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: _Wm Sanders 8-14-14_

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Approved by: _____ Date: _8/7/14_

Joel D. Welch, Ph.D., PE
Dean, Technology Division

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

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: 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 Edition; Hoisington; Course Technology; 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.

COLLEGE-WIDE STUDENT LEARNING OUTCOMES

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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.

IST 235 – MAIN TOPICS

PLAN OF INSTRUCTION:
TEXT
CHAPTER   **MAJOR TOPICS**

Chapter 1:   Meet the Android
Lab Assignment

Chapter 2:   The Android User Interface

Lab Assignment

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

Test Project 1

Chapter 4: Icons and Decision-Making Controls
Lab Assignment

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

Chapter 6: Implementing Audio in Android Apps
Lab Assignment

Test Project 2

Chapter 7: Displaying Pictures in a GridView
Lab Assignment

Chapter 8: Using a DatePicker on a Tablet
Lab Assignment

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

Test Project 3

Chapter 10: Creating Animation
Lab Assignment

Chapter 11: Persistent Data
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.

GRADING POLICY

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 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