Virginia Western Community College
ITE 152
Introduction to Digital Literacy and Computer Applications

Prerequisites
None

Course Description
Develops understanding of digital literacy. Introduces basic computer concepts in hardware, software, cyber, cloud, database, and operating systems. Includes hands-on experience developing word processing, spreadsheet, and presentation documents. Evaluates the reliability of sources. Covers creating a simple web page. Examines topics such as social, legal, and ethical issues. This is a UCGS transfer course.

Semester Credits: 3 Lecture Hours: 3 Lab/Clinical/Internship Hours: 0

Course Materials

REQUIRED COURSE MATERIALS

The required materials were purchased at the time of registration for this ITE 152 Class.
Students will use and access the MindTap learning platform and eResources in Canvas; **this will include the Online Book and all eResources.**

Online Book and eResources - *Cengage MindTap for Cable/Freund/Hoisington/Kaye/Porter/Sebok/Vermaat/West's The Shelly Cashman Series® Collection, Microsoft® 365® & Office®, 1 term Instant Access*.

IAC MindTap ISBN: 9780357676660
PRICE: Purchased at the time of registration

PRINTED BOOKS (OPTIONAL):
For students preferring a printed book, you will be able to purchase loose-leaf books at the VWCC Follett bookstore on campus. There are **two** loose-leaf books:

Title: The Shelly Cashman Series® Microsoft® 365® & Office® 2021 Introductory © 2023
VWCC IA Loose-Leaf ISBN: 9780357958490

Title: Loose Leaf of Technology for Success: Computer Concept, 1st Edition © 2020
VWCC IA Loose-Leaf ISBN: 9780357680575

REQUIRED SOFTWARE FOR THIS COURSE:

Microsoft Office 2021, or Microsoft Office 365
Word 2021/365, Excel 2021/365, PowerPoint 2021/365
** Students receive MS Office 365 Pro Plus for free. Visit this site to download Office 365 for free:
https://virginiawestern.edu/iet-services/student-tutorials-training/microsoft-office-365-proplus-for-students/

REQUIRED HARDWARE FOR THIS COURSE:

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.

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

Course Outcomes

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

- **Civic Engagement**
  - Communicate information legally and ethically using a variety of channels directed at a range of audiences
- **Critical Thinking**
  - Demonstrate the ability to determine the nature and extent of the information needed.
  - Demonstrate the ability to identify and evaluate information for credibility, currency, reliability, validity, accuracy, usefulness, relevance, and biases. (For example: CRAAP model)
  - Demonstrate the ability to distinguish between assumption and fact.
  - Demonstrate the ability to incorporate information literacy skills into one's own knowledge base and work.
- **Written Communication**
  - Demonstrate the ability to collaborate with other students to manage information using information technology
  - Demonstrate competency in creating and delivering a presentation, as well as linking and embedding data in a presentation.
- **Quantitative Literacy**
  - Demonstrate the use of logical formulas to reach a better understanding of the importance of becoming a logical thinker in the world of computers or the 21st century.
- **Professional Readiness**
  - Recognize the importance of an Internet presence
  - Demonstrate the use of productivity using application software
  - Explain the importance of Cyber and Information Security
  - Identify the role the computer plays across professional areas of expertise
- **Scientific Literacy**
  - Demonstrate the use of scientific or mathematical formulas to have a better understanding how a computer can assist with computations.

- **Current Software Applications**
  - Demonstrate the use of formatting for research papers using a writing style guide. (For example: APA or MLA)
  - Demonstrate the creation of various documents using word processing formatting and editing tools
  - Develop worksheets and charts incorporating formulas, functions, and formatting
  - Apply spreadsheet design principles to worksheets, tables and utilize data analysis
  - Demonstrate the use of conditional, logical, and cell referencing using spreadsheet software
  - Create and modify presentations enhancing the presentation with pictures, shapes, media and animation
  - Identify and describe database key principles: primary key, tables, fields, records, row, creating, modifying and maintaining
- **Operating Systems**
  - Recognize the different versions and capabilities of multiple operating systems
  - Demonstrate the use of an operating system, i.e. create folders, create nested folders, save files and organize files
- **Basic Computer Concepts**
  - Explain the importance of the history of computers
  - Define and identify computer hardware and software
  - Recognize the specifications for purchasing PC hardware and software
  - Describe the benefits of protecting systems while online or working remotely
  - Describe computing systems and how they are used to support and promote organizational goals
  - Recognize how computers are used in different careers
  - Define key terms: router, modem, app, input device, output device, storage device
- **Digital and Information Literacy**
  - Define, understand, and explain the need and impact of information literacy in today?s society
  - Self-assess and identify information needs
  - Identify different types of information sources
  - Develop and use search strategies to effectively perform searches to acquire sources from various platforms
  - Apply techniques to fact-check and evaluate information and sources, i.e. CRAAP test
  - Describe intellectual property, copyright, and fair use, and how they relate to using information legally and ethically
  - Recognize various forms of plagiarism and utilize skills and techniques to avoid plagiarism
  - Distinguish between credible and non-credible digital sources
- **Cyber Awareness and Information Security**
  - Define cyber security and explain why it is important, personally, on the Internet, for the computer and for mobile devices
  - Describe the challenges of securing information
  - Identify types of attackers that are common today
  - Describe the different types of attacks
  - Define different types of defenses
- **Web Technologies**
  - Identify introductory web design and/or development concepts
  - Identify top level domain (i.e. .gov, .edu, .com, .net, .org) use and purpose
  - Describe what responsive design means and explain HTML, CSS, Javascript and tags as it relates to developing websites

  - Define hosting and publishing in web development
  - Develop a simple webpage using a text editor or html editor that contains basic tags, such as title, headers, links, multimedia and images
  - Explain the importance of web development in world technology and the importance of having a basic knowledge of website creation
- **Cloud Computing and Emerging Technologies**
  - Define cloud computing
  - Explain the Cloud Computing Stacks
  - Identify advantages and disadvantages of Cloud Computing
  - Define the Internet of Things (IoT)
  - Explain the current version of global Cellular standard
  - Define Blockchain and the components of a block within every blockchain
  - Discuss how blockchain could be used within different types of industry
  - Compare Progressive Web Apps and Traditional Web Apps
  - Compare the Internet to Internet2
  - Discuss the different aspects of Artificial Intelligence (AI)
  - Identify other emerging technologies and Career in Computers
  - Give examples of how data science incorporates technology

Major Topics to be Included

- Current Software Applications
- Operating Systems
- Basic Computer Concepts
- Digital and Information Literacy
- Cyber Awareness and Information Security
- Web Technologies
- Cloud Computing and Emerging Technologies

ITE 152 Tentative 7-Week Course Calendar			
Note: Part of this course will be independent study and part will be delivered in a flipped classroom format via classroom lecture and lab. The estimated assignment times below are just that, estimates and will vary by student.			
Classroom Lecture/Assignments		**Independent Study**	
Week 1 **Estimated Time: 6-8 hours**	Syllabus/Required Orientation Assignment/Access MindTap - SAM Account (due Wed) Read Word Module 1: Creating and Modifying a Flyer SAM Assignments: Word Module 1 SAM Training (due Wed) & Project A Read Word Module 2: Creating a Research Paper SAM Assignments: Word Module 2 SAM Training	**Week 1**	Technology for Success: Modules 1 and 2 Read and complete the Critical Thinking Challenge and the Computer Concepts Skills Training
Week 2 **Estimated Time: 4-6 hours**	SAM Assignments: Word Module 2 Project A Read Word Module 3: Creating a Business Letter SAM Assignments: Word Module 3 SAM Training (due Wed)	**Week 2**	Technology for Success: Modules 3 and 4 Read and complete the Critical Thinking Challenge and the Computer Concepts Skills Training
Week 3 **Estimated Time: 7-10 hours**	TFS Modules 1-4 Test Review SAM Assignments: Word Module 3 Project A Read Excel Module 1: Creating a Worksheet and a Chart SAM Assignments: Excel Module 1 SAM Training (due Mon)	**Week 3**	Career Readiness Module SAM Assignment: Word 2019 Resume Project 1a Test 1 (on Modules 1-4) – **10% of your overall grade** Technology for Success: Modules 9 - Read and complete the Critical Thinking Challenge and the Computer Concepts Skills Training Web Development Project **(10% of your overall grade)**

Week 4 **Estimated Time: 5-7 hours**	Word Test Modules 1-3 Training Word Test - **(10% of your overall grade)** SAM Assignments: Excel Module 1 Project A Read Excel Module 2: Formulas, Functions, and Formatting SAM Assignments: Excel Module 2 SAM Training	**Week 4**	Technology for Success: Module 10 Read and complete the Critical Thinking Challenge and the Computer Concepts Skills Training
Week 5 **Estimated Time: 4-6 hours**	SAM Assignments: Excel Module 2 Project A Read Excel Module 3: Working with Large Worksheets, Charting, and What-if-Analysis SAM Assignments: Excel Module 3 SAM Training	**Week 5**	Technology for Success: Module 6 Read and complete the Critical Thinking Challenge and the Computer Concepts Skills Training
Week 6 **Estimated Time: 5-6 hours**	Excel Mod 3 Project A (due Wed) Excel Modules 1-3 Training Excel Test **(10% of your overall grade)** Read PowerPoint Module 1: Creating and Editing Presentations with Pictures SAM Assignments: PowerPoint Module 1 Project A	**Week 6**	Technology for Success: Module 13 Read and complete the Critical Thinking Challenge and the Computer Concepts Skills Training
Week 7 **Estimated Time: 3-5 hours**	Read PowerPoint Module 2: Enhancing Presentations with Shapes and SmartArt SAM Assignments: PowerPoint Module 2 SAM Project A	**Week 7**	Technology for Success: Modules 12 and 14 Read and complete the Critical Thinking Challenge and the Computer Concepts Skills Training

	Read PowerPoint Module 3: Inserting WordArt, Charts, and Tables SAM Assignments: PowerPoint Module 3 SAM Project A		
Week 8 **Estimated Time: 2-4 hours**	PowerPoint Modules 1-3 Training (at home training due Thursday) PowerPoint Test **(10% of your overall grade)**	**Week 8**	Test 2 (Technology for Success: Modules 6, 12, 13 and 14) - **10% of your overall grade**

ITE 152 Tentative 16-Week Course Calendar	
1	Syllabus/Required Orientation Assignment/Access MindTap - SAM Account Technology for Success: Modules 1 and 2
2	Technology for Success: Modules 3 and 4; Test 1 (on Modules 1-4 – **10% of your overall grade and REQUIRED to pass this course**)
3	Read Word Module 1: Creating and Modifying a Flyer SAM Assignment: Word Module 1 SAM Project A
4	Read Word Module 2: Creating a Research Paper SAM Assignment: Word Module 2 SAM Project A
5	Read Word Module 3: Creating a Business Letter SAM Assignment: Word Module 3 SAM Project A
6	Career Readiness Module SAM Assignment: Word 2019 Resume Project 1a Word Test **(10% of your overall grade)**
7	Read Excel Module 1: Creating a Worksheet and a Chart SAM Assignment: Excel Module 1 SAM Project A
8	Read Excel Module 2: Formulas, Functions, and Formatting SAM Assignment: Excel Module 2 SAM Project A
9	Read Excel Module 3: Working with Large Worksheets, Charting, and What-if-Analysis SAM Assignment: Excel Module 3 SAM Project A Excel Test **(10% of your overall grade)**
10	Read PowerPoint Module 1: Creating and Editing Presentations with Pictures SAM Assignment: PowerPoint Module 1 SAM Project A Read PowerPoint Module 2: Enhancing Presentations with Shapes and SmartArt SAM Assignment: PowerPoint Module 2 SAM Project A
11	Read PowerPoint Module 3: Inserting WordArt, Charts, and Tables SAM Assignment: PowerPoint Module 3 SAM Project A PowerPoint Test **(10% of your overall grade)**
12	Technology for Success: Modules 13 and 6
13	Technology for Success: Modules 10 and 9 Networking Project Based Assessment **(5% of your overall grade)**
14	Web Development Project **(5% of your overall grade)**
15	Technology for Success: Modules 12 and 14
16	Test 2 (Technology for Success: Modules 6, 12, 13 and 14) **(10% of your overall grade)**

Notes to Instructors

- All ITE 152 instructors must administer the same MindTap/SAM Word, SAM Excel, and SAM PowerPoint core homework.
- All ITE 152 instructors must administer the same MindTap/SAM Word, MindTap/SAM Excel, MindTap/SAM PowerPoint tests, as well as the same Technology for Success Tests, Tests 1 & 2.
- All MindTap/SAM core assignments (as well as some added optional activities) and MindTap/SAM tests are detailed in the ITE 152 Master Sandbox Course.
- All core curriculum, suggested pacing, modular structure, and instructor resources can also be found in the ITE 152 Master Sandbox Course.
- No Final Exam will be administered in the ITE 152 class.

ADA Statement (PDF)

Title IX Statement (PDF)