Digital & Information Technology

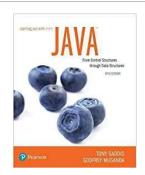


Houston Community College

COSC 1436 Programming Fundamentals I - 18204 (Java) COURSE SYLLABUS

SPRING 2020				
Instructor	Hiep Lee Email: hiep.lee@hccs.edu Office Hours: By appointment only			
Course Reference Number (CRN)	18204			
ACGM Course Description:	"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." http://www.thecb.state.tx.us/reports/pdf/10663.pdf?CFID=83464807&CFTOKEN=39967457			
Course Prerequisite(s)	College level reading, writing, math, and basic computer knowledge.			
Course Credit Hours	4			
Course Location/Times	Stafford Campus (Tues 6PM-9PM) http://eagleonline.hccs.edu	Total Course Contact Hours	96	

Textbook



Starting Out with Java from Control Structures through Data Structures - 4th Edition.

Author: T. Gaddis, G. Muganda

Publisher: Pearson.

ISBN-13: 9780135396094

MPL plus etext: ISBN 0134793676

Your textbook comes bundled with an access code to **MyProgrammingLab** (MLP). MLP is a Computer Assisted Leaning tool for computer programming. We will use it for lab and programming assignments. For instructions on how to register on MyProgrammingLab, go to http://myprogramminglab.com. When registering you need (1) an access code and (2) course access code.

The Course Access Code to use will be provided in the course website

Note: If you purchase a used textbook, make sure it has the access code to MPL. Most often used books don't. If the textbook you purchase doesn't come bundled with the MPL access code, you must purchase an access code separately from the MPL website.

Instructional Methods	Face-to-Face	Type of Instruction	Lecture/Lab
Course Length (number of weeks)		16	

Academic Discipline/CTE Students Learning Outcomes

- 1. Identify and explain a programming development lifecycle, including planning, analysis, design, development, and maintenance.
- 2. Demonstrate a basic understanding of object-oriented programming by using classes in software projects.
- 3. Use object-oriented programming techniques to develop executable programs that include elements such as inheritance and polymorphism.
- 4. Document and format code in a consistent manner.
- 5. Apply basic searching and sorting algorithms in software design.
- 6. Apply single- and multi-dimensional arrays in software.
- 7. Use a symbolic debugger to find and fix runtime and logical errors in software.
- 8. Demonstrate a basic understanding of programming methodologies, including object-oriented, structured, and procedural programming.
- 9. Describe the phases of program translation from source code to executable code.

COURSE REQUIREMENT

Course Requirements and Expectations

- You are expected to study course materials and successfully complete and submit projects and assignments on due dates. All projects involve hands on programming, so that you acquire a working knowledge of the subjects and develop problem solving skills. If nothing else, you must try all projects and assignments.
- If you have any concern about the class, you are highly encouraged to bring the matter to the instructor attention immediately.
- There are tests including final, but NO MAKEUP TESTS!!
- There are projects and lab assignments
- All projects are due on due date as specified by the projects and after cut-off date a
 project may not be accepted. There is a penalty for a project submitted passed a due
 date.

Class Platform: This is a Web Enhanced class and is offered both in classroom and electronically. Practices, exercises, assignments, projects, exams, online discussion, emails, team works, or lecture in eFormat may be conducted using Eagle Online Canvas. Every student who is registered for Web Enhanced class is granted an access to the class through Eagle Online Canvas. Use Firefox (web browser to use for Eagle Online – free online at http://www.mozilla.com).

- 1. You will need to download a development tool such as Eclipse/CDT or NetBeans (Sun) for Windows/Linux or Xcode for Mac. Choose the one suitable for your platform. However, when submitting your assignment, it needs to run properly on the Windows platform.
- 2. You are expected to study course materials timely and successfully work on assignments and submit your work on due date. All assignments involve hands on programming, so that you acquire a working knowledge of the subjects and develop problem solving skills.
- **3.** If you have any concern about the class, you are highly encouraged to bring the matter to the instructor attention immediately.
- **4.** There are quizzes, a mid-term exam and a final.
- 5. There are lab assignments for important topics. Each lab assignment has its own due date and if submitted after the due date the grade will be reduced to 25% of the grade earned on that lab. This penalty might be reduced or waived for the first couple of lab assignments in the course (per instructor's discretion). Failed to submit a lab assignment after 1 week will result in an automatic zero (0).

The **quizzes** are given for each chapter. They are to remind you to keep up with the material. If you miss a quiz you will receive a zero (0).

The withdrawal deadline April 6, 2020. If a student decides to drop or withdraw from a class upon careful review of other options, the student can drop online prior to the withdrawal deadline. If you quit participating in the course <u>after</u> the Last Day for Administrative/Student Withdrawals, you will receive an F. This will apply to all students taking the 16-wk semester course. Incomplete grades are rarely given. Some students think they will automatically be withdrawn if they quit participating. That is NOT always the case.

Make-up Policy for Exams All assignments are to be completed and turned in by their due dates. Late and Assignments assignments will NOT be accepted and there will not be makeup quizzes except 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 assignment, busy work schedule, etc. Extenuating circumstances will be evaluated by your instructor on case by case basis. No make-up exams will be given except in cases of extenuating circumstances. 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. You may dispute your assigned grade/score on any assessment or assignment activity by **Grade Dispute Policy** contacting your instructor via e-mail. Your instructor may request further information and/or explanation of reasons for the dispute before taking any action. Grades must be disputed no later than one week from the time the grade/score is posted on Canvas EOL. **Programming & Lab** There are several sets of required assignments beside guizzes and exams: **Assignments Programming Assignments Lab Assignments** NOTE: To acquire the maximum grade, your programs also must be designed according to the required specifications in the assignments. In other words, just because your programs produce the desired output will not guarantee you will get the perfect score. **Academy Dishonesty** Academic dishonesty is not a substitute for a successful completion of this course in any manner. Your independent work is accepted and credited according to your effort and result. All assignments MUST be done 100% on your own. Any findings of copy-and-paste code from the internet, external sources, or work developed by any others except yourself will be considered as cheating and will result in an "F" for the course plus a request by me to the Computer Science Department to expel you from the program. All actions will be permanently registered on your academic record! **Use of Personal** Cell phone use in classroom is not permitted. All cell phone or similar devices must be turned off during test taking periods. Communication devices in Internet access usage for the course purpose only. It is not permitted during test class taking periods. **Instructor Grade Criteria** Percentage Grade **Grade Determination** Chapter Quizzes 90% to 100% Α 10% 80% to 89.99% В 10% Chapter Lab Assignments 70% to 79.99% С **Programming Assignments** 30% 60% to 69.99% D Exams (Mid-term & Final) 50% 0% to 59.99% F or FX

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

Total

100%

HCC Grading Scale

The HCC grading scale is:

A = 100 – 90	4 points per semester hour
B = 89 – 80:	3 points per semester hour
C = 79 – 70:	2 points per semester hour
D = 69 – 60:	1 point per semester hour
59 and below = F	0 points per semester hour
IP (In Progress)	0 points per semester hour
W(Withdrawn)	0 points per semester hour
I (Incomplete)	0 points per semester hour
AUD (Audit)	0 points per semester hour

IP (In Progress) is given only in certain developmental courses. The student must re-enroll to receive credit. COM (Completed) is given in non-credit and continuing education courses. To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades "IP," "COM" and "I" do not affect GPA.

COURSE CALENDAR		
Topics	Textbook Reading	
Introduction to Computers and Java	Text: Chapter 1, Appendix D	
	Java Tutorial: http://download.oracle.com/javase/tutorial/getStarted/index.html	
Java Fundamentals (Program Construct, Java Expression and Primitive Data Types)	Text: Chapter 2, Appendix A, B, C	
Lab Assignment 1 Due Quiz 1	Java Tutorial: http://download.oracle.com/javase/tutorial/java/concepts/index.html http://download.oracle.com/javase/tutorial/java/nutsandbolts/index.html	
Decision Structures	Text: Chapter 3	
Programming Assignment 1 Due	Java Tutorial: http://download.oracle.com/javase/tutorial/java/nutsandbolts/if.html http://download.oracle.com/javase/tutorial/java/nutsandbolts/switch.html	
Loops and Files	Text: Chapter 4	
Lab Assignment 2 Due Quiz 2	Java Tutorial: http://download.oracle.com/javase/tutorial/java/nutsandbolts/while.html http://download.oracle.com/javase/tutorial/essential/io.html	
Mid-term		
Java Methods Programming Assignment 2 Due	Text: Chapter 5 Java Tutorial: http://download.oracle.com/javase/tutorial/java/landl/index.html	
Java Classes	Text: Chapter 6	
Lab Assignment 3 Due Quiz 3	Java Tutorial: http://download.oracle.com/javase/tutorial/java/java00/index.html	
Java Arrays Quiz 4 (Polymorphism)	Text: Chapter 7	
	Java Tutorial: http://download.oracle.com/javase/tutorial/java/nutsandbolts/arrrays.html	
Advanced Classes and Objects	Text: Chapter 8	
Lab Assignment 4 Due Programming Assignment 3 Due Quiz 4	Java Tutorial: http://download.oracle.com/javase/tutorial/essential/regex/index.html http://download.oracle.com/javase/tutorial/collections.html	
Final		

HCC Policies

Note: This section of the syllabus provides the HCC policies. If you have any question, or a concern, please contact the instructor or the department.

HCC Policy Statement: ADA Academic Honesty Student attendance 3-peaters Withdrawal deadline

Access Student Services Policies on the following website:

http://www.hccs.edu/resources-for/current-students/student-handbook/

HCC Policy on Class Attendance

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 <a href="https://example.com/https://exampl

HCC Policy on Course Withdrawal

If you feel that you cannot complete this course, you will need to withdraw from the course prior to the final date of April 1, 2019 (check HCCS Academic Calendar for any updates). Students must withdraw by the withdrawal deadline in order to receive a "W" on a transcript. Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online Academic Calendar, any HCC Registration Office, or any HCC advisor to determine class withdrawal deadlines.

Be certain you understand HCC policies about dropping a course and consult with a counselor/advisor to determine if withdrawing is in your best interest. It is your responsibility to withdraw officially from a class and prevent an "F" from appearing on your transcript. Senate Bill 1231 and limits the number of W's a student can have to 6 classes over the course of their entire academic career. This policy is effective for students entering higher education for the first time in fall 2007 and subsequent terms. Withdrawals accumulated at any other Texas public higher education institution count toward the 6 courses total. Withdrawals for certain circumstances beyond the students' control may not be counted toward the 6-drop limit.

In addition, withdrawing from a course may impact your financial aid award or eligibility. Contact the Financial Aid Office or website to learn more about the impact of withdrawing on financial aid. For complete information on HCC Course Withdrawal policy including the three-peat rule refer to the HCC Student Handbook.

Accommodations due to a qualified disability

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including 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 https://www.hccs.edu/support-services/disability-services/

HCC Policy Statement: Discrimination, Sexual Harassment, Sexual Misconduct, Pregnancy and Parental Status

HCC prohibits discrimination in its educational programs or activities on the basis of race, color, national origin, age, religion, disability, sex or gender-including pregnancy or parental status, gender identity, gender expression, sexual orientation, Veteran status or genetic information. Furthermore, HCC prohibits all forms of sexual misconduct, including but not limited to, sexual harassment, rape, sexual assault, sexual exploitation, domestic violence, interpersonal violence, dating violence and stalking.

HCC will comply with state and federal laws such Title IX of the Education Amendments of 1972, Title VI and Title VII of the Civil Rights Act, the Americans with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, the Vietnam Era Veterans Readjustment and Rights Act, and other similar laws that prohibit discrimination.

Any student that requires an academic accommodation due to pregnancy and pregnancy related conditions (i.e., pregnancy, childbirth, false pregnancy, termination of pregnancy, conditions arising in connection with pregnancy, and recovery from any of these conditions) or parental status, should consult with an *Abilities Services Counselor* to initiate an academic accommodation request. An academic accommodation may include, but is not limited to, receiving a grade of an "I" (Incomplete) on a course, an official withdrawal from a course, voluntarily leave of absence from the program with a conditional return, or the opportunity to resume enrollment at a later time without being subjected to a new admission process.

Students may report an incident of discrimination, sexual misconduct, or discrimination based on pregnancy or parental status to the Title IX Coordinator listed below. Individuals may also report incidents <u>online</u> or to any <u>Title IX Contact</u>.

Title IX Coordinator
James David Cross, Director of EEO/Compliance
Office of Institutional Equity
3100 Main, Suite 702
Houston, Texas 77002
713.718.8271

<u>Institutional.equity@hccs.edu</u>

For more information and resources related to HCC's non-discrimination policies and Title

IX, visit:

http://www.hccs.edu/departments/institutional-equity

Basic Needs	Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable us to provide any resources that HCC may possess.
Campus Carry	At HCC the safety of our students, staff, and faculty is our first priority. As of August 1, 2017, Houston Community College is subject to the Campus Carry Law (SB11 2015). For more information, visit the HCC Campus Carry web page at http://www.hccs.edu/departments/police/campus-carry/
HCC Online and/or Continuing Education Policies	Access HCC Online Policies on their Web site: All students are responsible for reading and understanding the HCC Online Student Handbook, which contains policies, information about conduct, and other important information. For the HCC Online Student Handbook click on the link below or go to the HCC Online page on the HCC website. The HCC Online Student Handbook contains policies and procedures unique to the online student. Students should have reviewed the handbook as part of the mandatory orientation. It is the student's responsibility to be familiar with the handbook's contents. The handbook contains valuable information, answers, and resources, such as HCC Online contacts, policies and procedures (how to drop, attendance requirements, etc.), student services (ADA, financial aid, degree planning, etc.), course information, testing procedures, technical support, and academic calendars. Refer to the HCC Online Student Handbook by visiting this link: http://www.hccs.edu/media/houston-community-college/distance-education/student-services/HCC-Online-Student-Handbook.pdf Access CE Policies on their Web site: http://www.hccs.edu/continuing-education/
EGLS3 Evaluation for Greater Learning Student Survey System	At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and division chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.