



# ILLINOIS VALLEY COMMUNITY COLLEGE

## COURSE OUTLINE

**DIVISION: Natural Sciences and Business**

**COURSE: AGR 1004 Microcomputer Applications in Agriculture**

Date: Spring 2023

Credit Hours: 3

*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)

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

**CATALOG DESCRIPTION and IAI NUMBER (if applicable):**

Introduction to computer hardware, file manipulation, printers and the use of word processing, electronic presentations and communications, graphics, spreadsheet, database management and web development software. Also includes solution of agriculture data-related problems and use of prepared software and templates. **IAI Equivalent: AG 913**

## **ACCREDITATION STATEMENTS AND COURSE NOTES:**

None

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

1. Introduction
2. Information Technology Essentials
  - a. Exploring Windows
  - b. Maintaining Files and Customizing Windows
  - c. Internet Searching
  - d. Browsing the Internet Using Web Browser
3. Microsoft Word
  - a. Creating and editing a document
  - b. Formatting characters and paragraphs
  - c. Formatting and enhancing a document
4. Microsoft Excel
  - a. Analyzing data using Excel
  - b. Editing and formatting worksheet
  - c. Using functions, setting print options, and adding visual elements
5. Microsoft Access
  - a. Maintaining data in access tables
  - b. Creating tables and relationships
  - c. Creating queries, forms, and reports
6. Microsoft PowerPoint
  - a. Preparing a presentation
  - b. Editing and enhancing slides
7. Integrating Programs
  - a. Word, Excel, Access, and PowerPoint
8. Using Farm Management Software
9. Using Technology in Agriculture
  - a. Applying Precision Agriculture Software
  - b. Crop Production
  - c. Livestock Production
  - d. Water Management
10. Web page design
11. Using Apps in Agriculture

## **INSTRUCTIONAL METHODS:**

- Lecture
- Laboratory
- Learning Module Activities/Projects

## **EVALUATION OF STUDENT ACHIEVEMENT:**

A= 90-100

B= 80-89

C= 70-79

D= 60-69

F= 0-59

Assignments/Projects: 40%

Exams: 60%

## **INSTRUCTIONAL MATERIALS:**

### **Textbooks**

Freund, Steven M. et al. Shelly Cashman Series Microsoft Office 365 & Office 2016: Advanced. Cengage. 2016. ISBN: 978-1-3370-1569-1

Rutkosky, N., D. Seguin, A. Roggenkamp, and I. Rutkosky. 2014. Marquee Series: Microsoft Office 2013. EMC Paradigm Publishing. ISBN: 978-0-76385-266-5

Vermaat, M.E., J.T. Campbell, S.M. Freund, M. Frydenberg, and M.Z. Last. 2016. Discovering Computers and Microsoft Office 2016: A Fundamental Combined Approach. Course Technology. ISBN-13: 9781305871809

### **Resources**

None

## **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. Effectively operate a computer keyboard, mouse, and other input peripheral devices.
2. Effectively use an operating system to manage files.
3. Effectively use word processing software.
4. Effectively use spreadsheet software.
5. Effectively use database management software.
6. Effectively use graphics and presentations software.
7. Effectively use computer-related applications such as electronic communications, the World Wide Web, web development, e-mail, web search engines, keyword selection and evaluation of results.