Course Syllabus Fall 2019
CP104 Introduction to Programming
Department of Physics & Computer Science, Faculty of Science
Wilfrid Laurier University

Course Instructor
Dr. Habib-ur Rehman (Section A) & Dr. Muhammad Muddassir Malik (Section B)
Email: hrehman@wlu.ca & mmalik@wlu.ca
(Please use this email, do not use MyLearningSpace email)
Office: N2086
Office Hours: Listed in MyLearningSpace or other times by appointment

Lab Instructors:
Mr. David Brown, Mr. Rick Magnotta, Ms. Debra Smith
Email: dbrown@wlu.ca; rmagnotta@wlu.ca; desmith@wlu.ca
[Use the Laurier email system; do not use MyLearningSpace email.]
Office: N2091
Office Hours: by appointment. To arrange a time, please email Mr. Brown.

Course Overview
An introductory course designed to familiarize the student with modern software development techniques. Emphasis is on problem-solving and structured program design methodologies. Programming projects are implemented in a widely used high-level language. (This course may be "challenged for credit".)

Course Outline:
Basic components of a computer, introduction to programming languages, Python programs, numbers, variables, expressions, standard input/output, decision structures, nested decision structures, repetition structures, nested repetition structures, functions, arrays, tuples, lists, handling files, text processing.

Learning Objectives:
• develop the computational thinking skill and programming skills required to analyse problems and design algorithm to solve them programs and implement these in Python.
• Learn basic components of a high-level programming language.
• Gain experience in writing structured and modular computer programs.

Credit: 0.5
3 lecture hours, 2.5 lab hours weekly

Course web pages: https://bohr.wlu.ca/cp104/
https://mylearningspace.wlu.ca/
Lecture and Lab Schedule:

<table>
<thead>
<tr>
<th>Section</th>
<th>Days</th>
<th>Times</th>
<th>Room</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture A</td>
<td>MWF</td>
<td>01:30 pm - 02:20 pm</td>
<td>BA201</td>
<td>Mr. Habib-ur Rehman</td>
</tr>
<tr>
<td>Lecture B</td>
<td>TR</td>
<td>05:30 pm - 06:50 pm</td>
<td>LH1001</td>
<td>Mr. Muhammad Malik</td>
</tr>
<tr>
<td>Lab L01</td>
<td>M</td>
<td>02:30 pm - 04:50 pm</td>
<td>BA113</td>
<td>Mr. David Brown</td>
</tr>
<tr>
<td>Lab L02</td>
<td>T</td>
<td>01:00 pm - 03:20 pm</td>
<td>BA113</td>
<td>Mr. David Brown</td>
</tr>
<tr>
<td>Lab L03</td>
<td>T</td>
<td>03:30 pm - 05:50 pm</td>
<td>BA113</td>
<td>Mr. David Brown</td>
</tr>
<tr>
<td>Lab L04</td>
<td>W</td>
<td>12:30 pm - 02:50 pm</td>
<td>BA113</td>
<td>Mr. David Brown</td>
</tr>
<tr>
<td>Lab L05</td>
<td>W</td>
<td>03:00 pm - 05:20 pm</td>
<td>BA113</td>
<td>Mr. Rick Magnotta</td>
</tr>
<tr>
<td>Lab L06</td>
<td>W</td>
<td>05:30 pm - 07:50 pm</td>
<td>BA113</td>
<td>Ms Debra Smith</td>
</tr>
<tr>
<td>Lab L07</td>
<td>R</td>
<td>08:30 am - 10:50 am</td>
<td>BA113</td>
<td>Mr. David Brown</td>
</tr>
<tr>
<td>Lab L08</td>
<td>R</td>
<td>11:00 am - 01:20 pm</td>
<td>BA113</td>
<td>Mr. Rick Magnotta</td>
</tr>
<tr>
<td>Lab L09</td>
<td>R</td>
<td>01:30 pm - 03:50 pm</td>
<td>BA113</td>
<td>Mr. Rick Magnotta</td>
</tr>
<tr>
<td>Lab L10</td>
<td>R</td>
<td>04:00 pm - 06:20 pm</td>
<td>BA113</td>
<td>Ms Debra Smith</td>
</tr>
<tr>
<td>Lab L11</td>
<td>F</td>
<td>08:30 am - 10:50 am</td>
<td>BA113</td>
<td>Mr. Rick Magnotta</td>
</tr>
<tr>
<td>Lab L12</td>
<td>F</td>
<td>12:00 pm - 02:20 pm</td>
<td>BA113</td>
<td>Mr. David Brown</td>
</tr>
<tr>
<td>Lab L13</td>
<td>M</td>
<td>05:00 pm - 07:20 pm</td>
<td>BA113</td>
<td>Ms Debra Smith</td>
</tr>
<tr>
<td>Lab L14</td>
<td>T</td>
<td>07:00 pm - 09:20 pm</td>
<td>N1055</td>
<td>Ms Debra Smith</td>
</tr>
</tbody>
</table>

Course Textbook

Starting Out With Python, Fourth Edition
Tony Gaddis, 2017, Addison Wesley

ISBN-10: 0134444329

You can purchase the etext version of the textbook from Laurier's bookstore. We do not use the more expensive "Access Card Package" or the "My Programming Lab" versions of the text.

Note: We will cover chapters 1 through 8 or 9 in this course. This is a new edition and the order of the material is different from previous versions.
Marking Scheme

<table>
<thead>
<tr>
<th>Assignments</th>
<th>15%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class participation</td>
<td>5%</td>
</tr>
<tr>
<td>Lab Tasks</td>
<td>20%</td>
</tr>
<tr>
<td>Midterm</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>40%</td>
</tr>
</tbody>
</table>

- The passing score is **50%**. Students must also pass the **weighted average** for midterm and final exams to pass the course i.e. score 50% out of the midterm and final exam combined. Weighted Average for Mid & Final is calculated using the formula below:

\[
(\text{Your\_score\_in\_mid} / \text{total\_of\_mid} \times 0.2) + (\text{Your\_score\_in\_final} / \text{total\_of\_final} \times 0.4)
\]

To pass, the result of above equation must be 0.3 or more.

Assignments

- No late assignment
- 10 assignments equally weighted
- Grade is based on the best 8 assignments.
- Assignments must be submitted online on MyLearningSpace.
- Due Saturday at 11:59 pm in each week
- Due dates for the assignments are listed on the Assignments section on MyLearningSpace.
- All assignment work is done individually on your own, there is no group work allowed. Work will be checked for plagiarism. **90% or more similarity will be awarded 0 to all the students involved.** It is considered Academic Misconduct to provide your work to another student for any reason.

Missed Assignments

An assignment not handed in receives a mark of 0, unless there is a documented reason. If a documented reason is supplied, the weight of the missing assignment is shifted to the final exam. A copy of the documented reason must be given to and approved by the instructor.

Lecture Participation

- The purpose is to create a more engaging learning environment and improve student retention
- You will be using your own iClicker during class (bringing a friend’s clicker is considered academic misconduct)
- Your best 75% of grades will be used for calculating your class participation grade
- You will receive marks for answering questions, but more marks for answering correctly
- Information about clicker registration will be posted on MyLearningSpace

Note: If you have multiple courses that require a clicker, you will use the same clicker for all your courses. Only buy one clicker!
Labs tasks

- Labs are scheduled every week.
- **There is no lab during the first week of classes.**
- Lab tasks must be completed during the lab time. Lab tasks cannot be completed at home unless a system-wide malfunction during lab times.

Midterm
Friday November 1, 2019. Time: 5:30 pm - 7:00 pm, Location: Announced on MyLearningSpace

Missed Midterm
A missed midterm exam will receive a mark of 0, unless there is a valid documented reason. If a documented reason is provided for missing the midterm, its weight is applied to the final exam.

Final Exam
To be announced by the registrar office.

The passing score is 50%. Students must also pass the weighted average for midterm and final exams to pass the course i.e. score 50% out of the midterm and final exam combined. Weighted Average for Mid & Final is calculated using the formula below:

\[
(\text{Your\_score\_in\_mid} / \text{total\_of\_mid} * 0.2) + (\text{Your\_score\_in\_final} / \text{total\_of\_final} * 0.4)
\]

To pass, the result of above equation must be 0.3 or more.

All work for this course (assignments, labs, clicker questions) is done individually. Work will be checked for plagiarism. **The department penalty for the first case of an academic integrity issue is 0 (zero) for the component in question and -5% (minus five percent) on your final grade; penalty applies to all parties involved.**
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic / Chapter</th>
<th>Assignments / Labs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 - Sep. 1</td>
<td>Chapter 1. Introduction to computers and programming</td>
<td>No Lab</td>
</tr>
</tbody>
</table>
| Week 2 – Sep. 8    | Chapter 1 (cont). Chapter 2. Input, processing and output | Lab 1 – Introduction  
Assignment 1 due –Sat. Sep. 14 |
| Week 3 - Sep. 15   | Chapter 2 (cont)                                                              | Lab 2 - Formatted output  
Assignment 2 due –Sat. Sep. 21 |
| Week 4 - Sep. 22   | Chapter 5. Functions                                                          | Lab 3 – Problem solving  
Assignment 3 due –Sat. Sep. 28 |
| Week 5 - Sep. 29   | Chapter 3. Decision structures and Boolean logic                              | Lab 4 – Functions  
Assignment 4 Due -Sat. Oct. 5 |
| Week 6 - Oct. 6    | Chapter 4. repetition structure                                               | Lab 5 – Decisions  
Assignment 5 Due -Sat. Oct. 12 |
| Week 8 - Oct. 20   | Chapter 4 (cont)                                                              | Lab 6 – Repetition -FOR  
Assignment 6 Due - Sat. Oct. 26 |
| Week 9 - Oct. 27   | Chapter 7. Lists and Tuples  
**Midterm: Friday Nov. 01, 2019**                                              | Lab 7 – Repetition – While  
No assignment due this week |
| Week 10 – Nov. 3   | Chapter 7 (cont.) Chapter 8 – More about Strings                              | Lab 8 -- Lists  
Assignment 7 Due –Sat. Nov. 9 |
| Week 11 - Nov. 10  | Chapter 8 (cont.)                                                              | Lab 9 – Strings  
Assignment 8 Due - Sat. Nov. 10 |
| Week 12 - Nov. 17  | Chapter 6. files and Exceptions                                                | Lab 10 -Files  
Assignment 9 Due – Sat. Nov. 23 |
| Week 13 - Nov. 24  | Chapter 7. Two dimensional Lists, Introduction to dictionaries                | Lab 11 – 2D lists  
Assignment 10 Due - Sat. Nov. 30 |
| Dec. 2 –Makeup class for Thanksgiving | Final exam Review  
|   |                                                                                 | |

The educational materials developed for this course, including, but not limited to, lecture notes and slides, handout materials, examinations and assignments, and any materials posted to MyLearningSpace, are the intellectual property of the course instructor. These materials have been developed for student use only and they are not intended for wider dissemination and/or communication outside of a given course. Posting or providing unauthorized audio, video, or textual material of lecture content to third-party websites violates an instructor’s intellectual property rights, and the Canadian Copyright Act. Recording lectures in any way is prohibited in this course unless specific permission has been granted by the instructor. Failure to follow these instructions may be in contravention of the university’s Code of Student Conduct and/or Code of Academic Conduct, and will result in appropriate penalties. Participation in this course constitutes an agreement by all parties to abide by the relevant University Policies, and to respect the intellectual property of others during and after their association with Wilfrid Laurier University.
University and Course Policies

2. Academic Integrity/Misconduct (cheating): Laurier is committed to a culture of integrity within and beyond the classroom. This culture values trustworthiness (i.e., honesty, integrity, reliability, fairness, caring, respect, responsibility and citizenship). Together, we have a shared responsibility to uphold this culture in our academic and non-academic behaviour. The University has a defined policy with respect to academic misconduct. You are responsible for familiarizing yourself with this policy and the penalty guidelines, and are cautioned that in addition to failure in a course, a student may be suspended or expelled from the University for Academic Misconduct and the offence may appear on their transcript. The relevant policy can be found at Laurier’s academic integrity website along with resources to educate and support you in upholding a culture of integrity. Ignorance of Laurier’s academic misconduct policy is not a defense. See: www.wlu.ca/academicintegrity

3. Special Needs: Students with disabilities or special needs are advised to contact Laurier’s Accessible Learning Centre for information regarding its services and resources. Students are encouraged to review the Academic Calendar. See: https://academic-calendar.wlu.ca/dates.php?cal=1&t=355&y=77

4. Plagiarism: Wilfrid Laurier University uses software that can check for plagiarism. Students may be asked to submit their written work in electronic form and have it checked for plagiarism. (Approved by Senate May 14, 2002)


6. Late Assignment Policy – Late assignments are not accepted. Students who are ill who miss the deadline for assignments must submit a doctor’s note to the Lab Coordinator to have the work accepted. Work that is not submitted to the proper Dropbox will not be marked.

7. Final Examinations – Students are required to be available for examinations during the examination periods of all terms in which they register. (See Academic Regulations – examinations in the academic calendars) The examination period for Fall 2019 is : December 07 - December 20, 2019


9. Other course policies
   • Students will have two weeks after a mark is posted to dispute the mark. After two weeks, no changes will be made. It is the responsibility of the student to ensure all grades are posted in MyLearningSpace.
   • Grades will not be changed after the final exam has ended regardless of circumstances. If you are missing your marks email your Instructional Assistant immediately.
   • If you are unable to write the midterms please contact your Course Instructor.
   • Students must complete at least 7 assignments for term work. If you are unable to complete more than 3 assignments please contact your Course Instructor or Lab Coordinator. Students who complete 6 or less assignments risk the possibility of failing the course.
   • Students must pass the weighted average for midterm and final exams to pass the course.

Guidelines for Technology use During Class and During Course Assessment
   • Adhering to the University’s policy on the use of electronic devices (see above) it is important for you to realize that the use of electronic devices such as cellphones, laptops, and tablets for non-academic use during lectures, labs, and assessments is prohibited.
• Answering messages, using social networking sites, or gaming are distracting practices that reduce the ability for you to learn the material that is provided. You are a distraction to others in the room as well as the instructor, so electronic devices will only be used for academic purposes.
• I’ll request that your cellphone is turned off and put away during lectures, labs, and midterms so you do not distract others, and so that your potential for learning is increased.
If you have personal reasons that require the use of a cellphone for emergency contact reasons, please contact me to discuss them so we can make appropriate arrangements.

Lab Regulations
• The labs are the hands-on portion of the course. In the lab you will be taught how to use WLU's PC network - you will not need your own computer and there is no space for you to use your own laptop.
• It is very important to attend labs if you have no previous background in the topics presented, or if you need a refresher. Lab attendance is mandatory to achieve full grades in the course.
• Arriving late causes distractions for your classmates who were able to arrive on time.
• If you miss lab due to illness, make sure you visit Health Services and receive a doctor’s note and provide it to the course instructor.
• The Lab instructor will make alternate arrangements in case of equipment failure, holidays, illness, etc. These changes will be posted to the MyLearningSpace web site. Check your WLU email on a regular basis.

General Regulations

Course Drop Dates
Please refer to the Undergraduate Academic Calendar - Academic Dates Fall term 2019 - for details of course add/drop dates, etc.

Accessible Learning Centre
Students with disabilities or special needs are advised to contact Laurier's Accessible Learning Centre for information regarding its services and resources, ext. 3086. Students are encouraged to review the Calendar for information regarding all services available on campus.

Learning Services
There is a range of academic learning support services offered at Laurier designed for all students who want to improve their academic achievement in the classroom. These services include the following specific areas:
• Central Academic Advising Office
• Mathematics Assistance Centre
• Study Skills and Supplemental Instruction Centre
• Writing Centre

Visit the Learning Services web page for detailed information.

Laurier Email Account
Our official means of communication is with your Laurier email account. Students are expected to regularly check their Laurier email account for important notices from the university community. Students are also expected to send emails to official members of the university community from their Laurier email account in order to ensure delivery.
<table>
<thead>
<tr>
<th>Service</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student Food Bank</strong></td>
<td><a href="http://www.wlusu.com/food-bank/">www.wlusu.com/food-bank/</a></td>
</tr>
<tr>
<td>All students are eligible to use this service to ensure they’re eating healthy when overwhelmed, stressed or financially strained. Anonymously request a package online 24-7. All dietary restrictions accommodated.</td>
<td></td>
</tr>
<tr>
<td><strong>Foot Patrol</strong></td>
<td>519.886.FOOT (3668)</td>
</tr>
<tr>
<td>A volunteer operated safe-walk program, available Fall and Winter, daily from 6:30pm to 3am. Teams of two are assigned to escort students to and from campus by foot or by van. <a href="http://www.wlusu.com/foot-patrol/">http://www.wlusu.com/foot-patrol/</a></td>
<td></td>
</tr>
<tr>
<td><strong>Peer Connect</strong></td>
<td>1.866.281.PEER (7337)</td>
</tr>
<tr>
<td>A confidential listening, referral, and information line available during evening hours to provide support and resources. Sunday to Thursday, 12pm – 2am</td>
<td>Friday to Saturday 12pm – 3am <a href="http://www.wlusu.com/peer-help-line/">http://www.wlusu.com/peer-help-line/</a></td>
</tr>
<tr>
<td><strong>The Wellness Centre</strong></td>
<td>519-884-0710, x3146</td>
</tr>
<tr>
<td>The Wellness Centre supports students’ physical, emotional and mental health needs. Located on the 2nd floor of the Student Services building, booked and same-day appointments are available Monday to Wednesday 8:30 am – 7:30 pm, Thursday to Friday 8:30 am-4:15 pm. Contact: x3146, <a href="mailto:wellness@wlu.ca">wellness@wlu.ca</a> or @LaurierWellness. After hours crisis support available 24/7 - “Good 2 Talk” 1-866-925-5454.</td>
<td></td>
</tr>
</tbody>
</table>