



## Course Number and Title: ITN 120 Operating Systems I

**Campus Location:**

Georgetown, Dover, Stanton, Wilmington

**Effective Date:**

2020-51

**Prerequisite:**

ENG 090 or ENG 091 or concurrent, MAT 010, SSC 100 or concurrent

**Co-Requisites:**

None

**Course Credits and Hours:**

3.00 credits

2.00 lecture hours/week

2.00 lab hours/week

**Course Description:**

This course provides students with fundamental concepts of current popular operating systems (e.g., Windows, Linux, Mac OS, iOS, and Android) and operating system security. Topics include the installation, configuration, maintenance, and troubleshooting of various selected operating systems.

**Required Text(s):**

Obtain current textbook information by viewing the [campus bookstore - https://www.dtcc.edu/bookstores](https://www.dtcc.edu/bookstores) online or visit a campus bookstore. Check your course schedule for the course number and section.

**Additional Materials:**

Access to high-speed Internet, USB drive (minimum 8 GB)

**Schedule Type:**

Classroom Course

Video Conferencing

Web Conferencing

Hybrid Course

Online Course

**Disclaimer:**

None

**Core Course Performance Objectives (CCPOs):**

1. Explain the characteristics, functions, and major components of an operating system (OS). (CCC 1, 5; PGC 2, 4)
2. Perform basic operating system tasks and customization. (CCC 3, 4, 5, 6; PGC 1, 3, 5)
3. Apply basic techniques to improve and maintain operating system security. (CCC 1, 2, 4, 6; PGC 1, 3)

See Core Curriculum Competencies and Program Graduate Competencies at the end of the syllabus. CCPOs are linked to every competency they develop.

**Measurable Performance Objectives (MPOs):**

Upon completion of this course, the student will:

1. Explain the characteristics, functions, and major components of an operating system (OS).
  1. Compare and contrast the uses of graphical user interfaces (GUI) and command line interfaces (CLI).
  2. Describe different types of input and output devices.
  3. Describe the file structures of various operating systems.
  4. Compare and contrast functions, processes, daemons, etc. of various operating systems.
  5. Explain the use and benefits of virtualization.
  6. Identify the different types of licensing and their uses.
2. Perform basic operating system tasks and customization.
  1. Select appropriate operating system(s) for a given scenario.
  2. Install and configure operating systems and drivers.
  3. Perform basic system troubleshooting and maintenance.
  4. Manage and apply system and software patches.
  5. Manage files and folders/directories for organization, maintenance, distribution, etc.
  6. Create, execute, and troubleshoot simple scripts.
  7. Use piping and filters to manipulate data.
  8. Install, maintain, and troubleshoot applications.
3. Apply basic techniques to improve and maintain operating system security.
  1. Describe the importance of operating system security.
  2. Create, maintain, and modify user accounts and groups.
  3. Determine and apply appropriate file permissions.

**Evaluation Criteria/Policies:**

Students must demonstrate proficiency on all CCPOs at a minimal 75 percent level to successfully complete the course. The grade will be determined using the Delaware Tech grading system:

92	-	100	=	A
83	-	91	=	B
75	-	82	=	C
0	-	74	=	F

Students should refer to the [Student Handbook - https://www.dtcc.edu/handbook](https://www.dtcc.edu/handbook) for information on the Academic Standing Policy, the Academic Integrity Policy, Student Rights and Responsibilities, and other policies relevant to their academic progress.

**Core Curriculum Competencies (CCCs are the competencies every graduate will develop):**

1. Apply clear and effective communication skills.
2. Use critical thinking to solve problems.
3. Collaborate to achieve a common goal.
4. Demonstrate professional and ethical conduct.
5. Use information literacy for effective vocational and/or academic research.
6. Apply quantitative reasoning and/or scientific inquiry to solve practical problems.

**Program Graduate Competencies (PGCs are the competencies every graduate will develop specific to his or her major):**

1. Solve technology-related problems using critical thinking and troubleshooting skills.
2. Articulate the role of the technology professional in organizations to support the ethical use of information technology.
3. Apply fundamental security concepts and strategies for maintaining and securing information technology.
4. Read and interpret technical information and effectively communicate to a wide range of audiences using oral, print, and multimedia strategies.
5. Demonstrate the importance of lifelong learning that empowers personal and professional growth.

**Disabilities Support Statement:**

The College is committed to providing reasonable accommodations for students with disabilities. Students are encouraged to schedule an appointment with the campus Disabilities Support Counselor to request an accommodation needed due to a disability. A listing of campus Disabilities Support Counselors and contact information can be found at the [disabilities services - https://www.dtcc.edu/disabilitysupport](https://www.dtcc.edu/disabilitysupport) web page or visit the campus Advising Center.