DOCUMENT P - OMNIBUS COURSE, CO-CURRICULAR LEARNING EXPERIENCE, AND PROGRAM DEVELOPMENT COVER SHEET

Instructions: See PRP 3230 Course and Program Development

DISCIPLINE PREFIX, COURSE NUMBER, COURSE TITLE: ITM 512 Web and Mobile Development for Business

SHORT TITLE OF PROPOSAL: Add new course ITM 512, Web and Application Development for Business with distance education

CIP: (FOR PROVOST'S USE ONLY)

Box 1: TYPE OF ACTION ADD(NEW) ☒ DEACTIVATE ☐ MODIFY ☐ N/A ☐ OTHER ☐

Box 2: LEVEL OF ACTION Non-Credit ☐ Undergraduate ☐ Graduate ☐ Other ☒

Box 3: ITEM OF ACTION (check appropriate boxes)		APPROVAL SEQUENCE(see box 5)	DOCUMENTS REQUIRED (see box 4)	INFO COPIES (see 2 below)
☐	1 Experimental Course [1]	A B2 E	PQR	1. d
☐	2 Change in Master Course Syllabus:			
	☐ 2a Title and/or Description ☐ 2b Credits/Points	A B1 B2 E	PQ	2ab.
	☐ 2c Course/CLE Number	A B1 B2 E	PQ	2c.
	☐ 2d Pre & Co-Requisite	A B1 B2 E	PQ	2d. a, b
	☐ 2e Content Outline	A B1 B2 DE	PQR	2e. a, b
	☐ 2f Methods	A B1 B2 E	PQR	2f. a, b
	☐ 2g Student Learning Objectives	A B1 B2 DE	PQR	2g. a, b
	☐ 2h Student Assessment and/or Evaluation	A B1 B2 E	PQR	2h. a, b
	☐ 2i Course/CLE Assessment	A B1 B2 E	PQR	2i. a, b, e
	☐ 2j Supporting Materials &/or Prototype Text	A	R	2j. a, b, f
☒	3 Departmental Recommended Class Size, if appropriate	A B1 B2 DE	PQR	3. a, b
☐	4 Deactivate a Course/CLE	A B1 B2 E	PQ	4. a, b
☐	5 Pass/Fail Grading	A B1 B2 DE	PQR	5. a, b
☐	6 Major/Minor/Concentration Requirements/Electives	A B1 B2 DE	PQV	6. a, b
☒	7 New Course/CLE	A B1 B2 DE	PQR	7. a, b
☐	8 Dual Listing (select 8a or 8b)	A B1 B2 DE	PQR	8. b
	☐ 8a Offered in two departments with same number	A B1 B2 DE	PQR	8a. b
	☐ 8b Offered in one department as undergrad & grad	A B1 B2 C1 C2 DE	PQR	8b. b
☐	9 General Education Change	A B1 B2 C3 DE	PQR	9. a, b
☐	10 Minor	A B1 B2 DE	PQV	10 a, b
☐	11 Non-Degree Certificate Program	A B1 B2 DE FGH	PQTU	11. a, b
☐	12 Program Deletion	A B2 D-Information EFGH	PQTU	12. a, b, c
☐	13 Program Moratorium	A B2 D-Information EFH	PQ	13. a, b, c
☐	14 Certificate Program(Major or Minor Exists)	A B1 B2 DEFG	PQ	14. a, b, c
☐	15 Degree Designation	A B1 B2 DEFGH	PQTU	15. b, c
☐	16 Degree Program			16. a, b, c
	☐ 16a Letter of Intent	A B1 B2 DEFGH	X	
	☐ 16b Request for Accelerated Program Review	A B1 B2 DEFGH	PQTUVW	
	☐ 16c Detailed Program Proposal[3]	A B1 B2 DEFGH	PQTUVW	
☐	17 Program Policy Change	A B1 B2 DE	PQ	17. a, b, c
☐	18 Concept Approval	A B1 B2 DE	PQ	18. a, b, c
☒	19 Distance Education (80% of content via Dist Ed)	A B1 B2 DE	PQR	19. a, b, c
☐	20 Other	VARIES	VARIES	20. varies

Box 4: DOCUMENTATION					
x	P. This Cover Sheet		T. Fiscal Impact		W. Program Completion Plan
x	Q. Summary (Reverse of P)		U. Needs Analysis		X. Letter of Intent
x	R. Syllabus		V. Program Course Checklists [4]		

1 Approval automatically lapses after two offerings unless permanently approved as a new course.

2 Codes: a) Director, Library Services b) College Deans c) Institutional Research d) BUCC
e) Office of Planning & Assessment f) Provost's Office

3 16a, submission of Letter of Intent to PASSHE, must be completed prior to detailed program development unless Request for Accelerated Program Review is granted

4 Include existing and proposed checklists.

SHORT TITLE OF PROPOSAL: Add new course ITM 512, Web and Application Development for Business

Box 5: APPROVAL SEQUENCE	APPROVAL SIGNATURES	DATE
A Dept/Program: BE/ITM	Chair: Margaret O'Connor	3.3.16
B1 College Curriculum Committee	Chair: [signature]	4/4/16
B2 College Dean	Dean: Jeffrey A. Berg	4/6/16
C1 Graduate Council	Chair: Robert Yates	4.18.16
C2 Graduate Dean	Dean: Robert Yates	4.18.16
C3 General Education Council	Chair:	
D University Curriculum Committee (BUCC)	Chair: [signature]	4/27/16
E University Provost & VPAA	Provost & VPAA [signature]	5/20/16
F University President	President:	
G Council of Trustees	Chair:	
H PASSHE		

SHORT TITLE OF PROPOSAL: Add new course ITM 512, Web and Mobile Development for Business with distance education

DOCUMENT Q - SUMMARY PROPOSAL

College: COB	Department: BE/ITM	
Contact Person: E. Eryilmaz	Phone: 5256	Effective Semester: Fall 2016

Q-1: Briefly describe what is requested: Add new course (Web and Mobile Development for Business, ITM 512) and offer in traditional and distance education formats. This an elective course for graduate students who want to develop an interest web and mobile development for Business.

For new courses or changes in existing courses (needed by Registrar):

New Title: Web and Mobile Development for Business	Course #: ITM 512	Credits: 3
Course Abbreviation: WEB MOBILE APP DEV (Maximum of 20 letters including blank spaces)		
Old Title:	Course #:	Credits:

Q-2: Set forth the full rationale for what is proposed.

The Information and Technology Management (ITM) faculty completed a comprehensive review of graduate information technology curriculum and concluded that there is a need to add a new course in web and mobile development for business.

The course emphasizes development techniques for popular mobile platforms such as Android and Apple iOS. Students will use the software development kit (SDK) to create mobile business programs including how to craft Graphical User Interfaces (GUIs), create location-based applications, and access web services. May be offered in traditional and distance education formats.

The course prerequisite is ITM 510, Graduate standing or a minimum of 90 credits in undergraduate courses and approval of Graduate Dean

We request to offer the class either in a traditional class setting or distance education format based on scheduling requirements. The online course offering supports the AACSB accreditation team's recent recommendation that the College of Business develop a strategy for online learning.

Q-3 RESOURCES

☐ No additional resources required. Explain why.

☒ Additional resources required. Indicate probable source of additional funds. It is anticipated that one section of this course will be offered annually. An additional .25 complement is required to staff each section of this course but new faculty will not be needed for this course.

SHORT TITLE OF PROPOSAL: Add new course ITM 512, Web and Application Development for Business

Q-4 Impact including Center for Academic Computing and Library resources (Complete **a** or **b**)

a) Impact was reviewed but none detected: Margaret O'Connor 3.3.16
Department Chair Signature Date

b) Impact was reviewed. All impacted units were contacted and understandings worked out. No unit objections to the proposal as currently submitted. Supporting documents are attached. The units contacted were:

_____ _____
Department Chair Signature Date

c) Impact was reviewed. All objections were worked out except those documented in attachments. Units contacted were:

_____ _____
Department Chair Signature Date

IB/kef/OmnibusForm 12/10/15

ATTACHMENT for Omnibus Form: Document P

Course Number, Course Title: ITM 512: Web and Mobile development for Business

F2F; Online/Distant Education; New Course

RE: Box 3, Item 3 Checked

The class size recommendations of 24 for traditional delivery format and 20 for online/distant education format is acknowledged. The recommendation is interpreted as the recommended optimal class size for course type, course level, student learning outcomes, group projects, discussion, lab space, assignments. A class sizes of 24 and 20 are approved. Even so, the president or his designee reserves the right to make changes in class size as he or she deems warranted to support the mission, vision and operations of the university in the future.

5/20/16

Provost & SVPAA DATE

1. **DATE PREPARED:** February 21, 2016

2. **PREPARED BY:** Evren Eryilmaz

3. **DEPARTMENT:** Business Education & Information and Technology Management

4. **COURSE NUMBER:** ITM 512

5. **COURSE TITLE:** Web Mobile Application Development for Business

6. **CREDIT HOURS:** 3

7. **PREREQUISITES:** ITM 510, Graduate standing or a minimum of 90 credits in undergraduate courses and approval of Graduate Dean

8. **CATALOG DESCRIPTION:**
Provides an introduction to the art and practice of mobile application development for popular mobile platforms such as Android and Apple iOS. Students will use the software development kit (SDK) to create programs including how to craft Graphical User Interfaces (GUIs), create location-based applications, and access web services. Prerequisite: ITM 510, Graduate standing or a minimum of 90 credits in undergraduate courses and approval of Graduate Dean

9. **CONTENT DESCRIPTION:**

The topics listed below are essential to the course. Individual instructors may add other topics they consider necessary.

1. Overview of Mobile Application Development
    a) What Mobile Operating Systems are made of
    b) Software Development Kit (SDK) and Mobile OS Developer Tools
    c) Fundamental Components
    d) Structure of a Mobile Application
    e) Application lifecycle
    f) Debugging
2. Building User Interfaces (UIs)
    a) UI development
    b) Controls
    c) Layout managers
    d) Adapters
3. Location-based services
    a) Mapping package
    b) MapView
    c) MapActivity
    d) Location package
4. Security
    a) Overview of security concepts
    b) Signing applications for deployment
    c) Performing runtime security checks

10. **METHODS:**

Traditional Class Setting: Classroom delivery methods can include lectures, class discussions and participations, case study review, group activities, student research projects, student research papers, interactive media, oral presentations, practice exercise. In addition, students are required to read quality publications on technology and business on a regular basis. This class may be taught in a business computer lab as deemed appropriate by the instructor.

Blended Online and Class Setting: This course may be taught online using synchronous or asynchronous methods based on the instructor. Software used may include video, presentation, meeting, and hands-on technology activities. This class is a combination of on-line presentations, case study review, small group activities, student research projects, student research papers, interactive media, oral presentations, and practice exercises. A computer (desktop, laptop, table, etc.) and interactive access are required.
The instructor reserves the right to have face to face exams and assessment of materials and/or to monitor assignments using technology

Recommended class size is 24 students for traditional class setting and 20 students for distance education. Class size recommendations are based on analysis of this course and the support required for instructional activities. A class size greater than the sizes recommended would diminish the ability of the instructor to provide meaningful feedback and assessment to each student.

11. **STUDENT LEARNING OBJECTIVES:** Knowledge, skills, and applications that students will be able to demonstrate upon completion of the course.	12. **STUDENT ASSESSMENT** Standard, departmentally-developed rubrics and/or exam items will be applied to assess competency for each Student Learning Objective.
1. Create, design and debug applications using the mobile development environment.	• Technology application • Lab assessments • Exam questions **Distance Education: Student created product (e.g., speech uploaded into BOLT), written responses, group discussion boards, peer feedback, technology applications, lab assessments, and exam items**
2. Create Graphical User Interfaces (GUIs) using controls, layout managers, adaptors, menus and dialogues.	• Technology application • Lab assessments • Exam questions **Distance Education: Student created product (e.g., speech uploaded into BOLT), written responses, group discussion boards, peer feedback, technology applications, lab assessments, and exam items**
3. Implement mobile applications incorporating activities, services, content providers and broadcast receivers.	• Technology application • Lab assessments • Exam questions **Distance Education: Student created product (e.g., speech uploaded into BOLT), written responses, group discussion boards, peer feedback, technology applications, lab assessments, and exam items**
4. Utilize the distinctive capabilities of mobile environment, including location tracking, maps and Internet access.	• Technology application • Lab assessments • Exam questions **Distance Education: Student created product (e.g., speech uploaded into BOLT), written responses, group discussion boards, peer feedback, technology applications, lab assessments, and exam items**

13. EVALUATION OF INDIVIDUAL STUDENT PERFORMANCE:

Individual student evaluation will include a comprehensive final project. Other evaluation of individual student performance will include a combination of exams, cases analyses, written projects, article summaries, and discussion board participation as determined by the instructor. Item specific rubrics, checklists, and rating scales will be used in evaluation process.

14. COURSE ASSESSMENT:

The department will collect the departmental-developed rubrics and/or results on exam items across all sections of the course, both distance and in-class learning on a regular basis. The assessment data will assist in identifying changes needed to the course to ensure greater student attainment of the Student Learning Objectives. The results of the evaluation will be reviewed by the department and, if warranted, adjustments to the course will be made.

15. **SUPPORTING MATERIALS AND REFERENCES:**

BOLT, a course management application, is used for posting of instructor-developed supporting materials.

Articles are available through the Harvey A. Andruss Library.

Tracy, K. W. (2012). Mobile Application Development Experiences on Apple?? s iOS and Android OS. *Potentials, IEEE, 31*(4), 30-34.

Holla, S., & Katti, M. M. (2012). Android based mobile application development and its security. *International Journal of Computer Trends and Technology*, *3*(3), 486-490.

16. **PROTOTYPE TEXTBOOKS:**

Joel Murach. *Murach's Andriod Programming.* Mike Murach & Associates, 2013. 13th Grade Textbook Reading Level. ISBN-13: 978-1890774714.

Vandad Nahavandipoor, iOS 8 Swift Programming Cookbook. O'Reilly Media, 2014. 13th Grade Reading Level. ISBN-13: 978-1-4919-0869-3.