Syllabus

Rutgers University - Department of Computer Science CS110 - Introduction to Computers and Applications

Jt • Summer 2018

Instructor

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Class Website

Visit the website: http://nbcs.rutgers.edu/~jt for all our materials for this summer.

Overview

This course explores computer hardware and software and gives you hands-on experience using various computer applications such as spreadsheets, graphics, and webpage-design. Also in this course you will learn to program using the Scratch programming language.

Lecture is where new material will be presented. It meets Tuesday and Thursday evenings – May 29 until July 19, from 6pm to 8:00pm in FOR-138A. Recitation will meet from 4:50 until 5:50 pm right before each lecture. These are held in Room 007 within the Loree computer center. Recitation sessions are used to review class material; give you hands-on lessons on various applications, a chance to learn Scratch on a computer, time to review and return homework assignments and tests; and give you an opportunity to ask questions related to lectures, software assignments, programming, etc. Lectures are presented by Jt; your teaching assistant Giannis will instruct you during recitation. Please note: Recitations will not meet during the first week. Instead lecture will be 3 hours long both days. Also, the last lecture (Thursday July 19) is when the final exam will be given and it too will go from 5-8pm in the lecture room - there will be no recitation that day.

A calendar of topics, homework assignment due dates, and test dates is also included on our class website. Introduction to Computers and Applications requires a considerable amount of work, which you must complete on your own time. There are thirteen assignments that can be done in the Rutgers computer centers, or (most of the time) on your own home computer. As a general rule, you should expect to complete two assignments each week over the next eight weeks; you will need to plan for approximately four to eight hours per week on the computers. *Please Note:* You are expected to attend lecture and recitation each evening. Using class or recitation time to work in the computer lab is unacceptable.

Required Materials

Text:

Blown to Bits(BTB), Your Life, Liberty, and Happiness After the Digital Explosion by Hal Abelson, Ken Ledeen, Harry Lewis. This book in pdf form is available for you for free through our class website.

File Storage: It is important to have a USB flash drive (of any size) to store your work on.

Account: All students will be using a ScarletApps account. ScarletApps is a cloud-based, cross-application, collaborative environment that provides software applications, website development tools, email, a calendar and many other services. It is the main account offered by Rutgers working in collaboration with Google. Using ScarletApps means your files are available from any computer at any time. If you do not already have an account on ScarletApps, trigger your account using the **Activate ScarletApps** button on the ScarletApps page: http://scarletmail.rutgers.edu. Please make sure you can get on to your account by *Tuesday*, *June 5*.

Assignments

There are thirteen assignments in Introduction to Computers and Applications. These include six assignment using various applications (most within the ScarletApps environment) and seven involving programming with Scratch. The Schedule of Classes (linked off class webpage) shows when each assignment is assigned and when it is due. Regarding homework, please remember:

- All assignments are worth 15 points.
- The best 11 of 13 assignments will count towards your HW score. Thus there is a total
 of 165 HW points.
- The 12th best score counts as extra credit points. (For example, if you skipped one
 assignment and got 15 on all the others except one which earned you 7 points, you
 would earn 7 extra credit points.)
- There will be one other separate extra credit assignment worth ten points.
- All assignments must be turned in on time to receive full credit. Assignments are due at the beginning of lecture.
- Assignments turned in after the 6:15pm deadline are considered late. If they are turned
 in by the next lecture's deadline, they will be worth half credit. Assignments turned in
 more than one class late will not be accepted for any credit. (They count as zero.)
- In effect, extra credit aside, you can completely miss two homework assignments without affecting your grade.
- Also, you may use a one-time, "one free late" option for turning in one homework assignment one class late without penalty.
- The previous two items have been built into the course to handle all emergencies and circumstances family problems, illnesses, car breakdowns, etc. which might lead to you being late with HW or being unable to complete it. This means, it is unnecessary to come up with justifications as to why particular work could not get done on time. However, also note, further exclusions besides those listed here will not be given under any circumstances. Your grade is only affected the fourth time you do not get work completed on time at that point, outside pressures are clearly interfering with your classwork and dropping the course may be advisable. Be wise, save your "late-HW" and "missed assignment" options for unplanned circumstances that may occur. That is what they are intended for. If you waste them because you just don't feel like going to class one night you are out of luck when emergencies do arise.
- Students who violate the academic integrity policies of Rutgers University will be reported to the Dean's Office.
- No work or extra credit will be accepted after Tuesday, July 17 (last class before final exam)

Examinations

Bring your student identification card with you to all quizzes and exams.

The course includes three midterm quizzes and a final exam. The final is cumulative. Exams and quizzes may include any material from lecture, recitation, homework assignments, or assigned readings. Each quiz is worth 80 points. Your lowest quiz score is dropped. The final is worth 175.

NOTE: There are no makeup exams or makeup quizzes. The dropped quiz exists for the same reason that the "missed assignment" option mentioned above does. So use this wisely too - outside circumstances may cause you to need to miss a quiz entirely.

You are strongly encouraged to take the third quiz, even if you did very well on the first two, as it will give you good practice for the final

Midterm Quizzes: Thursday, June 7

Thursday, June 21 Thursday, July 5

Final Exam: Thursday July 19

5pm. - 8:00p.m.

Grading

Your final grade for the course will be based on the total number of points accumulated from tests and homework assignments. The maximum number of points is 500, divided as follows:

Midterm Quizzes 160 points Final Exam 175 points Homework 165 points

Grades are assigned using the following scale:

450 - 500 points A
435 - 449 points B+
400 - 434 points B
380 - 399 points C+
350 - 379 points C
300 - 349 points D
0 - 299 points F

Software

The main application software we will use in class comes as part of the ScarletApps environment – Rutgers implementation of "Google Apps" – this includes Mail, Sites, Docs (Drive), Spreadsheets, Forms and various others. All students at Rutgers are entitled to a ScarletApp account. Make sure you have and can get on to your account during the first week of class. We will also be focusing on programming in this course using a language called **Scratch**. You do not need to purchase any software for this course, nor load any on to your own computer; all you need throughout the summer is available on the computers in the labs.

If you own a computer, you may be able to complete all the homework assignments using your own computer. Be aware, the quizzes and exam will assume you are familiar with the software used in the course and exam topics may include questions on features and operations of the Macintosh computer which you will get experience with during recitation. Since you can access the "cloud-based" ScarletApps from most computers on the Internet, for the application assignments you will have no difficulties working on your own computer when completing this work. The programming assignments use Scratch, which is software already installed on the lab computers. Nevertheless, you may be interested in acquiring this software yourself so you can do those assignment on your computer too. If you want it for your own computer, you can get the Scratch offline editor for free at: http://scratch.mit.edu/scratch2download/

Computer Labs

There are about one thousand computers available at the New Brunswick computer labs that contain all the software you need for this course during the summer. Computers are located in Allison Road Classroom Building (ARC) on Busch Campus, Tillett on Livingston Campus, Loree on Cook/Douglass Campus and the College Avenue Computer Center, located at Records Hall.

Loree is open often during most of the summer (until 6pm on most weekdays). The computer labs on the other campuses (College Avenue, Livingston, Busch) are open much of Monday through Friday, but the hours of operation at each lab may vary throughout the summer. Most labs will be closed on weekends during the summer. Check the *OIT User Services Computing Facilities Access Hours* notice posted in each lab. You can also find this info at their website (http://computerlabs.rutgers.edu).

If you have questions or need assistance in completing homework assignments, check first with your teaching assistant during the scheduled lab hours or recitation. If you experience difficulty in using the computer labs or you have questions about the equipment, ask the student consultants on duty or contact your teaching assistant. The role of the student consultants in the computer labs is to help you, not to do your work for you. To ensure you learn the material on your own, they have been advised to give you limited assistance.

There are also several computer sites in the libraries (Alexander, Kilmer, LSM and Douglass) that you can also utilize, but do not expect any assistance at these sites since they are unstaffed.

You should also be wise in planning your computer time. Do your assignments early and find a time when the computers are not heavily used. Read your assignment completely before sitting down at the computer so that your time is used efficiently and productively.

Academic Integrity

The Department of Computer Science strictly adheres to the Rutgers University Policy on Academic Integrity, as described on the Academic Integrity at Rutgers website http://academicintegrity.rutgers.edu/ Students enrolled in Department of Computer Science courses are advised that all allegations of academic dishonesty will be fully investigated and any evidence of academic dishonesty will be reported to Office of Student Conduct for appropriate action. With regard to software applications assignments and programming assignments, it is a violation of academic integrity to copy someone else's work or to permit another person to copy your work. While you may discuss programming and software assignments with other students at a general level, all coding, debugging, preparation, refinement, and testing of assignments should be entirely your own work. Just as copying or collaborating on an examination is dishonest, turning in a program or software application assignment which is a clone of someone else's work is also dishonest. Students enrolled in computer science courses are required to follow department guidelines and responsibilities on academic integrity.

Miscellaneous

- 1. If you are not officially enrolled in Introduction to Computers and Applications (01:198:110), you can add the course by going to University Summer Sessions Office. No special permission is being given for this course.
- 2. Declared Computer Science majors (curriculum code 198) will not receive credit towards the major when taking this course. CS110 will only count as an elective course.
- 3. Prebusiness majors (curriculum code 006 or 373) are required to register for Computer Applications for Business (01:198:170). Admission to the School of Business requires successful completion of Computer Applications for Business (01:198:170). The course you are sitting in now CS110 is not accepted by the School of Business as a substitute for CS170 and you cannot receive credit for both courses.
- 4. Not working independently on exams or homework assignments will result in no credit for the exam or assignment. Academic dishonesty of any type is a serious offense and will be reported to the Dean's Office.
- 5. There will be no makeup quizzes or final exam given.
- 6. Homework assignments must be turned in on time for full credit. No extra time will be given.
- 7. Peer group tutoring, individualized learning assistance, learning strategies group sessions, and successful learning tip sheets are available through the Rutgers Learning Centers, located on the Busch, College Avenue, Douglass, and Livingston campus. For additional information, visit their website at http://rlc.rutgers.edu/ Do not wait until the week before an exam to visit the Rutgers Learning Center; stop by early in the summer and take advantage of their excellent services.