Agenda Item #15-44 Effective Spring 2016 Effective Fall 2016, with revisions

Revised Course Proposal MIS 4530, Web & Mobile Application Development

Banner/Catalog Information (Coversheet)

1.	New Course orXRevision of Existing Course						
2.	Course prefix and number: MIS 4530						
3.	Short title:Web & Mobile Apps						
4.	Long title: Web & Mobile Application Development						
5.	Hours per week: 3 Class 0 Lab 3 Credit						
6.	Terms: FallX_ Spring Summer On demand						
7.	Initial term : FallX_ Spring Summer Year: <u>2016_</u>						
8.	Catalog course description: Development of web-based and Mobile applications, including client-side and server-side scripting languages, database interfaces, XML, web services, SDKs (e.g. Eclipse and Xcode), and design concepts.						
9.	Course attributes:						
	General education component: N/A						
Cultural diversity Honors Writing centered Writing intensiveWriting ac							
10.	0. Instructional delivery Type of Course:						
	X Lecture Lab Lecture/lab combined Independent study/research						
	Internship Performance Practicum/clinical Other, specify:						
Mode(s) of Delivery:							
	X_ Face to Face X_ Online Study Abroad						
	X_ Hybrid, specify approximate amount of on-line and face-to-face instruction: A maximum of 49% of the course will be online.						
11.	Course(s) to be deleted from the catalog once this course is approved. None. This is a revision of an existing course.						
12.	Equivalent course(s): NONE						
	a. Are students allowed to take equivalent course(s) for credit? Yes No						
13.	Prerequisite(s): MIS 2000 with C or better, MIS 3530 with C or better, or permission of the Associate Chair, School of Business.						
	a. Can prerequisite be taken concurrently? Yes _X_ No						
	b. Minimum grade required for the prerequisite course(s)? _C_						

	c. Use Banner coding to enforce prerequisite course(s)? X Yes No				
	d. Who may waive prerequisite(s)?				
	No one Chair Instructor AdvisorX_ Other (specify): Associate Chair				
14.	Co-requisite(s): N/A				
15.	Enrollment restrictions				
	a. Degrees, colleges, majors, levels, classes which <u>may</u> take the course: <u>ALL</u>				
	b. Degrees, colleges, majors, levels, classes which may <u>not</u> take the course: <u>NONE</u>				
16.	Repeat status: X May not be repeated May be repeated once with credit				
17.	Enter the limit, if any, on hours which may be applied to a major or minor: _3_				
18.	Grading methods: X Standard CR/NC Audit ABC/NC				
19.	Special grading provisions:				
	Grade for course will <u>not</u> count in a student's grade point average.				
	Grade for course will <u>not</u> count in hours toward graduation.				
	Grade for course will be removed from GPA if student already has credit for or is registered in:				
	Credit hours for course will be removed from student's hours toward graduation if student already has credit for or is registered in:				
20.	Additional costs to students: Supplemental Materials or SoftwareNone				
	Course Fee X_NoYes, Explain if yes				
21.	Community college transfer:				
	A community college course may be judged equivalent.				
	X A community college may <u>not</u> be judged equivalent.				
	Note: Upper division credit (3000+) will <u>not</u> be granted for a community college course, even if the content is judged to be equivalent.				

Rationale, Justifications, and Assurances (Part I)

1.	Course is required for the major(s) of
	Course is required for the minor(s) of
	Course is required for the certificate program(s) of
	X Course is used as an elective for the Management Information Systems major and minor

2. Rationale for proposal:

Today, mobile technologies are fueling economic growth, transforming industries, and are redefining the way we live. According to the International Data Corporation (IDC), in the fourth quarter of 2013 (4Q13), vendors shipped a total of 284.4 million smartphones worldwide, up 24.2% from the 229.0 million units shipped in 4Q12. Android devices count for about 70% of operating systems (OS) for mobile devices. This proposal adds Mobile technologies to the existing MIS 4530 which focuses on traditional Web application development. This revision adds System Development Kits such as Eclipse and Xcode to the toolkits used for developing Web applications.

3. Justifications for (answer N/A if not applicable)

Similarity to other courses: N/A

<u>Prerequisites</u>: Students enrolled in this class must have some logic skills. They also need to have knowledge of HTML and the necessary skills for designing Web pages. As a result a satisfactory completion of both MIS 2000 and MIS 3530 is necessary.

Co-requisites: None

Enrollment restrictions: N/A

Writing active, intensive, centered: N/A

4. General education assurances (answer N/A if not applicable)

General education component: N/A

Curriculum: N/A
Instruction: N/A
Assessment: N/A

5. Online/Hybrid delivery justification & assurances (answer N/A if not applicable)

Online or hybrid delivery justification: Offering and instructing this course through a hybrid or online model allows and increases the enrollment probability of students in the Summer semester who have moved away from campus and may attempt an equivalent course at another institution. An online course gives EIU the opportunity to market to these students as well as other students interested in taking the course in an alternative format. EIU School of Business continues to deliver high quality education through traditional methods of teaching and technologically advanced methods such as online and hybrid education. Students are able to watch recorded videos whenever they prefer, stop the video, take notes and ask questions of the instructor and their peers. Web and Mobile Apps' content is suitable for online or hybrid education.

<u>Instruction</u>: Lectures from the face-to-face courses may be recorded and posted online for students to view. Other online components (e.g., tutorials, videos, discussions) will be included. All faculty who will deliver this course online are/will be OCDI (or appropriate equivalent) trained.

<u>Integrity</u>: Students will take exams through an online test taking monitoring system, or they will take them at a proctored facility such as a community college in their area.

<u>Interaction</u>: At the discretion of the faculty, provisions and requirements would vary but generally will utilize Email, Web-Based Discussions, and Web-conferencing.

Model Syllabus (Part II)

Please include the following information:

- **1.** Course number and title:
 - MIS 4530 Web & Mobile Application Development
- **2.** Catalog description:

Development of web-based and Mobile applications, including client-side and server-side scripting languages, database interfaces, XML, web services, SDKs (e.g. Eclipse and Xcode), and design concepts.

3. Learning objectives:

Upon successful completion of the course, students will be able to:

- 1. Write and analyze client-side scripts (CT 3)
- 2. Write and analyze server-side scripts (CT 3)
- 3. Design and develop scripts that interface with databases (CT 4)
- 4. Design and develop three-tiered applications, including the user interface, server-side scripts, and the data-access layer (CT 4)
- 5. Utilize Mobile applications toolkits
- 6. Develop native and non-native Mobile applications (OR 3)
- **4.** Course materials:
 - PHP Programming With MySQL: The Web Technologies Series (Gosselin, Kokoska, and Easterbrooks), Cengage Learning, 2nd Edition, 2011.
 - Android Boot Camp For Developers Using Java, (Corinne Hoisington), Cengage Learning, 2nd Edition, 2015
- **5.** Weekly outline of content.

Week	Topic	75-minute class period
		equivalents
1	Introduction to Web & Mobile apps development	2
2	HTML Forms and Client-side Java Script	2
3	Basics of Java Script	2
4	Server-side basics	2
5,6	Database connections & Dynamic Documents with Java Script	4
7,8	Introduction to XML, PHP and ASP.NET	4
9	Introduction to SDKs	2
10,11	Mobile apps' user input, variables and operations	4
12	Implementing Audio and Video in Mobile apps	2
13	Creating animations for mobile devices	2
14-15	Publishing Mobile Apps	4
16	Final Exam	2 hours
	Total	Thirty 75-minute periods
		(37.5 hrs) + Two-hour
		final exam

6. Assignments and evaluation, including weights for final course grade.

The grade components and weights may vary by the instructor, but are generally considered as follows:

Exams (40%)

Homework (15%)

Projects (Business Web Application and Mobile Application) (30%)

Final Exam (15%)

7. Grading scale.

90% or better	Α
80-89%	В
70-79%	С
60-69%	D
Less than 60%	F

8. Correlation of learning objectives to assignments and evaluation.

The students' achievement of the stated course objectives will be assessed as follow:

Objectives	Exams (30%)	Homework Assignments (10%)	Projects (50%)	Final Exam (10%)
1.	X	X	Χ	X
2.	X	X	Χ	X
3.	X	X	Χ	X
4.	X	X	Х	
5.	X	X	X	X
6.	X		X	X

Date approved by the discipline: Approved by MIS/OM Discipline on November 6, 2014

Date approved by the department or school: 12/3/14

Date approved by the college curriculum committee: 1/21/15 Date approved by the Honors Council (if this is an honors course):

Date approved by CAA: 2/19/15 **CGS:** Not applicable.