GREENVILLE TECHNICAL COLLEGE

Business and Technology Division
Computer Technology
Course Syllabus
Handheld Computer Programming IST 235

Credit/Contact Hours:
3.0

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

Co-requisite:
None

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

Required Texts:

1. Android Boot Camp for Developers Using Java ; 2nd Edition; Hoisington; Cengage Learning; ISBN: 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.

Additional Materials:

There are no specific course requirements other than attachment 1.

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.

Program 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

Greenville Technical College Core Competencies:

Communication Core Competency: Students will demonstrate effective written and oral communication skills to convey information, ideas, or opinions.

- Written Communication: Students will demonstrate effective written communication skills to convey information, ideas, or opinions.
- Oral Communication: Students will demonstrate effective oral communication skills to convey information, ideas, or opinions.

Critical Thinking Core Competency: Students will demonstrate effective reasoning, problem solving, or quantitative skills to develop an opinion or conclusion.

- Critical Reasoning: Students will employ inquiry, analysis, and synthesis of information to formulate and/or evaluate an opinion or conclusion.
- Problem Reasoning: Students will design and formulate a strategy to answer a question or achieve a desired goal.
- Quantitative Reasoning: Students will be able to analyze numerical information or observable facts resulting in informed conclusions.

Information Literacy Core Competency: Students will be able to locate, evaluate, and use information effectively from diverse sources.

Professionalism Core Competency: Students will demonstrate conduct and etiquette appropriate to the community and chosen career.

- Professionalism: Students will display professional conduct and work habits.
- Teamwork: Students will collaborate with others to accomplish a shared goal.

Instructional Agreement:

This syllabus is an agreement between the student and instructor concerning course objectives, course content, grading and other policies and procedures

particular to the course as well as any posted program, departmental, and divisional policies. It is also the student's responsibility to become familiar with the Student Handbook/College Catalog found in the Student Resource area of Blackboard.

Grading Scale:
Exams represent 50 percent of the final grade: 35 percent for Test Projects and 15 percent for the Final Exam Project.

Lab assignments count 50 percent of the final grade.

1. Programming assignments will be assigned from selected chapters.
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

Course Policies:

Disabilities Information

Students with disabilities, including those who were served in Special Education (resource or tutorial), should contact Student Disability Services (SDS) to discuss their need for services and accommodations. The main SDS office is located on the Barton

Campus in the Student Center Building 105, office 113. Staff can be reached by phone at 864 250-8202 or via email to DisabilityServices@gvltec.edu . Appointments are available at all satellite campus locations. Please check the GTC website for more information concerning Student Disability Services: http://gvltec.edu/disability-services/

Efforts have been made to ensure all materials presented in an electronic format are accessible for students with disabilities and the college is committed to this obligation. However, if you experience any difficulty accessing these materials please notify your instructor immediately so a solution can be provided. You may also contact Student Disability Services directly at 864-250-8202 or by email at DisabilityServices@gvltec.edu.

Students who need a PDF reader for accessibility of course documents presented in PDF format may download a free reader at https://acrobat.adobe.com/us/en/products/pdf-reader.htm

PLAN OF INSTRUCTION:

TEXT

CHAPTER	MAJOR TOPICS
Chapter 1:	Meet the Android
Chapter 2:	The Android User Interface
Chapter 3:	Android User Input, Variables, and Operations
Chapter 4:	Icons and Decision-Making Controls
Chapter 5:	Android Lists, Arrays, and Web Browsers
Chapter 6:	Implementing Audio in Android Apps
Chapter 7:	Displaying Pictures in a GridView
Chapter 8:	Using a DatePicker on a Tablet
Chapter 9:	Navigating with a Master/Detail Flow Activity on a Tablet
Chapter 10:	Creating Animation

Chapter 11: Persistent Data

Chapter 12: Publishing Your Android App

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.