FLEMING

Course Outline

Course Title:	Computer for Technologies		
Course Number:	COMP577	**Approval Date:**	2025/9/4
Course Hours:	45 hours	**Academic Year:**	2025
Academic School:	School of Trades & Technology		
Program Co-ordinator or Equivalent:	Blane Bell - blane.bell@flemingcollege.ca		
Dean (or Chair):	Lisa Fenn - Lisa.Fenn@flemingcollege.ca		
	Allison MacGregor - Allison.MacGregor@flemingcollege.ca		

Course Description

This course introduces the student to computing and Information Technology used in today's devices and networks. Students will develop a basic understanding of computer hardware, software, operating systems, programming languages and data communications required to form an integrated Information system. Emphasis will be placed on personal/industry computer use along with specific applications such as MS Word, Excel, and Powerpoint. This will ensure students can use computing and software applications as a communication, documentation and problem solving tool.

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. Use the Fleming College computer file system and for storage and retrieval of program documents.
2. Explain the fundamental concepts of and work with computer hardware and software.
3. Describe the use of number systems and basic operating systems used in computing.

4. Describe the various classes of computing and applicability of each. Embedded, PC, Server, Programmable Logic Controller (PLC), Cloud Computing.
5. Describe the major components of applications software, file management , data communications, and networks
6. Use MS Office Word for creation of reports.
7. Use MS Office Excel for data management, charting, analysis and calculations.
8. Use MS Office PowerPoint for presentation of information.
9. Use of MS outlook for professional email communications.
10. Use software packages in word processing, spreadsheets, database management, graphics.
11. Describe IOT (Internet of Things) and IIOT (Industrial Internet of Things) architectures and uses in todays global economy. Understand Data Communications as it relates to protocols, network topology, configuration, hardware, testing, and troubleshooting.

Learning Resources

Recommended text: Any of the published books on Microsoft Office Word, Excel, and PowerPoint.

Faculty will provide some handout materials.

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	30%
Quizzes	10%
Assignments	5%
Tests	55%

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)
  (https://department.flemingcollege.ca/hr/attachment/5619/download)
- [Grading and Academic Standing (2-201C)](https://department.flemingcollege.ca/hr/attachment/7752/download)
  (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)
  (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: Blane Bell - blane.bell@flemingcollege.ca

Dean (or Chair): Allison MacGregor - Allison.MacGregor@flemingcollege.ca
Lisa Fenn - Lisa.Fenn@flemingcollege.ca

Learning Plan

Wks/Hrs Units	Topics, Resources, Learning, Activities	Learning Outcomes	Assessment
Unit #1	Introduction to Fleming computer system, myCampus, OneDrive, D2L, file types, file size, extensions, and file management.	1	
Unit #2	Computer hardware and operating system basics: power supply, motherboard, cards, interfaces, memory, Windows, booting, peripherals.	1, 2, 3	Assignment #1
Unit #3	Computer categories and platforms: embedded, PC, server, cloud along. Applications and appropriate use of each.	1, 2, 3, 4	Quiz #1 Assignment #2
Unit #4	Numbering systems overview , 16bit vs 32 bit vs 64 bit operating systems and high level introduction to networking.	2, 3, 4, 5	Quiz #2 Assignment #3
Unit #5	MS Office and MS Word for report creation.	1, 2, 3, 4, 5, 6, 10	Test #1 Assignment #4
Unit #6	MS Word layout, formatting, detailed tool bar for all Office applications.	3, 6, 10	Quiz #3 Assignment #5
Unit #7	MS Excel calculation operators, cell references and built in formula/statistics, using Excel in Word.	6, 7, 10	Quiz #4 Assignment #6
Unit #8	Independent Learning Week	1, 2, 3, 4, 5, 6, 7, 10	
Unit #9	MS Excel data organization, formatting, chart types and detailed single line chart.	7, 10	Assignment #7
Unit #10	MS Excel scatter plots and multiline charts, detailed chart formatting.	7, 10	
Unit #11	MS PowerPoint for presentations.	7, 8, 10	Quiz #5 Assignment #8
Unit #12	MS Outlook and professional email communications, built-in Windows applications snipping tool, calculator, paint, etc.	5, 7, 9	Assignment #9 Excel in Class Practical Assignment (1.5 Hr.)

Wks/Hrs Units	Topics, Resources, Learning, Activities	Learning Outcomes	Assessment
Unit #13	An introduction to programming languages to create software applications.	2, 3, 4, 5, 9	Assignment #10
Unit #14	Example of IOT and IIOT architectures along with discussion on future of computing.	2, 3, 4, 5, 6, 7, 8, 9, 11	Test #2
Unit #15	Final Examination	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	Final Examination

Assessment Requirements

Assessment Task	Date/Weeks	Course Learning Outcome	Percentage
Assignment #1	Unit #2	1, 2, 3	3%
Quiz #1	Units #1 & 2	1, 2, 3	2%
Assignment #2	Unit #3	4	3%
Quiz #2	Unit #3 & 4	2, 3, 4, 5	2%
Assignment #3	Units #4	3, 4, 5	3%
Test #1	Units #1, 2, 3, 4	1, 2, 3, 4, 5, 10	15%
Assignment #4	Unit #5	6, 10	3%
Quiz #3	Units # 5 & 6	3	2%
Assignment #5	Unit #6	6, 10	3%
Quiz #4	Units #7 & 8	6, 10	2%
Assignment #6	Unit #7	7, 10	3%
Assignment #7	Unit #9	7, 10	3%
Quiz #5	Units #9, 10, 11	7, 10	2%
Assignment #8	Unit #10	8, 10	3%
Excel in Class Practical Assignment (1.5 Hr.)	Units #7, 8, 9, 10	7, 10	5%
Assignment #9	Unit #11	9	3%
Assignment #10	Unit #12	2, 10	3%
Test #2	Units #5, 6, 7, 8, 9, 10, 11, & 12	6, 7, 8, 9, 10	15%
Final Exam (Full Course)	Unit #14	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 10, 11	25%

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) (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) (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

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.

ACADEMIC RESPONSIBILITIES

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

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 unless you have made arrangements with your instructor **PRIOR TO** the due date in question.

5. Your instructor will consider a makeup for missed assignments or tests for valid reasons only; for example, documented illness or extenuating personal circumstances. These situations will be discussed 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.

LATE ASSIGNMENT POLICY

You must submit/present all written/oral assignments on their assigned dates unless you make specific arrangements in writing/voice mail/E-mail with your professor at least 24 hours prior to the due date in question. In the case of any emergency, make arrangements (in writing, if necessary) immediately upon your return.

Your professor will make special arrangements for valid reasons only. In the case illness, you may be required to provide a medical note. Other extenuating circumstances will be discussed on an individual basis.

A penalty of 10% per day will be applied to an assignment not submitted by the original or extended due date. An assignment more than three days late will receive a grade of zero ("0"). Weekends are counted as two days. No assignment will be accepted after the last day of classes without prior arrangement with your professor.

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.

DUE DATES

Students must submit/present all assignments on their due dates unless specific arrangements are made in writing with the instructor at least 24 hours prior to the due date. In the case of an emergency, students are expected to decide immediately upon return to campus to communicate challenges for submitting the work on time and to submit the assigned work. Unreasonable delay to contact your instructor may result in there being no opportunity for assessment. Your professor will make special arrangements for valid verifiable reasons only. These specific arrangements may require documentation verifying an absence. Extenuating circumstances will be discussed on an individual basis. It is the instructor's right to determine whether to accommodate a student's request.

A penalty of 10% per day will be applied to an assignment not submitted by the original or extended due date. An assignment more than three days late will receive a grade of Zero ("0"). No assignment will be accepted after the last day of classes without prior arrangement with your professor.

ATTENDANCE

Attendance is the best predictor of student success. Students must attend the course section that appears on their timetable.

It is expected that students attend all classes, labs and workshops. Prompt attendance is expected.

Students who are late will not receive extra time to complete in-class work; nor will late students be able to earn full marks for miss components of class activities.

Students are also expected to participate in classroom dialogue related to content, assigned tasks, and research as well as provide relevant and respectful feedback to peers. It is expected that all oral and written communication will be professional and respectful using clear, correct and concise English.

Students are encouraged to communicate in emerging professional tone and language.

Students are expected to bring required course materials and other resources to each class. Students are solely responsible for catching up on course work when absent. This includes collecting course materials (handouts, assignments, etc.) and catching up on missed classroom work. Your instructor may provide more specific expectations for attendance. **Students who cause disruption in class may be asked to leave.**

LATE ARRIVAL TO CLASS

Students who are late for class are a disruption to their classmates and have a negative impact on the learning environment. For reasons relating to classroom management and/or safety, late students may be refused entry. Lateness, in general, is unacceptable and will be dealt with on an individual basis. It is a courtesy to communicate a possible late arrival, due to extenuating circumstances, prior to a class.

Students who are late for class will not receive extra time to complete in-class work nor be able to earn full marks for in-class activities. Students who miss an assessed task due to late arrival will not have an opportunity to make up for the missed grade at a later time.

MISSED CLASSES

Students are solely responsible for catching up on course work when absent. This includes collecting course materials (handouts, assignments, etc.), acquiring lecture notes, and catching up on missed class work. Missed in-class assessments cannot be made up at a later time.

MISSED ASSESSMENTS

Only in extreme circumstances will a student be permitted to write/submit a missed test or assessment. It is the student's responsibility to contact the professor as soon as possible after a missed test or assessment and, if required, provide appropriate documentation that explains the absence. If a student is going to miss a test or assessment for a legitimate documentable reason, the student should discuss the issue with their professor prior to the absence or within 24 hours after the event. Your instructor is accessible by telephone, e-mail and in person. It is the professor's right to determine whether to accommodate a student's request.

There are no rewrites, redos, retakes, or alternative assignments for work missed in this course. No work will be accepted after classes end without prior arrangement with your professor.

CLASSROOM BEHAVIOUR

It is imperative that we work together to create and nurture an environment that is conducive to student learning.

- Students are NOT permitted to use cell phones, iPods, MP3 players, or other electronic devices for the purposes of sending/receiving calls, text messaging, or web surfing during class. Such devices are to be turned off during class in order to avoid distractions. Students who do not respect this requirement may be asked to leave the classroom.
- Students wishing to record the class material must receive permission from their instructor.
- Laptops will be permitted provided they are used for an academic purpose related to the activities occurring in the class.
- We will engage in many discussions about potentially sensitive issues in this course.

Students are expected to show respect for the diverse opinions, values, belief systems, and contributions of all of their peers. Active and respectful listening is an important and essential communication skill, in general, and in health care professions. Students are encouraged to practice communicating in professional tone and language.

Students who are unable or unwilling to fulfill these expectations may be asked to leave the class.

OUT-OF-CLASS PREPARATION

Students are expected to complete all required readings, assignments, and tasks, and to study and prepare for classes so that they can participate meaningfully in a vibrant learning community. Prep and class activity marks are associated. Failure to prepare for class will result in an inability to earn marks associated with prep or in-class activities.

ELECTRONIC ACTIVITIES / HOMEWORK / ASSIGNMENTS

Students should expect to do a minimum of two hours of homework each week: assigned readings, online searches, viewing of video clips or listening to audio clips, participation in discussion

boards, and other assigned tasks. Failure to prepare for classes will result in an inability to earn grades for prep activities or in-class activities.

Technical difficulties will not be considered a valid reason for missing an online assignment, activity, or assessment. A mark of zero ("0") will be recorded for a missed electronic assignment deadline or a missed prep activity. Therefore, students are strongly advised to plan ahead, to NOT leave such work until the last minute, and to use campus resources, including computers in the Learning Commons, to avoid technical difficulties.

If a student misses a deadline, it is her/his responsibility to arrange with their instructor how the work will be submitted, understanding that late penalties will be applied in accordance with course policy.

GRADED WORK

Graded work that has been submitted on time will be returned to students in class within two weeks of the due date. If a student misses the class where graded work has been returned, it is the student's responsibility to make arrangements with the instructor to pick up the work.

Students have two weeks after the work has been graded and posted in the course home page to report any concerns or problems to their professors.

Graded work that has not been retrieved by the last day of classes will not be retained by the instructor.

FINAL GRADES

Final grades in this course are assigned based on the level of academic achievement that corresponds to the assessment components as cited in this course outline.

Faculty members will not offer additional assessments to individual students beyond those cited in course outlines.

Students are encouraged to keep a copy of this outline (which could potentially be used for future PLAR exemptions), copies of all submitted assignments, and to retain graded work until the end of the

semester. Students are also advised to familiarize themselves with the College appeal process.

ACADEMIC INTEGRITY

Students have a responsibility to support academic integrity. The principle of academic integrity requires that all work submitted for evaluation and course credit be the original, unassisted work of the student.

The College views very seriously any form of academic dishonesty, such as: plagiarism, submission of work for which credit has already been received, cheating, impersonation, falsification or fabrication of data, the acquisition of confidential materials (e.g., examination papers), misrepresentation of facts, altering transcripts or other official documents. Breaches of Academic Integrity will result in a grade of Zero ("0") for the assessment component involved. In addition, breaches of Academic Integrity will be reported to the Registrar and subject to Fleming College policies.

PLAGIARISM

Plagiarism is the submission for credit of work taken without correct documentation from an existing source. One form of plagiarism involves direct incorporation, without proper credit, of phrases, passages of text, images, or data of any kind from an existing source. A second form involves using data or information without proper credit (even though the incorporated information is paraphrased or otherwise not in direct form).

Students are taught about issues of plagiarism in their first semester Communications courses.

Specifically, students are taught how to identify and avoid plagiarism. There are also many resources available to students to help ensure complete and accurate referencing of sources, such as Library Services tools and guidebooks available in the campus bookstore. Because of the seriousness of a breach of Academic Integrity, students are strongly encouraged to seek clarification from their instructors prior to the submission of written work.

A plagiarized assignment or any other breach of academic integrity will receive a grade of Zero ("0") and will be reported to the Registrar's Office.

Students will be introduced to APA formatting for citing their research in this course.

Plagiarism is not acceptable in any course. It is the student's responsibility to be familiar with the course and College rules about plagiarism: Section 6.0 of Fleming's Academic Regulations Policy #2-201, which can be found in the Fleming portal under "Resources > Policies and Regulation".

ACADEMIC ASSISTANCE

Students are encouraged to discuss academic concerns, learning needs, and learning challenges with the instructor as soon as possible; particularly, if a student has received prior learning support such as an I.E.P.

If you are experiencing difficulties in any course, Fleming College has many services available to help you. If you have had assistance with learning support in the past, you should consider following up on present learning needs by communicating with Accessible Education Services (AES). AES provides a range of FREE services to support students who need assistance to reach their academic potential.

Some of the services that students find helpful: peer tutoring, writing labs, drop-in tutorials, study smart lab, and more. Online registration for tutors and workshops is easy!

COURSE CONTENT AND SEQUENCE

The instructor reserves the right to modify the course content and sequence based on time constraints, students' learning needs and interests, and industry trends.