Mobile Application Design and Development

Doane University – Lincoln Campus   Summer 2018 Term Syllabus

1. **Course Information**
   a. **Course Description:** Students will work through the process of analyzing, designing, and implementing an application on a mobile platform. The first half of the course will be a workshop environment in which each student is guided through the creation of sample programs. The second half of the course will involve each student creating a unique application. As a result of the experiences in this course, students will further develop their problem-solving and communication skills, and build skills allowing them to develop mobile applications using current development tools.
   b. **Course number:** IST 327
   c. **Course title:** Mobile Application Design and Development
   d. **Number of credits :** 3
   e. **Course Meeting Time:** May 23 – July 21, Wednesday Evenings, 6 – 10:30 PM
   f. **Instructor's name:**   Steven Millet
   g. **Instructor's contact information:** steven.millet@doane.edu   email anytime. Immediate response between 10 AM – 12 AM daily, 10 hour delay thereafter.

2. **Course Materials**
   a. **Required Text:** Android Programming: The Big Nerd Ranch 3rd Ed. By Phillips, Stewart & Marsicano, Prentice Hall 2017. ISBN-13: 9780134706078.
   b. **Optional:** Additional learning/reference supplements provided by instructor. Flash (thumb) Drive for saving backups

3. **Learning outcomes**
   a. **Student Learning Outcomes (SLO):**
   Students will:

   1. Develop analytical and critical thinking skills to gather and analyze information, to identify and solve problems, to determine potential outcome alternatives, and to make appropriate decisions.

   2. Recognize ethical issues involved in information technology and its management.

3. Understand information science and technology concepts and processes, their relationships to each other, and their relationships to existing and emerging computing technologies.

4. Develop the confidence and the skill to learn independently and apply existing and emerging computing technologies and processes. Develop the confidence and the skill to solve an unknown problem and to efficiently research, learn, and apply a previously unknown topic or skill to a novel problem- solving situation.

b. **Course Learning Goals and Specific Objectives**:
- Understand the phases involved in the Software Development Life Cycle (SWDLC).
- Understand the software deployment design methods used in Android development.
- Be familiar with features of the Java programming language.
- Be able to develop phone and tablet programs utilizing the programming tools in the JDK for Android development including XML.
- Be able to plan the needs of a business/consumer app development project including database design.
- Be able to develop a multi-development tool approach to app design.

4. **Course Schedule**

Week or Module	Topic	Content	Assignments	Due dates
1	Introduction to Andriod Development	Course Overview	Lab #1	
2	App Development with JAVA	Programming Basics	Lab #2	Week 4
3	Andriod App Project Development	Software Development Team Roles	Quiz #1 Lab #3	Week 5
4		Midterm Exam Lab Exam #1		
5	Student Project Selection	Planning and Designing An Android App	Lab #4	Week 8

6	Project Development	Enhancing Management Decision Making	Lab #5 Quiz #2	Week 8
7	**NO CLASS** 07 – 04 - 2018	4th Of July Holiday		
8	Project Completion	Final Exam Lab Exam #2		

5. Grading

a. List of assessments

Type of assessment	% of total
Homework (Labs)	30
Exams (2)	50
Student Project	20

b. Grade scheme (percentages)

A+	100 - 97	B+	89 - 87	C+	79 - 77	D+	69 - 67	F	Below 60
A	96 - 94	B	86 - 84	C	76 - 74	D	66 - 64		
A-	93 - 90	B-	83 - 80	C-	73 - 70	D-	63 - 60		

6. Course policies

a. Required:

   i. **Attendance policy** Students are required to complete all assignments even if absent. To receive class participation credit students are required to be present in class, unless the absence is for an excused reason.

   ii. **Study time** - Expectation of the amount of time the course requires students to spend preparing and completing assignments. (Typically, students could expect to spend approximately 12 hours a week preparing for and actively participating in this 8-week 3 credit hour course. This actual time for study varies depending on students' backgrounds.)

   iii. **Late work – Incomplete grades.** The federal requirement states that students must complete 75% of the course work in order to receive an incomplete grade. If students fall more than two weeks behind, they cannot meet this requirement.

   iv. **Rewrites/drafts** – Students can submit assignments prior to the due date.

v. **Assignments** - can be submitted in class, or by Doane email.

vi. **Academic Integrity** - Doane University expects and requires all its students to act with honesty and integrity, and respect the rights of others in carrying out all academic assignments. Academic dishonesty, the act of knowingly and willingly attempting or assisting others to gain academic success by dishonest means, is manifested in various measures. Gehring, et al, (1986) suggests that four categories of academic dishonesty exist[1]:

1. Cheating
2. Fabrication
3. Facilitating academic dishonesty
4. Plagiarism

vii. **Student Accommodations** – The Rehabilitation Act of 1973 (section 504) and the Americans with Disability Act (ADA) provide that "no otherwise qualified disabled individual in the United States... shall, solely on the basis of disability, be denied access to, or the benefits of, or be subjected to discrimination under any program or activity provided by any institution receiving federal financial assistance." This regulation requires that Doane programs be accessible to the disabled, but it does not require that every building or part of a building be accessible. Thus it may be necessary to reschedule classes to accessible classrooms or take other steps to open some of the programs to students with mobility impairments.

1. Students interested in services related to a disability should notify the college of any special circumstances that would affect their ability to compete equally in the college environment. To assist the college in providing services, documentation of such disabilities must be provided by qualified professionals upon request.
2. While students are encouraged to self-identify at the earliest possible time, they can access services at any time by initiating the process described in number one above.

To initiate this process, students are encouraged to contact the Dean of Undergraduate Studies before beginning classes so their needs can be anticipated, reviewed and accommodated.

viii. **Student Support Center** –Doane professors have high expectations. They want you to be prepared and engaged in class. (College would be easy if grades were based on attendance.
The engaged part is what gives a Doane degree its worth.)

The Academic Success Center helps you meet those expectations and your own. They can help with a specific project such as prepping for a professional school entry exam. Or they can introduce you to the trifecta of academics: study habits, time management and exam preparation skills. Cost: FREE!

ix. **Anti-Harassment Policy** – It is the policy of Doane College not to discriminate on the basis of gender in its educational programs, activities or employment policies as required by Title IX of the 1972 Education Amendments. Inquiries regarding compliance with Title IX may be directed to the Director of Human Resources, Doane College, 1014 Boswell Avenue, Crete, NE 68333 or to the ***Director of the Office for Civil Rights***, Department of Health, Education, and Welfare, Washington, D.C., 20202.

x. **Grade appeal process** - If a student thinks an instructor has graded him or her in a way that is inconsistent with the grading policy outlined in the course syllabus, the student may initiate the grade appeal process below. (Students who think their grade was calculated in error should consult the Grade Change Policy.) If at any stage of the process the appeal is withdrawn or resolved, the process stops. The Grade Appeal Request form and a written statement of the resolution will be kept in the student's record.

Steps:

1. Within 10 days of the grade's release, the student will contact the instructor to discuss the student's concern.
2. To continue with the appeal, the student will contact the Dean no later than 10 days following the discussion with the instructor to set up a meeting with the student and instructor to discuss the

student's concern. (If the Dean is the instructor, the Dean will designate another division faculty member to act as Dean in this matter.)

If the student wishes to appeal the Dean's decision, the student will file a Grade Appeal Request form with the Registrar's Office within 3 days, and schedule a meeting with the Vice President of Academic Affairs within 7 days. The Vice President of Academic Affairs will review the process. If the process has been followed as stipulated in this policy, the Dean's decision will be final.