Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should not be used to purchase course materials.
COURSE SYLLABUS

BMIS 310
WEB ARCHITECTURE AND DEVELOPMENT

COURSE DESCRIPTION
Provides students with thorough knowledge of the foundations of web architecture, current technologies utilized in the development of a web site, and criteria for assessing the usability of web sites.

RATIONALE
Today’s business world is becoming increasingly dependent on the speed, accuracy, and capacity of technology to provide the necessary infrastructure for growth and a competitive edge in the marketplace. This course provides an understanding of the architecture that is essential to a successful web application.

I. PREREQUISITES
For information regarding prerequisites for this course, please refer to the Academic Course Catalog.

II. REQUIRED RESOURCE PURCHASES
Click on the following link to view the required resource(s) for the term in which you are registered: http://bookstore.mbsdirect.net/liberty.htm

III. ADDITIONAL MATERIALS FOR LEARNING
A. Computer with basic audio/video output equipment
B. Internet access (broadband recommended)
C. Microsoft Word
   (Microsoft Office is available at a special discount to Liberty University students.)
D. NotePad and/or TextPad
E. Web hosting free resource

IV. MEASURABLE LEARNING OUTCOMES
Upon successful completion of this course, the student will be able to:
A. Analyze the history, protocols, and architecture of the Internet and World Wide Web.
B. Use client-side markup languages to manage the presentation of information in a variety of browsers.
C. Compare the structure and presentation of mobile-use websites versus traditional web presentation.

D. Use client-side and server-side scripting languages to support dynamic, interactive information presentation, or webpages in a browser.

E. Assess the moral and ethical considerations of the use of Intellectual Property and how the web designer can incorporate a Christian Worldview into World Wide Web communications.

F. Demonstrate proficiency in client-side and simple server-side web technologies by designing and constructing a web site or web application.

G. Assess the technical and usability strengths and weaknesses of commercial web sites.

H. Evaluate emerging standards in web markup languages.

V. COURSE REQUIREMENTS AND ASSIGNMENTS

A. Textbook readings and lecture presentations/notes

B. Course Requirements Checklist
   After reading the Syllabus and Student Expectations, the student will complete the related checklist found in Module/Week 1.

C. Discussion Board Forums (4)
   The purpose of the Discussion Board Forums is to generate interaction among students in regard to relevant course topics. The student is required to post 1 thread of at least 150 words. The student must also post 2 replies of at least 50 words. For each thread, the student must support his/her assertions with at least 1 citation in current APA format.

D. Website Review
   The student will review a website of his/her choice. The student will summarize, in a Microsoft Word document of at least 1 page, what he or she observed by answering the instructor prompts in current APA format.

E. Case Studies (6)
   The student will complete 6 Case Studies from the Felke-Morris text. Each Case Study will help the student understand the structure and function of writing code. The URL for these assignments must be submitted within the textbox of the submission link.

F. Web Tract
   Using a text editor, the student will create a 3–4 webpage evangelistic website tract demonstrating how a person can become a born-again Christian.

G. Server-side Scripting
The student will research 3 scripting languages, and write at least 1 webpage detailing his/her findings. This assignment must follow current APA citation guidelines.

H. JavaScript Validation
For this assignment, the student will obtain a new script, set up a form page, validate JavaScript, and add an SSI footer.

I. JavaScript Stylesheet
For this assignment, the student will review articles and create JavaScript.

J. Web Project
   Part 1:
   The student must receive the instructor’s approval for his/her Web Project topic. The student will also answer the instructor prompts in a single webpage that follows current APA formatting guidelines.
   Part 2:
   The student will answer the instructor prompts regarding webpage content in a current APA cited webpage.

K. PHP (Hyper Preprocessor) Visitor
The student must complete a PHP form that collects information from the visitor of that site. Once the assignment has been completed, the student must submit his/her URL within the textbox of the assignment submission link.

L. Focus on Web Design Optimization
The student will use the textbook to complete the more personally relevant of 2 Focus on Web Design Optimization assignments. The student must describe his/her reasoning for selecting the topic and discuss, in at least 1 page, how to optimize web or social media searches. This assignment must be completed in current APA format, and be submitted through SafeAssign.

M. Web Final
The student will create a website that demonstrates his/her proficiencies in client-side web development. The website must contain at least 15 webpages, and follow current APA citation guidelines.

N. Quizzes (8)
The student will complete 8 quizzes during this course, comprised of 20 true/false and multiple-choice questions. Each quiz is open-book/open-notes and open-Internet. The student will have 30 minutes to complete each quiz.

VI. COURSE GRADING AND POLICIES
A. Points
   Course Requirements Checklist 10
Discussion Board Forums (4 at 30 pts ea) 120
Website Review 35
Case Studies (6 at 40 pts ea) 240
Web Tract 35
Server-side Scripting 35
JavaScript Validation 35
JavaScript Stylesheet 35
Web Project:
  Part 1 35
  Part 2 35
PHP Visitor 40
Focus on Web Design Optimization 35
Web Final 160
Quizzes (8 at 20 pts ea) 160
Total 1010

B. Scale
A = 900–1010   B = 800–899   C = 700–799   D = 600–699   F = 0–599

C. Late Assignment Policy
If the student is unable to complete an assignment on time, then he or she must contact the instructor immediately by email.

Assignments that are submitted after the due date without prior approval from the instructor will receive the following deductions:

1. Late assignments submitted within one week of the due date will receive a 10% deduction.
2. Assignments submitted more than one week late will receive a 20% deduction.
3. Assignments submitted two weeks late or after the final date of the class will not be accepted.
4. Late Discussion Board threads or replies will not be accepted.

Special circumstances (e.g. death in the family, personal health issues) will be reviewed by the instructor on a case-by-case basis.

D. Disability Assistance
Students with a documented disability may contact Liberty University Online’s Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport
## COURSE SCHEDULE

### BMIS 310


<table>
<thead>
<tr>
<th>Module/Week</th>
<th>Reading &amp; Study</th>
<th>Assignments</th>
<th>Points</th>
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</thead>
</table>
| 1           | Felke-Morris: ch. 1  
1 presentation  
4 websites | Course Requirements Checklist  
Class Introductions  
Web Hosting  
Website Review  
Case Study 1  
Quiz 1 | 10  0  35  40  20 |
| 2           | Felke-Morris: chs. 2–3  
3 websites | DB Forum 1  
Web Tract  
Case Study 2  
Quiz 2 | 30  35  40  20 |
| 3           | Felke-Morris: chs. 4–6  
Bible Readings  
1 presentation  
1 website | Server-side Scripting  
Case Study 3  
Quiz 3 | 35  40  20 |
| 4           | Felke-Morris: chs. 7–8  
1 presentation  
2 websites  
1 lecture note | DB Forum 2  
JavaScript Validation  
Case Study 4  
Quiz 4 | 30  35  40  20 |
| 5           | Felke-Morris: chs. 9–10 | JavaScript Stylesheet  
Web Project: Part 1  
Case Study 5  
Quiz 5 | 35  35  40  20 |
| 6           | 1 presentation  
2 websites | DB Forum 3  
PHP Visitor  
Quiz 6 | 30  40  20 |
| 7           | Felke-Morris: chs. 11–12  
1 presentation | Web Project: Part 2  
Case Study 6  
Quiz 7 | 35  40  20 |
| 8           | Review Course Readings  
1 presentation | DB Forum 4  
Focus on Web Design Optimization  
Web Final  
Quiz 8 | 30  35  160  20 |

**DB = Discussion Board**

*This task must be finished to complete all remaining assignments in the course.

**NOTE:** Each course week (except Module/Week 1) begins on Tuesday morning at 12:00 a.m. (ET) and ends on Monday night at 11:59 p.m. (ET). The final week ends at 11:59 p.m. (ET) on Friday.