Banner/Catalog Information (Coversheet)

1. **New Course or Revision 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:** Fall  Spring  Summer  On demand

7. **Initial term:** Fall  Spring  Summer  Year: 2016

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 intensive  Writing active

10. **Instructional delivery**

    **Type of Course:**

    Lecture  Lab  Lecture/lab combined  Independent study/research

    Internship  Performance  Practicum/clinical  Other, specify:

    **Mode(s) of Delivery:**

    Face to Face  Online  Study Abroad

    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

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  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  ___ Advisor  X  Other (specify): Associate Chair

14. Co-requisite(s): ___________________________ N/A ___________________________

15. Enrollment restrictions
   a. Degrees, colleges, majors, levels, classes which may take the course: ___ ALL ___
   b. Degrees, colleges, majors, levels, classes which may not take the course: ___ NONE ___

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 not count in a student’s grade point average.
   ___ Grade for course will not 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 Software___ None

   Course Fee X No ___ Yes, Explain if yes_________________________________

21. Community college transfer:
   ___ A community college course may be judged equivalent.
   X  A community college may not be judged equivalent.

   Note: Upper division credit (3000+) will not 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

   Prerequisites: 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.
Instruction: 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.

Integrity: 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.

Interaction: 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 (QR 3)
4. Course materials:
5. Weekly outline of content.

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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>90% or better</td>
<td>A</td>
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<tr>
<td>80-89%</td>
<td>B</td>
</tr>
<tr>
<td>70-79%</td>
<td>C</td>
</tr>
<tr>
<td>60-69%</td>
<td>D</td>
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<tr>
<td>Less than 60%</td>
<td>F</td>
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</tbody>
</table>

8. Correlation of learning objectives to assignments and evaluation.

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

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Exams (30%)</th>
<th>Homework Assignments (10%)</th>
<th>Projects (50%)</th>
<th>Final Exam (10%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>2.</td>
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<td>3.</td>
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<td>4.</td>
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<td>5.</td>
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<td>6.</td>
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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.