



Section 1. Proposed Course Outline (A general statement of course content that informs class syllabus construction. Once approved, all sections of a given course must include this content, no matter which instructor teaches the course, or the mode of delivery. Divisions must include this new course outline in the Divisional Course Outline binder as required by COPPs.)

Course Number: CIS125M Full Course Title for print catalog: **Software Tools: Mobile Development**

Abbreviated Course Title for Banner: **Software Tools: Mobile** (30 character limit)

Prerequisites: none

Co-requisites: none

Grade Option: ☒ Graded (with P/NP option) ☐ Pass/No Pass only

Number/Type Credits	Term Minimum Contact	Term Maximum Contact	11-Week Term Contact
<u>2</u> Lecture	<u>20</u> hours (lecture credits x 10)	<u>24</u> hours (lecture credits x 12)	<u>22</u> hours (lecture credits x 11)
<u>1</u> Lec/Lab	<u>20</u> hours (lec-lab credits x 20)	<u>24</u> hours (lec-lab credits x 24)	<u>22</u> hours (lec-lab credits x 22)
<u>1</u> Lab	<u>30</u> hours (lab credits x 30)	<u>36</u> hours (lab credits x 36)	<u>33</u> hours (lab credits x 33)
<u>4</u> Total credits (sum)	<u>70</u> Total hours (sum)	<u>84</u> Total hours (sum)	<u>77</u> Total hours (sum)

Course Description (300 character limit):

This course provides students with no programming background with an introduction to mobile application development. Students will use a visual, drag and drop tool to build applications for the Android and will be introduced to fundamental programming concepts and skills in the process.

Course Outcomes and Proficiencies

What will the student *know* or *be able to do* at the end of the course?

What *attitudes* related to the subject will the student hold?

Upon successful completion of this course, the student will:

Discuss mobile application development concepts, themes and issues orally and in writing.

Use AppInventor to implement, debug and test :
 - event driven applications.
 - mobile games
 - SMS and location aware applications.
 - quizzes and informational applications.
 - applications using user input and persistence.

Describe programming concepts, themes and issues orally and in writing

Assessments Planned

What evidence will demonstrate that students have achieved course outcomes? (assessment tools may include departmental tests, written products, portfolios, juried performances, quizzes and exams, or alternative assessments such as qualitative studies, capstone projects, external reviewers, etc.)

How each outcome will be assessed:

Small group activities. Quizzes.

Hands on activities. Small group activities. Quizzes.

Small group activities. Quizzes.

Course Content by Major Topics

What topics will be presented? What are the main activities of the course? What are the central themes?

(See sample at <http://www.lanecc.edu/cops/format3.htm>.)

Topics:

Introduction to mobile development and App Inventor

Creating event driven applications. Introduction to functions, variables and event handlers.

Creating mobile games. Introduction to selection statements, animation, sprites and game related events

Creating SMS and location aware applications. Introduction to persistence.

Creating quizzes and informational apps. Introduction to repetition and arrays.

Creating apps with user input forms and persistence. Introduction to databases.

Design and implement an "original" application.

Section 2. Proposal Information

Course Developer:

Mari Good

Date: 12/15/2012

Catalog year to take effect:

2011-2012____

2012-2013____

Type of Proposal

☒ New course

☐ Currently 199 or 299

☐ Experimental Course

☐ 199 Special Studies

☐ 299 Trends

☐ Revised course (If increasing credits, use credit change form)

☐ Reactivated course with no change

☐ Reactivated course with changes

Type of Course:

☐ Lower Division Collegiate (transfer)

☒ Professional/Technical (required or elective)

☐ Developmental, numbered below 100

Rationale:

How does this proposal further the goals of the program or department?

This course provides "non-traditional" students with an introduction to mobile application development and the fields of computer science and programming. It supports the departmental intention to increase involvement of non-traditional students in computer science and potentially increases enrollment in programming courses.

What assessment evidence supports this proposal?

Discussions with CIT advisory committee members and employers in the community indicate a need for mobile development knowledge and skill as well as a need to increase diversity in the community of programming professionals.

How do you know there is a demand for this course?

The department offers at least onw section each term of the game application development course that is similar in intent to this course. We expect the demand for this course to be similar. This course will also be used as an elective for programming, networking and computer information systems students.

Section 3. Curriculum Equity (<http://www.lanecc.edu/cops/curric.htm>)

To promote an environment where all learners are encouraged to develop their full potential, this course will support Lane's Curriculum Equity policy in the following way(s):

Computer related fields are, in general, white male dominated. The CIT department attempts to counteract the gender inequity by co-sponsoring a monthly professional meeting, Women in Information Technology, with the Women's Center. Every attempt is made to teach individual courses in a way that encourages all students.

Section 4. For revised courses only: PREVIOUS Catalog/Course Information:

Course Number: _____ Course Title in Banner: _____ (30 characters maximum)

Full Course Title in print catalog:

Prerequisites:

Co-requisites:

Grade Option: ☐ Graded (with P/NP option) ☐ Pass/No Pass only

Number/Type Credits	Term Minimum Contact	Term Maximum Contact	11-Week Term Contact
__ Lecture	__ hours (lecture credits x 10)	__ hours (lecture credits x 12)	__ hours (lecture credits x 11)
__ Lec/Lab	__ hours (lec-lab credits x 20)	__ hours (lec-lab credits x 24)	__ hours (lec-lab credits x 22)
__ Lab	__ hours (lab credits x 30)	__ hours (lab credits x 36)	__ hours (lab credits x 33)
__ Total credits (sum)	__ Total hours (sum)	__ Total hours (sum)	__ Total hours (sum)

Course Description:

What will change? ☐ Course Number ☐ Title ☐ Course Description ☐ Credit hours ☐ Contact hours

Section 5. Support Courses (New Professional/Technical course proposals must complete.)

Professional/Technical courses are tracked within programs for purposes of Carl Perkins funding and budgetary planning. Indicate all degree or certificate programs for which this course will be required.

Program	Division
Computer programming, networking and information systems (elective)	

Section 6. Overlap Courses (New course proposals must complete.)

While overlap of course materials is not necessarily a flaw, duplication of course materials may lead to inefficient use of college resources. If there is overlap, the faculty of overlapping courses must agree on the extent of overlap and attach a rationale explaining its necessity.

Indicate all departments/courses that this course may overlap. Division Dean of existing course enters one of two options at right. Note: N/A is not an option.

Options:

1. No overlap.
2. Approved: overlap is acceptable. Rationale attached.
3. Disapproved: reasons attached.

Division	Course Number / Title	% Overlap	Option	Division Dean of existing course (Signature required for all options)	Date
none					

Section 7. Qualification to fulfill degree requirements (complete all relevant forms, available at <http://www.lanecc.edu/currshed/index.html> and send to Mary Brau for the Degree Requirements Review Committee):

☐ Form(s) applying for the following degree requirement status have been attached. (Only check this box when forms have been completed and attached.)

AAOT, ASOT-Bus, OTM:

- ☐ Arts & Letters
☐ Social Sciences
☐ Science /Computer Science
☐ Mathematics
☐ Cultural Literacy Option

All degrees:

- ☐ Health/Wellness/Fitness

AAS, 1-year and 2-year certificates:

- ☐ Human Relations

Optional designation:

- ☐ Sustainability status

Section 8. Library Impact Statement

Under accreditation standards, Library consultation is essential for new programs, new courses and for substantively revised courses when the revisions entail any change in library use.

What assignments will require the use of library and information resources?

This course involved numerous lab activities in which students access the internet and other information resources to supplement the text for the course.

Each academic area has a Liaison Librarian (<http://www.lanecc.edu/library/services/liaison.htm>). Contact the designated librarian to discuss the library needs of your course. Please allow the librarian at least one week to assess library resources.

To be completed by Liaison Librarian:

- ☐ Library resources are adequate to support this proposal.
- ☐ Additional resources are needed but can be obtained from current funds.
- ☐ Significant additional Library funds/resources are required to support this proposal.

Liaison Librarian

Date

Section 9. Divisional Approval (To be completed by Division Chair and Administrative Assistant)

Human, Physical, and Financial Resources:

☐ Additional instructional costs (staff, materials, services or facilities) will be incurred to offer this course. Source of funding:

☒ No additional instructional resources (staff, materials, services or facilities) are needed to offer this course.

Explain:

Required Certifications:

☒ We have developed minimum course certification standards according to the COPPs procedure "Instructor Qualifications: Credit," to be filed with ASA upon course approval.

☒ We have completed faculty certification form(s) for faculty qualified to teach this course, to be filed with ASA and Human Resources upon course approval.

Fees:

- ☒ We have completed fee rationale and fee request forms to be submitted to ASA upon course approval, in compliance with the COPPs procedure, "Fees: Special"
- ☐ No special fees will be required for this course.

Divisional Recommendation:

☒ The Division Chair and Administrative Assistant have reviewed this course proposal and kept a copy for divisional files.

☐ Faculty review of this course was completed within the division on ____ (date).

☐ Pass

☐ Do Not Pass

Administrative Assistant/Coordinator

Date

Academic Dean

Date

Section 10. College Approval

Curriculum Committee Chair

Date

Executive Dean for Academic Affairs

Date

Curriculum Approval Committee hearing:

Date

Vice President for Academic &
Student Affairs

Date