   6.2. Students will be able to add a combo box and modify it properties.

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

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

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

7.1.   Students will be able to create and run a macro

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

7.3.   Students will be able to copy a macro.

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