Computer Technology Department
_____Business/Public Service and Technology Division
_____GREENVILLE TECHNICAL COLLEGE

COURSE SYLLABUS

Course Title: Handheld Computer Programming
Course Number: IST 235

READ THIS SYLLABUS CAREFULLY

You should read this syllabus carefully and ask your instructor about _any_ aspects that you do not understand. The syllabus is an agreement between you and your instructor concerning course objectives, course content, grading, and other policies and procedures particular to this course. The following information is specific to the course. Three additional documents are provided as attachments and _are considered a part of this syllabus_:

Attachment I:

Each instructor will provide a supplement to this syllabus. The supplement will include: a week-by-week plan of instruction based on the section in which you are enrolled; your instructor's name, office hours and/or office location; and your instructor's contact information and recommended best methods to contact your instructor.

Attachment 2:

The Department responsible for developing and teaching has policies and procedures in place to assure quality instruction for all students. These are attached as "Departmental Policies and Procedures."

Attachment 3:

Please note that it is your responsibility to read the current Student Handbook included in Greenville Technical College's Catalog. (See website.) The Student Handbook addresses specific academic and student conduct policies and procedures. Excerpts from the Student Handbook representing the policies and procedures most often referred to in working with students are provided for your convenience as "Attachment 3."

Approved by: _____
            Phillip Cluley, Department Head for Computer Technology
            Phillip.Cluley@gvltec.edu (864) 250-8655, Barton Campus, Building 103/309

Approved by: _____   Date: _____
            Joel D. Welch, Ph.D., PE
            Dean, Technology Division

This syllabus will remain in effect until revised or reviewed no later than August 2016.

Approved by: _____

Beau Sanders, Department Head, Computer Technology Department
beau.sanders@gvltec.edu, (864) 250-8314, Barton Campus, Building 103/311

Approved by: _____

Wanda Clark, Associate Vice President
for the Dean of Business/Public Service Division
Date _____ Dean's Office: (864) 250-8196, Barton Campus, Engineering Technology Building 103/104
_____

This syllabus will remain in effect until revised or reviewed no later than August 2015.

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COURSE SYLLABUS

Course Title: Handheld Computer Programming
Course Number: IST 235

Lecture hours per week: 3.0   **Lab/Clinic Hours:**   **Semester credit hours:** 3.0

Prerequisites: ~~IST 237 and CPT 236~~ CPT 236, IST 237. Computer Technology students must obtain a minimum grade of "C" in all CPT and IST courses.

Catalog Course Description: This course is a survey of the techniques of rapid application development for handheld devices. Topics include setup of development environment, creation and deployment of programs, and design strategies to overcome memory and interface limitations.

Purpose of the Course: This course introduces the student to programming solutions for mobile computers such as handheld smart phones.

Required text(s) and other materials:

1. Android Boot Camp for Developers Using Java - Comprehensive; 2nd~~1st~~ Edition; Hoisington; Course Technology; ISBN: ~~978-1-133-59720-9~~978-1-285-85683-4

2. Access to an Internet-capable computer system.

3. NOTE: Students in traditional classes must access Blackboard for course-related information. Students in hybrid and online classes will access their online content through Blackboard.

COLLEGE-WIDE STUDENT LEARNING OUTCOMES

1. Communication – Students will demonstrate the ability to use active reading and listening skills and to produce effective written and oral communication for varying audiences.

2. Information Technology and Technological Literacy – Students will demonstrate competency in using computer technology within a field of study.

3. Critical Thinking/Reasoning – Students will demonstrate the ability to apply the scientific method, mathematical processes, and research skills to analyze and solve problems/issues by using reflection and reasoning to justify conclusions.

4. Professional and Personal Responsibility – Students will demonstrate the ability to exhibit conduct, attitudes, and etiquette appropriate to the student's community and chosen career. Students will demonstrate the ability to manage time, to use effective interpersonal skills, and to display responsible behavior.

5. Diversity – Students will demonstrate the ability to recognize diversity and to demonstrate respectful conduct and attitudes toward all. Students will demonstrate the ability to explain how global issues impact life, work, and opportunities.

Revised December 31, 2012

COMPUTER TECHNOLOGY PROGRAM LEVEL STUDENT LEARNING OUTCOMES

Upon successful completion of the Computer Technology Degree students will be able to:

1. Install computer and network hardware.

2. Install computer operating systems and application software.

3. Design, create and test computer programming solutions.

4. Demonstrate the ability to take initiative, assume responsibility, and work under pressure with minimum supervision by successfully completing "hands-on" computer assignments.

5. Analyze, troubleshoot, and correct computer related technical problems.

Revised August 2012

IST 235 COURSE OUTCOMES

Students who successfully complete this course will have demonstrated the skills required to accomplish the following objectives with a minimum competence level of 70 percent.

1. Use an Integrated Development Environment to create mobile applications.

2. Design, code, and test a mobile application.

3. Publish a working mobile application.

The objectives of the IST 235 course are intended to meet the CPT program level student learning outcomes 3 and 4.

IST 235 – MAIN TOPICS

PLAN OF INSTRUCTION:
TEXT
CHAPTER   MAJOR TOPICS

Chapter 1:   Meet the Android
Chapter 1   Lab Assignment

Chapter 2:   The Android User Interface

Chapter 2 Lab Assignment

Chapter 3:   Android User Input, Variables, and Operations
Chapter 3 Lab Assignment

Test 1   Chapters 1, 2 and 3Test Project 1

Chapter 4:   Icons and Decision-Making Controls
Chapter 4 Lab Assignment

Chapter 5:   Android Lists, Arrays, and Web Browsers
Chapter 5 Lab Assignment

Chapter 6:   Implementing Audio in Android Apps
Chapter 6 Lab Assignment

Test 2   Chapters 4, 5 and 6Test Project 2

Chapter 7:   Displaying Pictures in a GalleryGridView
Chapter 7 Lab Assignment

Chapter 8:   Using a DatePicker on a Tablet
Chapter 8 Lab Assignment

Chapter 9:   Navigating with Tabs on a Tablet Appa Master/Detail Flow Activity on a Tablet
Chapter 9 Lab Assignment

Test 3   Chapters 7, 8 and 9Test Project 3

Chapter 10:   Creating Animation
Chapter 10 Lab Assignment

Chapter 11:   Incorporating Google MapsPersistent Data
Chapter 11 Lab Assignment

Chapter 12:   Publishing Your Android App

Final Exam Project

SPECIAL NOTE TO ONLINE STUDENTS: The final exam for online students will be administered on the Barton Campus and will be scheduled at a time determined by the department.

The instructor reserves the right to modify the Plan of Instruction by changing the sequence of text material or testing content.

IST 235 – COURSE SPECIFIC REQUIREMENTS

There are no specific course requirements other than attachment 1.

IST 235 – EVALUATION AND GRADING INFORMATION

GRADING POLICY

Exams represent 50 percent of the final grade: 35 percent for ~~tests~~ Test Projects and 15 percent for the ~~final exam project~~Final Exam Project.

Lab assignments count 50 percent of the final grade.
1. Programming assignments will be assigned from selected chapters for 50 percent of the grade.
2. The following factors will be considered in grading assignments:
    a. The program must work correctly and produce the desired results.
    b. The program must be written in the style described in the text or described in class.
    c. Write with compactness in mind.
    d. Documentation should be clear and meaningful.
    e. Must be submitted on time.

All assignments (i.e., labs, projects, research papers, etc.) for this course must be completed and submitted to the instructor by the due date established in order to receive credit for the assignment.

Final letter grades will be issued as follows:

A	=	90 - 100
B	=	80 - 89
C	=	70 - 79
D	=	60 - 69
F	=	0 - 59

~~**Business/Public Service Division – Assistant Dean Information**~~

~~During the semester, if you have any issues that need to be addressed at an administrative level, the Business/Public Service has two assistant deans in addition to the Dean who will be glad to speak with you about your concerns. They are available via email, phone, or in their offices as provided below:~~

~~Mary Locke, Assistant Dean, Business/Public Service for Student Services~~
~~mary.locke@gvltec.edu, (864) 250-8629, Barton Campus, Engineering Technology Building 103/304~~

~~Elizabeth Mann, Assistant Dean, Business/Public Service for Teaching and Learning~~
~~elizabeth.mann@gvltec.edu, (864) 250-8491, Barton Campus, Criminal Justice Building 121/124~~

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