Instructor: Professor Hardy

Office: Hardy BLB 367C } Tu 5:00 to 6:20 or by appointment

Email: LeRoy.Hardy@unt.edu

Phone: 940.369.8569

TEXTBOOK: UNT Bookstore [Amazon or Voertmans if UNT Bookstore is out]

Starting Out with JAVA - CONTROL STRUCTURES THRU OBJECTS
7th Edition, by Tony Gaddis ISBN-13: 978-0134802817 loose leaf

Do not get the Mylab edition - it costs more

COURSE OBJECTIVES:

This course is an introduction to business computer programming and design in a corporate environment. The primary focus is on the information systems function in support of corporate activities. Students will learn business problem solving using JAVA PROGRAMMING in both a microcomputer environment and on an IBM System Z Mainframe.

JAVA TOPICS COVERED

JAVA program types, creating an application, syntax, variables, literals and identifiers, methods, expressions, print, println. primitive data types, arithmetic operators, final, string class, dialog boxes, joptionpane, scope, scanner class methods, decision structures, if-else, relational operators, nested ifs, logical operators, precedence, switch and the case structure, printf method, selection, repetition, formatting, loops, while loop, nested loop, methods, passing arguments, local variables, classes, instance fields, constructors, overloading methods and constructors, scope of instance fields, packages, import statements, iteration, instance, string arrays, arrays of objects, arrays, loops, external classes, table/arrays, arraylist class.

TO SUCCEED IN THIS CLASS

- 1. Read the book! Exams come from the material covered in the Java book by Gaddis, as does the programming.
- 2. Take notes! Vocabulary words, Java commands, etc. Use your notes to do the programming. If you must go back to the book, then update your notes.
- 3. Do the assignments on your own. This helps you understand the concepts.

Academic Integrity Standards and Consequences.

Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating - [such as copying JAVA CODE from other students' computer programs and turning that code in as their own work, or copying JAVA CODE that they find on the internet and turning it in as part of their own work] also facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty will result in a range of academic penalties or sanctions ranging from negative points on homework assignments OR the semester grade of F in the course OR expulsion from the University.

Specifically, for BCIS 3630:

- a. Copying is defined as getting even one line of code **from the internet** or **from another student**.
- b. The first time a student turns in copied code, they will receive the grade of -10 on that chapter's entire assignment.
- c. The second time a student turns in copied code, they will receive a grade of -20 on that chapter's entire assignment. At this point you are in danger of failing the course, because you received no credit for two assignments and then lost 30 points from what few points you have left. That means the maximum homework grade you can receive is 58%, which means you will also lose 2% from your exam grades, assuming you get full credit for all other homework assignments [see e. below].
- d. Any other act of academic dishonesty in BCIS 3630 will result in **a semester grade of F**. Any attempt to use a service such as Chegg to solve the assignment will result in you handling your actions with the ITDS department chair or Dean Wiley. THIS is your warning.
 - If a student is smart they will NOT EVEN MENTION any java homework assignments in GROUPME. Someone might take their code and turn it in as their own and both students get punished equally. **Do not give another student as much as a single line of code.**
- e. You are required to complete all of your 3630 homework assignments, otherwise you will not be able to write your JAVA programs in BCIS 3680 the advanced JAVA course you are required to take. You must earn at least 60% of the 120 points available to you in 3630.

If you earn 60% or more, you will receive the exact average you achieve on the 3 exams. For example, if you make 189/210 on exam one, 168/210 on exam two, and 178/210 on exam 3, you earn 535/630 = 85% of 630 possible exam points for the full 535 points.

However, if you earn less than 60% of the 100 possible points, you will lose 1% off of your semester exam average for each 1% below 60% on the homework. So, if you make 189/210 on exam one, 168/210 on exam two, and 178/210 on exam 3, you have 535/630 = 85%. But if you only get 50% on your homework grade, then after subtracting 10% for poor homework performance, you only receive 75% of 630 possible exam points for only 473 points. Do not panic over this, as some semesters every student earned 60% or higher on their homework. Copying someone else's work and getting negative points will hurt you the most, followed by not turning in anything. Turn in what you've completed by the time it is due. I need to know that you can write a program in a programming class, and I'm trying to keep students from failing BCIS 3680.

COVID Policy statement

COVID-19 impact on attendance

While attendance is expected as outlined above, it is important for all of us to be mindful of the health and safety of everyone in our community, especially given concerns about COVID-19. Please contact me if you are unable to attend class because you are ill, or unable to attend class due to a related issue regarding COVID-19. It is important that you communicate with me prior to being absent as to what may be preventing you from coming to class so I may decide about accommodating your request to be excused from class.

If you are experiencing cough, shortness of breath or difficulty breathing, fever, or any of the other possible symptoms of COVID-19 (https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html) please seek medical attention from the Student Health and Wellness Center (940-565-2333 or askSHWC@unt.edu) or your health care provider. While attendance is an important part of succeeding in this class, your own health, and those of others in the community, is more important.

All 3630 homework assignments go to the student grader, NO COPY GOES TO THE INSTRUCTOR. <u>Each 3630 student is required to keep all submission emails to the grader along with the receipt that the grader sends the student when they receive the assignment.</u> This is your only proof of submission in case of a dispute over a submission and/or of a submission being on time.

NO MAKE-UP EXAMS WILL BE GIVEN IN THIS COURSE

The official UNT exceptions do apply but only if you notify me at the <u>BEGINNING</u> of the semester. You must give me signed documentation from the university at the beginning of the semester. If not notified at the beginning of the semester - you will not be allowed a make-up exam.

For the rest of the class, if you miss an exam, I will give you a grade of 75% of the average grade you make on the other 2 exams.

EXAMPLE: If you make 90% and 80% on the 2 exams you do take, I will give you 75% of the average of the two scores for a grade of 63.75%.

BE SMART AND SHOW UP FOR ALL 3 EXAMS OR YOU WILL BE PENALIZED

CLICK BELOW TO DOWNLOAD JAVA

https://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html

The Widows 64-bit version is at the bottom, the Mac 64 bit is in the middle of the Java SE Development Kit 8u301 section.

Create an account as a student and log in to get your java software

If you have a MAC, install as you normally install software Hints for PC installation of JAVA in Windows

Be CERTAIN to install JAVA in:

C:\Program Files\Java

Do not install it anywhere else !!!

If you mess up - uninstall it - and reinstall it.

REMEMBER - BE CERTAIN THAT YOU download and install Java ONLY in:

C:\Program Files\Java

*You may use ANY jdk1.8.0_01 ... _250 etc. INSTEAD OF jdk1.8.0_261

NEXT set the "Path"

Open Control Panel on your Windows Computer - [Start--->Control Panel, or type Control Panel in the Search]

Click the "System" (or maybe System and Security, then System)

Click the "Advanced system settings"

Click the "Environment Variables" button near the bottom of the box

In the "System variables" window, look for a variable named "Path"

Path tells software programs such as JGrasp where to find the "JAVA" executable file. Path variables are separated by a '; '.

Click on the "Path" variable under "System variables" and click Edit

Scroll to the bottom of the window (or you might have to click New) and type the following:

";C:\Program Files\Java\jdk1.8.0_261\bin; "

Please be very careful that you add the text to the End of the existing information that you see, and be sure that you type the ";" along with the rest of the information stated above.

Click OK

Next – set the CLASSPATH.

IF the "CLASSPATH" variable ALREADY EXISTS do the following:

Click on the "CLASSPATH" [as you did with Path] and click Edit

Scroll to the bottom of the window and type the following:

" ;C:\Program Files\Java\jdk1.8.0_261\lib; "

Please be very careful that you add the text to the end of the existing information that you see, and be sure that you type the ";" along with the rest of the information stated above.

Click OK

IF the "CLASSPATH" variable DOES NOT EXIST do the following:

Click the New button below the "System variables" dialog box

Type "CLASSPATH" in the Variable name field

Type the following in the Variable value field:

" C:\Program Files\Java\jdk1.8.0_261\lib; "

Click OK, OK, OK

For PC or MAC

CLICK THE LINK BELOW TO DOWNLOAD AND INSTALL THE **JGRASP IDE** program WHICH WE WILL USE TO RUN ALL OF OUR JAVA PROGRAMS:

http://www.jgrasp.org/

JGRASP software basics

- 1. Open the .java file you want to compile, so you can run it or debug it for logic errors.
- 2. Click the 'Toggle line numbers' ICON to turn on line numbering.
- 3. Click the 'Compile file' ICON to check for syntax errors. [fix any errors you find]
- 4. When you have NO syntax errors, click the 'Run application for current file' ICON.
- 5. If you still have a LOGIC error, set a breakpoint on the line where you want to start debugging and then click the 'Run debugger on current file' ICON.

Class Schedule

_	Class Schedule				
THIS IS A CRITICAL FULL 3 HOUR LECTURE – DO NOT MISS THIS CLA					
Aug 24	Aptitude Test Instructions Lecture: Intro to Mainframe MAINFRAME PROBLEM ONE & TWO – [Logging in and editing on Sys Z] Installing TN3270 for mainframe Sys Z Installing FTP for mainframe Sys Z JAVA - Downloading and installing JAVA JDK Setting PATH and CLASSPATH variables for JAVA in WINDOWS INSTALLING JGRASP FOR DEBUGING JAVA Intro to Object-Oriented Programming				
31	Lecture over Gaddis Ch 1 & MF Prob Three Q&A MF Prob ONE & TWO Running JAVA Programs on Sys Z Gaddis JAVA textbook chapter 1Terminology & Aptitude Test – 70 minutes	MF Prob ONE due 8/31 Not accepted after Wed 9/1 Ethical Behavior due 8/31			
Sept 7	Lecture over Gaddis Ch 2 JAVA Fundamentals Writing a Program Basics – Bring your laptop	MF Prob TWO due 9/7 Not accepted after Wed 9/8			
14	Lecture over Gaddis Ch 3 Decision Structures	MF Prob THREE due and JAVA ONE due 9/14 Not accepted after Wed 9/15			
21	Web Session A & Finish JAVA Two Hints for Gaddis Ch 1, 2, 3 Exam	JAVA Two due 9/21 Not accepted after Wed 9/22			
Sept 28	EXAM ONE on GADDIS Ch1, Ch2, and Ch3 40 MC/TF Questions worth 5.25 points each = 210 points				
Oct 5	Lecture over Gaddis Ch 4 – Loops (skip files) Finish JAVA THREE				
12	Lecture over Gaddis Ch 5 - Methods	JAVA Three due 10/12 Not accepted after Wed 10/13 MF Prob Four due 10/14			
19	Web Session B & C Hints for Gaddis Ch 4, 5 Exam Finish JAVA FOUR	JAVA Four due 10/19 Not accepted after Wed 10/20			
Oct 26	EXAM TWO on GADDIS Ch4 and Ch5 40 MC/TF Questions worth 5.25 points each = 210 points				
Nov 2	Lecture over Gaddis Ch 6 A First Look at Classes				
9	Q & A on Ch 6 – Review Ch 6, Demo Examples	JAVA Five due 11/09 Not accepted after Mon 11/10			
16	Lecture over Gaddis Ch 7 Arrays and ArrayList	Master the Mainframe 11/19			
23	Web Session D & E Hints for Gaddis Ch 6 &7 Exam Finish JAVA SIX	JAVA Six due 11/23 Not accepted after Wed 11/24			
Nov 30	EXAM THREE on GADDIS Ch6 and Ch7 40 MC/TF Questions worth 5.25 points each = 210 points				

HOMEWORK ASSIGNMENTS

Point Distribution for Assignments

MF Prob One – Login/Basics	UNT/SYS Z	5	8/31
MF Prob Two – More Editing	UNT/SYS Z	5	9/07
MF Prob Three – JAVA/FTP/JCL	UNT/SYS Z	10	9/14
MF Prob Four – MtMF Part 1	UNT/SYS Z	10	10/08
JAVA One	Gaddis Ch 2	10	9/14
JAVA Two	Gaddis Ch 3	15	9/21
JAVA Three	Gaddis Ch 4	15	10/12
JAVA Four	Gaddis Ch 5	20	10/19
JAVA Five	Gaddis Ch 6	20	11/09
JAVA Six	Gaddis Ch 7	15	11/23
TOTAL		120	

^{*} If you do the math you'll notice that you can get 125 points (5 bonus)

I WILL GRADE MAINFRAME PROBLEMS ONE, TWO, & THREE THE UNT/SYSTEM Z. EMAIL Prof Hardy WHEN READY TO BE GRADED ON THE UNT/Z.

*** EMAIL ALL JAVA PROBLEMS, ONE thru SIX, TO THE 3630 STUDENT GRADER

You are required to complete all of your 3630 homework assignments; otherwise, you will not be able to write your JAVA programs in BCIS 3680, the advanced JAVA course you are required to take. In addition, you must earn at least 60% of the 100 points available to you in 3630.

If you earn 60% or more, your exam grades will remain the same. For example, if you make 189/210 on exam one, 168/210 on exam two, and 178/210 on exam 3, you earn 535/630 = 85% of 630 possible exam points for the total 535 points.

However, if you get less than 60% of the 120 possible points, you will lose 1% on your exam scores for each 1% below the 60% on your homework. So, if you make 189/210 on exam one, 168/210 on exam two, and 178/210 on exam 3, you have 535/630 = 85%. But if you only get 50% on your homework grade, then after subtracting 10% for poor homework performance, you only receive 75% of 630 possible exam points for only 473 points. Do not panic over this, some semesters, every student earned 60% or higher on their homework. Copying someone else's work and getting negative points will hurt you the most, followed by not turning in anything. Turn in what you've completed by the due date. *I need to know you can write a program in a programming class, and I'm trying to keep students from failing BCIS 3680*

After completing the four mainframe assignments at the beginning of the semester, you may want to earn EXTRA CREDIT by working on the IBM Master the Mainframe (MtMF) contest LEVEL's Two and Three. It will be approximately 50 bonus points but will be determined after IBM announces the contest. You can receive partial credit, but there is a hard cutoff of 11/19 to post grades. Therefore, any work you do after that time will only count towards the IBM contest. Note that people who complete all three levels get an offer for a mainframe job most of the time. And if you win the contest, you'll have multiple offers to consider.

POINTS

APTITUDE TEST	50 points	(6.25%)
EXAM ONE	210 points	(26.25%)
EXAM TWO	210 points	(26.25%)
EXAM THREE	210 points	(26.25%)
<u>HOMEWORK</u>	<u>120 points</u>	(15.00%)
TOTAL	800 points	(100.00%)

720 TO 800 POINTS = A 640 TO 719 POINTS = B 560 TO 639 POINTS = C 480 TO 559 POINTS = D 0 TO 479 POINTS = F

SEPT 28 EXAM ONE on GADDIS Ch1, Ch 2, and Ch 3 OCT 26 EXAM TWO on GADDIS Ch 4 and Ch 5

NOV 30 EXAM THREE on GADDIS Ch 6 and Ch 7

NO MAKE-UP EXAMS WILL BE GIVEN IN THIS COURSE

The official UNT exceptions do apply but ONLY IF YOU NOTIFY ME AT THE BEGINNING OF THE SEMESTER. You must give me signed documentation from the University at the beginning of the semester. If you do not notify me at the beginning of the semester - you will not be allowed a make-up exam.

For the rest of the class, if you miss an exam, I will give you a grade of 75% of the average grade you make on the other two exams.

EXAMPLE: If you make 80% and 90% on the <u>two</u> exams you take, I will give you 75% of the average grade of 85% for a grade of 63.75% on the exam you missed.

BE SMART AND SHOW UP FOR ALL 3 EXAMS OR YOU'LL BE PENALIZED.

OFFICIAL UNT REQUIRED SYLLABUS STATEMENTS

ADA Accommodation Statement. UNT makes reasonable academic accommodations for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is confirmed, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time; however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that **students must obtain a new letter of accommodation for every semester** and meet with each faculty member before implementation in each class.

Emergency Evacuation Procedures for Business Leadership Building:

- □ Severe Weather In the event of severe weather, all building occupants should immediately seek shelter in the designated shelter-in-place area in the building. If unable to safely move to the designated shelter-in-place area, seek shelter in a windowless interior room or hallway on the lowest floor of the building. All building occupants should take refuge in rooms 055, 077, 090 and the restrooms on the basement level. In rooms 170, 155, and the bathrooms on the first floor.
- Bomb Threat/Fire In the event of a bomb threat or fire in the building, all building occupants should immediately evacuate the building using the nearest exit. Once outside, proceed to the designated assembly area. If unable to safely move to the designated assembly area, contact one or more members of your department or unit to let them know you are safe and inform them of your whereabouts. Persons with mobility impairments who cannot safely exit the building should move to a designated refuge area and await assistance from emergency responders. All building occupants should immediately evacuate and proceed to the south side of Crumley Hall in the grassy area west of parking lot 24.

Acceptable Student Behavior. Student behavior that interferes with an instructor's ability to conduct a class or other students' learning opportunity is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in inappropriate behavior will be directed to leave the classroom. The instructor may also refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classrooms, labs, discussion groups, field trips, etc.

Welcome to BCIS 3630 JAVA programming. Logic Preparedness Test.

I hope that every student is successful in this course. If you are a bright student with strong analytical skills and attempt all of the JAVA homework assignments and do not copy anything from the internet or another student, you should make an A or B in the course.

However, there are some things that I must discuss first. In Fall 2020, approximately 33% of the students who started the semester did not complete this course successfully. The three primary reasons for this happening are:

- 1. Some students enrolling in BCIS 3630 do not have the quantitative, analytical, and logical skills necessary to succeed in a programming course.
- 2. There were 38 zeros on the first two straightforward JAVA homework assignments.
- 3. There were 29 instances of admitted cheating on the first 2 JAVA homework assignments.

The Dean of the College of Business and the Chair of the ITDS Department are very upset about this poor level of performance and want us to implement measures to stop it.

- 1. I am addressing cheating by giving -10 points for the first assignment. Cheating on the second assignment will result in a grade of -20. If a student is caught a third time, they will receive an F in the course.
- 2. I am addressing not turning in the homework assignments by lowering your semester EXAM GRADE AVERAGE if you do not attempt to complete your work. You must earn at least 60% out of the 100% possible for completing all assignments correctly; otherwise, I will significantly reduce your SEMESTER EXAM GRADE AVERAGE.
- 3. I am addressing the preparedness issue by giving a LOGIC PREPAREDNESS TEST during the second week of class in BCIS 3630.

Any student who does poorly on that test will be encouraged to drop 3630 and seriously ask themselves if they want to be an ITDS major, which involves a significant amount of computer programming.

To help a student prepare for the LOGIC PREPAREDNESS TEST, I am giving each student a STUDY GUIDE to work thru before the first day of class. This STUDY GUIDE contains 21 pages of textual material and a 40-question sample test to take at your leisure after you have studied the STUDY GUIDE. Therefore, I suggest that you start working thru the STUDY GUIDE right away.

PLEASE DOWNLOAD THE STUDY GUIDE FROM CANVAS, or I can email it to you before Canvas is up.

4. Whenever you complete the sample test, email me [LeRoy.Hardy@unt.edu], and I will send you the answer key to grade your sample test.

If you do well, you will be ready for the actual LOGIC PREPAREDNESS TEST on the 2nd week of class.

However, if you do poorly on the sample test, you have two options. The 1st is to reread the study guide closely and take the sample test again and again until you do well on it. Your 2nd choice is to drop BCIS 3630 and look for another major that better suits your talents.

If you do poorly on the sample test, you are almost sure to do worse on the actual LOGIC PREPAREDNESS TEST taken after the semester starts. Also, the grade you earn on the LOGIC PREPAREDNESS TEST, which you will take during the 2nd class period, will count as 50 points of your semester grade in BCIS 3630, so please take it very seriously.

5. The companies that hire our ITDS majors demand that they are technically competent and have good grades, and ITDS decided that this is the best way to accomplish that requirement.

The UNT Accounting Department implemented a similar 'preparedness test' to get into intermediate accounting several years ago, and it has cut their drop rate drastically. Accounting is stringent in that if you do not do well on the 'preparedness test,' you cannot even register for the intermediate accounting course.

Email me, and I will send it to you before Canvas is up, or you can download it from Canvas when available.