COURSE SYLLABUS

Science, Allied Health, & **CSC*262 Programming Mobile Devices I Engineering** Department Course No. Course Title 3 hrs Credit Hrs. # lecture # lab hrs./week hrs./week Greg Izzo Prepared by **January 16, 2016 Faculty Member** Date Course prerequisites: CSC*205 or CSC*220

Course Location (bldg/room #):

Meeting time

(days/hours): This is a distance learning course, and you are

required to log on regularly to complete class assignments. Check "Announcement" and "Messages" whenever you log on to the course.

Course Description:

The course will introduce students to the various platforms in use on small and mobile devices. Platforms will include Apple iPhone, Google Android OS, and Microsoft Windows Phone 7. Students will learn the process involved in developing applications for mobile devices. They will create applications for each platform using specialized development environments.

Prerequisite: CSC*205 or CSC*220

Scope of Course:

In the changing world of computer technology, many applications are being developed for deployment on mobile devices. This new programming arena has created a demand for skills that cross a number of platforms, such as Apple iPhone, Google Android OS, and Microsoft Windows Phone 7. This course will expose students to application development in all three leading platforms and provide students with a fundamental knowledge of the mobile development life cycle. Mobile application development is skill that is currently in high demand and this is expected to continue to grow.

Program/Discipline Learning Outcomes Contained in Course:

The goal of the Science Division is to incorporate the following learning outcomes into each course:

- Written and oral communication skills
- Critical thinking, problem solving, and analytical skills
- Interpersonal skills and awareness

- Teamwork, team-building, and project focus
- Knowledge of ethical and legal healthcare environment
- Awareness and respect for other perspectives
- Global awareness and diversity
- Flexibility and adaptive to change
- Personal productivity and organizational skills
- Ability to understand your customer
- Understand process management

Importance of Course in Program/Discipline:

This course is very important within the area of Information Technology (IT) and it offers training in cutting-edge programming that is aligned with the new demands of the workplace.

Learning Outcomes:

Upon successful completion of this course, the student will:

- Compare and contrast mobile platforms, their tools, and the development process
- Install software development kits for each platform
- Demonstrate understanding of the development cycle for mobile devices including building, testing, and deployment
- Create apps for Apple iOS, Google Android, and Windows Phone 7 mobile devices
- Create cross-platform web applications for mobile devices using PhoneGap and Web Technologies
- Test projects in proprietary emulators for each platform

Textbooks and other required readings/computer software/materials/library reserve room:

Programming with Mobile Applications by Thomas Duffy. Course Technology. ISBN: 978-1-133-62813-2.

NOTE: The ONC-certified Spring Charts premium HER program is available with each text at no additional cost.

Office Location (building/room number):	Online	Office Hours:	Tuesday: 5 – 6pm
Office Telephone:	(860) 301 – 9816. This is my personal cell phone, please contact me via Blackboard Message for normal communications.	Office e-mail:	gizzo@mcc.commnet.edu

Attendance Policy:

Students are expected to attend all classes. Missing scheduled classes will, in most cases, have an increasingly negative effect on a student's grade. Only students who officially withdraw from class by the deadline of Wednesday February 3, 2016 will receive a grade of W. Otherwise, students will be given the grade they earn.

IMPORTANT COLLEGE POLICIES!! PLEASE READ CAREFULLY:

For information about the college's policies and procedures regarding academic honesty, accessibility/disability services, attendance, audio-recording in the classroom, grade appeals, plagiarism, religious accommodations, weather and emergency closings, and more, please go to the following website: http://www.mxcc.edu/catalog/syllabus-policies/ or scan the QR code with your smart phone. Also, please become



familiar with the policies regarding nondiscrimination, sexual misconduct, and general student conduct at the following website: http://www.mxcc.edu/nondiscrimination/.

NON-DISCRIMINATION STATEMENT

Middlesex Community College does not discriminate on the basis of race, color, religious creed, age, sex, national origin, marital status, ancestry, present or past history of mental disorder, learning disability or physical disability, sexual orientation, gender identity and expression or genetic information in its programs and activities. In addition, the College does not discriminate in employment on the additional basis of veteran status or criminal record. The following people have been designated to handle inquiries or complaints regarding non-discrimination policies and practices:

• Primary Title IX Coordinator

Dr. Adrienne Maslin; Dean of Students/Title IX and Section 504/ADA Coordinator amaslin@mxcc.edu; 860-343-5759; Founders Hall Room 123|

• Secondary Title IX Coordinator

Ms. Queen Fordham Coordinator of the Meriden Center Welcome Desk qfordham@mxcc.edu; 203-608-3011

Evaluation (exams, term papers, projects, etc., and percentages towards final grades):

Discussion prompts 9 assignments x 2 pts per	18 points
Programming Exercises 12 assignments x 4 pts per	48 points
Final	8 points
Total	74 points

There are no make-up exams given unless arrangements have been made prior to the exam.

Letter Grade based on total points:

A >= 68.8	A- 66.6 – 68.7	
B+ 64.4 – 66.5	B 61.4 – 64.3	B- 59.2 – 61.3
C+ 57.0 – 59.1	C 54.0 – 56.9	C- 51.8 – 53.9
D+ 49.6 – 51.7	D 46.6 – 49.5	D- 44.4 – 46.5
F <= 44.3		

Unit Outlines/Unit Objectives/Expected Outcomes/Assessment Measures:

Each unit will cover specific topics from the textbook as well as a software product. Each student is expected to read the assigned chapters, do all homework assignments, and complete all hands-on lab assignments. The labs, homework assignments, and test scores will be used to calculate the student's overall grade. An assignment sheet lists the projects, quizzes and exams.

Getting the most out of your ONLINE course

Preparing for online learning: If this is your first online course, you may be wondering what the experience will be like and how best to prepare. The following information will help to get the most out of this course.

1. Understand your role

- a. Be Organized
 - i. Set aside a specific time in which you will complete the work required for each chapter. Treat this as your time to be 'in school' and avoid distractions. Allocate time for completing home work.
 - ii. Communicate with the instructor or other classmates when you are having difficulty and in need of further assistance.
 - iii. Stay current with all assignments. Do not let assignments slide. Be sure to hand in all assignments on the due date. Assignments will be released weekly.

b. Be Prepared

- i. Get the required textbook. You will have to read and follow the instructions in the textbook. There are also additional resources on Blackboard to supplement your learning.
- ii. Make sure that you have Internet access and have room on your computer for downloading files.
- iii. Be sure that you have a copy of the syllabus. It is the guideline for the course. (The syllabus is subject to change).
- iv. When you begin the course, it will be important to be able to navigate the Blackboard Learn Web site with ease.

c. Avoiding Roadblocks

- i. Sometimes the site may be down and you cannot access the work. Be sure the time you selected as convenient works online as well.
- ii. Many of the instructions of how to accomplish specific tasks will be in writing rather than visual or audio. You will experience different ways of learning.
- iii. Do not spend excess time to complete a task if errors on the system are displaying. Contact me

2. Understand my role

- a. Facilitate, not lecture. My role is to be there as a resource to provide guidance through your learning experience, to discuss problems you may encounter, and to review your progress.
- b. Evaluate. My role is to evaluate and grade your work.
- c. Manage the course. I will manage the pace of the course and keep us all moving forward at a steady pace. The weekly assignments documents will be used to communicate what material you should be working on at any given time.

SCHEDULE

	Topic	Reading	Assignments
Week 1	Introduction, Setup	Module 1	(Written) Up For Discussion p. 19-20 Programming Exercises p. 20
Week 2	Developing for Small Devices, Best Practices	Module 2	(Written) Up For Discussion p. 20 (Written) Research Projects p. 20
Week 3		Module 3	(Written) Up For Discussion p. 70 Programming Exercises p. 70-72
Week Google Android – App 4 Inventor		Module 4	(Written) Up For Discussion p. 48-49 Programming Detective Work p. 18, pp. 32-33, and p. 44
Week 5			Programming Exercises pp. 49-50
Week 6	Google Android – Android Studio	Module 5	(Written) Up For Discussion questions on p. 77
Week 7			Programming Detective Work on pp. 25-26, 46, and 70.
Week 8			Programming Exercise on pp. 77 - 78.
Week 9	Apple iOS	Module 6	(Written) Up For Discussion topics on p. 53. Programming Detective Work on p. 25 and pp. 33-34
Week 10			Programming Exercises on pp. 54-55.
Week 11	Microsoft Windows Phone 7	Module 7	(Written) Up For Discussion Questions on p. 49. Programming Detective Work on p. 29 and pp. 37-38.
Week 12			Programming Exercises on pp. 49-50.
Week 13	Web Applications	Module 8	(Written) Up For Discussion questions on p. 61 Programming Detective Work on pp. 33-34 and p. 53
Week 14			Programming Exercises on p. 61.
Week 15	Smart Watches	Module 9	Read Chapter 9
Week 16	Final		Programming: Create a mobile device app.

Additional assignments will be listed in Blackboard Learn