605.201 Introduction to Programming Using Java (Spring 2020), Section 84.SP20

Syllabus

Instructor Contact

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The best way to contact me is to send email through Blackboard. Use the Email function in the menu on the left side of the screen. If you choose to use external email, you can send it to the email addresses listed above. Please be sure to include 605.201 and your section number on the subject line of any external email. In an emergency, you may send an SMS message or call on the telephone at the numbers listed above.

Office Hours via Zoom

For more information regarding Zoom, please see the Connect Information Page located in Help & Support on the left menu.

This course will use Zoom to facilitate weekly, synchronous office hours. You are not required to participate in office hours; however, you may find them very beneficial for receiving more timely answers to questions related to the course content and assignments. Office hours are as follows:

Every Tuesday 8:00 p.m. – 9:00 p.m. Eastern Time
Zoom meeting link – https://wse.zoom.us/j/310638166

Recorded Office Hour sessions will be posted to the Modules area's Office Hour Recordings folder for students who were unable to participate in the live sessions, or for student who would like to have them available again for review purposes. I recommend viewing the office hour recordings if you were unable to attend the live session.

To connect to an office hour session, click on the Office Hour link in the course's Blackboard site.

Course Description

This course enables students without a background in software development to become proficient programmers who are preparing for a follow-on course in data structures. The Java language will be used to introduce foundations of structured, procedural, and object-oriented programming. Topics include I/O, data types, operators, operands, expressions, conditional statements, iteration, recursion, arrays, functions, parameter passing, and returning values. Students will also be introduced to classes, objects, object references, inheritance, polymorphism, and exception handling. Additional topics include file I/O, searching, sorting, Java collections, and developing graphical user interfaces (GUIs). Students will complete several programming assignments to develop their problem-solving skills and to gain experience in detecting and correcting software errors.

Prerequisites

One year of college mathematics.

Course Goals

This class will prepare you for many of the courses that follow in your curriculum. You will learn the fundamentals of computer programming using the Java programming language. You will learn how to formulate solutions to computing problems and implement those solutions using industry best-practice programming principles and techniques.

Course Objectives

By the end of this course, you will be able to:

- Understand and apply concepts and techniques for developing, debugging, and documenting programs written in the Java language
- Understand and apply Java control flow constructs, primitive types, and non-primitive types
- Understand and apply object-oriented design and programming concepts in the development of Java programs
- Plan, design, and develop programs using the Java programming language

Course Structure

The course materials are divided into modules which can be accessed by clicking Course Modules on the left menu. A module will have several sections including the overview, content, readings, discussions, and assignments. You are encouraged to preview all sections of the module before starting. Modules run for a period of seven (7) days. Any exceptions are noted on the Course Outline page. If there are any due date discrepancies use the date in the course outline.

Required Textbook

Schildt, Herbert (2017). *Java: The Complete Reference 10/E, 10th Edition:* McGraw-Hill Education.
ISBN-10: 0071808558
ISBN-13: 978-1259589331

Textbook information for this course is available online through the appropriate bookstore website: For online courses, search the MBS website at http://ep.jhu.edu/bookstore.

Technical Requirements

Technical Requirements You should refer to Help & Support on the left menu for a general listing of all the course technical requirements.

Student Coursework Requirements

It is expected that each module will take approximately 6-16 hours per week to complete. Here is an approximate breakdown: completing textbook reading assignments (approximately 1-2 hours per week), listening to the audio annotated slide presentations (approximately 1–2 hours per week), participating in discussions (approximately 1-2 hours per week for some weeks) doing the homework and mini-project assignments (approximately 3-10 hours per week on average).

This course will consist of four basic student requirements:

1. **Participation (Module Discussions)** (10% of Final Grade Calculation)

   Post your initial response to the discussion questions as soon as you are prepared for that module week. Posting a response to the discussion question is part one of your grade for module discussions (i.e., Timeliness).

   Part of your grade for module discussion is your interaction (i.e., responding to classmate postings with thoughtful responses) with at least two classmates. Just posting your response to a discussion question is not sufficient; we want you to interact with your classmates. Be detailed in your postings and in your responses to your classmates' postings. Feel free to agree or disagree with your classmates. Please ensure that your postings are civil and constructive.

   A detailed grading rubric for discussion participation can be found in the Syllabus and Course Information section of this website.

2. **Assignments** (30% of Final Grade Calculation)

   Assignments will consist of developing one or more programs in the Java language.

   All assignments are due according to the dates in the Course Outline.

   Late submissions will be reduced according to the policies of your instructors.

   A detailed grading rubric for assignments can be found in the Syllabus and Course Information section of this website.

3. **Individual Mini-Projects** (30% of Final Grade Calculation)

   Three mini-projects will be assigned for this course. Each mini-project will take several weeks to complete and will require that you apply the principles and techniques that you learn in each course module.

   A detailed grading rubric for mini-projects can be found in the instructions for each mini-project**.**

4. **Quizzes & Final Exam** (30% of Final Grade Calculation)

   There will be three quizzes and a comprehensive final exam. Consult the course outline and schedule for the due dates of each quiz. The final exam will be available in Module 14 and must be completed prior to the last day of that module. Your instructor will provide more information on the details of the exam as the semester progresses.

Grading

A grade of A indicates achievement of consistent excellence and distinction throughout the course.

A grade of B indicates work that meets all course requirements on a level appropriate for graduate academic work.

A grade of C indicates that the quality of the work falls short of expectations.

Grade categories are as follows:

100–98 = A+
97–94 = A
93–90 = A−
89–87 = B+
86–83 = B
82–80 = B−
79–77 = C+
76–73 = C
72–70 = C-
69–67 = D+
66–63 = D
<63 = F

Final grades will be determined by the following weighting:

Item	% of Grade
Participation (Module Discussions)	10%
Assignments	30%
Course Projects (10%, 10%, 10%)	30%
Quizzes (15%) & Final Exam (15%)	30%

Help & Support

You should refer to Help & Support on the left menu for a listing of all the student services and support available.

Policies and Guidelines

From time to time the instructors will communicate with the students via the Announcement mechanism in Blackboard and official JHU student email. Be sure to monitor the Blackboard website and your JHU student email regularly so you don't miss important announcements.

Academic Integrity

Academic Misconduct

All students are required to read, know, and comply with the Johns Hopkins University Krieger School of Arts and Sciences (KSAS) / Whiting School of Engineering (WSE) Procedures for Handling Allegations of Misconduct by Full-Time and Part-Time Graduate Students available at:
https://ep.jhu.edu/wseacademicmisconductpolicy

This policy prohibits academic misconduct, including but not limited to the following: cheating or facilitating cheating; plagiarism; reuse of assignments; unauthorized collaboration; alteration of graded assignments; and unfair competition. You may request a paper copy of this policy at this by contacting:

Mark Tuminello
Phone 410-516-2306
E-mail mtumine2@jhu.edu

Policy on Disability Services

Johns Hopkins University (JHU) is committed to creating a welcoming and inclusive environment for students, faculty, staff and visitors with disabilities. The University does not discriminate on the basis of race, color, sex, religion, sexual orientation, national or ethnic origin, age, disability or veteran status in any student program or activity, or with regard to admission or employment. JHU works to ensure that students, employees and visitors with disabilities have equal access to university programs, facilities, technology and websites.

Under Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990 and the ADA Amendments Act of 2008, a person is considered to have a disability if c (1) he or she has a physical or mental impairment that substantially limits one or more major life activities (such as hearing, seeing, speaking, breathing, performing manual tasks, walking, caring for oneself, learning, or concentrating); (2) has a record of having such an impairment; or (3) is regarded as having such an impairment class. The University provides reasonable and appropriate accommodations to students and employees with disabilities. In most cases, JHU will require documentation of the disability and the need for the specific requested accommodation.
The Disability Services program within the Office of Institutional Equity oversees the coordination of reasonable accommodations for students and employees with disabilities, and serves as the central point of contact for information on physical and programmatic access at the University. More information on this policy may be found at http://web.jhu.edu/administration/jhuoie/disability/index.html or by contacting (410) 516-8075.

Disability Services

Johns Hopkins Engineering for Professionals is committed to providing reasonable and appropriate accommodations to students with disabilities.

Students requiring accommodations are encouraged to contact Disability Services at least four weeks before the start of the academic term or as soon as possible. Although requests can be made at any time, students should understand that there may be a delay of up to two weeks for implementation depending on the nature of the accommodations requested.

Requesting Accommodation

New students must submit a Student Request for Accommodation form along with supporting documentation from a qualified diagnostician that:

- Identifies the type of disability
- Describes the current level of functioning in an academic setting
- Lists recommended accommodations

Questions about disability resources and requests for accommodation at Johns Hopkins Engineering for Professionals should be directed to:

Mark Tuminello
Disability Services Coordinator
Phone 410-516-2306
Fax 410-579-8049
E-mail mtumine2@jhu.edu or ep-disability-svcs@jhu.edu