

GEEN163 Introduction to Computer Programming
Spring Semester 2016

Instructor: Dr. Ken Williams

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office hours: MWR 3:00 to 5:00, Thursdays 9:00 to 11:00

other times by appointment

Lectures are held in Graham 210 and labs in Graham 203

section	CRN	Lecture		Lab		Recitation		
1	20184	MWF	10:00 – 10:50am	R	8:00 – 9:50am	M	6:00 – 6:50pm	Graham 210
2	20185	MWF	10:00 – 10:50am	R	10:00 – 11:50am	F	3:00 – 3:50pm	Graham 210

Prerequisites: none

Text (required): “Java Illuminated: An Active Learning Approach”, 4th edition by Anderson and Franceschi, ISBN-9781284045314. The 3rd edition is acceptable.

Communication: Assignments and information will be posted on the University’s online Blackboard system at <https://blackboard.ncat.edu> Lecture notes and other material for this class can be found at <http://williams.comp.ncat.edu/geen163> Email messages will be sent to the student’s A&T email address. It is the student’s responsibility to check their A&T email account regularly.

Description:

3 credits

This is an introductory course in computer programming. Problem solving techniques and writing algorithms will be stressed. Students will write programs for such tasks as engineering decision-making and numerical computation.

Goals: Upon completion of this course, the student should be able to:

- Design, implement, and evaluate an object-oriented program in Java to meet desired needs.
- Use current techniques, skills, and tools necessary to create and debug a program.
- Read a Java program and understand what the program is doing

Online systems: GEEN163 will use the TuringsCraft online Java tutorial system. Students can access the system from <http://www.tcgo1.com> You will need a student access code which can be found on the inside the cover of the textbook or purchased from TuringsCraft. The MyCodeLab section code for GEEN163 is **NORT-22683-RUMZ-27** Register for TuringsCraft at <https://jblearning.turingscraft.com> and click on “Register with Payment Code” if you have an access code from the textbook.

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Grading : A student's grade in the class will be based on their performance on the exams, lab exams, programs and homework assignments. All work will be graded on a numerical scale from 0 to 100. The final grade will be the weighted sum of all work using the following weights:

Lab assignments	7% combined
Lab quizzes	5% combined
Quizzes and assignments	11% combined
Online tutorials	4% combined
Attendance	4%
3 exams	17% each for 51%
Final exam	18%

The lowest quiz or assignment grade will be discarded. Homework submitted up to one day after the due date will lose 10 points and up to three days late will lose 20 points. Homework will not be accepted after three days without a valid excuse. Lab assignments must be turned in by the end of the assigned lab period on the due day for full credit, unless accompanied by a valid excuse. Students who are absent during a class period when a test is given, will receive a score of zero unless previous arrangements are made or a valid written excuse is presented. There will be no extra credit.

Final letter grades will be based on the following scale:

Letter Grade	from	up to but not including
A	87	100
A-	85	87
B+	82	85
B	77	82
B-	75	77
C+	72	75
C	62	72
C-	60	62
D+	57	60
D	50	57
F	0	50

The final exam will be optional for a student when it is determined by the instructor that it is statistically unlikely that the final exam will change the student's grade. A student always has the option to take the final exam if they wish to do so. When a student is permitted to not take the final exam, their course grade will be determined by the weighted average of all other graded work.

Attendance: The lectures introduce the class material. Some material presented in the lectures is not covered in the text. Students are responsible for all class material covered or assigned in lectures. After the first three classes, students must attend 38 of the remaining 41 lectures to receive 100% of their attendance grade. For each class missed the attendance grade will be lowered by 5 points. If you come to class without your clicker, you will only receive half credit for your attendance that day. If your clicker comes to class without you, you will lose all attendance points. Students must attend at least one recitation class each week.

Clickers: Response clickers are used in this course. All students are required to have an i>clicker 2 response clicker or purchase the iClicker app for their smart phone. Response clickers may be purchased at the A&T bookstore.

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Cheating: Instances of cheating will be handled according to departmental policy. Cheating covers any case in which a student has received unauthorized aid in his/her performance that contributes to a course grade or submits material contributing to a course grade with the intent to deceive the instructor or grader. Plagiarism or submitting material copied from another source without providing a reference to the source is considered cheating. If the unauthorized aid includes help from another student, then that student is considered to have cheated as well. Students are expected to submit assignments that are entirely their own work. A common example of cheating is to copy another person's program or homework assignment. If a student cheats on a homework or programming assignment, then he/she will receive a grade of zero (a grade of F) for that item as will anyone assisting him/her in an unauthorized way. If a student cheats on an exam or the final, he/she will receive a failing grade for the class. All cases of cheating will be reported to the Director of Undergraduate Studies. When a student cheats for the second or more time in any Computer Science class, he/she will receive an F in the class in which the most recent case occurred and will be referred to the University authorities for disciplinary action.

Students with any special need or disability should inform the instructor or the Office of Veterans and Disability Services at the beginning of the semester. Any necessary accommodations will be made.

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Class Schedule

Monday, January 11 Introduction sections 1.1-1.3	Wednesday, January 13 Overview of Java sections 1.4-1.5	Friday, January 15 Primitive data types sections 2.1-2.2
Monday, January 18 <i>Martin Luther King Day holiday</i> <i>(no classes)</i>	Wednesday, January 20 Expressions section 2.3	Friday, January 22 Simple input and output sections 3.10-3.12
Monday, January 25 Using objects and methods sections 3.3-3.6	Wednesday, January 27 Strings sections 3.7	Friday, January 29 Applets sections 4.1-4.2
Monday, February 1 Applets	Wednesday, February 3 Graphics sections 4.3-4.6	Friday, February 5 GUI basics
Monday, February 8 GUI programming	Wednesday, February 10 review	Friday, February 12 Exam 1
Monday, February 15 Boolean expressions sections 5.1	Wednesday, February 17 if statement sections 5.2-5.4	Friday, February 19 if statement sections 5.5-5.10
Monday, February 22 Loops sections 6.1-6.2	Wednesday, February 24 while Loops sections 6.3-6.9	Friday, February 26 Reading files section 11.2-11.3
Monday, February 29 for loops sections 6.10-6.12	Wednesday, March 2 for break	Friday, March 4 Writing files section 11.4
Monday, March 7 <i>Spring Break</i> <i>(no classes)</i>	Wednesday, March 9 <i>Spring Break</i> <i>(no classes)</i>	Friday, March 11 <i>Spring Break</i> <i>(no classes)</i>
Monday, March 14 Writing classes sections 7.1-7.2	Wednesday, March 16 Writing methods sections 7.3-7.6	Friday, March 18 Programming Practice
Monday, March 21 review	Wednesday, March 23 Exam 2	Friday, March 25 <i>Good Friday</i> <i>(no classes)</i>
Monday, March 28 Parameter passing sections 7.7 - 7.12	Wednesday, March 30 Writing methods	Friday, April 1 Methods
Monday, April 4 Methods	Wednesday, April 6 Arrays sections 8.1-8.2	Friday, April 8 Arrays sections 8.3
Monday, April 11 Arrays sections 8.5-8.8	Wednesday, April 13 <i>Honor's Convocation</i> <i>(no classes)</i>	Friday, April 15 Methods and Classes
Monday, April 18 More on GUIs	Wednesday, April 20 GUI events	Friday, April 22 Methods again
Monday, April 25 Secure Programming	Wednesday, April 27 Programming Practice	Friday, April 29 review
Monday, May 2 Exam 3	Wednesday, May 4 final review	
	Wednesday, May 11 Final Exam 8:00am – 10:00am	