CS 171 - Computer Programming I

Course Overview

Where do I find the syllabus?

- Log into Blackboard Learn
- Go to your lab section
- Find the:
  - Course Information
  - Course schedule
- You are responsible for keeping up with all the due dates

Course Instructor

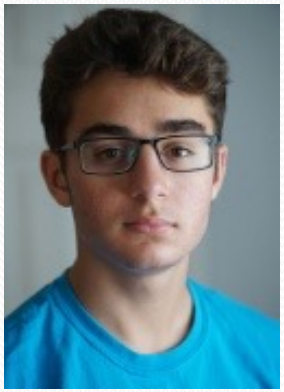
- Prof. Adelaida A. Medlock
- Email: aalban@drexel.edu
- Office: 3675 Market St. Room 1064
- Office hours:
  - Tuesdays 4:00 pm – 6:00 pm

Teacher Assistants (TAs)

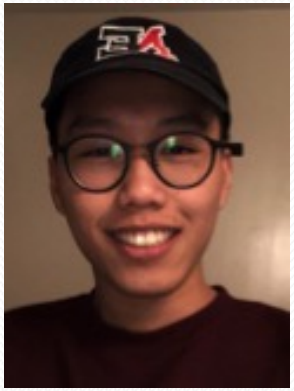
- Giang Doan

- Emily Johns

- Yonatan Wiese-Namir



- Russell Zheng



Lab Assistants

- Ahnaf An Nafeee

- Ibrahim Elsaid

Teacher Assistants (TAs)

- TAs will hold office hours at the CLC:
  - 3675 Market St. Room 1066
- Office hours schedule can be found:
  - Bb Learn → Faculty Information (CS 171 TAs)
  - at https://www.cs.drexel.edu/clc/ (all CS Department TAs)

Office Hours Etiquette

- Please make sure to contact the TAs during the posted office hours
  - Remember that we do not have office hours during the weekends
- You are welcome to post questions in Discord at any time
  - if any TA is available and able to answer the question, they may do so
  - but please be mindful and remember that you may not get an instant answer if the questions are posted outside your course office hours.
- Please remember that your TAs are also students who are taking courses, working on their own assignments, and some may be also working on a co-op job.

How to make the most of office hours

- Seek assistance immediately after you first begin to experience difficulty in class.
- Come prepared: Be able to point out specifically where you are getting stuck.
- Have specific questions, talk about what you have tried, and what resources you have used.
- If you have more than one issue, come with a list.
- Do not send screen-shots of your code
  - TAs/instructors cannot help you debug code sent in an image
- Be patient
  - particularly during busy times such as mid-terms, final exams, etc.
- Assume responsibility
  - A TA's role is to help and guide you, not to do the work for you

Pre-Requisites

- None

Description and Learning Goals

- Introduction to structured computer programming in Python. Topics include variables, input and output, expressions, assignment statements, conditionals and branching, repetition, functions and parameter passing, arrays, and string manipulation. Stresses good programming style, documentation, debugging, and testing.
- **Goals:**
  The goal of this course is for students completing it to be competent programmers, able to write working Python program on their own using appropriate constructs when presented with a problem description.

Objectives

By the end of this course, you should be able to

1. Trace execution of a Python program containing assignment statements, strings, conditionals, loops, file input/output, functions.
2. Determine appropriate constructs and design a Python program using them to satisfy problem description.
3. Write appropriately styled Python code for programs using assignment statements, strings, conditionals, loops, file input/output, functions.
4. Detect and correct syntax errors in a Python program.
5. Detect and correct logic errors in a Python program.
6. Communicate and solve problems effectively as a member of a team

Textbook

- **Title:** Programming in Python 3 with zyLabs
- **Edition:** CS 171 Computer Programming I - Fall 2021
- **Author:** Bailey Miller
- **ISBN**: 979-8-203-90171-2
- **Copyright:** 2015, 2016, 2018, 2019, 2020, 2021 Zyante Inc. (zyBooks.com)
- **Price:** $77.00

In order to acquire the book you will need to follow these steps:

- Sign up at learn.zybooks.com
- Enter zyBook code **DREXELCS171MedlockFall2021**
- Click Subscribe

Software

- The official language used for this course is Python 3
  - Available for free at https://www.python.org
- Required IDE (free):
  - Thonny: https://thonny.org/
- Optional IDE (free):

  PyCharm: PyCharm Free Community Edition

  Cloud environment: https://repl.it/
- Required communication tool (free): Discord
  - Invitation has been sent by CCI to students registered in CS 171
  - Sign up as soon as possible since this is the tool we will use to communicate during the term (TAs, instructors, students)

Software

- Blackboard Learn:
  - Lab assignments, lecture notes, examples, quizzed, and announcements will be posted in Blackboard Learn
  - You can access Bb Learn from: https://one.drexel.edu
  - Contents for the course is posted in your lab section (not the lecture)

Course Assessment

- Your course grade will have the following components:
  - Homework Assignments (individual) 15%
  - Lab assignments 15%
  - Textbook readings and exercises (individual) 10%
  - Quizzes (individual) 25%
  - Final Exam (individual) 35%

Course Assessment

- Final grades will be assigned via a normal grading scale

Points	Grade	Points	Grade	Points	Grade
97 - 100	A+	83 - 86.99	B	70 - 72.99	C-
93 - 96.99	A	80 - 82.99	B-	67 - 69.99	D+
90 - 92.99	A-	77 - 79.99	C+	60 - 66.99	D
87 - 89.99	B+	73 - 76.99	C	0 - 59.99	F

Reading assignments

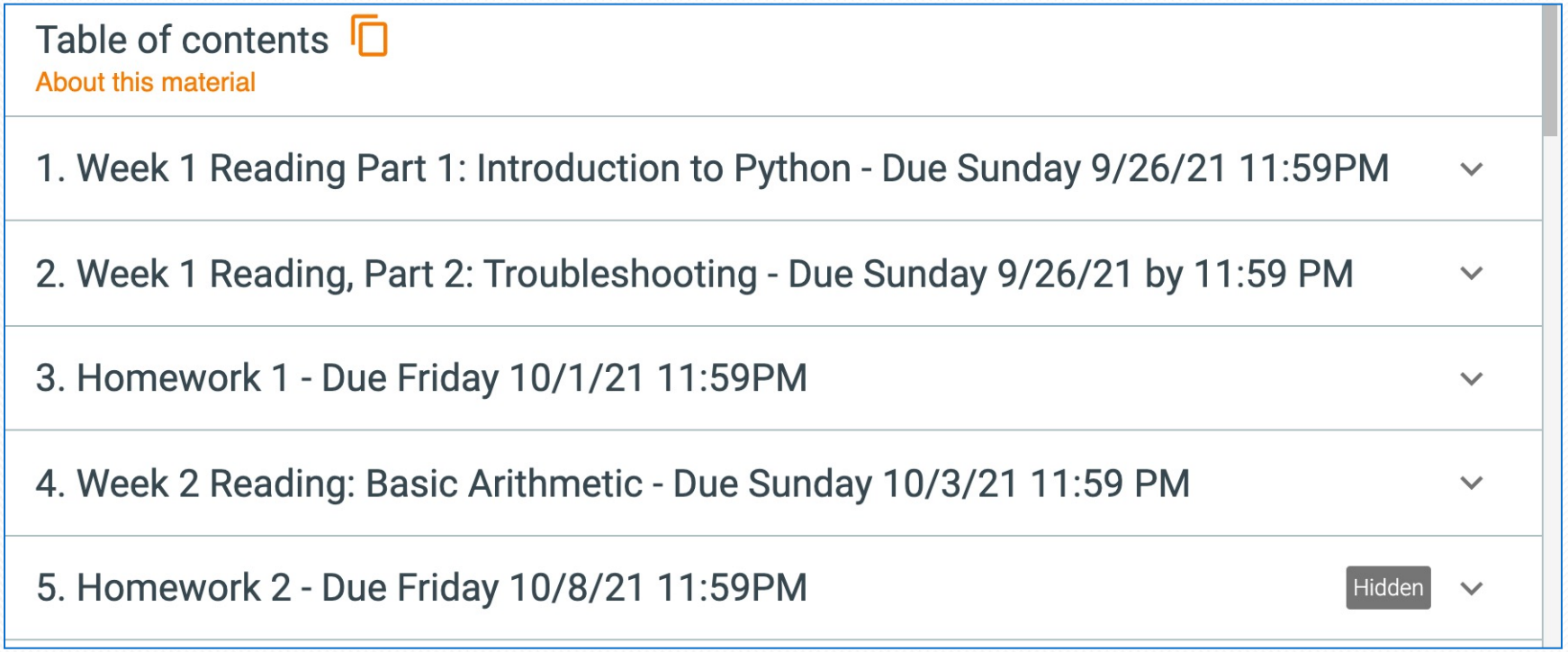
- Individual assignments
- Each week sections of the ZyBooks online textbook will be assigned.
- You are required to complete **all** **Participation Activity** and **Challenge Activity** questions in the assigned readings.
- You must purchase a ZyBooks subscription to complete reading assignments.
- Each Student is required to have their own ZyBooks account.
- Reading assignments will be due on Sundays
- Late Submissions will not be accepted for Readings.

Homework

- Individual assignments.
- Most weeks homework assignments will be assigned (about 8)
- Homework assignments consist of an additional section in ZyBooks with Programming problems.
- You must purchase a ZyBooks subscription to complete homework assignments.
- Each student is required to have their own ZyBooks account.
- Homework assignments will be due on Fridays
- Late Submissions will not be accepted for Homework assignments.
- If you feel ZyBooks has graded your homework code incorrectly, you may request a TA review the grade. You must request a review within 1 week of the Homework's due date.

Reading and Homework Assignments

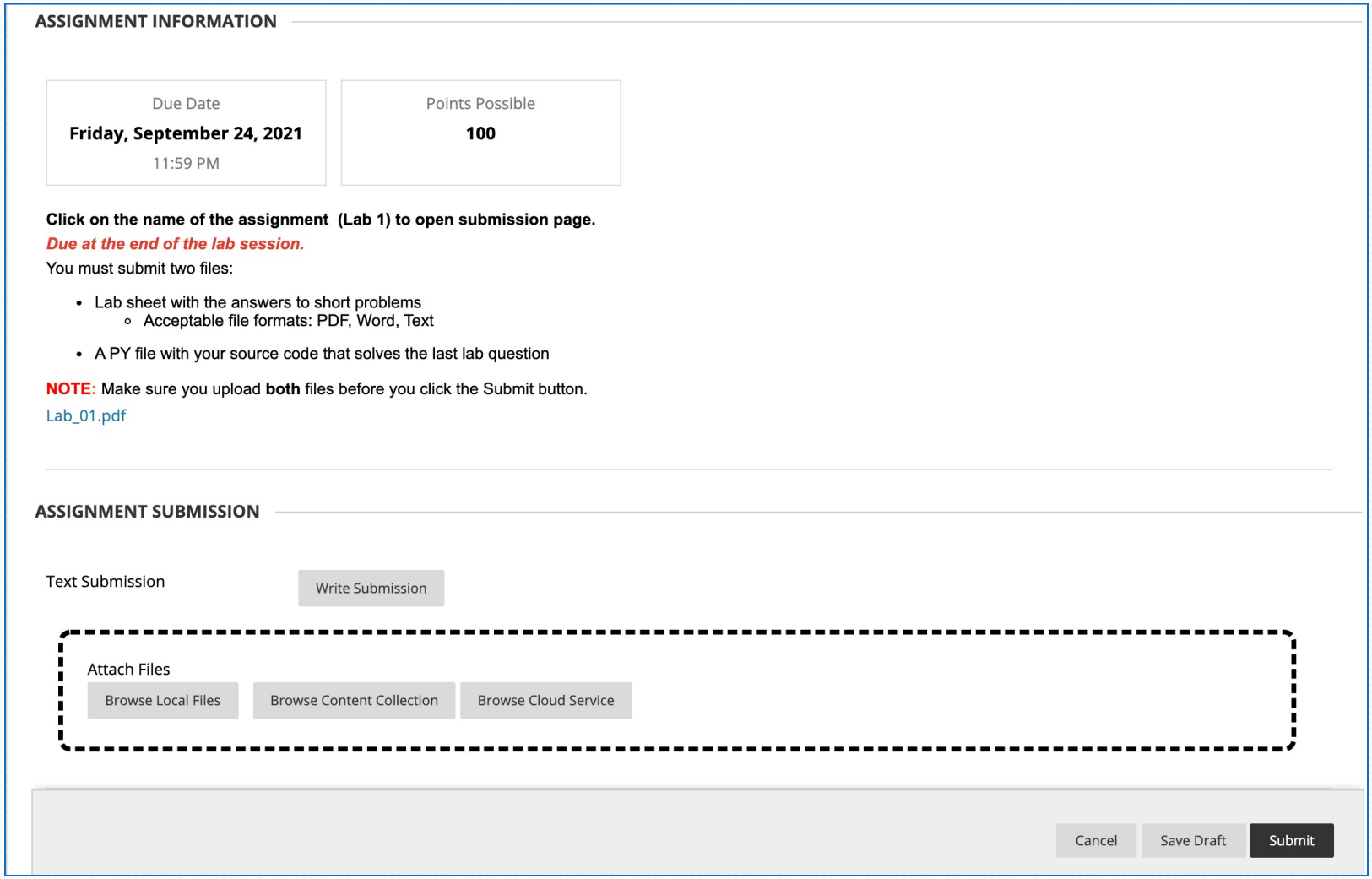
Some Material will become visible when it is assigned.



Labs

- Labs will be posted in Bb Learn as weekly assignments.
- You will work on the weekly lab assignments and submit them via Bb Learn by the end of the lab period.
- The 1st lab assignment will be individual work then the rest of the term you will work on the lab assignment with **one** lab partner of your choosing.
  - You should write both names in the lab sheet
  - You will choose a lab partner during lab 1 session

Lab Assignments submission



Quizzes / Final

- Individual tests
- Quizzes will be given online via Bb Learn
- Time limited
- There will be 4 quizzes this term:
  - On weeks 3, 6, 8, and 11
  - Given at the beginning of the lab session
- Final Exam will be given during finals week
  - Date/Time/Room: TBA

Due Dates/Late Policy

Due Dates

- Weekly readings: Due on Sundays by 11:59 pm.
- Weekly Homework: Due on Fridays by 11:59 pm.
- Weekly Labs: Due at the end of your lab session.
- Quizzes: To be taken at the beginning of the lab session

Note: all due dates and times are on Eastern Time Zone.

Late Policies:

- Lab, Homework, Reading Assignments:
  - Zero if not submitted by the due date
- Quizzes/Exams
  - Zero if missed

Due Dates/Late Policy

- Lowest Grade will be dropped in each of the follow:
  - Homework
  - Labs
  - Readings
- Quizzes **will not** drop lowest grade
- Final **must** be taken at date/time assigned by the Registrar's Office

Additional Policies

- Any dispute about a grade must be resolved within 5 days of receiving your grade
- We are all bound by the Academic Honesty Policy
- Consequences for breaches of the policy include
  - A grade of zero for the assignment in question
  - Reduction of the final letter grade for the course
  - An Academic Misconduct report filed with the University
- To ensure that assignments are done independently
  - In addition to human observation, we will be running all assignments through a plagiarism detection system.
  - This program uses compiler techniques which are invariant of syntax and style. It has a very high accuracy rate.

Additional Policies

- You must observe proper etiquette while on Discord / Email.
  - Be respectful of your TAs, course instructor, and fellow students
  - Stay on topic
  - Don’t post irrelevant links, comments, thoughts, or pictures.
  - Respect the opinions of your classmates.
  - Do not ever post your assignments' code online

University Policies

- Students with Disability Statement:
  - http://www.drexel.edu/oed/disabilityResources/students/
- Course Drop Policy:
  - http://www.drexel.edu/provost/policies/course-add-drop/
- Course Withdrawal Policy:
  - http://www.drexel.edu/provost/policies/course-withdrawal/

Week By Week

- Week 1 - Overview, Introduction to Python, Variables
- Week 2 – Arithmetic Expressions
- Week 3 – Data Types – **Quiz 1**
- Week 4 – Indigenous People Day – University Holiday
- Week 5 – Conditional Branching
- Week 6 – Loops and Iteration – **Quiz 2**
- Week 7 – Functions
- Week 8 – Exceptions, File I/O, Modules – **Quiz 3**
- Week 9 –Recursion, Linear and Binary Search
- Week 10 - Thanksgiving Holiday
- Week 11 – Sorting Algorithms – **Quiz 4**
- Week 12 – Final Exam

Course Resources

- There are lots of resources for this course posted in Bb Learn → CS 171 Resources:
  - Python keywords, and style guidelines
  - Bb Learn help
  - TAs office hours and website
  - CCI Commons lab link
    - Get help with software, etc.

Syllabus and Course Schedule

- Posted in Blackboard Learn
- Read it!
- You are accountable for everything in it.
- You are responsible for keeping track of due dates for assignments, quizzes, and exams.