

Virginia Western Community College
AST 232
Microcomputer Office Applications

Prerequisites

AST 101 or successful completion of VWCC's AST 101 Credit by Exam.

Course Description

Teaches production of business documents using word processing, databases, and spreadsheets. Emphasizes document production to meet business and industry standards.

PREREQUISITE: AST 101 (Keyboarding I) with a "C" or better, or successful completion of VWCC's AST 101 Credit by Exam.

ADDITIONAL COURSE DESCRIPTION NOTES

Students must be proficient in using Windows 10 or 11. It will be necessary for you to work on the computer from 6 to 10 hours a week.

Semester Credits: 3

Lecture Hours: 3

Lab/Clinical/Internship Hours: 0

COURSE MATERIALS

REQUIRED COURSE MATERIALS (included with the cost of registration – continue to read please). Online Book and eResources - Nordell, *Microsoft Access and Excel 365 Complete: In Practice*, 2021 Edition, delivered via SimNet.

The required materials were purchased and included at the time of registration for this AST 232 Class. Students will use and access the SIMnet learning platform and eResources in Canvas; this will include the Online Book and all eResources. Students will also use the Gmetrix platform to access the Generative AI curriculum and to practice for both the MOS and Gen AI certification exams. These resources will be available to students in Canvas on Day 1 and/or as needed in the course.

PRINTED BOOKS (OPTIONAL)

If you would like a physical copy of the eTextbook, you may purchase a loose-leaf copy at VWCC's Bookstore. This does NOT replace the SimNet component required for this course.

REQUIRED SOFTWARE FOR THIS COURSE:

Microsoft Office 2021, or Microsoft Office 365

Word 2021/365 ** Students receive MS Office 365 Pro Plus for free. Visit this site to install/access Office 365 for free on your personal computer: <https://virginiawestern.edu/iet-services/student-tutorials-training/microsoft-office-365-proplus-for-students/>

REQUIRED HARDWARE FOR THIS COURSE:

Access to a Windows-based computer is required.

Access to cloud storage or a USB/Flash Drive is suggested.

Note: Access to the Internet and a Windows-based computer is required. Chromebooks and Apple MacBooks are not compatible with the software required in these courses. AST/ITE courses are required in all Business and Professional Services programs and ITE 152 is a required course in almost all Virginia Western transfer programs.

Course Outcomes

At the completion of this course, the student should be able to:

- Reinforce Windows and Microsoft Word skills learned in other classes
- Create spreadsheets and graphs using Excel 365
- Integrate files and documents in Excel
- Introduction to Generative AI and CoPilot
- Understand what Generative AI is, how to use it, and available products.
- Compose Generative AI prompts using a variety of prompt engineering best practices to enhance the likelihood of appropriate and useful output.
- Assess ethical and responsible use of Generative AI by understanding ethical considerations, verifying information, editing content, and citing information.
- Introduction to databases using Microsoft Office Access
- Produce professional quality “mailto” documents that meet current office standards
- Use correct English skills in email, homework, projects, and tests
- Use Canvas to access course information
- Prepare for and attempt the Microsoft Office Specialist (MOS) Excel 365 and Generative AI Foundations Exams

Additional Information

[ADA Statement \(PDF\)](#)

[Title IX Statement \(PDF\)](#)

AST 232 MICROCOMPUTER OFFICE APPLICATIONS

AST 232 <u>TENTATIVE</u> CALENDAR		
Any revisions to the calendar will be posted in Canvas.		
WEEK	CHAPTER	TOPICS COVERED
1	Getting Ready for AST 232 Windows Review	Syllabus, Orientation, Getting Started, Register SimNet, Introduction Discussion Board, Create GMetrix, LearnKey and Certiport Accounts, Identity Check
	Excel Chapter 1	Excel: Creating and Editing Workbooks (SIMnet)
2	Excel Chapter 2	Excel: Working with Formulas and Functions (SIMnet) Word Refresher Project
	GMetrix CCS AI Domain 1	Gen AI: Generative AI Methods and Methodologies (GMetrix/Learnkey)
3	Excel Chapter 3	Excel: Creating and Editing Charts (SIMnet) Access: Creating a Database and Tables (SIMnet)
	GMetrix CCS AI Domain 2	Gen AI: Basic Prompt Engineering (GMetrix/Learnkey)
4	Excel Chapter 4	Excel: Getting and Managing Data (SIMnet) Word Refresher Project
	GMetrix CCS AI Domain 3	Gen AI: Prompt Refinement (GMetrix/Learnkey)
5	Gmetrix – Excel	Excel GMetrix (3 Skill Review Assignments)
	GMetrix CCS AI Domain 4	Gen AI: Ethics, Law, and Societal Impact (Gmetrix/Learnkey)
6	Gmetrix – Excel	Excel GMetrix (3 Practice Exams)
	GMetrix Gen AI Practice Exams	Gen AI: Practice Exams (2 Practice Exams) Discussion Board Topic
7	Excel MOS Certification Exam	MOS Exam – Dates and Times TBD
	CCS Generative AI Foundations Certification Exam	Gen AI Exam – Dates and Times TBD