

Division of Digital and Information Technology Computer Programming Department

https://www.hccs.edu/programs/areas-of-study/science-technologyengineering--math/computer-programming/

COSC 1437: Programming Fundamentals II (Using java) CRN #17332

Fall2020 | 16 Weeks (8/24/2020 -12/13/2020) On-line 4 Credit Hours | 96 hours per semester

Instructor Contact Information

Instructor:homied,AsgaryOffice Phone:713-718-6576Office:2811 Hayes, Room C422Office Hours:posted on CANVASHCC Email:homied.Asgary @hccs.eduOffice Location:NW 2811 HayesPleasePlease feel free to contact me concerning any problems that you are experiencing in thiscourse.Your performance in my class is very important to me.I am available to hear theconcerns and just to discuss course topics.Homied.asgaryHomied.asgaryHomied.asgary

Instructor's Preferred Method of Contact

Please set appointment before stop by office by class email or HCC email Bost Mothed of Communication is Canvas omail. I will respond to omails within 24 hours

Best Method of Communication is Canvas email. I will respond to emails within 24 hours Monday through Friday;

What's Exciting About This Course

This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software.

My Personal Welcome

Welcome to Programming Fundamentals I. My name is: Homied Asgary , professor of Computer Science at HCC. I'm delighted that you have chosen this course!

As its title indicates, this is an introductory course to computer programming. The course starts with an overview of computers, both at the hardware and software levels, and an introduction to programming languages and the programming process. The rest of the course will provide an introduction to computer programming using C++.

Please read the **rest of this syllabus** for course description, pre-requisites, students learning outcomes, required textbook and instructional material, course assignments/assessments, as well as other course policies (participation, makeup, etc). See also the assignments /assessments due dates.

As the course progresses, you may encounter challenging ideas or difficulties completing your coursework. I am available to support you. The fastest way to reach me is through Canvas Inbox e-mail. If, for any reason, you can't access Canvas, you can reach me at my HCC email (homied.Asgary@hccs.edu). The best way to really discuss issues is in person and I'm available during posted office hours to tackle the questions. My goal is for you to walk out of

the course with a solid understanding of computer programming and its applications. So please visit me or contact me by email whenever you have a question.

Prerequisites and/or Co-Requisites

Must had COSC 1436 Programming Fundamentals I , and must be at college-level skills in reading and writing, place into MATH 1314 College Algebra or higher, and have had high school computer literacy or equivalent. If you have enrolled in this course having satisfied these prerequisites, you have a higher chance of success than students who have not done so. Please carefully read and consider the repeater policy in the <u>HCCS Student Handbook</u>.

Canvas Learning Management System

This section of COSC 1437 will use <u>Canvas</u> (<u>https://eagleonline.hccs.edu</u>) to supplement in class assignments, exams, and activities. Please visit course materials on CANVAS, and email me for any clarifications

HCCS Open Lab locations may be used to access the Internet and Canvas. **USE <u>FIREFOX</u> OR** <u>**CHROME**</u> **AS THE INTERNET BROWSER**.

HCC Online Information and Policies

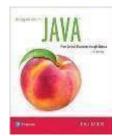
Here is the link to information about HCC Online classes including the required Online Orientation for all fully online classes: <u>http://www.hccs.edu/online/</u>

Scoring Rubrics, Sample Assignments, etc.

Look in Canvas for the scoring rubrics for assignments, samples of class assignments, and other information to assist you in the course. <u>https://eagleonline.hccs.edu/login/ldap</u>

Instructional Materials

Textbook Information



The textbook listed below is *required* for this course.

"**Starting Out with java from Control Structures to Objects**" by T. Gaddis any Edition (as you see on left side images are the edition 1, 4, or 7) is acceptable. All additions have the content we suppose to cover on this class.



The book is available at the <u>HCC Bookstore</u>. You may either use a hard or electronic copy of the book, or rent the e-book from Pearson. Order your book here: <u>HCC Bookstore</u>.

When registering you need (1) an access code and (2) our section Course ID. Your access code comes with the textbook you purchased as stated above and will be different for each student. Our section Course ID is:

Tutoring

HCC provides free, confidential, and convenient academic support, including writing critiques, to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the <u>HCC Tutoring</u> <u>Services</u> website for services provided.

Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the

libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at http://library.hccs.edu.

Supplementary Instruction

Supplemental Instruction is an academic enrichment and support program that uses peerassisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at http://www.hccs.edu/resources-for/current-students/supplemental-instruction/.

Course Overview

COSC 1437 Programming Fundamentals II. This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software.

Core Curriculum Objectives (CCOs)

COSC 1436 satisfies Component Area Option in the HCCS core curriculum. The HCCS Core Curriculum Committee has specified that the course address the following core objectives:

- **Critical Thinking**: Students will demonstrate the ability to engage in inquiry and analysis, evaluation and synthesis of information, and creative thinking by completing programming assignments that involve analyzing a problem, designing a solution to solve the problem, and implementing the solution including testing it against problem specifications and debugging it.
- Communication Skills: Students will demonstrate effective development, interpretation and expression of ideas through written, oral, and visual communication by analyzing the merits and drawbacks of alternative approaches to solving problems through online or in-class discussions and/or answering questions on quizzes and exams.
- **Quantitative and Empirical Literacy**: Students will demonstrate the ability to draw conclusions based on the systematic analysis of topics using observation, experiment, and/or numerical skills by completing assignments, and answering questions on quizzes and exams.

Program Student Learning Outcomes (PSLOs)

Can be found at: <u>https://www.hccs.edu/programs/areas-of-study/science-technologyengineering-math/computer-programming/</u>

Course Student Learning Outcomes (SLOs)

- Upon completion of COSC 1437, the student will be able to:
- Identify and explain a programming development lifecycle, including planning, analysis, design, development, and maintenance.
- Demonstrate a basic understanding of object-oriented programming by using structs and classes in software projects.
- Use object-oriented programming techniques to develop executable programs that include elements such as inheritance and polymorphism.
- Document and format code in a consistent manner.
- Apply basic searching and sorting algorithms in software design.
- Apply single and multi-dimensional arrays in software.
- Use a symbolic debugger to find and fix runtime and logical errors in software.
- Demonstrate a basic understanding of programming methodologies, including objectoriented, structured, and procedural programming.

• Describe the phases of program translation from source code to executable code. Learning Objectives

Learning Objectives for each CSLO are under development.

Student Success

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time will be required for programming assignments. The assignments provided will help you practice the concepts discussed in class lectures and hone your programming hand-on skills. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class in person and/or online
- Completing assignments
- Participating in class activities

There is no short cut for success in this course; it requires reading and studying the material and more importantly completing the programming assignments.

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments
- Provide the course outline and class calendar
- Arrange to meet with individual students ss as needed

As a student, it is your responsibility to:

- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Be aware of and comply with academic honesty policies in the HCCS Student Handbook

Assignments, Exams, and Activities

Programming Assignment

There will be one programming assignment in each module. Unless indicated otherwise, all programming assignments will be assigned and submitted on MyProgrammingLab (MLP). Each programming assignment will consist of a set of short exercises and one programming challenge. For most MLP exercises your solution will consist of a short piece of code consisting of one to few lines of code. Programming Challenges, on the other hand, require you to write a full program. Programming Assignments are to be completed individually. See Grading Formula below for programming assignments weight toward your course grade.

Quizzes

Quizzes are short assessments administered online (on Canvas) each consisting of a set of multiple-choice question covering material in one module. The purpose of quizzes is to help you assess your knowledge of the material covered in a module and prepare for the major exams. Quizzes y are to be completed individually and may not be made up for any reason. There will be one quiz in each module.

Exams

There will be two tests and a final exam. All exams will be closed-book, closed-notes, proctored exams to be taken in-person. Please see Grading formula for the weight of each exam toward your course grade and see the Course Calendar on Canvas for scheduled exam dates and the time limit for each.

In-Class Activities

We have in lass activity such as completing part of programs that I assign in class or writing a complete program. This enforcing class lecture for that specific day

Final Exam

The final exam will be administered on campus (i.e. must be taken in person). It will be closed book, closed notes and comprehensive.

Make up Exam

Make-up exams will be given *only* in cases of extenuating circumstances. Extenuating circumstances are **unexpected and unavoidable** situations such as hospitalization or auto accident. They don't include forgetting about the date of the exam, busy work schedule, etc. You would need to provide documentation to your instructor as soon as possible after the missed assignment/assessment for consideration. Extenuating circumstances will be evaluated by your instructor on a case by case basis. It is your responsibility to contact your instructor with documentation of your situation as soon as possible, schedule a makeup exam, and submit the proper documentation to the department. All missed grades will be recorded as zeros.

Grading Formula

Final course grades are determined using the average score computed with the weights above based on the HCC standard Grading scale **Grading Formula**

1) Programming Assignments 20 points

- 2) Quizzes 20 points
- 3) Exams30 points each4) Final Exam30 pointsTotal100 points

Grade	Total Points	
Α	90+	
В	80-89	
С	70-79	
D	60-69	
F	< 60	

Incomplete Policy:

In order to receive a grade of Incomplete (I''), a student must have completed at least 85% of the work in the course. In all cases, the instructor reserves the right to decline a student's request to receive a grade of Incomplete.

HCC Grading Scale can be found on this site under Academic Information: http://www.hccs.edu/resources-for/current-students/student-handbook/

Course Calendar

Fri Aug 28, 2020	📴 Assign0 Assignments	due by 11:59am
Sat Sep 5, 2020	Assgn01< Your Homework (Must submit for grading)	due by 11:59am
Sun Sep 6, 2020	Quiz1 <your (must="" p="" quiz="" submit)<=""></your>	due by 11:59am
Sat Sep 12, 2020	🛃 Assign02	due by 11:59am
Sun Sep 13, 2020	P Quiz2	due by 11:59am
Sat Sep 19, 2020	Assign3.1	due by 11:59am
Sun Sep 20, 2020	🗟 quiz3	due by 11:59am
Sat San 26, 2020	Assign3.2	due by 11:59am
Sat Sep 26, 2020	Assign4.1	due by 11:59am
Sat Oct 3, 2020	Assign4.2	due by 11:59am
	診 quiz4	due by 11:59am
Wed Oct 7, 2020	Assignment 4.2	due by 11:59am
Sat Oct 10, 2020	😰 Assign5	due by 11:59am
Sun Oct 11, 2020	廖 Quiz5	due by 11:59am
Sat Oct 17, 2020	廖 Exam1	due by 11:59am
Sun Oct 18, 2020	P Assign6	due by 11:59am
Mon Oct 19, 2020	Quiz6.1	due by 11:59am
Fri Oct 23, 2020	昬 Quiz6.2	due by 11:59am
Sat Nov 7, 2020	😰 Assign7.1	due by 11:59am
Sun Nov 8, 2020	Quizz7.1 - Requires Respondus LockDown Browser	due by 11:59am
Sat New 14 2020	Mod7.2 Assignments	due by 11:59am
Sat Nov 14, 2020	Quiz7.2- Requires Respondus LockDown Browser	due by 11:59am
Sun Nov 15, 2020	Quiz8- Requires Respondus LockDown Browser	due by 11:59pm
Tue Nov 17, 2020	P Assign7.3	due by 11:59pm
Sat Nov 28, 2020	Mod8 Assignments	due by 11:59pm
Mon Des/7 2020 The exact date will be post class homepage	Final COSC1437 javaII2020- Requires Respondus LockDown Browser	due by 11:59am

Syllabus Modifications The instructor reserves the right to modify the syllabus at any time during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

Instructor's Practices and Procedures

Missed Assignments

All missing assignment has **0 points.** Late assignments has **5 points deduction /day**

Academic Integrity

A student who is academically dishonest is, by definition, not showing that the coursework has been learned, and that student is claiming an advantage not available to other students. The instructor is responsible for measuring each student's individual achievements and also for ensuring that all students compete on a level playing field. Thus, in our system, the instructor has teaching, grading, and enforcement roles. You are expected to be familiar with the University's Policy on Academic Honesty, found in the catalog. What that means is: If you are charged with an offense, pleading ignorance of the rules will not help you. Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty. "Scholastic dishonesty": includes, but is not limited to, cheating on a test, plagiarism, and collusion. For more information on HCC policy on academic honesty refer to the <u>HCC Student Handbook.</u>

Here's the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance): http://www.hccs.edu/about-hcc/procedures/student-rights-policies-procedures/studentprocedures/

Attendance Procedures

Students are expected to attend class meetings on a regular basis and to participate in class and online activities. Students may be withdrawn administratively if they don't meet the State mandated attendance policy. You are responsible for materials covered during your absences. Class attendance is checked daily. Although it is your responsibility to drop a course for nonattendance, the instructor has the authority to drop you for excessive absences. For complete information regarding Houston Community College's policies on attendance, please refer to the <u>HCC Student Handbook.</u>.

Student Conduct

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status-in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross

Director EEO/Compliance Office of Institutional Equity & Diversity 3100 Main (713) 718-8271 Houston, TX 77266-7517 or <u>Institutional.Equity@hccs.edu</u>

HCC Policy –Vaccination against bacterial meningitis

Texas Senate Bill 1107, passed in May 2011, requires that new HCC students and former HCC students returning after an absence of at least one fall or spring semester who are under the age of 22 are required to present a physician-signed certificate showing they have been vaccinated against bacterial meningitis. For more information and the list of exemptions, please visit the HCC page at: <u>http://www.hccs.edu/applying-and-paying/meningitis/</u> Electronic Devices Approval of Faculty is required for any audio/video recording device to be used in class

HCC Policies

Here's the link to the HCC Student Handbook

http://www.hccs.edu/resourcesfor/currentstudents/student-handbook/ In it you will find information about the following:

- Academic Information
- Academic Support
- Attendance, Repeating Courses, and Withdrawal
- Career Planning and Job Search
- Childcare
- disability Support Services
- Electronic Devices
- Equal Educational Opportunity
- Financial Aid TV (FATV)
- General Student Complaints
- Grade of FX
- Incomplete Grades
- International Student Services
- Health Awareness
- Libraries/Bookstore
- Police Services & Campus Safety
- Student Life at HCC
- Student Rights and Responsibilities
- Student Services
- Testing
- Transfer Planning
- Veteran Services

EGLS³

The EGLS³ (Evaluation for Greater Learning Student Survey System) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS³ surveys are only available for the Fall and Spring semesters. -EGLS3 surveys are not offered during the Summer semester due to logistical constraints.

http://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/

Campus Carry Link

Here's the link to the HCC information about Campus Carry: http://www.hccs.edu/departments/police/campus-carry/

HCC Email Policy

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go to HCC Eagle ID and activate it now. You may also use Canvas Inbox to communicate.

Housing and Food Assistance for Students

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their college for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable HCC to provide any resources that HCC may possess.

Office of Institutional Equity

Use the link below to access the HCC Office of Institutional Equity, Inclusion, and Engagement (<u>http://www.hccs.edu/departments/institutional-equity/</u>)

disAbility Services

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including long and short term conditions, mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to http://www.hccs.edu/supportservices/abilityservices/

Title IX

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

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Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

https://www.hccs.edu/about-hcc/procedures/student-rights-policies-procedures/studentcomplaints/speak-with-the-dean-of-students/

Department Chair Contact Information

Reni Abraham reni.abraham@hccs.edu 713)718-2067