# ITSS 3311.001 - Introduction to Programming



#### Fall 2019



### **Professor's Contact Information**

Schedule: Tuesday 8:00 am - 10:45am

Location: JSOM 2.902

Email Address: <u>Srimathi.Srinivasan@utdallas.edu</u>

Office Location: ECSS 4.403

Office Hours: T H 3.00 pm – 3:45 pm, W 3.30 pm – 5:00 pm

TA: Vishakha Rajput

TA email: vishakha.rajput@utdallas.edu

TA hours: Wednesday- 4:00 PM to 6:00 PM Thursday- 1:00 PM to 3:00 PM

Location: JSOM 2.604

## **General Course Information**

### **Course Description**

This course introduces students to the fundamental concepts of programming. Students will also be introduced to the object-oriented paradigm. Topics include data types, control structures, objects, classes, iterations, functions, and arrays as they relate to developing business applications. In this course students will learn the mechanics of running, testing, and debugging programs.

### Course Objectives:

CLSO#1: Apply the basic mechanics of object-oriented programming which includes:

- Problem solving for programming (i.e., "how to think about solving the problem" including techniques such as pseudo-code or flowcharts);
- · Syntax and program structure, including Java identifier rules;
- · Conditional execution with if, else if, and else;
- · Basic looping, including for and while loops;
- · Static methods and method invocation;
- · One-dimensional arrays of primitive types
- Strings including the following topics: declaration, initialization, assignment, traversal, and methods;
- Basics of identifying and fixing errors;
- · Identify classes, objects, members of a class and the relationships among them

CSLO#2: Interpret code by being able to trace the execution of code fragments, keeping track of the values of variables through a short series of computations, including branches, loops, and method calls.

CSLO#3: Develop programs using the Java Collection API and the Java standard class library.

# **Required Hardware and Software**

- 1. Laptop REQUIRED (Windows or MacOS) from first day of class.
- 2. The following software is required from first day of class

### Java JDK – latest update

- For Window OS Users: Edition: Standard Edition (SE).
- Important Note: Many editions, versions, and updates of Java JDK are available for downloads. Students must be sure that the correct version of Java JDK is selected, downloaded, and installed: There are 2 versions of the Java JDK, 32-bit and 64-bit, available for downloads. Students should try to install the 64-bit version. However, you can install the 32- bit version if you prefer.
- Free download of Java JDK
  <a href="http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html">http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html</a>
- Choose: Java SE Development Kit
  - Java JDK file name to download for 32-bit: Windows x86
  - Java JDK file name to download for 64-bit: Windows x64
  - Java JDK file name to download for Mac: Mac OS X x64

Eclipse IDE for Java Developers – Free download of Eclipse: <a href="http://www.eclipse.org/downloads/">http://www.eclipse.org/downloads/</a> – Important Notes: Many packages of Eclipse IDE are available for downloads. Students must be sure that the correct package of Eclipse (Eclipse IDE for Java Developers) is selected, downloaded, and installed.

— The version of Eclipse IDE must be compatible with the version (32-bit or 64-bit) of the Java JDK. If the 32-bit Java JDK is installed, Eclipse IDE of 32 bits must be used.

### **Required Texts and Materials**

Online interactive book in <a href="https://www.zybooks.com">www.zybooks.com</a>.

- 1. Sign in or create an account at learn.zybooks.com
- 2. Enter zyBook code: UTDALLASITSS3311SrinivasanFall2019
- 3. A subscription is \$58. Students may begin subscribing on Aug 05, 2019 and the cutoff to subscribe is Nov 28, 2019. Subscriptions will last until Dec 27, 2019.

## **Supporting Texts and Materials**

Introduction to Java Programming, Brief Version, 10th edition, Y. Daniel Liang ISBN-13: 978-0-13-359220-7 ISBN-10: 0-13-359220-0

## **Supporting Information**

- 1. Suggested tutorials: <a href="http://docs.oracle.com/javase/tutorial">http://docs.oracle.com/javase/tutorial</a>
- 2. Supplemental Notes will be posted on eLearning course site
- 3. All the required software applications are currently available in JSOM labs PCs. Students can use these PCs for their class work whenever the labs are open.

Email: When you send me an email, please specify ITSS 3311 in the subject.

### **Course & Instructor Policies**

**eLearning** will be used for class content (assignment descriptions) and the recording of grades. Slides (e.g., class slides and assignment solutions) will be posted on the box folders. The link will be provided in elearning. Class announcements (e.g., change in assignment dates) will also be posted.

**Instructor Response Policy:** The instructor will respond to all student inquiries via emails within 48 hours (excluding holidays and weekends).

**Attendance Policy:** Attendance is extremely important. Students are expected to attend all classes in order to achieve maximum success.

**Late Work:** Students are required to submit their homework on time. I do not accept late assignments unless *prior* arrangements have been made with the instructor.

**WORKING TOGETHER on Individual Assignments:** This course will have a considerable amount of computing work for application assignments. Each student is expected to do their own work on the "individual" assignments. Copying another student's work (computer files) or having another person do your work is scholastic dishonesty and will be dealt with accordingly.

**Exams:** Exams will consist of Multiple choice and True or False Questions. Final exams will not be comprehensive.

**Make-Up Policy:** Make-up exams will be allowed **ONLY** with the **prior** permission of the instructor. Students will be required to provide necessary documentation.

**Email:** All requests, including re-grading, regarding to a homework assignment or an exam must be submitted in writing via email. When you send me an email, please **specify ITSS 3311** in the **subject.** 

# **Assignments & Academic Calendar**

# **Course Outline**

This is a tentative outline of the course:

Week 1	08/20/2019	Introduction to Java	
Week 2	08/27/2019	Variables and Assignments	
Week 3	09/03/2019	Variables and Assignments	Assignment 1 out
Week 4	09/10/2019	Branches	Assignment 1 Due
	09/17/2019	Branches/ Functions,	
Week 5		Characters and Strings	
		Functions, Characters and	In class Quiz,
Week 6	09/24/2019	Strings	Assignment 2 out
Week 7	10/01/2019	Review	Assignment 2 Due
Week 8	10/08/2019	Exam 1	8.45 – 11 AM (90 mins)
Week 9 D9	10/15/2019	Loops	
Week 10 D10	10/22/2019	Loops Methods	Assignment 3 out
			Assignment 3 Due
Week 11 D11	10/29/2019	Methods	Assignment 4 out
Week 12 D12	11/05/2019	Arrays	Assignment 4 Due
			In class Quiz
Week 13 D13	11/12/2019	Arrays	Assignment 5 out
Week 14 D14	11/19/2019	Review	Assignment5 Due
Week 15	11/26/2019	Thanks Giving Holidays	
Week 16	12/03/2019	Exams	In class (90 mins)

# **Grading Criteria**

In line with the applied nature of this class, a large portion of the assessment will be made through homework. There will be five programming assignments throughout the semester. Zybooks participation and challenging activities will be part of class/home work. Students are also encouraged to do Zybooks participation activities before the class. Zybooks activities need to be finished on the assigned deadlines. There will be two in-class quiz and two exams. There will be no final exam. The breakdown will be:

Assignments	40
Zybooks Activities	10
In Class quiz	10
Exam 1	20
Exam 2	20
Total	100

# **Grading Scale**

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A	94 – 100
A-	90 – 93
B+	87 – 89
В	84 – 86
B-	80 – 83
C+	77 – 79
С	74 – 76
C-	70 – 73
D+	67 – 69
D	64 – 66
D-	60 – 63
F	< 60

# **University Policies**

# Student Conduct and Discipline

The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, A to Z Guide, which is provided to all registered students each academic year. The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the Rules and Regulations, Board of Regents, The University of Texas System, Part 1, Chapter VI, Section 3, and in Title V, Rules on Student Services and Activities of the university's Handbook of Operating Procedures. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391). A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

### **Academic Integrity**

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work. Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a

degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings. Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective. Any act of scholastic dishonesty in this course results in an F as the final grade of the course.

#### Email Use

The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. The university encourages all official student email correspondence be sent only to a student's U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.

### Withdrawal from Class

The administration of this institution has set deadlines for withdrawal of any college level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, the instructor cannot drop or withdraw any student. The student must do the proper paperwork to ensure that he/she will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.

### Student Grievance Procedures

Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's Handbook of Operating Procedures. In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the deal will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties. Copies of these rules and regulations are available to students in the Office of

the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.

### **Incomplete Grades**

As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of F.

# **Disability Services**

The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union. Office hours are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday and Wednesday, 8:30 a.m. to 7:30 p.m.; and Friday, 8:30 a.m. to 5:30 p.m.

The contact information for the Office of Disability Services is: The University of Texas at Dallas, SU 22 PO Box 830688 Richardson, Texas 75083-0688 (972) 883-2098 (voice or TTY)

Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.

It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

# **Religious Holy Days**

The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated. The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period

equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment. If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.

# Off-Campus Instruction and Course Activities

Off-campus, out-of-state, and foreign instruction and activities are subject to state law and University policies and procedures regarding travel and risk-related activities. Information regarding these rules and regulations may be found at http://www.utdallas.edu/BusinessAffairs/Travel\_Risk\_Activities.htm. Additional information is available from the office of the school dean.