

Course Instructor:

Dr. Amber Wagner

Office: Olin 208

Email: anwagner@bsc.edu (best way to reach me)

Book an appointment: wagner-9.youcanbook.me

Anonymous feedback: sayat.me/anwagner

A little about me...I have been a dancer for most of my life, and I still dance. As a high school student, I assisted and taught numerous dance classes, which is where I found my love for teaching. I started teaching computer science to grades 7 through 12 at the Alabama School of Fine Arts (ASFA) in 2004. I spent three incredible years at ASFA where I had the privilege of teaching fantastic individuals who taught me as much, if not more, than I taught them. I have also used my computer science degree as a project manager and software developer for Kennesaw State University where I was recently an assistant professor. I earned my PhD in Computer Science from the University of Alabama under the advisement of Dr. Jeff Gray.

Course Description:

Introduction to textual programming using Python. Course will cover data types, decisions, loops, functions, basic data structures, and classes.

Major Course Activities

- Four-Five projects will be given throughout the semester. Each project will either pose a fun question to solve or will allow the student to apply programming to a particular field of interest
- Weekly lab assignments
- Midterm Exam
- A final project will be required in lieu of a final exam. Students will choose from several options.

Course Delivery Description:

This course will meet in person in Olin 201 on Mondays, Wednesdays, and Fridays from 9:30 to 10:50. Attendance is highly recommended.

Course Prerequisites:

None

Required Course Materials:

There will be a variety of readings assigned throughout the term. All readings will be posted on Moodle. Students are expected to complete the chapters in the Zybooks textbook. A **minimum of 50%** of each chapter should be completed for a full participation grade.

Technology Requirements:

All course materials and assignments will be posted on Moodle. Please ensure you have Eclipse (or another IDE with Python) installed on your personal machine. Eclipse is installed on the lab computers.

It is expected that all written assignments be saved and submitted on Moodle as a PDF.

[IT Helpdesk](#) offers telephone, email, and in-person support to all Birmingham-Southern students and employees. Please view the [Student Quick Guide](#) for information on how to access BSC technology tools. Hours of operation are listed below.

Hours of Operation

Email: helpdesk@bsc.edu, Monday-Friday, 7:30 a.m.- 4 p.m.

Phone: [205-226-3033](tel:205-226-3033)

24/7 Hotline via Apogee: 1-877-478-8861

Web address: www.bsc.edu/campus/it/helpdesk.html

Student Learning Outcomes (SLOs):

At the conclusion of this project, students will be able to:

- SLO-1 Design solutions to non-trivial problems
- SLO-2 Implement solutions to non-trivial problems
- SLO-3 Master the fundamental programming constructs including variables, decisions, loops, functions, lists
- SLO-4 Implement basic object-oriented design

Instructional Method and Learning Strategies:

The course will consist of lectures followed by hands-on activities to practice what was discussed in the lecture. There will be readings, quizzes on the readings, and discussions about the readings. There will be weekly labs, larger projects, a midterm exam, and a final project.

The primary teaching style utilized will be active learning. There will be group work, independent research, problem-solving activities, and analytical writings throughout the course.

Course Outline/Schedule:

The final course outline/schedule will be posted in Moodle, but the below is a tentative schedule. The readings will consist of articles or other online material.

Date/Week	Topics	Important Dates/Activities
8/24-8/26 Week 1	Intro to Course Python Basics Lab #1	The ZyBook was included in your textbook fee. You should have received a digital code to use from the bookstore.
8/29-9/2 Week 2	Input/Output & Variables Lab #2	Read ZyBooks Chapters 1 & 2
9/5-9/9 Week 3	Types Lab #3	9/5 Monday: Labor Day Holiday 9/7 Wednesday: Class online 9/9 Friday: Lab online 9/7 – Last day to add a class
9/12-9/16 Week 4	Branching Lab #4	Read ZyBooks Chapter 4 9/12 Monday: Class online 9/14 – Project #1 Due 9/14– Last day to withdraw with tuition refund
9/19-9/23 Week 5	Loops Lab #5	Read ZyBooks Chapter 5 9/21 – Last day to drop without a grade
9/26-9/30 Week 6	Functions Lab – Midterm exam	Read ZyBooks Chapter 6 9/28 – Project #2 Due 9/30 – Midterm Exam
10/3-10/7 Week 7	Strings	Read ZyBooks Chapter 7 10/7 – Fall break, no lab
10/10-10/14 Week 8	Lists and Dictionaries Lab #6	Read ZyBooks Chapter 8 10/12 – Last day to drop with a “W” 10/12 – Project #3 Due

Date/Week	Topics	Important Dates/Activities
10/17-10/21 Week 9	Files/Pandas Plotting/NumPy Lab #7	Read ZyBooks Chapter 9 Read ZyBooks Chapter 10
10/24-10/28 Week 10	Classes Lab #8	Read ZyBooks Chapter 11 10/24 – Project #4 Due
10/31-11/4 Week 11	Classes Lab #9	
11/7-11/11 Week 12	Exceptions Modules	Read ZyBooks Chapter 14 11/11 – Project #5 Due, No lab
11/14-11/18 Week 13	Inheritance Lab #10	
11/21-11/25 Week 14	Inheritance	11/23-11/25 No School
11/28-11/30 Week 15	Inheritance Final Project Assistance	12/5 12:00 PM – Final Project Due

Course Activities, Assessments, & Interactions:

This course consists of a sequence of activities, assessments, and interactions to support you in achieving the Student Learning Outcomes (SLO) for this course. You will engage in weekly activities, discussions, research, readings, quizzes, projects, one exam, and a final project. The primary course artifacts required to achieve the Student Learning Outcomes (SLO) are described below:

Discussions

Active participation is required for this course. There will be regular discussions regarding the readings. There may also be reading quizzes or reflections posted on Moodle.

Participation

Throughout the course, there will be worksheets distributed during class for students to solidify their understanding of lectures or expand upon what was covered in the lecture. If students are

not in class, they are unable to participate.

Programming Projects

There will be four-five programming projects and one final project in this course.

Midterm Exam

A closed book exam will be given during the middle of the term.

Grading:

ACTIVITY	Weight
Participation	10%
Lab Exercises	25%
Programming Projects	40%
Midterm Exam	10%
Final Project	15%

Grading Scale

A	93-100%	B-	80-82%	D+	68-69%
A-	90-92%	C+	78-79%	D	60-67%
B+	88-89%	C	73-77%	F	0-59%
B	83-87%	C-	70-72%		

Getting Started with this Course:

Moodle Learning Management System

Students are responsible for checking Moodle for course readings, assignments, and announcements. Work that is passed in late because of not checking Moodle is the responsibility of the student. You are also required to check your grades on Moodle to verify that the correct grades are recorded for your completed work.

Logging into Moodle

Birmingham-Southern College uses the Moodle Learning Management System (LMS). To get started with the course, do the following:

1. Log onto the BSC access point by going to: moodle.bsc.edu.
2. Enter your BSC username and password.
3. The Moodle dashboard will open, and your courses will be displayed in the middle of the screen.
4. Select your course to begin.
5. The course welcome page will open. Read the welcome section and follow the instructions for getting started.

You will need your BSC User Name and Password to log in to the course. If you do not have or don't know your User Name, contact the IT Help Desk at [205-226-3039](tel:205-226-3039) or helpdesk@bsc.edu.

Course & College Policies:

Attendance

Plan to attend class. If you must miss, please refer to Moodle for any missed work.

Assignments

Assignments will be due as posted on Moodle. All instructions regarding submission format will be on Moodle. Assignments not following the protocol stated on Moodle will not be graded. Late submissions will be penalized 5% per day and will not be accepted more than 3 days late.

Masking Policy

Masking is optional at the start of the term, but I reserve the right to request that we mask in class based on updates from the CDC.

Academic Integrity

Adhere to the honor code at all times: As a member of the student body of Birmingham-Southern College, I recognize my responsibility to the traditions of the institution, to my fellow students and to myself. I recognize the significance of the honor system. I pledge that I have read and understand the Constitution of the Honor Council, including the Honor Code, and agree to be bound by its provisions.

Additional information on the honor code and violations can be found in the Birmingham-Southern Student Handbook and on [the BSC website](#).

Netiquette

1. Check your email often--this is the method the instructor will use most often to communicate with you.
2. Adhere to the same standards in your digital communications as you would for traditional written language.
3. Use clear and concise language.
4. Remember that all college level communication should have correct spelling and grammar.
5. Be cautious when using humor or sarcasm as tone can be lost in an email or discussion post.
6. Using all capitals is the equivalent of SHOUTING and considered RUDE.

Student Grievance Policy

Students should follow the complaint process as outlined in the current [Birmingham-Southern College Student Handbook](#).

Academic Accessibility and Accommodations

Students with a disability that qualify under the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act and require accommodations should be registered with BSC's Accessibility Office. If you are registered for academic accommodations, please make an appointment with me as soon as possible to discuss any accommodations that may be necessary. During this discussion you are not expected to disclose any details concerning your disability though you may do so at your discretion. If you have a disability but have not yet registered, please contact Dr. Sandra Foster, Assistant Director of Accessibility Services and Resources (Norton 228), at 205-226-7909 or smfoster@bsc.edu. Keep in mind that no accommodation will be made unless and until the instructor receives official notification from the College.

Title IX

Birmingham-Southern College is committed to the creation and maintenance of a safe learning environment for students and the campus community. The College forbids any type of sexual or gender-based misconduct among its students, faculty, and staff. The College encourages all members of the academic community to report suspected sexual and gender-based misconduct to the appropriate authorities so that it can be investigated, remedied, and eliminated. BSC forbids retaliation against any person who has opposed, reported, or participated in an investigation concerning sexual or gender-based misconduct. See the BSC Title IX website (www.bsc.edu/titleix) for more information, including an online report form. If you or a peer have experienced such misconduct, there are faculty and staff members who are trained in supporting students by answering questions and helping them navigate this process. The list of advocates can be found along with other helpful resources on the Title IX website.

BSC Resources for Writers and Readers

Located in Humanities 102, the BSC Writing Center offers in-person and virtual peer-to-peer tutoring and quiet, supportive lab space to work on writing assignments. The Center's tutors are students from a wide variety of majors on campus and have the range to address student writing needs with discipline specificity. Supervised and assisted by BSC Writing Center directors, the tutors provide one-on-one consultations for any student at any point in the writing process. The BSC Writing Center is open Sunday-Thursday 4pm-8pm. To ensure a full 30-minute tutorial time slot, students are encouraged to be mindful of assignment-heavy weeks, keep track of due dates, and visit the Writing Center at their earliest availability during open hours. Please contact Dr. MK Foster or Professor Laura Tolbert (writingcenter@bsc.edu) with any questions or requests for virtual appointments.

Inclement Weather

Inclement weather or other events beyond the control of the College that might cause risk or danger to students, faculty, and staff may occasionally result in changes to normal College operations, including cancellation of classes or events; the calendar schedule may be adjusted.