

# Computer Studies – Winter 2023

## HYBRID DELIVERY

### COMP 1112

## Document Automation Using Python

### Course Description:

In this course, students learn how to use Python programming language to solve common programming problems that involve the automation of tasks, such as reading and manipulating word processing files, spreadsheets and web data, as well as scheduling tasks and launching programs. Emphasis is placed upon document automation by covering the following topics:

- Introduction to programming concepts
  - Python Basics
  - Flow control
  - Python Functions
  - Manipulating Strings
  - Lists
  - Input validation
- Reading and writing text files
- Web Scraping
- Working with cloud resources
- Scheduling Tasks and launching programs
- Working with Word Documents
- Working with Excel spreadsheets
- Working with PDF documents

### Resources:

Text Book: <https://automatetheboringstuff.com/>

Instructor: Wayne Brown

## Class Times:

Section 1: 6-9pm ET Mondays Room K220\*

Section 2: 7-10pm ET Wednesdays, Room K227\*

Section 3: 3-6pm ET Fridays, Room K218

\*Only those weeks where on campus classes are taking place, see weekly schedule below for details

## Office Hours: [\(N211E\)](#)

Monday: 5-6 pm ET

Tuesday: 2-3 pm ET

Thursday: 10-11am ET

## How to communicate with the instructor:

Please use **email only** to communicate with the instructor at: [wayne.brown@georgiancollege.ca](mailto:wayne.brown@georgiancollege.ca) , other forms of communication may not be seen.

## Expectations for Success:

To succeed in this course, it is suggested that students should initially plan to invest, at a minimum, **6 hours per week in the course which includes lecture time**. More or less time may be required depending on the student's ability to grasp the concepts of the course. It is important for students to keep up with weekly and ongoing course tasks, and to practice daily the concepts taught during the course. Commit to putting in the appropriate effort in this course in week one

## Course Evaluation:

Weekly Linked in Learning Assignments (10)	10%
Weekly Coding Labs (12 – top 10 scores used in final grade)	15%
Course project	15%
Midterm Exam	30%
Final Exam	30%
<b>TOTAL</b>	<b>100%</b>

## General Schedule of Activities:

REMOTE SYNCHRONOUS means the lecture will be delivered during regular scheduled classroom time via Webex:

<https://georgiancollege.webex.com/meet/wayne.brown>

WEEK	Date	Notes	General Topics	Delivery Modality
1	Jan. 9-13		Language Basics	In Person
2	Jan. 16-20	Jan. 20 – Add/Drop Deadline	Flow Control	In person
3	Jan. 23-27		Functions	In Person
4	Jan. 30-Feb. 3		Manipulating Strings	REMOTE SYNCHRONOUS
5	Feb. 6-10		Lists	REMOTE SYNCHRONOUS
6	Feb. 13-17		Input Validation	REMOTE SYNCHRONOUS
7	Feb. 20-24	Feb. 20 - Holiday	Reading/writing text files	In Person
	Feb. 27-March 3	<b>No Classes</b>		
8	March 6-10	<b>Midterm Exam</b>	MIDTERM EXAM	In Person
9	March 13-17	March 15 – last day to withdraw from a course without academic penalty	Web scraping-working with excel	REMOTE SYNCHRONOUS
10	March 20-24		Working with Google spreadsheets	In Person
11	March 27-31		Scheduling tasks and launching programs	In Person
12	April 3-7	April 7 – closed Good Friday	Working with Word Docs	In Person
13	April 10-14	<b>Course Project Due</b>	Working with PDF documents	In Person
14	April 17-21	<b>Final Exam</b>		In Person

The sequence and content of this syllabus may change due to unanticipated opportunities or challenges, or to accommodate the learning styles of the students. Due to unforeseen or extenuating circumstances and to accommodate the need for this program, there may be some modifications to the evaluation/assessment. This has been approved by the Dean of Technology & Visual Arts (TVA), as directed by the Vice President, Academic.

# Academic Misconduct:

Academic misconduct is taken very seriously at Georgian College. Academic misconduct is defined by Georgian college as:

## 9.1.1 Cheating

Cheating is the use of inappropriate, prohibited or unacknowledged materials, information aids, or misrepresentation in any academic work. The use of books, notes, online resources, electronic technology (including but not limited to calculators, cell phones, tablets, and voice and video recorders) and conversation with others is restricted or forbidden in many instances of academic work and would constitute cheating. Students may not request others (including commercial or free term-paper organizations) to conduct research or prepare any work for them.

## 9.1.2 Fabrication

Fabrication is the falsification or invention of any information or citation in an academic work or required program documentation which includes, but is not limited to clinical permits, criminal reference checks, co-op jobs, placements, employer or placement supervisor evaluation, or signatures. False information may not be used in any academic work without the prior authorization of the faculty. It would be considered misconduct, for instance, to analyze one sample in an experiment and invent data based on that single experiment for several more required analyses. The actual and original source of the information must be acknowledged in a citation.

## 9.1.3 Plagiarism

Plagiarism is the representation of another's words or ideas as one's own, in any academic work. Self-plagiarism is the resubmission of previous work, or portions thereof without the permission of the current faculty. Students should be aware that plagiarism or self-plagiarism of any part of a work is an academic misconduct; there is no partial responsibility or penalty. To avoid plagiarism/self-plagiarism, every source of information must be identified and properly documented according to an established writing convention determined by the faculty, for example; [American Psychological Association \(APA\)](#) style. Faculty have the right to request that students submit their work for electronic text matching.

## 9.1.4 Facilitating academic misconduct

Students who knowingly or negligently allow their work (including electronic files), portions of their work, or drafts of their work to be used by other students or who aid others in committing academic misconduct are violating academic integrity. This applies to students who hide, misrepresent or falsify information related to an incident of academic misconduct. Such students are as responsible as a student who is involved in the incident directly, even though they may not themselves benefit from that act of misconduct, and are therefore subject to the same penalties.

### 9.1.5 Impersonation

Impersonation is pretending to be another person for the purpose of deception. Students who knowingly have someone impersonate them, either in-person or electronically, for any academic work or activity are violating academic integrity. Both the impersonator and student impersonated are subject to the same penalties.

### 9.1.6 Denying access to information or material

It is a violation of academic integrity to deny others access to academic resources or to deliberately impede the progress of another student or scholar. This would include giving other students false or misleading information, making library or shared resource material unavailable to others by stealing, deliberately misplacing, defacing or destroying any of these resources, including computer files that are not one's own.

### 9.1.7 Copyright violation

[Canada's Copyright Act](#), states the legal and permissible use of copyrighted material. Georgian College has adopted the 'Association of Canadian Community Colleges Fair Dealing Policy' that provides guidance in copying according to the Fair Dealing exception under the [Copyright Act](#). Copying beyond these limits of the guidelines and the [Copyright Act](#), is an academic misconduct for the individual who made the illegal copy. Students may also be subject to penalties under the [Copyright Act](#).

## Academic Misconduct Penalties

In the Computer Studies faculty, an academic misconduct will result in one of the following penalties depending on the number of academic misconducts on file. Academic misconducts are attached to the students file for the life of their time at the college, therefore a second or third offence will carry the penalty as outlined below regardless if they were committed in a different course or program.

- **The first academic misconduct will result in a zero in the student work.**
- **The second offense will result in a zero on the course.**
- **The third offence will result in an 8 month suspension from the college.**

## Plagiarism in writing computer code

The purpose of writing code in this course is to demonstrate that you have independently written and understand the code and have the ability to independently solve a given problem with software. Therefore, you must be the author of any code you write. Authorship means that you independently designed the solution framework, designed the code and authored the code. Simply typing the code based upon coaching from a third party does not mean you authored the code. Writing the code with help from another person or the internet does not mean you have authored the code. Of course, you may seek help to understand a construct in

its general application, but you must then independently transfer that general knowledge to the specific problem you are trying to solve. So, to be clear, **copying a code solution or a portion of a solution, of any size directly from a third-party source, is a form of plagiarism, and will result in a zero in the work involved or the course. Or getting help from a third party such that this help enabled you to author the code is a form of plagiarism.**

**Submitting work that was written for another course is a form of plagiarism. All work submitted for this course must be written by you as original work for this course. It must not be work previously completed for another course or work from a previous course that has been modified or work from the same course if you are repeating the course.**

An academic misconduct quiz must be completed and a score of 100% must be achieved before course materials are released to the student.

### **Late Penalties**

Late penalties are implemented as follows:

- **Weekly Assignments** – no late submissions will be graded; however the lowest two grades will be dropped.
- **Linked in Learning Assignment** - - No late submissions will be graded.
- **Course Project** - - 5% will be deducted for the first 24 hour late period, starting one minute after the due date/time. See example below. 10% will be deducted for each day late after the first 24 late period. After 4- 24 hour late periods a grade of zero is assigned.

Example: Lets assume an assignment has a due date of Monday, Jan 3 at 5pm ET.

If the assignment is handed in within the first 24-hour window beginning Jan 3 at 5:01pm ET the penalty is 5%.

If the assignment is handed in within the second 24-hour window the penalty is 15%.

If the assignment is handed in within the third 24-hour window the penalty is 25%.

If the assignment is handed in within the fourth 24-hour window the penalty is 35%.

If the assignment is handed in after the fourth 24-hour window (5:01 ET, Thursday, Jan 6) the penalty is 100%.

### **Weekly Coding Labs**

Each week the students will complete a weekly coding lab. These labs are designed to be completed during the lecture period. However, it is possible that all students will not complete the labs during the time allotted. In this case hand in what you have completed. If you find you do not have time to complete the weekly labs it may be due to one or more of the following reasons:

- You are not focusing 100% of your attention to the work assigned.
- You do not have a full grasp of the material being taught because you have not practiced past concepts thoroughly.

There are 12 labs in total, the lowest two scores will be dropped from your overall lab score.

## Missed tests

**Tests and examinations must be written at the time scheduled by the faculty.** Documented medical/family emergency situations, conflicting religious observance schedules, students in varsity games or Georgian College Student Association executive members in Georgian Board of Governor, or senior management scheduled events, are grounds for special consideration. Requests for adjustments to prescribed examination or test dates must be made **before the examination or test dates.**

## Assignment extensions

Generally speaking, no assignment extensions will be given (unless documented extenuating circumstances are a factor); instead, the late penalty will be applied: - 5% will be deducted for the first 24 hour period late, starting one minute after the due date/time. After 4- 24 hour late periods a grade of zero is assigned. It is highly recommended that the student manage their time and due dates and aim to complete all work at least 24 hours ahead of the due date and time. This will avoid loss of grades due to last minute illness or technical issues. Extensions are not provided due to last minute illness or technical issues.

## Communication with Students

It is the student's responsibility to monitor their Georgian College email and Blackboard daily. Missed deadlines due to missed announcements do not warrant special attention; therefore, all late penalties will be applied. Additionally, it is the student's responsibility to confirm that any files uploaded into Blackboard are uploaded successfully. Late penalties will be applied to any submissions that did not upload successfully and were later uploaded by the student either because they or the instructor discovered the error.

## Weekly Lectures:

This course is delivered using the hybrid delivery modality. This means that a minimum of 30% of the course will be delivered remotely. In this course all lectures will be delivered synchronously at the scheduled class time, the only difference is if the lecture will take place in person in the classroom or online using Webex.

## Repeating Students:

If you are repeating this course please ensure that all work completed during this offering of the course is original to this offering, do not submit work from a previous attempt of the course as this defeats the purpose of the course and more importantly is a form of plagiarism.

## Use of material beyond the scope of the course:

This course covers a number of specific, introductory, python constructs and concepts. Many times during course assignments and tests, students will be asked to solve problems which very well may be solved more easily with more advanced constructs. However, in order to provide the student with an opportunity to practice and learn the relative construct, it will be required that student's only use constructs covered in the course. Therefore, when solving any assignment, project or test problem, only use constructs covered in the course, use of more advanced constructs will result in a zero awarded for that applicable question or work.



## **Oral Reviews:**

The instructor reserves the right to schedule an oral review if any student submission appears, in any way, to be written by or inappropriately influenced by a third party source. The purpose of the oral review is to confirm that you are the author of your submission and that you understand the design of your code and the constructs used. Failure to demonstrate authorship of your submitted code, or understanding of the constructs used, will result in an academic misconduct which in turn will result in a zero in the work or a zero in the course. If a student submits advanced code or code similar to that of another student or code that does not adhere to course coding standards an oral review may be scheduled to validate authorship of the code. If the oral review is not successful, a zero will be awarded on that question and an academic misconduct will be filed resulting in a possible zero in the course. However, if you wish to use advanced constructs on the course project you may get an exemption from the professor by scheduling a 1:1 face to face meeting to review your proposal.

## **BYOD:**

This is a Bring you own device program. Therefore, it is your responsibility to ensure that you have a reliable working laptop. Technology issues do not justify an extension or rescheduling of any student work. Please ensure that you have a reliable working computer and access to a back up computer in the event of a device failure.

## **Contact information:**

If you have any questions about the course or its contents, please do not hesitate to contact me. All questions are good questions. Emails will be answered within 48 hours M-F between 9-5pm EST. You may contact me at: [wayne.brown@georgiancollege.ca](mailto:wayne.brown@georgiancollege.ca)

## **Blackboard grade Entries:**

All grade entries in Blackboard grade book will be based upon the total % that each item is worth vs a weighted grade. For example, the midterm exam is worth 30% of the course grade. If you score 50% in on the midterm exam, the blackboard entry will be 15 points vs 50%, this will allow you to know your course grade at any time by simply looking at the total points earned to date.

## **Blackboard Submissions**

Blackboard is the system of record for all student work. Emailed submissions cannot be accepted. Once a submission is uploaded to blackboard another submission cannot be uploaded even if the deadline is not passed. Be sure that your submission is 100% complete before uploading. Submission to the wrong folder is not the instructors responsibility, submissions uploaded to the wrong folder or drop box may not be graded. It is the students responsibility to ensure that all submissions are in the correct format based upon the assignment instructions, failure to submit the correct file format may result in the loss of grades. All course submissions must be kept private, i.e. do not upload any course work to a public website such as github or similar until the course is completed and all student work is graded. Failure to do so may result in a zero in the student work.

## **Coding Standards:**

All code written during the course must adhere to course coding standards to score full grades.

**General course organization:**

- Each week you will attend a synchronous lecture either in person or online
- Each week you will complete one coding assignment during lecture which must be handed in at the end of the lecture.
- Each week a TO-DO list will be posted to help you stay on track.
- Each week you will complete a portion of the linked in learning video assignment.
- Along the way you will have two exams.
- At the end of the course you will submit a final project which you should start working on around week 5.