FLEMING

Course Outline

Course Title:	Operating Systems I
Course Number:	COMP91
Course Hours:	45 hours
Academic School:	School of Business and Information Technology

Approval Date:	2025/6/12
Academic Year:	2025

Program Co-ordinator or Equivalent:	Mamdouh Mina - Mamdouh.Mina@flemingcollege.ca
Dean (or Chair):	Allison MacGregor - Allison.MacGregor@flemingcollege.ca

Course Description

To truly utilize a system to its full extent, one must first become accustomed with the fundamental aspects of the operating system (OS). Hidden just beneath the surface of our desktops, the OS is the main driving force of every system, managing file systems, threads and processes, memory, and much more. In this course, students will be introduced to the fundamentals of OSs, their configuration processes, and how to securely maintain and implement them. Through experiential-learning exercises and involved experimentation, students will leave the course with a firm-grasp on OS troubleshooting, its operational procedures, and the knowledge to begin pursuing a variety of in-demand industry certifications.

Prerequisites: None.

Corequisites: None.

Course Delivery Type

Face to face.

All course hours are delivered in person at the delivery location specified on the academic timetable.

Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Define what an Operating System (OS) is and describe its major functions
2. Discuss Windows Operating System versions, installations and upgrades.
3. Utilize Windows command-line tools to manage Windows Operating Systems.
4. Configure and verify Windows network configurations.

5. Discuss the Linux kernel, Linux distributions and differences between Windows and Linux.
6. Utilize Linux command-line tools to manage Linux-based Operating Systems.
7. Explain core concepts in Cyber Security including physical, network and systems security.
8. Implement troubleshooting tools and techniques to resolve Operating System problems.

Learning Resources

Recommended (but Optional) Textbook: *CompTIA A+ Core 2 Exam Guide to Operating Systems and Security, 10th Edition*

HardCopy - ISBN: 9780357108505
eTextbook - ISBN: 9780357694244

Miscellaneous online resources referenced in learning material.

Costs for learning resources can be found on the Campus Store website, using the links below, or by visiting the Campus Store location at your campus.

- Sutherland: https://www.bkstr.com/sfleming-sutherlandstore/home
- Frost: https://www.bkstr.com/sfleming-froststore/home

Assessment Summary

Assessment Task	Percentage
Labs	50%
Quizzes	20%
Tests	30%

Student Success: Policies and Procedures

Mutually, faculty and learners will support and adhere to college Academic Regulations, and Student Rights and Responsibilities. The following policies and guidelines have been developed to support the learning process.

Please click on the link for information about:

- Academic Integrity (2-201A)
  (https://department.flemingcollege.ca/hr/attachment/7750/download)
- Accessibility for Persons with Disabilities (3-341)
  (https://department.flemingcollege.ca/hr/attachment/5619/download)
- Grading and Academic Standing (2-201C)
  (https://department.flemingcollege.ca/hr/attachment/7752/download)
- Guidelines for Professional Practice: Students and Faculty
  (https://flemingcollege.ca/PDF/guidelines-for-professional-practice-students-faculty.pdf)

- [Student Rights and Responsibilities (5-506)](https://department.flemingcollege.ca/hr/attachment/269/download)

  (https://department.flemingcollege.ca/hr/attachment/269/download)

If you will need academic accommodations (for example if you have a learning disability, mental health condition such as anxiety or depression or if you had an IEP in high school), please contact the [Accessible Education Services (AES)](https://department.flemingcollege.ca/aes/) department (https://department.flemingcollege.ca/aes/) to meet with a counsellor.

Alternate accessible formats of learning resources and materials will be provided, on request.

Program Standards

The **Ministry of Colleges and Universities** oversees the development and the review of standards for programs of instruction. The **Ministry of Labour Training and Skills Development** oversees the development and the review of standards for programs of instruction for Apprenticeship training in the province of Ontario. Each college is required to ensure that its programs and program delivery are consistent with these standards, and must assist students to achieve these essential outcomes.

This course contributes to Program Standards as defined by the [Ministry of Colleges and Universities](#) (MCU). Program standards apply to all similar programs of instruction offered by colleges across the province. Each program standard for a postsecondary program includes the following elements:

- **Vocational standards** (the vocationally specific learning outcomes which apply to the program of instruction in question);
- **Essential employability skills** (the essential employability skills learning outcomes which apply to all programs of instruction); and
- **General education requirement** (the requirement for general education in postsecondary programs of instruction that contribute to the development of citizens who are conscious of the diversity, complexity and richness of the human experience; and, the society in which they live and work).

Collectively, these elements outline the essential skills and knowledge that a student must reliably demonstrate in order to graduate from the program. For further information on the standards for your program, follow the MCU link (www.tcu.gov.on.ca/pepg/audiences/colleges/progstan/).

Detail Plan

Term:	2025 Fall
Program Co-ordinator or Equivalent:	Mamdouh Mina - Mamdouh.Mina@flemingcollege.ca
Dean (or Chair):	Allison MacGregor - Allison.MacGregor@flemingcollege.ca

Learning Plan

Wks/Hrs Units	Topics, Resources, Learning, Activities	Learning Outcomes	Assessment
Week 1	Introduction to Operating Systems. Chapter 1 - Windows Versions and Customer Service.	1,2	Weekly Assessments
Week 2	Chapter 2 - Windows OS	1, 2, 3	Weekly Assessments
Week 3	Chapter 3 - Networking in Windows	1, 2, 3, 4	Weekly Assessments
Week 4	Chapter 4 - Working with Windows	1,2,3,4, 8	Weekly Assessments
Week 5	Chapter 5 - Troubleshooting Windows Part 1	1,2,3,4, 8	Weekly Assessments
Week 6	Chapter 6 - Troubleshooting Windows Part 2	1,2,3,4, 8	Weekly Assessments
Week 7	Midterm	1,2,3,4, 8	Midterm Test
Week 8	Reading Week (No classes)		Reading Week
Week 9	Chapter 7 - Securing and Sharing Windows Resources	1,2,3,4,7,8	Weekly Assessments
Week 10	Chapter 8 - Security Strategies and Documentation	1,2,3,4,5,6,7	Weekly Assessments
Week 11	Chapter 9 - Supporting Mobile Devices	1,2,3,4,5,6,7	Weekly Assessments
Week 12	Chapter 10 - macOS, Linux, and Scripting	1,2,3,4,5,6,7, 8	Weekly Assessments
Week 14	Final Theory Exam	1,2,3,4,5,6,7,8	Final Written Examination
Week 15	Course review and Cleanup	1,2,3,4,5,6,7,8	

Assessment Requirements

Assessment Task	Date/Weeks	Course Learning Outcome	Percentage
Lab Assessments 10 labs	Weekly	1-8	70%
Written Tests 2x15% = 30%	Midterm and Final	1-8	30%

Synchronous sessions may be recorded. As a result, your image, voice, name, personal views and opinions, and course work may be collected under legal authority of section 2 of the Ontario Colleges of Applied Arts and Technology Act, 2002. This information will be used for the purpose of supporting student learning. Any questions about this collection can be directed to the Privacy and Policy Officer at freedomofinformation@flemingcollege.ca or by mail to 599 Brealey Drive, Peterborough, ON K9J 7B1.

All assignments, tests, presentations, or reports are due on their stated due dates. Any assignment, test, presentation or report not submitted/presented on the due date will receive a mark of zero (0). No exceptions. In the case of *extreme* circumstances, your instructor *may* make an exception, provided that complete, accurate, and *verifiable* documentation is submitted in support of the request, and in timely fashion. These situations are rare, but possible, and will be evaluated on a case-by-case basis.

Artificial Intelligence (AI) Statement

NO USE. Use of generative AI tools (like ChatGPT) is not permitted in this course.

It is the responsibility of students to maintain a history of records and supporting documentation to demonstrate their efforts in all academic submissions, even if submission of these is not part of the final academic deliverable.

Turnitin Statement

Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com in support of academic integrity. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site.

If students choose to opt out of using the software, they must inform their faculty member at the time of the assignment, of their refusal and meet with the faculty to discuss their options. For further information on the use of Turnitin, please refer to the Operating Procedure 2-201F (https://department.flemingcollege.ca/hr/attachment/10233/download)

Respondus Monitor Statement

This course will use Respondus Monitor as a remote proctoring tool to support the administration of electronic examinations and assessments. Fleming College has an institutional license to use Respondus Monitor, a cloud-based service and software that captures video, audio, and other data during student assessment sessions for use in monitoring students. This data is accessible to, and may be used by, authorized individuals at the college to administer student assessments and manage the academic integrity of such assessments. The Student Terms of Use for Respondus Monitor must be agreed to by users (e.g. students) prior to each use of the Respondus Monitor, available at: https://web.respondus.com/tou-monitor-student/

By accessing and using Respondus Monitor, you agree to the collection, use, disclosure and retention of your personal information (including personal images) by Respondus Inc. in accordance with its Privacy Policy, available

at: https://web.respondus.com/privacy-policy/

If you have questions about the collection of your personal information, please contact the Privacy and Policy Officer at freedomofinformation@flemingcollege.ca, or visit Fleming College's Privacy Statement (https://flemingcollege.ca/privacy-statement) for more information.

If students choose to opt out of using Respondus Monitor, they must inform their faculty member prior to the scheduled assessment, of their refusal and meet with the faculty to discuss their options.

Exemption Contact

See your coordinator for more information on PLAR options.

CTN/CTY and CSI: Mamdouh Mina, mamdouh.mina@flemingcollege.ca

Prior Learning and Assessment and Recognition (PLAR)

PLAR uses tools to help learners reflect on, identify, articulate, and demonstrate past learning which has been acquired through study, work and other life experiences and which is not recognized through formal transfer of credit mechanisms. PLAR options include authentic assessment activities designed by faculty that may include challenge exams, portfolio presentations, interviews, and written assignments. Learners may also be encouraged and supported to design an individual documentation package that would meet the learning requirements of the course. Any student who wishes to have any prior learning acquired through life and work experience assessed, so as to translate it into a college credit, may initiate the process by applying through the Registrar's office. For more information please click on the following link: http://flemingcollege.ca/admissions/prior-learning-assessment-and-recognition

Course Specific Policies and Procedures

It is the responsibility of the student to retain this course outline for future reference. Course outlines may be required to support applications for advanced standing and credit transfer to other educational institutions, portfolio development, PLAR and accreditation with professional associations.

Synchronous sessions may be recorded. As a result, your image, voice, name, personal views and opinions, and course work may be collected under legal authority of section 2 of the Ontario Colleges of Applied Arts and Technology Act, 2002. This information will be used for the purpose of supporting student learning. Any questions about this collection can be directed to the Privacy and Policy Officer at freedomofinformation@flemingcollege.ca or by mail to 599 Brealey Drive, Peterborough, ON K9J 7B1.

Late assignments in this course will not be accepted. All due dates for assignments and labs must be met, as established by the professor. Make up tests and assignments will not be given and late material will be given a mark of zero (0).

Due to the technical nature of the course, student attendance in the lab is a mandatory component of the learning process. Students who do not attend the lab and complete the practical assessments, under direction and observation by the professor, will not be permitted to pass the lab assessment.

Also note that due to the changing nature of forensics and the computing environment, the professor may make changes in content or delivery to better prepare students for success in this area of study. Such changes may be discussed with student learners, but will be introduced at the sole discretion of the professor.

ACADEMIC RESPONSIBILITIES

1. To gain the most possible benefit from this skill developing course, students need to attend classes. Learning takes place when you become engaged in the learning process. Your instructor will be recording attendance data and will report absences, late arrivals, and early departures to your program co-ordinator.

2. All tests and lab assignments have scheduled due/completion dates. Meeting these due dates is key to your success in this course: your instructor's feedback will add to your learning.

3. Therefore, you must write all tests with the class on the tests' assigned dates. As well, you must complete all lab assignments by the scheduled due date during the schedule lab time.

4. You will receive a grade of zero for any test not written or lab assignment not completed and submitted by the indicated due date.

5. Your instructor *may* consider a makeup for missed assignments or tests for valid reasons only; for example, a severe illness or other, extenuating personal circumstances, provided that complete, accurate, and *verifiable* documentation is submitted by the student within a designated time frame. These situations will be considered and assessed on an individual basis.

6. You, the student, are responsible for making these arrangements; you're learning and success in this course is a shared goal.

7. Final grades in this course are assigned based on the level of achievement that corresponds to the assessment components as cited in the course outline. It is important to note that faculty member(s) will **not** offer additional evaluation activities (NO CREDIT RECOVERY) beyond those cited in the course outline.

8. The professor, faculty team in consultation with the program co-ordinator and academic chair reserves the right to modify the course content, sequence based on industry trends, interests, and time constraints in this course.

9. It is the responsibility of the student to exercise proper care and back-up procedures for electronic data files. Corrupted or lost disk files do not constitute a valid excuse for late, or non-submission of work.

10. E-mail is a standard mode of communication in the School of Business and Information Technology. Important course information will be conveyed via email, and you are expected to read your e-mail regularly to remain aware of course-related details.

ACADEMIC INTEGRITY

Fleming College opposes any form of academic dishonesty, such as plagiarism, submission of work for which credit has already been received; cheating, impersonation; falsification or fabrication If data; the acquisition of confidential material, e.g., examination papers; misrepresentation of facts; altering transcripts or other official documents. Please see Academic Regulations Policy for more information on Academic Integrity.