CSC-121, Python Programming

Course Syllabus

Engineering, Transportation, Technology

A-B Tech reserves the right to make changes as necessary to this schedule, including possible responses to any health crisis. The instructor will communicate any changes prior to the implementation of the change. Please make sure to check your A-B Tech email and Moodle on a regular basis.

Course Information

- **Course/Section:** CSC-121-OA1
- **Course Hours:** 2 3 3
- **Semester:** 2024SP
- **Meeting Times:** ONLINE
- **Meeting Location:** ONLINE.
- **Prerequisites:** None
- **Co-requisites:** None
- **Course Description** *per catalog***:** This course introduces computer programming using the Python programming language. Emphasis is placed on common algorithms and programming principles utilizing the standard library distributed with Python. Upon completion, students should be able to design, code, test, and debug Python language programs.
- **Text(s):** Python Crash Course – A Hands-On Project-Based Introduction to Programming – by Eric Matthes. ISBN: 978-1-59327-928-8
- **Supplies/Materials:** Cloud based or USB flash storage. Back it up!

Instructor Information

- **Instructor Name**: Dawn Harrison
- **Office Telephone Number:** N/A
- **Email Address:** dawnrharrison@abtech.edu
- **Office Location:** online
- **Office Hours:** by appointment via zoom
- **Communication:**
  - My *preferred form of communication is email* at dawnrharrison@abtech.edu. If communicating by email, I will only respond to A-B Tech email addresses. I will usually respond to emails within 24 hours during the workweek.
  - If you do not hear from me within 24 hours, please email me again.

- - If you don't reach me within 3 days, contact Pete Kennedy, peterukennedy@abtech.edu.
- **When emailing me, follow these guidelines:**
  - Always state which class you are in. I suggest adding your semester schedule to your email signature.
  - If you have a question about code, always zip and attach all files (HTML, CSS, PHP, text files, etc.)
  - Attach a screenshot if the question is about the display.
  - Be as explicit and detailed as possible if you're asking for help. Briefly explain:
    - What the problem is.
    - What do you expect should happen that's not?
    - Your troubleshooting steps. What have you already done to try to fix the problem?
  - Use proper grammar, spelling, punctuation, and tone and format your message for readability. Communication skills are high on the list for employers. Practice professional communication in your emails.

Course Learning Outcomes/Objectives

- Work towards proficiency in programming with Python.
- Demonstrate an ability to plan and develop software solutions.
- Solve technical problems without clear solutions.

A-B Tech General Education Outcomes

Expected competencies students will develop in this course:

- Students will critically evaluate information.
- Students will solve problems.
- Students will effectively communicate.

Additional information can be located on A-B Tech's website at the following link: Course Syllabus Information.

Grading System

Grade Letter	Associated Percentages
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	Below 60

Professionalism

Students are expected to conduct themselves in a professional and respectful manner at all times and adhere to the code of student conduct. In that regard, students will not at any time engage in disruptive,

threatening, unethical, disrespectful, or abusive conduct toward other members of the college community, including fellow students, faculty, staff, and/or campus visitors.

Participation Requirements

It is mandatory that the student attend each course at least once during the first 10% of the course, or in the case of online courses, a graded activity must be submitted during the first 10% of the course. For hybrid courses, the student must attend the classroom portion of the course or complete an online graded activity prior to the 10% point. Failure to attend or complete the activity prior to the 10% point will result in the student being dropped from the course. The student will not be allowed to continue in the course or receive a refund.

Course Requirements and Expectations

Evaluation

Discussions: There will be graded discussions in the class. All students must participate in these discussions. Each discussion will have a question posed or something to comment on. You will be responsible for making a well-thought-out comment on the discussion. In addition, you are to respond to at least one of your classmate's posts. Discussion boards are 20% of your final grade.

There are a few Discussion boards that are not graded. One is to introduce yourself to the class and officially "enroll" you in the class; this discussion board is mandatory. Others are for HELP and the Coffee House.

Programming Assignments: There are multiple programming assignments for each chapter during the course. You will be required to complete these programming assignments, upload a screenshot of the code and the outcome, and upload the python code to Moodle. In addition, you will be required to upload the project (code) to GitHub and share it with me. Programming Assignments are 60% of your final grade.

Project: There will be a final project in this class that will allow you to apply the skills that you have acquired. Final Project is 20% of your final grade.

Assignment Due Dates

Assignments are due on **Sunday** nights by 11:55 pm on the week assigned. Late assignments are not accepted. Period. If you miss a deadline and fail to post your required assignment, you'll receive a zero for the assignment.   Turn in something! Partial credit is better than nothing! If you have the work almost completed, you might be able to resubmit it for credit.

Given the volume of work turned in on a weekly basis, I simply cannot accept late work.

You cannot pass this course without turning in work. Assignments are not optional. Turning them in late is not an option. Don't procrastinate. Don't neglect deadlines. Don't fail to complete the required assignments.

The weekly folders in Moodle will be made available IN ADVANCE to allow students to work ahead and avoid missing a deadline. Once the folder containing the links to the assignments, chapter projects

discussion forums, and tests are gone, so is the opportunity to post your comments, turn in your work, or complete your test.

If you request an extension, it will be denied unless it is due to an emergency. Do not request an extension of time to complete your assignments.

Communication

Throughout the semester, we will have regular, substantive communication. Below are some of the ways in which we can communicate.

1.   Assignments/Grading. If your assignments are submitted without any issue, then I'll just post a quick comment regarding them. However, if the assignments are missing content, could be improved, or have other issues, I will provide a more detailed comment and possibly further instructions for you to follow. Please make sure that you read the comments I've posted on your assignments and discussion boards.

2.   Announcements. During the semester, expect announcements (and emails) from me regarding the course. These will be more general interactions where I am letting you know about any updates, issues, cancellations, etc. as well as "kudos" when the class has done outstanding work.

3.   Emails. Occasionally, I will email you directly. This email could be to check in with you to see if you're having any issues, to let you know that there are issues that we need to talk over in person, or just to thank you for doing an outstanding job.

Email

Please feel free to email me anytime you have questions (dawnrharrison@abtech.edu). In the subject header of the email please state the class and the section and your full name (for example "CSC 121 OA1 Donald Duck"). And please be as specific as possible if you are having an issue. Unless it is a weekend or a holiday, I try to respond within 24 hours. If you email on a Friday or weekend, I'll respond on Monday. If you email on a holiday, I'll respond the next working day. If I haven't returned your email within a timely manner, please call me at 339-4208 and leave a message or email me again. I get tons of emails and it may have gotten lost or you might have mistyped my email address and I didn't receive it.

Grading

I will make an honest effort to have your assignments graded and comments back to you the week after the due date. (I normally don't grade the assignments until the due date has passed.) For the most part, my class assignments require that I go line by line reviewing code when there is something wrong with a program or web page. This is extremely time consuming and I'm usually teaching 5 or 6 classes that require this. There will be times when I get behind on grading. If that happens, I will let you know when to expect the assignments to be graded and the comments back to you.

Virtual Meetings

The best way to reach me is via email. If you are having issues that we can not resolve via email, then we'll need to set up a virtual meeting so we can collaborate to resolve it.

Inclement Weather

When the College is closed, <u>all curriculum classes (including online synchronous (Zoom))</u>, are cancelled except for clinical sites that are still operating (i.e. Mission Hospital, etc.). **Assignments are still due! Please log into Moodle and review instructions from me.**

Please sign up for A-B Tech text alerts to receive early weather and emergency notifications. To register, instructions are at https://ABTech.edu/emergency. You may also check the A-B Tech homepage at www.abtech.edu for updates. **Should you lose power or internet, please contact me ASAP!**

Rights, Responsibilities, and Procedures

Information on Rights, Responsibilities, and Procedures pertaining to students can be located on A-B Tech's website at the following link: Course Syllabus Information.

ADA/Accessibility

A-B Tech is committed to creating an environment that meets the needs of its diverse student body. If a student has a disability, thinks they may have a disability, or are having issues with the accessibility of course materials, the student should contact Support Services to arrange appropriate accommodations to ensure access to their education. Complete information and forms can be located at the following link: Student Service Overview.

Course Evaluation by Students

Students will have the opportunity to provide constructive feedback on their courses each semester at approximately the 75% completion point through an online survey. *All responses are anonymous* unless a student chooses to self-identify in submitted comments. Results are used to determine whether changes should be made during the second half of the course to improve the learning experience for students. Additional information can be located on A-B Tech's website at the following link: Course Syllabus Information.

Course Schedule

Any changes to the syllabus will be posted in the College's Learning Management System (Moodle) prior to implementation of change.

Week	Module	Topic	Due
1	Module 0	Introduction Discussion Email Instructor Download Python (Python.org)	Jan-14

Week	Module	Topic	Due
2	Module 1	Read and *Work Through* Chapter 1 Create GitHub account Complete Assignment(s) as stated on Moodle Discussion Board	Jan-21
3	Module 2	Read and *Work Through* Chapter 2 Complete Assignment(s) as stated on Moodle	Jan-28
4	Module 3	Read and *Work Through* Chapter 3 Complete Assignment(s) as stated on Moodle	Feb-04
5	Module 4	Read and *Work Through* Chapter 4 Complete Assignment(s) as stated on Moodle	Feb-11
6	Module 5	Read and *Work Through* Chapter 5 Complete Assignment(s) as stated on Moodle	Feb-18
7	Module 6	Read and *Work Through* Chapter 6 Complete Assignment(s) as stated on Moodle Discussion Board	Feb-25
8	Module 7	Read and *Work Through* Chapter 7 Complete Assignment(s) as stated on Moodle	Mar-03
9	Module 8	Read and *Work Through* Chapter 8 Complete Assignment(s) as stated on Moodle	Mar-10
10		Continue to Read and *Work Through* Chapter 8 Complete Assignment(s) as stated on Moodle Discussion Board	Mar-17
11	Module 9	Read and *Work Through* Chapter 9 Complete Assignment(s) as stated on Moodle Discussion Board	Mar-24

12	Module 10	Read and *Work Through* Chapter 10
		Complete Assignment(s) as stated on Moodle
		Decide which Project you'd like to complete for your final project:
		  1) The Space Aliens Game (chapters 12 - 14)
		  2) Data Visualization (chapters 15 - 20)
			Mar-31

13	**Spring Break (4/1 - 4/6)**		Apr-07
14	Module 11	Read and *Work Through* Chapter 11 Complete Assignment(s) as stated on Moodle	Apr-14
15	Module 12	Work on Final Project	Apr-21
16		**Final Project**	May-01