

Course number, Course CRN, COURSE TITLE
CIS 3303 – 110, Programming Logic and Design – 10102
Spring 2019
Texas A&M University-Central Texas

COURSE DATES, MODALITY, AND LOCATION

January 14, 2019 – May 10, 2019

Class meeting building and room number: Founder's Hall 307

INSTRUCTOR AND CONTACT INFORMATION

Instructor: Rahul Dwivedi, Ph.D.

Office: Founder's Hall 323N

Phone: 254-519-5784

Email: rahul.dwivedi@tamuct.edu (preferred) or Canvas inbox.

Mode of instruction and course access:

This is a face-to-face course that makes extensive use of the TAMUCT Canvas Learning Management System (<https://tamuct.instructure.com>). The course syllabus, schedule, supplemental readings, class announcements, power point slides, learning modules, homework assignments, exams and other course related documents will be posted on Canvas. Each student is responsible for the posted material and should check Canvas several times a week for updates.

Office Hours:

Mon Wed 1:00 PM – 2:00 PM

Tue Thurs 2:00 PM – 4:00 PM

At other times: By appointment through email

Student-instructor interaction:

I typically respond to Canvas email within 24 hours except on weekends. Email is the best mode of communication (avoid phone calls or voice messages).

911 Cellular: Emergency Warning System for Texas A&M University-Central Texas

911Cellular is an emergency notification service that gives Texas A&M University-Central Texas the ability to communicate health and safety emergency information quickly via email, text message, and social media. All students are automatically enrolled in 911Cellular through their myCT email account.

In an effort to enhance personal safety on the Texas A&M University – Central Texas (TAMUCT) campus, the TAMUCT Police Department has introduced Warrior Shield by 911 Cellular. [Warrior Shield](https://www.tamuct.edu/police/911cellular.html) [<https://www.tamuct.edu/police/911cellular.html>] can be downloaded and installed on your mobile device from Google Play or Apple Store.

Connect at [911Cellular](https://portal.publicsafetycloud.net/Texas-AM-Central/alert-) [<https://portal.publicsafetycloud.net/Texas-AM-Central/alert->

management] to change where you receive your alerts or to opt out. By staying enrolled in 911Cellular, university officials can quickly pass on safety-related information, regardless of your location.

COURSE INFORMATION

Course Overview and description: This course introduces computer programming and problem solving in a structured program logic environment. Study the logic of decision-making, nested looping, multidimensional arrays, implementation of the structure theorem and Boolean algebra. Utilize structured flowcharts, structured pseudocode, hierarchy charts and decision tables, in order to document logical problem solutions. The course focuses on business problem solving and does not count as a programming language. No prior programming experience is necessary.

Course Objective:

Student Learning Outcomes:

- Demonstrate an understanding of pseudo code by designing applications requiring the use of variables, conditional statements, loops, arrays, and files.
- Demonstrate an understanding of flow-charting by designing applications requiring the use of variables, conditional statements, loops, arrays, and files.
- Demonstrate an understanding of structured programming techniques by designing an application using this technique.
- Demonstrate an understanding of object-oriented techniques by designing an application using this technique.
- Students will develop basic skills using CASE tools by implementing their flow charts in MS Visio.

Competency Goals Statements (certification or standards):

Section not used.

Required Reading and Textbook(s):

Required Text: Starting Out with Python, 4th edition, Tony Gaddis. Pearson Education.
ISBN: 978- 0134444321

Reference Book: Python for Everybody: Exploring Data Using Python 3 by Charles Severance (freely available at <https://www.py4e.com/book>). This book is a companion to the Coursera (www.coursera.org) specialization by the same name (<https://www.coursera.org/specializations/python>).

Supplementary Material: The course textbook will be supplemented with other materials which may include research papers readings, handouts, oral presentations, industry articles, videos, research paper readings, case studies, power point presentations etc.

COURSE REQUIREMENTS

Reading Assignments: All assigned chapters will be used as basis for class and/or canvas discussions. Students are expected to study the assigned readings before each class session.

Examinations: There will be **two exams**, one midterm and one final exam. Each is worth 25 points. The midterm exam covers chapters 1-4 and the final exam covers chapters 5, 7 and 10. Exams will be taken during class and will be timed. The exams will be a combination of multiple choice and writing/executing/finding errors in programming problems. The exams will be required to be submitted via Canvas. The exams will be open book.

Hands-on Homework Assignments: There will be **five take-home assignments**. Each assignment will be worth 10 points. Assignments will typically be available on Canvas for 15 days. Multiple attempts are not allowed. If an assignment has multiple files, you are required to “zip” the files prior to submission via Canvas. Each late submit will deduct 1 point for each day i.e. you will not receive any points after 10 days of submission deadline. **You are strictly required to submit everything via Canvas (no email submissions will be accepted).**

Requirements for homework assignments: Homework assignments must follow the requirements as stated in the Canvas assignment system; demonstrate the concepts; get proper results; use best practices and use proper English. They are due on the mid night (11:59 PM) of the due date.

Extra Credit opportunity:

Participation/Attendance: There will be **attendance on random days** throughout the semester. This will be worth 5 bonus points (or 5 %) of the entire course grade.

Late policy: Assignments are due by midnight on the date assigned in Canvas. Refer above for point deductions due to late submissions.

Grading Criteria Rubric and Conversion

Item	Quantity	Points	Total / Percent
Homework Assignments	5	10	50
Mid Term exam	1	25	25
Final exam	1	25	25
*Participation/Attendance	Throughout the semester	5	5
Total	100		

* Extra credit opportunity

Exams and homework assignments will receive a numeric score (0-100) each. These scores will be converted to points and totaled to ultimately be converted to letter grade of A, B, C, D, or F as shown in the example below:

	Percent earned by student	Max points	Points to be added to the final grade
Homework assignment 1	80%	10	8
Homework assignment 2	85%	10	8.5
Homework assignment 3	90%	10	9
Homework assignment 4	100%	10	10
Homework assignment 5	78%	10	7.8
Mid Term exam	70%	25	17.5
Final Exam	96%	25	24
*Participation/Attendance	67%	5	3.35
TOTAL		100	88.15

*Bonus points

89.5 – 100 = A

79.5 – 89.49999 = B

69.5 – 79.49999 = C

59.5 – 69.49999 = D

Below 59.5 = F

Grades will not be curved (in the above example, the student with 88.15 will receive a B NOT an A).

Posting of Grades

All student grades will be posted on the Canvas Grade Book and students should monitor their grading status through this tool. Grades will be posted within 10 days after the due date.

COURSE OUTLINE AND CALENDAR

Complete Course Calendar

Week	Dates	Reading Chapters	Due	Notes
1	January 14	Syllabi and chapter 1: Introduction to computers and programming		
	January 16	Chapter 1 continued		
2	January 21			Martin L. King Jr. Day (University Closed)
	January 23	Chapter 1 continued	Homework 1 based	

			on Ch. 1 available	
3	January 28 – January 30	Chapter 2: Input, processing and output		January 30: Deadline to drop 16-week class with no record
4	February 4 – 6	Chapter 2 continued	Homework 1 due on Feb 6; Homework 2 based on Ch. 2 available	
5	February 11 – 13	Chapter 3: Decision structure and Boolean logic		
6	February 18 – 20	Chapter 3 continued	Homework 2 due on Feb 20; Homework 3 based on Ch. 3 available	
7	February 25 – 27	Chapter 4: Repetition structures		
8	March 4 – 6	Chapter 4 continued	Homework 3 due on March 6; Homework 4 based on Ch. 4 available	
9	March 11 – 15		Mid-term exam review will be available during Spring break via Canvas	Spring Break (no class)
10	March 18 – 20	Chapter 4 continued	Homework 4 due on March 20	
11	March 25	Mid-Term Exam Day	Mid-term exam (Ch. 1,2,3,4)	Mid-term exam (in-class)
11	March 27	Chapter 5: Functions		
12	April 1– 3	Chapter 5 continued		April 5: Deadline to drop 16-week class with a quit (Q) or withdraw (W)
13	April 8 – 10	Chapter 5 continued		
14	April 15 – 17	Chapter 5 continued	Homework 5 based on Ch. 5 available	
15	April 22 – 24	Chapter 7: List and		

		Tuples		
16	April 29 – May 1	Chapter 10: Classes and Object-Oriented Programming	Homework 5 due on May 1	
17	May 6	Backup day / exam review day		
17	May 8	Final Exam Day	Final Exam (Ch. 5, Ch. 7 and Ch. 10)	Final Exam (in class)

Important University Dates:

Refer to University academic calendar at <https://www.tamuct.edu/registrar/academic-calendar-18-19.html>

TECHNOLOGY REQUIREMENTS AND SUPPORT

Technology Requirements

MS Visio (flowchart maker and diagramming software) will be used to create flowcharts for program logic representation.

For writing Python programs, you may use either Python IDLE (integrated development environment for Python) which is the standard Python development environment which comes with Python 3.7 or PyCharm or Spyder (which comes with Anaconda) or even simple freely available text editors such as notepad or notepad++. Our computer labs are equipped with Python IDLE (free) and PyCharm. You may download PyCharm's community edition free from <https://www.jetbrains.com/pycharm/download/#section=windows> or Anaconda's Spyder for free for your personal use (<https://www.spyder-ide.org/>).

This course will use the A&M-Central Texas Instructure Canvas learning management system. Logon to A&M-Central Texas Canvas [<https://tamuct.instructure.com/>] or access Canvas through the TAMUCT Online link in myCT [<https://tamuct.onecampus.com/>]. You will log in through our Microsoft portal.

Username: Your MyCT email address. Password: Your MyCT password

Canvas Support

Use the Canvas Help link, located at the bottom of the left-hand menu, for issues with Canvas. You can select "Chat with Canvas Support," submit a support request through "Report a Problem," or call the Canvas support line: 1-844-757-0953.

For issues related to course content and requirements, contact your instructor.

Other Technology Support

For log-in problems, students should contact Help Desk Central.

24 hours a day, 7 days a week:

Email: helpdesk@tamu.edu

Phone: (254) 519-5466

[Web Chat](http://hdc.tamu.edu): [http://hdc.tamu.edu]

Please let the support technician know you are an A&M-Central Texas student.

UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES

Drop Policy.

If you discover that you need to drop this class, you must complete a [Drop Request Form](https://www.tamuct.edu/registrar/docs/Drop_Request_Form.pdf) [https://www.tamuct.edu/registrar/docs/Drop_Request_Form.pdf].

Professors cannot drop students; this is always the responsibility of the student. The Registrar's Office will provide a deadline on the Academic Calendar for which the form must be completed, signed and returned. Once you return the signed form to the Registrar's Office, you must go into Warrior Web and confirm that you are no longer enrolled. If you still show as enrolled, FOLLOW-UP with the Registrar's Office immediately. You are to attend class until the procedure is complete to avoid penalty for absence. Should you miss the drop deadline or fail to follow the procedure, you will receive an F in the course, which may affect your financial aid and/or VA educational benefits.

Academic Integrity.

Texas A&M University -Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Academic integrity is defined as a commitment to honesty, trust, fairness, respect, and responsibility. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. Academic misconduct is any act that improperly affects a true and honest evaluation of a student's academic performance and includes, but is not limited to, cheating on an examination or other academic work, plagiarism and improper citation of sources, using another student's work, collusion, and the abuse of resource materials. All academic misconduct concerns will be reported to the university's Office of Student Conduct. Ignorance of the university's standards and expectations is never an excuse to act with a lack of integrity. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

For more [information regarding the Student Conduct process](https://tamuct.campuslabs.com/engage/organization/tamuct-student-conduct-panel), [https://tamuct.campuslabs.com/engage/organization/tamuct-student-conduct-panel].

If you know of potential honor violations by other students, you may [submit a report](#),

[https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0].

Academic Accommodations.

At Texas A&M University-Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to a barrier-free education. The Office of Access and Inclusion is responsible for ensuring that students with a disability receive equal access to the university's programs, services and activities. If you believe you have a disability requiring reasonable accommodations please contact the Office of Access and Inclusion at (254) 519-5797. Any information you provide is private and confidential and will be treated as such.

For more information please visit our [Access & Inclusion](https://www.tamuct.edu/student-affairs/access-inclusion.html) web page [<https://www.tamuct.edu/student-affairs/access-inclusion.html>].

Important information for Pregnant and/or Parenting Students.

Texas A&M University-Central Texas supports students who are pregnant and/or parenting. In accordance with requirements of Title IX and related guidance from US Department of Education's Office of Civil Rights, the Dean of Student Affairs' Office can assist students who are pregnant and/or parenting in seeking accommodations related to pregnancy and/or parenting. Students should seek out assistance as early in the pregnancy as possible. For more information, please visit the [Student Affairs](https://www.tamuct.edu/student-affairs/index.html) web page [<https://www.tamuct.edu/student-affairs/index.html>]. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these [requirements and guidelines online](http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf), please visit the website [<http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf>].

Title IX of the Education Amendments Act of 1972 prohibits discrimination on the basis of sex and gender—including pregnancy, parenting, and all related conditions. A&M-Central Texas is able to provide flexible and individualized reasonable accommodation to pregnant and parenting students. All pregnant and parenting students should contact the Associate Dean in the Division of Student Affairs at (254) 501-5909 to seek out assistance. Students may also contact the University's Title IX Coordinator.

Tutoring.

Tutoring is available to all A&M-Central Texas students, both on-campus and online. Subjects tutored on campus include Accounting, Advanced Math, Biology, Finance, Statistics, Mathematics, and Study Skills. Tutors are available at the Tutoring Center in Warrior Hall, Suite 111.

If you have a question regarding tutor schedules, need to schedule a tutoring session, are interested in becoming a tutor, or have any other question, contact Academic Support Programs at (254) 519-5796, or by emailing Dr. DeEadra Albert-Green at deeadra.albertgreen@tamuct.edu.

Chat live with a tutor 24/7 for almost any subject from on your computer! Tutor.com is an online

tutoring platform that enables A&M-Central Texas students to log in and receive FREE online tutoring and writing support. This tool provides tutoring in over 40 subject areas. Access Tutor.com through Canvas.

University Writing Center.

Located in Warrior Hall 416, the University Writing Center (UWC) at Texas A&M University–Central Texas (TAMUCT) is a free workspace open to all TAMUCT students from 10:00 a.m.-5:00 p.m. Monday thru Thursday with satellite hours in the University Library Monday thru Thursday from 6:00-9:00 p.m. This semester, the UWC is also offering online only hours from 12:00-3:00 p.m. on Saturdays.

Tutors are prepared to help writers of all levels and abilities at any stage of the writing process. While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. By providing a practice audience for students' ideas and writing, our tutors highlight the ways in which they read and interpret students' texts, offering guidance and support throughout the various stages of the writing process. In addition, students may work independently in the UWC by checking out a laptop that runs the Microsoft Office suite and connects to WIFI, or by consulting our resources on writing, including all of the relevant style guides. Whether you need help brainstorming ideas, organizing an essay, proofreading, understanding proper citation practices, or just want a quiet place to work, the UWC is here to help!

Students may arrange a one-on-one session with a trained and experienced writing tutor by visiting the UWC during normal operating hours (both half-hour and hour sessions are available) or by making an appointment via [WCOOnline](#). In addition, you can email Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu if you have any questions about the UWC and/or need any assistance with scheduling.

University Library.

The University Library provides many services in support of research across campus and at a distance. We offer over 200 electronic databases containing approximately 250,000 eBooks and 82,000 journals, in addition to the 85,000 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at A&M-Central Texas are available through our website to help students navigate these resources. On campus, the library offers technology including cameras, laptops, microphones, webcams, and digital sound recorders.

Research assistance from a librarian is also available 24 hours a day through our online chat service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place on Skype or in-person at the library. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to piece together research for written assignments.

Our 27,000-square-foot facility on the A&M-Central Texas main campus includes student

lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other events. For more information, please visit our [Library website](http://tamuct.libguides.com/index) [http://tamuct.libguides.com/index].

OPTIONAL POLICY STATEMENTS:

A Note about Sexual Violence at A&M-Central Texas

Sexual violence is a serious safety, social justice, and public health issue. The university offers support for anyone struggling with these issues. University faculty are mandated reporters, so if someone discloses that they were sexually assaulted (or a victim of Domestic/Dating Violence or Stalking) while a student at TAMUCT, faculty members are required to inform the Title IX Office. If you want to discuss any of these issues confidentially, you can do so through Student Counseling (254-501-5955) located on the second floor of Warrior Hall (207L).

Sexual violence can occur on our campus because predators often feel emboldened, and victims often feel silenced or shamed. It is incumbent on ALL of us to find ways to actively create environments that tell predators we don't agree with their behaviors and tell survivors we will support them. Your actions matter. Don't be a bystander; be an agent of change. For additional information on campus policy and resources visit the [Title IX webpage](https://www.tamuct.edu/departments/compliance/titleix.php) [https://www.tamuct.edu/departments/compliance/titleix.php].

INSTRUCTOR POLICIES.

Policies related to absence, grading, etc.

- You are responsible for all class material presented during an absence.
- All work must be submitted through Canvas and due on the mid night (11:59 PM) of specified due date/time.
- Late penalties will be applied to items submitted after due dates. 1 point will be deducted per day for late submission for homework assignments. Homework assignments will not be accepted after due dates.

My personal statement

- You will receive feedback in the form of graded assignments within 10 days after the due date.
- I want you to read the feedback that I provide to you (your personal grading notes and Canvas emails).
- I am almost always available via email and typically respond within 24 hours except on weekends.
- I prefer email over phone conversations.
- I reserve the right to modify the course syllabus during the semester for the benefit of the students.

- I reserve the right to supplement materials presented in the text with additional course material that may help the students to understand the topic better.
- I reserve the right to modify grading policy rubrics. Any Change to grading rubrics will be applied to current and possible future assignments.

Copyright Notice.

Section not used.