



**Program Design and Development
CIST 1305 -
COURSE SYLLABUS
Spring Semester 2016
TENTATIVE – SUBJECT TO CHANGE

Semester: 201614 Spring 2016
Course Title: Program Design and Development
Course Number: CIST 1305
Credit Hours/ Minutes: 3/3000
Class Location: Room 6204 Bldg 6, Swainsboro Campus
Class Meets: Mon & Wed 1:00 PM – 2:50 PM / 15 weeks

CRN: 400xx

Instructor: Mr. Jamie Powers
Office Hours: 3:00 – 5:30 p.m. Monday-Thursday
Office Location: Office 6204 Bldg 6 Swainsboro Campus
Email Address: jpowers@southeasterntech.edu
Phone: 478-289-2221
Fax Number: 478-289-2214
Tutoring Hours: By Appointment
Preferred Method of Contact: STC OWL Email to address above

REQUIRED TEXT:



Starting Out with Python,
Tony Gaddis, *Haywood Community College* Publisher:
Addison-Wesley
ISBN-10: 0133582736 ISBN-13: 9780133582734
614 Pages PB
©2014 Published

You can purchase from the STC bookstore
stcbookstore@southeasterntech.edu or 478-289-2217.

REQUIRED SUPPLIES & SOFTWARE: Internet access, Python interpreter software.

Note: Although students can use their smart phones and tablets to access the online portion of their course(s), exams, discussions, assignments, and other graded activities should be performed on a personal computer. Neither BLACKBOARD nor GVTC provide technical support for issues relating to the use of a smart phone or tablet so students are advised to not rely on these devices to complete the online portion of the course.

COURSE DESCRIPTION: An introductory course that provides problem solving and programming concepts for those that develop user applications. An emphasis is placed on developing logic, troubleshooting, and using tools to develop solutions. Topics include: problem solving and programming concepts, structured programming, the three logic structures, file processing concepts, and arrays.

MAJOR COURSE COMPETENCIES/OUTLINE:

1. Define problem solving and programming concepts
2. Develop structured solutions using the three logic structures
3. Develop structured solutions utilizing file processing concepts
4. Develop structured solutions using arrays.

PREREQUISITE(S): None

GENERAL EDUCATION CORE COMPETENCIES: STC has identified the following general education core competencies that graduates will attain:

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.
3. The ability to read, analyze, and interpret information.

STUDENT REQUIREMENTS: Students are expected to complete all work shown on the attached lesson plan. Students are also expected to complete all tests and comprehensive problems on the dates specified on the attached lesson plan.

Students will have at least one week to complete tests and assignments. All tests and assignments are due at 11:55 PM on Monday of each week. Exceptions to the due dates of assignments due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor. Assignments will be submitted via the Remote Lab Information Delivery System (CITRIX – IDS) or emailed to the instructor, Blackboard, and SAM. **Late assignments will not be accepted. Students who miss any assignment, test, project, or discussion board will receive a grade of 0. Unannounced quizzes/assignments may be given. Students who miss an unannounced quiz or assignment will receive a grade of 0.**

ATTENDANCE GUIDELINES: Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and also interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of F and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

Students will not be withdrawn by an instructor for attendance; however, all instructors will keep records of graded assignments and student participation in course activities. The completion dates of these activities will be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an F in a course

EMAILS: Prefer method of communication should be thru OWL MAIL. Make sure that you always type your name and class in the subject line of every email you send me so I know which class you are in. **For example: CIST1305 Powers**

DISCUSSION BOARD TOPICS must be appropriate to the class. Spelling and grammar are considered part of the grade. Posted content should fully answer the question. Short 1 to 2 sentence posts will not be sufficient. See Discussion Board rubric attached. **Complete your initial post by Wednesday and all replies by the Monday due date.**

CHECKING GRADES: A grade book is made available in the BLACKBOARD course on the main page when students log in. This grade book is for students to review and is continuously updated throughout the semester. Students can click My Grades on the menu at any time to see the individual grades for each assignment. The overall percentage averages should display in the grade book to help track course progress.

SURFING THE WEB WHILE IN CLASS: For each time a student is caught on Facebook or a site that is not approved by the instructor, student will be dismissed from class with an absence given for attendance.

CELL PHONE USING IN CLASS: Cell phone usage is not allowed in the classroom. Any student caught using a phone or answering a call during class will have a 5 point deduction on the next Exam/Test.

SPECIAL NEEDS: Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact Jan Brantley, Room 1208 Swainsboro Campus, 478-289-2274, or Helen Thomas, Room 108 Vidalia Campus, 912-538-3126, to coordinate reasonable accommodations.

PREGNANCY: Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please advise me and make appropriate arrangements with the Special Needs Office. Swainsboro Campus: Jan Brantley Room 1208 (478) 289-2274 -- Vidalia Campus: Helen Thomas Room 108 (912) 538-3126.

MAKEUP GUIDELINES: Students are required to take all tests scheduled during the semester. Failure to take Tests/Exam(s), and assignments **will result in a grade of zero. There will be no makeup of assignments or EXAMS.** If Internet or browser failure occurs, contact instructor immediately. A decision will be made at that time if the assignment/exam will be reset. Instructor reserves the right to deduct points from the scores for exceeding the scheduled time limit on the assignment/exam. **Note: If student notifies instructor about problems because of technical issues after the due date or on the last day of the semester, the student will NOT be allowed to make-up the assignment. No exceptions! Assignments must be turned in on the assigned date and will not be accepted late, a grade of zero will be given. All assignments are due according to the lesson plan. The due dates are posted on the lesson plan. Weeks start on Tuesday and end on Monday with assignments due on Monday at 11:55 PM. See Lesson Plan.**

No Harm No Foul Policy: It is the student's responsibility to drop courses during the first three days by completing a withdrawal form with a Counselor in Student Affairs. If a student comes to class during the first three days or any day during this time, the student will be dropped with no penalty **only if** they have completed the Withdrawal Form with Student Affairs by the close of business on the third business day of the semester. (For **SPRING semester, that day will be January 13, 2015.**) **The student must formally withdraw from classes in order to receive the no harm-no foul benefit.**

DROPPING COURSES BEFORE THE CLASS HAS BEGUN: Students wishing to withdraw from one or all courses prior to the first day of class need to go to Banner Web and drop their classes. Please note that a registration access number will be needed as well as a student's ID number and PIN. If the registration access number is unknown, the student will need to contact the registrar.

WITHDRAWAL PROCEDURE: Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% portion of the semester (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" is assigned when the student completes the withdrawal form from the course.

Students who are dropped from courses due to attendance (see your course syllabus for attendance policy) after drop/add until the 65% point of the semester will receive a "W" for the course. Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of 'F' being assigned.

After the 65% portion of the semester, the student will receive a grade for the course. (Please note: A zero will be given for all missed assignments.)

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. All grades, including grades of 'W', will count in attempted hour calculations for the purpose of Financial Aid.

Remember - Informing your instructor that you will not return to his/her course does not satisfy the approved withdrawal procedure outlined above.

ACADEMIC DISHONESTY POLICY: The STC Academic Dishonesty Policy states All forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline. The policy can also be found in the STC Catalog and Student Handbook.

Procedure for Academic Misconduct

The procedure for dealing with academic misconduct and dishonesty is as follows:

--First Offense--

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

--Second Offense--

Student is given a grade of "WF" for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

--Third Offense--

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

STATEMENT OF NON-DISCRIMINATION: Southeastern Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, disabled veteran, veteran of Vietnam Era or citizenship status, (except in those special circumstances permitted or mandated by law). This school is in compliance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin; with the provisions of Title IX of the Educational Amendments of 1972, which prohibits discrimination on the basis of gender; with the provisions of Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap; and with the American with Disabilities Act (ADA).

GRIEVANCE PROCEDURES: Grievance procedures can be found in the Catalog and Handbook located on STC's website.

ACCESS TO TECHNOLOGY: Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the STC website at www.southeasterntech.edu.

Grading Policy		Grading Scale		
Chapter Review Questions	20%	A	EXCELLENT	100-90
Programming Assignments	25%	B	GOOD	89-80
Tests	35%	C	SATISFACTORY	79-70
Discussion Board	15%	D*	POOR	69-60
Unannounced Quizzes	5%	F*	FAILING	59-0
TOTAL	<u>100%</u>	* Grade of D or below results in student repeating the class		

TCSG GUARANTEE/WARRANTY STATEMENT: *The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.*

Discussion Board Project/Problems Grading Rubric

Performance	Exceptional 100	Proficient 90	Satisfactory 70	Poor 50	Unacceptable 0
Grammar/ Spelling 25%	<ul style="list-style-type: none"> •No grammatical or spelling errors 	<ul style="list-style-type: none"> •Grammatical and Spelling errors are few and cause no comprehension problems 	<ul style="list-style-type: none"> •Grammatical and spelling errors cause the reader to reread many parts of the post 	<ul style="list-style-type: none"> •Grammatical and spelling errors are frequent making post confusing to read and comprehend 	<ul style="list-style-type: none"> •Grammatical and spelling errors are so numerous the post is hard or impossible to comprehend
Points	25	22.5	17.5	12.5	0
Posts & Word Count 25%	<ul style="list-style-type: none"> •Posts early to allow time to read and reply to 4 posts •125-150 words in main thread 	<ul style="list-style-type: none"> •Posts early to allow others time to read and reply to 3 posts •80-124 words in main thread 	<ul style="list-style-type: none"> •Posts at the last minute without allowing enough time for others to read and reply •Some required posts missing •26-79 words in main thread 	<ul style="list-style-type: none"> •Posts at the last minute without allowing enough time for others to read and reply •Some required posts missing •0-26 words in main thread 	<ul style="list-style-type: none"> •No posted response to the main thread
Points	25	22.5	17.5	12.5	0
Scope of Solution NO COPYING AND PASTING FROM WEBSITES If any information comes from a website it must be cited as a resource 25%	<ul style="list-style-type: none"> •Content provides a thorough frame of reference for comprehending the solution •An original solution is provided •Numerous resources listed 	<ul style="list-style-type: none"> •Content provides appropriate factual data but is not original or complete to solve problem or topic •Resources listed 	<ul style="list-style-type: none"> •Content attempts to solve problem or topic but is too vague or disorganized to completely comprehend solution •Few resources listed 	<ul style="list-style-type: none"> •Content is not a realistic solution to the problem or topic •Only 1 resource listed 	<ul style="list-style-type: none"> •Content fails to offer a conscientious solution to selected problem or topic •No resources listed
Points	25	22.5	17.5	12.5	0
Explanation 25%	<ul style="list-style-type: none"> •All steps are covered •Questions are answered correctly 	<ul style="list-style-type: none"> •Most steps are covered and answered correctly 	<ul style="list-style-type: none"> •Most steps are covered but not answered correctly 	<ul style="list-style-type: none"> •Less than half of the steps are covered and answered correctly 	<ul style="list-style-type: none"> •No steps are covered or answered
Points	25	22.5	17.5	12.5	0

CIST 1305 – Program Design and Development

SPRING Semester 2016 Lesson Schedule Fiscal Year 201614

Date	Chapter / Lesson	Content	Assignments & Tests Due	*Competency Area
Week 1				
Mon Jan 11	1	Class Introduction – Syllabus, Outline, Rules, and Regulations Coverage Introduction to Computers and Programming	<p>Logon to the course on BLACKBOARD</p> <p>All students: Review and complete all information found under the Getting Started before beginning course work.</p> <p>To begin, go to Course Work - Chapter 1. Complete each item in order to maintain attendance for the class. You have assignments to complete that are due at the end of each week.</p> <ul style="list-style-type: none"> Send an email to instructor for first day attendance <p>Read and work thru Chapter 1 pp. 1-24. Install Python (if not already installed) and review Appendix A & B Do Discussion Board Topic #1 on BLACKBOARD.</p>	1,2 a, c
Wed Jan 13			<p>Do Chapter 1 Review Questions on BLACKBOARD.</p> <p>Take Chapter 1 Test on BLACKBOARD.</p> <p>WEEK 1 ASSIGNMENTS DUE Jan 19 BEFORE 11:55 PM</p>	1,2 a, c
Week 2				
Mon Jan 18	H	Holiday	MLK	
Wed Jan 20	2	Input, Processing, and Output	Read and work thru Chapter 2 pp.31-73. WEEK 2 ASSIGNMENTS DUE Jan 25 BEFORE 11:55 PM	1,2 a, c
Week 3				
Mon Jan 25		Input, Processing, and Output - continued	<p>Do Chapter 2 Programming Exercises 2 & 5 pp.77-78.</p> <p>Save all work for this assignment in your P:\cist1305 folder using the following naming convention for exercise files: ch#ex#.py Example: chapter 2 exercise 2 - ch2ex2.py</p>	1,2 a, c
Wed Jan 27	2		<p>Do Chapter 2 Programming Exercises 8 & 12 pp.78-79.</p> <p>Save all work for this assignment in your P:\cist1305 folder.</p> <p>Do Chapter 2 Review Questions on BLACKBOARD.</p> <p>Take Chapter 2 Test on BLACKBOARD.</p> <p>WEEK 3 ASSIGNMENTS DUE Feb 1 BEFORE 11:55 PM</p>	1,2 a, c

Week 4				
Mon Feb 1	3	Decision Structures and Boolean Logic	Read and work thru Chapter 3 pp.81-112. Do Discussion Board Topic #2 on BLACKBOARD.	1,2,3 a, b, c
Wed Feb 3			Do Chapter 3 Programming Exercises 2 & 3 pp.115. Save all work for this assignment in your P:\cist1305 folder. WEEK 4 ASSIGNMENTS DUE Feb 8 BEFORE 11:55 PM	1,2,3 a, b, c
Week 5				
Mon Feb 8	3	Decision Structures and Boolean Logic continued	Do Chapter 3 Programming Exercises 6 & 13 pp.116 & 118. Save all work for this assignment in your P:\cist1305 folder.	1,2,3 a, b, c
Wed Feb 10			Do Chapter 3 Review Questions on BLACKBOARD. Take Chapter 3 Test on BLACKBOARD. WEEK 5 ASSIGNMENTS DUE Feb15 BEFORE 11:55 PM	1,2,3 a, b, c
Week 6				
Mon Feb 15	4	Repetition Structures	Read and work thru Chapter 4 pp.121-158 Do Discussion Board Topic #3 on BLACKBOARD.	1,2,3 a, b, c
Wed Feb 17			Do Chapter 4 Programming Exercises 1, 5 & 6 pp.161-162. Save all work for this assignment in your P:\cist1305 folder. WEEK 6 ASSIGNMENTS DUE Feb 22 BEFORE 11:55 PM	1,2,3 a, b, c
Week 7				
Mon Feb 22	4	Repetition Structures - continued	Do Chapter 4 Programming Exercises 8 & 10 pp.162-163. Save all work for this assignment in your P:\cist1305 folder.	1,2,3 a, b, c
Wed Feb 24			Do Chapter 4 Review Questions on BLACKBOARD. Take Chapter 4 Test on BLACKBOARD. WEEK 7 ASSIGNMENTS DUE Feb 29 BEFORE 11:55 PM	1,2,3 a, b, c
Week 8				
Mon Feb 29	5	Functions	Read and work thru Chapter 5 pp.165-224. Do Discussion Board Topic #4 on BLACKBOARD.	1,2,3 a, b, c
Wed Mar 2		SEMESTER MIDTERM MARCH 3	Do Chapter 5 Programming Exercises 1, 3 & 4 pp.229 Save all work for this assignment in your P:\cist1305 folder. WEEK 8 ASSIGNMENTS DUE Mar 7 BEFORE 11:55 PM	1,2,3 a, b, c

Week 9				
Mon Mar 7	5	Functions – continued	Do Chapter 5 Programming Exercises 11, 15, & 20 pp.231-233. Save all work for this assignment in your P:\cist1305 folder.	1,2,3 a, b, c
Wed Mar 9			Do Chapter 5 Review Questions on BLACKBOARD. Take Chapter 5 Test on BLACKBOARD. WEEK 9 ASSIGNMENTS DUE Mar 14 BEFORE 11:55 PM	1,2,3 a, b, c
Week 10				
Mon Mar 14	6	Files and Exceptions	Read and work thru Chapter 6 pp.235-285. Do Discussion Board Topic #5 on BLACKBOARD.	1,2,3 a, b, c
Wed Mar 16			Do Chapter 6 Programming Exercises 3 & 4 pp.289. Save all work for this assignment in your P:\cist1305 folder. WEEK 10 ASSIGNMENTS DUE Mar 21 BEFORE 11:55 PM	1,2,3 a, b, c
Week 11				
Mon Mar 21	6	Files and Exceptions continued	Do Chapter 6 Programming Exercises 5, 6 & 9 pp.289. Save all work for this assignment in your P:\cist1305 folder.	1,2,3 a, b, c
Wed Mar 23			Do Chapter 6 Review Questions on BLACKBOARD. Take Chapter 6 Test on BLACKBOARD. WEEK 11 ASSIGNMENTS DUE Apr 4 BEFORE 11:55 PM	1,2,3 a, b, c
SPRING BREAK HOLIDAYS MARCH 30 – APRIL 2				
Week 12				
Mon Apr 4	7	Lists and Tuples	Read and work thru Chapter 7 pp.291-330.	1,3,4 a, b, c
Wed Apr 6			Do Chapter 7 Programming Exercises 1, 2, 3, 5 & 10 pp.334-335. Save all work for this assignment in your P:\cist1305 folder. Do Chapter 7 Review Questions on BLACKBOARD. Take Chapter 7 Test on BLACKBOARD. WEEK 12 ASSIGNMENTS DUE Apr 11 BEFORE 11:55 PM	1,3,4,5 a, b, c
Week 13				
Mon Apr 11	8	More about Strings	Read and work thru Chapter 8 pp.339-362.	1,2,3, a, c
Wed Apr 13			Do Chapter 8 Programming Exercises 1, 3, 5, & 10 pp.366-368. Save all work for this assignment in your P:\cist1305 folder. Do Chapter 8 Review Questions on	1,2,3 a, c

			BLACKBOARD. Take Chapter 8 Review Test on BLACKBOARD. WEEK 13 ASSIGNMENTS DUE Apr 18 BEFORE 11:55 PM	
Week 14				
Mon Apr 18	10	Classes and Object-Oriented Programming	Read and work thru Chapter 10 pp.419-473	1,4 a, c
Wed Apr 20			Do Chapter 10 Programming Exercises 2, & 3 pp.477 Save all work for this assignment in your P:\cist1305 folder. WEEK 14 ASSIGNMENTS DUE Apr 25 BEFORE 11:55 PM	1,3,4 a, c
Week 15				
Mon Apr 25	10	Classes and Object-Oriented Programming continued	Do Chapter 10 Programming Exercises 5 & 8 pp.478-479. Save all work for this assignment in your P:\cist1305 folder.	3,4 a, c
Wed Apr 27			Do Chapter 10 Review Questions on BLACKBOARD. Take Chapter 10 Test on BLACKBOARD. WEEK 15 ASSIGNMENTS DUE May 2 BEFORE 11:55 PM	3,4 a,b,c

MAJOR COURSE COMPETENCIES

1. Define Problem Solving and Programming Concepts
2. Develop Structured Solutions Using the Three Logic Structures
3. Develop Structured Solutions Utilizing File Processing Concepts
4. Develop Structured Solutions Using Arrays

GENERAL EDUCATION CORE COMPETENCIES

- a. The ability to utilize standard written English.
- b. The ability to solve practical mathematical problems.
- c. The ability to read, analyze, and interpret information.

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