OUTCOMES BASED LEARNING MATRIX

Course: CTIM139 Introduction to Mobile App Development   (3 credits, 60 hours)
Department: Computer Technology and Information Management

Description: This course provides students with an overview of the process of mobile app development from concept to construction to launch. Building on an examination of the creative process and software development/programming students explore the development paradigm of strategy/development/launch and the place/process of iteration within that paradigm.

Prerequisites: None

While completing the table below, remember that the individual outcomes you list in the first column should answer this question: **What must the learner know and be able to do at the end of the course?** Items in the third column should answer the question: **How do we know?** The second column is where teachers can be most creative; it's for pedagogy. Each rectangle in column one should contain just one outcome; the corresponding rectangles in columns two and three, however, may contain more than one item. Using the code at the end of the matrix, indicate the core competencies being strengthened by the outcomes activities and the assessment tools.

*COURSE OUTCOMES	OUTCOMES ACTIVITIES	ASSESSMENT TOOLS
At the end of this course students will be able to design simple applications to include:		
1. Understanding Strategy	1. Examine/Explore Developing an App Idea: The creative process, technical/economic feasibility, market research. (CCT, OC, QL, IL, WC, IG) 2. Examine/Explore App Devices: Hardware, operating systems, development environments,	1. Quizzes, tests, projects, class participation, homework assignments (CCT, OC, QL, IL, WC, IG)

	programming languages, market share. (CCT, OC, QL, IL, WC, IG) 3. Examine/Explore Taking an Idea to a Concept: market viability, technical feasibility, timeliness. (CCT, OC, QL, IL, WC, IG)	
2. Working through Development	1. Examine/Explore Acquiring Help: determining designer/developer needs, building a team. (CCT, OC, QL, IL, WC, IG) 2. Examine/Explore Constructing a Working App: specifications, look and feel, functionality (CCT, OC, QL, IL, WC, IG) 3. Examine/Explore Improving your App: testing, the iterative process (CCT, OC, QL, IL, WC, IG)	Referenced above.

3. Launching	1. Examine/Explore Preparing for Submission: App marketplace ecosystems, requirements, business models (CCT, OC, QL, IL, WC, IG) 2. Examine/Explore Building Marketing Momentum: visibility, reception, acquisition of customers. (CCT, OC, QL, IL, WC, IG) 3. Examine/Explore Measuring Success and Future Development: sales, downloads, upgrades, in App purchases. (CCT, OC, QL, IL, WC, IG)	Referenced above.
To strengthen Core Competencies** in order to increase success in this and other courses and in the workplace.	Referenced above.	Referenced above.

*Try to express an outcome as an infinitive phrase that concludes this sentence: **At the end of the course, the students should be able to . . ..** Finding the line between too general and too specific can be difficult. In an English Composition course, for instance, it is probably too general to say, "The student should be able to write effective essays." It is probably too specific to say, "The student should be able to write an introductory paragraph of at least 50 words, containing an attention-getting device, an announcement of

the narrowed topic, and an explicit thesis sentence." Just right might read, "The student will write introductions that gather attention and focus the essay."

**Indicate the Core Competencies that apply to the outcomes activities and assessment tools: critical and creative thinking (CCT); oral communications (OC); quantitative literacy (QL); information literacy (IL); written communication (WC); civic engagement (CE); integrative learning (IG); global learning (GL).