# 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 Software: Microsoft Office 365 ProPlus.** Virginia Western offers **free software**. Please go to the following Virginia Western website to download Microsoft Office 365 ProPlus if you need it:

http://virginiawestern.edu/iet-services/student-tutorials-training/microsoft-office-365-proplus-for-students/. You will then click on http://office.vccs.edu/. The login will be your full MyVWCC e-mail address (e.g. student123@email.vccs.edu) and your password is your MyVWCC password.

**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.

**Required eTextbook**: Technology for Success and Shelly Cashman Series Microsoft®Office 365 & Office 2019 1st Edition. Online eTextbook and Mindtap with SAM is **purchased at the time of registration for the ITE 152 Class, unless student opts-out**. Students will access MindTap in Canvas; **this will include** the Online eTextbook and MindTap/SAM. We will use MindTap/SAM for assignments.

**Optional Loose Leaf Copy**: 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 MindTap/SAM component required for this course.

**IA LL National ISBN:** 9780357119280

**Recommended Miscellaneous Items:**

Folder and a USB (for in person courses)

## 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

- o   Define and identify computer hardware and software
- o   Recognize the specifications for purchasing PC hardware and software
- o   Describe the benefits of protecting systems while online or working remotely
- o   Describe computing systems and how they are used to support and promote organizational goals
- o   Recognize how computers are used in different careers
- o   Define key terms: router, modem, app, input device, output device, storage device
- **Digital and Information Literacy**
  - o   Define, understand, and explain the need and impact of information literacy in today?s society
  - o   Self-assess and identify information needs
  - o   Identify different types of information sources
  - o   Develop and use search strategies to effectively perform searches to acquire sources from various platforms
  - o   Apply techniques to fact-check and evaluate information and sources, i.e. CRAAP test
  - o   Describe intellectual property, copyright, and fair use, and how they relate to using information legally and ethically
  - o   Recognize various forms of plagiarism and utilize skills and techniques to avoid plagiarism
  - o   Distinguish between credible and non-credible digital sources
- **Cyber Awareness and Information Security**
  - o   Define cyber security and explain why it is important, personally, on the Internet, for the computer and for mobile devices
  - o   Describe the challenges of securing information
  - o   Identify types of attackers that are common today
  - o   Describe the different types of attacks
  - o   Define different types of defenses
- **Web Technologies**
  - o   Identify introductory web design and/or development concepts
  - o   Identify top level domain (i.e. .gov, .edu, .com, .net, .org) use and purpose
  - o   Describe what responsive design means and explain HTML, CSS, Javascript and tags as it relates to developing websites
  - o   Define hosting and publishing in web development
  - o   Develop a simple webpage using a text editor or html editor that contains basic tags, such as title, headers, links, multimedia and images
  - o   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**
  - o   Define cloud computing
  - o   Explain the Cloud Computing Stacks
  - o   Identify advantages and disadvantages of Cloud Computing
  - o   Define the Internet of Things (IoT)
  - o   Explain the current version of global Cellular standard
  - o   Define Blockchain and the components of a block within every blockchain
  - o   Discuss how blockchain could be used within different types of industry
  - o   Compare Progressive Web Apps and Traditional Web Apps
  - o   Compare the Internet to Internet2
  - o   Discuss the different aspects of Artificial Intelligence (AI)
  - o   Identify other emerging technologies and Career in Computers
  - o   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 16-Week Course Calendar |
|---|---|
| 1 | Syllabus/Required Orientation Assignment/Access MindTap - SAM Account<br>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<br>SAM Assignment: Word Module 1 SAM Project A |
| 4 | Read Word Module 2: Creating a Research Paper<br>SAM Assignment: Word Module 2 SAM Project A |
| 5 | Read Word Module 3: Creating a Business Letter<br>SAM Assignment: Word Module 3 SAM Project A |
| 6 | Career Readiness Module<br>SAM Assignment: Word 2019 Resume Project 1a<br>Word Test **(10% of your overall grade)** |
| 7 | Read Excel Module 1: Creating a Worksheet and a Chart<br>SAM Assignment: Excel Module 1 SAM Project A |
| 8 | Read Excel Module 2: Formulas, Functions, and Formatting<br>SAM Assignment: Excel Module 2 SAM Project A |
| 9 | Read Excel Module 3: Working with Large Worksheets, Charting, and What-if-Analysis<br>SAM Assignment: Excel Module 3 SAM Project A<br>Excel Test **(10% of your overall grade)** |
| 10 | Read PowerPoint Module 1: Creating and Editing Presentations with Pictures<br>SAM Assignment: PowerPoint Module 1 SAM Project A<br>Read PowerPoint Module 2: Enhancing Presentations with Shapes and SmartArt<br>SAM Assignment: PowerPoint Module 2 SAM Project A |
| 11 | Read PowerPoint Module 3: Inserting WordArt, Charts, and Tables<br>SAM Assignment: PowerPoint Module 3 SAM Project A<br>PowerPoint Test **(10% of your overall grade)** |
| 12 | Technology for Success: Modules 13 and 6 |
| 13 | Technology for Success: Modules 10 and 9<br>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)** |

## <u>Notes to Instructors</u>

- MindTap/SAM Assessment, Training, and Projects v1.0, will be used for tests, training, and homework assignments, starting in the fall 2019 semester.

- 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.