Catalog Description

IT 335: Web Development Using Content Management Systems (3 credit).

Prerequisites: IT 213 or Permission of the department

Through lecture, class demonstration, class discussion, and hands-on lab experience, presents web development techniques using two of the industry’s leading content management systems (e.g. Joomla! and MS SharePoint 2013). Introduces and discuss the characteristics and components of various types of websites (corporate portals, corporate intranets and extranets, online magazines, newspapers, and publications, e-commerce and online reservations, government applications, small business Web sites). Presents methods, languages, and tools related to the web content management systems from an applied perspective.

Prerequisites

The prerequisites for this course are IT213. A grade of “C” or better must be achieved in these courses. For students that are not enrolled in the IT major and who can prove the necessary background knowledge, this course may be taken with the approval of the AIT department. Expected outcomes:

Rationale

This course falls into the Web Development and Multimedia Concentration in the IT Major. That category currently contains only four courses related to web development (IT 331, IT 332, IT 431, IT 435) however none of these courses covers the content management environments, a modern trend in creating easy to use web knowledge/content management for organizations.

Objectives

This course is designed to give a student practical knowledge about the currently most used web content management environments. By combining lecturers with seminar discussions and extensive hands-on experiences the course will introduce the student both to the applied aspects of content management technologies but also to the theoretical issues involved.

Expected Outcomes

The outcomes expected for a student passing this course are:

- Experience developing with MS SharePoint 2013 and Wordpress.
- Translate real-world business problems into practical IT solutions using SharePoint web parts and lists, SharePoint workflows, MS Access and MS Excel SharePoint Apps, CMS extensions, CMS modules, components and plugins.
• Understanding the role of content management technologies to acquire, organize and present web content.
• Understanding and exploring methods, tools and applications for content management.
• Understanding the knowledge cycle: acquisition, storing, application and maintenance.
• Understanding key terms about semantic web, knowledge management and content management technologies.

Section
The course has one section IT 335-001 (CRN: 21927)
• Class lecture (13 modules)
• Monday 7:20 – 10:00 PM
• Online
• Session: 22 January 2019 – 15 May 2019

Course Instructor and Office Hours
Gary Freas
• Phone: (607)382-4565
• Email: gfreas@gmu.edu
• Office hours: By appointment

GTA
TBD

Course Coordinator
Dr. Mihai Boicu
• You must contact the course coordinator only after you contacted and tried to resolve an issue with your course instructor and/or assigned GTA.
• Phone: (703) 993-1591 (M-F 9AM-3PM)
• Email: mboicu@gmu.edu (start email subject with IT335-001)
• Office hours by appointment
Textbook

The following textbook and web resources are free through Mason Libraries and required for this class to complete lab exercises and assignments. GMU students DO NOT need to purchase a textbook for this class:


Access the course text books following the link:


You need to login and then search based on ISBN.
Grading:

The grading scale for this course is:

<table>
<thead>
<tr>
<th>Points Accumulated</th>
<th>Letter Grade</th>
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</thead>
<tbody>
<tr>
<td>965 – 1000</td>
<td>A+</td>
</tr>
<tr>
<td>925 – 964</td>
<td>A</td>
</tr>
<tr>
<td>895 – 924</td>
<td>A–</td>
</tr>
<tr>
<td>875 – 894</td>
<td>B+</td>
</tr>
<tr>
<td>825 – 874</td>
<td>B</td>
</tr>
<tr>
<td>795 – 824</td>
<td>B–</td>
</tr>
<tr>
<td>765 – 794</td>
<td>C+</td>
</tr>
<tr>
<td>725 – 764</td>
<td>C</td>
</tr>
<tr>
<td>695 – 724</td>
<td>C–</td>
</tr>
<tr>
<td>595 – 694</td>
<td>D</td>
</tr>
<tr>
<td>0 – 594</td>
<td>F</td>
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</tbody>
</table>

Final grades will be calculated based on the total points accumulated from the following assessments, and corresponding points:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>100</td>
</tr>
<tr>
<td>WordPress.com Sign-Up</td>
<td>100</td>
</tr>
<tr>
<td>Due Date:</td>
<td></td>
</tr>
<tr>
<td>Digital Footprint Research Paper</td>
<td>100</td>
</tr>
<tr>
<td>Due date:</td>
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<tr>
<td>Search Engine Optimization Research Paper</td>
<td>100</td>
</tr>
<tr>
<td>Due date:</td>
<td></td>
</tr>
<tr>
<td>Midterm WordPress Project</td>
<td>200</td>
</tr>
<tr>
<td>Due Date:</td>
<td></td>
</tr>
<tr>
<td>SharePoint Access</td>
<td>100</td>
</tr>
<tr>
<td>Due Date:</td>
<td></td>
</tr>
<tr>
<td>SharePoint Research Paper</td>
<td>100</td>
</tr>
</tbody>
</table>
Hardware and Software requirements

You must have a personal computer with internet connection, with speakers and microphone. The course delivery was tested on Windows Vista, Windows 7, Windows 8, Linux, and Ubuntu, but it will probably work on other operating systems as well. If you use another operating system you must allow additional time for system setup in the first course week. You will receive installation requirements for Joomla! at the beginning of that week, and access instructions for the class SharePoint site after the midterm. You must perform the required operations at the times identified on the schedule in order to correct any potential technical problems you might encounter prior to the week midterm or final projects are due.

Below is a list of Hardware and Software Requirements:

1. Computer with IEv9: Access to an Internet-accessible computer capable of fully running Blackboard and Blackboard Collaborate are required with Internet Explorer version 9 or above. Computer needs to be equipped with speakers or a headset. To assure you are prepared for course sessions you should check your installation and configuration at here while also learning more about Blackboard Collaborate if you are a first time user. If you cannot download IEv9, use a virtual machine (VM) environment to install IEv9 on a Windows OS. VM instructions are provided on Blackboard.

2. Microphone and Speakers: Availability of a microphone during the configuration is required however its use throughout the semester will be limited to virtual office hours and final project presentations.

3. Virtual Private Network (VPN): In order for students to view the required text for this course online, they must be connected to the Mason Network (MESA). Direct access to the required textbook from off-campus networks is not allowed. In order to gain access to the Mason Network from off-campus, VPN software is necessary and can be obtained with setup instructions at https://access.ite.gmu.edu. If you are having problems with the VPN, including installation, assistance can be obtained via the System Administrators.

4. Adobe Acrobat Reader (Acrobat) and Adobe Flash (SWF): As course materials use features of the latest specification, you will need to have installed the current major release of Acrobat. The necessary software is available from Adobe Reader and Adobe Flash.

5. Quick Time/Real Player: As course materials use features of the latest specification, you will need to have installed some sort of video/media player. The necessary software is available at QuickTime or RealPlayer.
Course Delivery Methods

The course will be delivered using various methods. You must have your MASON email account activated and you must check your email daily for announcements related to the course. You must have access to Blackboard Learning System and to know how to use its features.

There are video presentations posted on the Blackboard. You must have an environment in which you can watch these videos.

You will have several assignments and assessments to be performed each week.

COURSE CANCELED (SNOW DAYS)

If the courses are canceled the first option is to have a synchronous meeting online during the same times. If you cannot be online the course will be recorded and posted on the course Blackboard site.

Intellectual Property

There is a strong recommendation that all work in the class projects to be done based on an open source license (e.g. Academic Free License http://en.wikipedia.org/wiki/Academic_Free_License). This will allow a rich, shared exchange of ideas and will allow each member of the class to further benefit with no restriction from the work performed in the class.

Privacy

Instructors respect and protect the privacy of information related to individual students. Specific issues relating to an individual student will be discussed via email, telephone or in person. Instructors will not discuss issues relating to an individual student with other students (or anyone without a need to know) without prior permission of the student. There is no guarantee related to the security of email and telephone conversations.

Assessable work other than final exams will be returned to individual students directly by the Instructor (or by a faculty or staff member or a Teaching Assistant designated by the Instructor, or via another secure method). Under no circumstances will a student's graded work be returned to another student.

Faculty and staff will take care to protect the privacy of each student's scores and grades.

Because of the nature of this class, some work performed by the student will be published and discussed in the class. Other students will be able to make comments and suggestions related to the published work, without seeing the actual grade the student earned for the work.

Disability Accommodations

The Office of Disability Services (ODS) works with disabled students to arrange for appropriate accommodations to ensure equal access to university services. Any student with a disability of any kind is strongly encouraged to register with ODS as soon as possible and take advantage of the services offered.
Accommodations for disabled students must be made in advance – ODS cannot assist students retroactively, and at least one week's notice is required for special accommodations related to exams. Any student who needs accommodation should contact the Instructor during the first week of the semester so the sufficient time is allowed to make arrangements.

**Honor Code**

All members of the Mason community are expected to uphold the principles of scholarly ethics. Similarly, graduating students are bound by the ethical requirements of the professional communities they join. The ethics requirements for some of the communities relevant to Applied IT graduates are available via the following links:

- ACM Code of Ethics and Professional Conduct
- IEEE Code of Ethics
- EC-Council Code of Ethics

On admission to Mason, students agree to comply with the requirements of the Mason Honor System and Code. The Honor Code will be strictly enforced in this course. Honor Code cases are heard by a panel consisting of students – students who meet the requirements are encouraged to nominate themselves to serve on the Honor Committee.

Any use of the words or ideas of another person(s), without explicit attribution that clearly identifies the material used and its source in an appropriate manner, is plagiarism and will not be tolerated. There is a "zero tolerance" policy for plagiarism within The Volgenau School. The Instructor reserves the right to use manual and/or automated means (including such services as Turnitin.com) to detect plagiarism in any work submitted by students for this course, and to direct Teaching Assistants and/or other faculty and/or staff members to do likewise in support of this course.

For this course, the following requirements are specified:

- All assessable work is to be prepared by the individual student, unless the Instructor explicitly directs otherwise.

- All work must be newly created by the individual student for this course for this semester. Any usage of work developed for another course, or for this course in a prior semester, is strictly prohibited without prior approval from the instructor.

- For team work a summary at the end of the submission must identify mutually agreed individual contributions.

Students may seek assistance with assigned work (and are encouraged to do so if they feel the need), provided:

- The directions for the assigned work do not prohibit such assistance.

1 Available at [http://catalog.gmu.edu/](http://catalog.gmu.edu/) and related Mason Web pages.
Such assistance is acknowledged in the submitted work, clearly identifying the person(s) giving assistance and the nature of the assistance given.

Any work to be submitted is prepared entirely an exclusively by the student submitting it. Students are expressly prohibited from sharing any assessable work for this course in any manner with other students (except students assigned as Teaching Assistants or Undergraduate Peer Mentors to this course and the student's section), unless all students involved have had their work graded and returned by the Instructor, or the Instructor has explicitly approved such sharing.