

CSIT 105 - Foundations of Computer Science - CRN 17194

Fall 2020 Syllabus - ver 0.1

Section Info

Section 01V - CRN 17194

Monday 1:00 pm-2:50 pm “Remote Synch”

Wednesday 1:00 pm-3:50 pm “Remote Synch”

Course Modality: “Remote Synch”

The class will be conducted as a “Remote Synch” course. The ‘Remote’ means that we will work from home instead of on-campus and the ‘Synch’ is short for synchronous which means the class has a scheduled meeting time, for us that is Mondays and Wednesdays starting at 1:00 pm.

Link(s) to Zoom meeting(s) will be in the Learning Management System (LMS) called Canvas

Versions

- Version 0.1 - 8/31/2020 - first draft (**published but not polished**)
- Version 0.0 - 8/20/2020 - Pre-draft

Book Information

Required:

Starting Out with Java: Early Objects, 6th edition, Tony Gaddis, ISBN-13:
97801344462011

[cover picture has peapods with peas]



Note: This class does NOT use myprogramming lab which is a different resource and is more expensive ~\$42.40

[See canvas for information on 5th edition resources]

Instructor

Name: Stephen T. Brower

Work # (908) 526-1200 x8259 *

Office: West Building W324 *

preferred email: stephen.brower@rarityval.edu

CSIT 105 - Foundations of Computer Science - CRN 17194

Fall 2020 Syllabus - ver 0.1

* For Fall 2020, I will not be on campus - the best way to reach me will be via email. I will have “drop-in” office hours via Zoom - link(s) in Canvas

Canvas:

Canvas is the official source for the latest: Syllabus, Class Schedule, Slides, Demos, Homework Assignments, Lab Assignments, Project Assignments, Quiz/Exam Information

Fall 2020 “Virtual” Office Hours via Zoom (9/2-12/14):

- Monday 3:00 - 5:00
- Tuesday 3:00 - 4:00
- Wednesday 4:00 - 6:00
- Thursday 3:00 - 4:00
- and by appointment

Which Email to use and Email Response Time

If you have a question or have an issue submitting an assignment in Canvas, the preferred (fastest) way to contact the instructor is via his preferred email: stephen.brower@raritanval.edu

Over the last several semesters, I found the email system embedded in Canvas frustrating. So please email me at: stephen.brower@raritanval.edu

The goal is to respond in less than 24 hours. Please don't expect a response after 10 pm.

Occasionally there are known exceptions such around Thanksgiving where a response may take a little longer. If the instructor knows ahead of time there will be a period of unavailability longer than 24 hours, that will be communicated to the class.

Course Overview:

(Prerequisite: Math 113 – Precalculus II or Math 114H – Precalculus Honors) This is the first course in Computer Science for transfer students. The programming language Java will be taught in conjunction with problem solving methods, algorithm development, and object-oriented design. Topics include data types, control structures, classes, objects, methods, file processing, recursion, and introduction to data structures.[Also General Education Elective]

Note: This course assumes no prior programming experience

Course Learning Outcomes:

At the conclusion of the course, students will be able to:

CSIT 105 - Foundations of Computer Science - CRN 17194

Fall 2020 Syllabus - ver 0.1

1. Describe concepts of object-oriented programming such as encapsulation, inheritance, and polymorphism.
2. Solve problems involving decisions and repetition.
3. Develop algorithms that may be used in coding programs.
4. Apply algorithms such as the sequential sort and search in solving problems.
5. Design classes using appropriate instance data and methods.
6. Design programs using traditional structured as well as object oriented methods.
7. Code programs using the correct syntax of the programming language.
8. Asses the ethical implications of writing code
9. Understand where testing fits in the software development process.
10. Test programs adequately with appropriate input data.
11. Distinguish among programming errors (syntax, logic, run-time)
12. Correct programming errors.
13. Understand the difference between a Java application and a Java Applet.
14. Gain some familiarity with HTML (Hypertext Markup Language)

Course Management, Structure and Pace

This course meets for approximately five hours a week for 14 weeks. Students should plan on putting in at least two hours of study time for every hour spent in class for lecture. Additionally, students should plan study time of another half hour for every hour spent in the lab. Students who are successful in this class typically spend approximately seven hours *outside of class* each week working on the subject. This includes reviewing class notes, reading and studying the textbooks, doing homework and reviewing demo Java code.

Zoom for Lectures / Lab time

As a “Remote Synch” course, Zoom will be used for the time we spend in the class.

Zoom Lectures

If we were in a traditional classroom, I would be able to see the student’s faces. I could see multiple “deer in the headlights” looks and realize I was going too fast and needed to back up and slow down and re-explain something. I could see multiple students falling asleep and realize I needed to move on or do an impromptu group exercise.

For the lecture I am asking you to have the webcam on and be muted. My asking of the students to use their webcam to project their face while I am lecturing can benefit everyone so I can read the audience. I may not adjust if 1 person looks lost or 1 person starts to doze off, but if I realize 4-5 or more look lost or 4-5 or more face-plant on the keyboard (that happens) then I will adjust.

CSIT 105 - Foundations of Computer Science - CRN 17194

Fall 2020 Syllabus - ver 0.1

Zoom has a raise hand feature and Zoom has a chat where questions could be posted.

I am afraid that when reviewing code (this course involves programming) I may forget to position the code and the Zoom room side by side so I can read the audience, look for hands and see if hands are raised. I'm sure I will forget multiple times and I apologize in advance.

Zoom Lab Time

There are a small handful of group exercises for this class where we will use breakout rooms in Zoom. To work in these breakout groups, you need a webcam so your fellow group members can see you, and you need a microphone so your fellow group members can hear you.

For this class, the majority of the labs will be individual exercises programming in Java.

If we were in a traditional classroom, I could hear someone groan or see someone literally pull out their hair and I would realize that although they didn't ask for help, they need help. In a traditional classroom, I would periodically walk up and down the aisle because some people are hesitant to ask for help from afar but will ask if I am nearby.

If we were in a traditional classroom, I could look over your shoulder at your code or output screen on your computer and offer advice or direct through some clicking.

Since this is my first semester using Zoom for "Lab Time" I am not really sure what the best way is to handle lab time.

There will be times that it would help me if you share your screen so I can see the code, but then so does the whole class.

If someone unmutes and asks a question everyone hears the question and everyone hears the answer (or me saying beats me)

It is possible that for lab time for the programming labs, I might just say leave the room and come back in if you have a question.

For lab time I want to help those that want help and I want to leave alone those that want to be left alone

So, for Lab time in Zoom...beats me!

CSIT 105 - Foundations of Computer Science - CRN 17194

Fall 2020 Syllabus - ver 0.1

Zoom down?

Remember August 24th 2020? Zoom had a major outage.

If that happens, I will create a Microsoft Teams meeting and email the link to the class.

If both Zoom and Microsoft Teams are down...Beats me!

Additional Software/Computer Requirements:

Unless you plan on working in the open lab on campus, you will need access to a computer with Java and an IDE.

You can download the Java JDK and Netbeans. There are links in Canvas with some information. See the "Preparing your computer" module in Canvas

Class Routine:

The class has 3 segments: Java Lecture, Lab Lecture, and Lab - all will be conducted in Zoom

Java Lecture - Lecture on programming in Java from the Java book

Each class we will take the next step in learning how to program. Some classes will cover 2 chapters. There are some Computer Science topics the instructor will cover that are not in the book. So pay attention! The instructor will integrate programming demos into the lecture. Pre-written demos are in Canvas and any new demos will be available at the end of the lecture.

The caution here is that the knowledge is cumulative. So if you skip a Java lecture class, the following class will be more difficult.

You should attempt to "skim" the chapter(s) covered prior to class.

Lab Lecture - Brief lecture on how to tackle the lab that follows

The intent of the Lab Lecture is to refresh your memory on some key items from Java or programming in general and then provide "hints" on how to do the lab. Some Lab lectures may be as long as 15 minutes. Some may be only 15 seconds.

Lab - Hands on lab time

The majority of the Labs will be for individual work programming in Java. Labs must be completed during lab time. There are a couple of "group labs"

CSIT 105 - Foundations of Computer Science - CRN 17194

Fall 2020 Syllabus - ver 0.1

The time set aside for the programming In-Class Labs is enough time for a novice programmer to finish the In-Class Lab. Novice programmers may need to find time outside of class to work on "Projects".

Some classes the Lab assignments may have multiple parts. The Lab assignments get progressively harder and/or longer as the semester progresses.

Whether you are a novice or not, if you finish the lab early, you should look ahead on the Class Schedule to work on the next computer project, do the next homework that is due, or explore some of the features of Java that are in the book but skipped by the instructor.

Except for a few exceptions (namely the first weeks), Java Lectures will normally be on Mondays and Lab will normally be Wednesdays.

Zoom Recording Policy

There are a number of privacy issues regarding the recording of Zoom lectures, especially the potential recording of students. I will not be recording the lectures and posting them later.

There are a handful of software demonstrations that I will do live that I will also record a video not in Zoom demonstrating the same software. The Software Demonstration videos I record outside of Zoom will be made available via Canvas

Grade Determinants

Item	Percent
Homework	15%
Programming Labs	15%
Programming Projects	20%
Quizzes	10%
Exam 1	10%
Exam 2	15%
Final Exam	15%

CSIT 105 - Foundations of Computer Science - CRN 17194

Fall 2020 Syllabus - ver 0.1

Grades

Grade	% Range
A	89.5-100+
B+	86.5-89.4
B	79.5-86.4
C+	76.5-79.4
C	69.5-76.4
D	59.5-69.4
F	0.0-59.4

Homework:

See Canvas for homework details.

Homework will be a subset of the Review Questions and Exercises, Find the Error, Algorithm Workbench, and Short Answer questions.

Note: The author's website for the prior edition (the 5th edition) has answers to the odd numbered Short Answer questions from that edition

Homework must be submitted electronically via Canvas as a document saved as a .docx or as a .rtf file

All but 2 homework assignments will be due on Wednesdays

See below for the Late Policy and the Cheating Policy (don't cheat)

Programming Labs (In-Class Labs):

See Canvas for Programming Lab details. Most Programming Labs are not posted until the day of class. Some labs are not posted until after class.

The idea behind Programming Labs is that they are designed to be done in the classroom in a 2-3 hour window of time. Programming Labs reinforce the material covered in class.

CSIT 105 - Foundations of Computer Science - CRN 17194

Fall 2020 Syllabus - ver 0.1

Programming Labs are designed for a novice programmer to complete in the time allotted.

Programming Labs are due by the end of class (2:50 or 3:50 depending on the day) and are considered late if submitted after the end of class.

The .java file(s) for the Programming Labs (or a .zip that contains the .java files) must be submitted via Canvas. All but 1 Programming Lab will be on Wednesdays

A word of caution: Programming Labs get progressively harder as the semester progresses and part of that is because the material is cumulative. So Programming Labs in late November will take longer than those in September.

All Programming Labs will be due on Wednesdays

See below for the Late Policy(-10 pts per calendar day) and the Cheating Policy (don't cheat)

Programming Lab Compiling Policy

After you have written 4 Programming Labs, the expectation is that your Java code will compile. For all of the Programming Labs after Programming Lab 4, if the code submitted does not compile, or if the instructor's tester used to test the classes submitted does not compile, the assignment is a 0.

The only edits that will be made to get the program to compile is to remove the `-#` that Canvas adds to the file name when there are additional submissions and the package statement

Projects:

See Canvas for Project details. Details are usually posted 2-3 Lab times ahead of the due date.

The idea behind the Projects is they demonstrate your mastery of the material. Projects are more complex than labs and are expected to take longer.

You may not have enough time in class to complete the projects so you either need to replicate the development environment at home/work or use the open lab on the second floor of the West Building which is open 6 days a week.

The .java file(s) for the projects (or a .zip that contains the .java files) must be submitted via Canvas

Projects are due via Canvas by midnight of date due.

CSIT 105 - Foundations of Computer Science - CRN 17194

Fall 2020 Syllabus - ver 0.1

See below for the Late Policy and the Cheating Policy (don't cheat)

Project Compiling Policy

The expectation is that your Java code submitted for Projects will compile. For all of the Projects, if the code submitted does not compile, or if the instructor's tester used to test the classes submitted does not compile, the assignment is a 0.

The only edits that will be made to get the program to compile is to remove the `-#` that Canvas adds to the file name when there are additional submissions and the package statement

Exams/Quizzes:

See Canvas for Quiz/Exam Information. Details are usually posted 1 week ahead of the quiz/exam day.

Note the Class Schedule for the timing of the Quizzes/Exams. If you are late for a quiz/exam you will only have the time until the scheduled end of the quiz/exam.

If you know ahead of time that you will miss an exam, please make arrangements with the instructor.

The format of the quizzes/exams will be different (multiple choice, hand write a program, write a program on the computer). The format/content will be reviewed a week prior to the quiz/exam

See below for the Cheating Policy (don't cheat)

Cheating Policy:

Don't Cheat!

You must work alone on the Projects, In-Class Labs, and Homework. Working with someone is considered cheating. Taking a file that someone else created is considered cheating. Having your neighbor work on your computer is considered cheating. Collaborating on logic is cheating. Cheating is not allowed.

For the Programming Labs, asking the instructor for hints is not considered cheating. It is ok to email a Java file to the instructor to ask for assistance. But, don't expect a response after 10:15 pm on any night.

CSIT 105 - Foundations of Computer Science - CRN 17194

Fall 2020 Syllabus - ver 0.1

Cheating is also not allowed on Quizzes and Exams. If you have a question during a quiz/exam ask the instructor.

All parties involved in cheating (including the one who shares) will be dealt with according to the school's policy on cheating. The penalty can range from 0 on the assignment to F for the course.

NOTE: you have permission to use the instructor's demo .java files, in whole or in part, for your programming labs and programming projects (just cite that in a comment in the code) and you have permission to use the code the instructor writes on the whiteboard (just cite that in a comment in the code) and you have permission to use the code in the book, in whole or in part (just cite that in a comment in the code).

Late Policy

Don't submit work late!

According to the RVCC Catalog, students are not to be penalized for 1 week of absences. To accommodate this, at the end of the semester the lowest homework and the lowest programming lab will be dropped.

"Life Happens"

According to the RVCC Catalog, students are not to be penalized for 1 week of absences. To accommodate this, at the end of the semester the lowest homework, the lowest programming lab and the lowest Data Structures lab will be dropped. That handles life happens.

Extra Credit:

Some labs/projects/quizzes/exams have extra credit built into them. ***Other than that no extra credit will be given.***

So if you choose to do no homework all semester and then in November you ask for extra credit, the answer is no.

Class Attendance:

Zoom Note: Each class session attendance will be taken. As of this writing I am not sure exactly how that will be done. (Zoom can generate a report if I require registration or I can capture the participants - I'm not sure which is better) - beats me!

CSIT 105 - Foundations of Computer Science - CRN 17194

Fall 2020 Syllabus - ver 0.1

For the record, the 'School Policy': Students are expected to attend all classes for every course in which they are enrolled. To accommodate students' reasonable, personal situations that might prevent them from attending classes, each student is entitled to excused absences amounting to the equivalent of one week's class time in a semester. Absences in excess of this standard are handled individually by each faculty member. A student with absences amounting to one-fifth or more of the term's lecture or laboratory classes is subject to administrative withdrawal by the Dean of Instruction upon the recommendation of the faculty member.

Visiting Campus?

As of 8/28, there are only 3 access points to the main part of the campus. Please see the reopening page for information on visiting campus. (see: <https://www.raritanval.edu/reopening>)

Open Labs

For the schedule of the open computer labs for Fall 2020 Semester (see: <https://www.raritanval.edu/reopen-technology>)

Withdrawal Procedure

See school's webpage for Fall 2020 Withdrawal and Refund Schedule and Refund Info (see: https://commons.raritanval.edu/admin/finance/Documents/Fall%202020%20WithdrawalRefund%20Schedule%20and%20Enrollment_Payment%20Calendar.pdf)

(see: https://commons.raritanval.edu/admin/finance/Pages/refund_info.aspx)

Syllabus Part 2-College Policies

Please see the "Syllabus Part 2-College Policies v3" document

Class Schedule

Please see the Class Schedule for topics. See Canvas for assignment details.

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CSIT 105 - Foundations of Computer Science - CRN 17194

Fall 2020 Syllabus - ver 0.1