## University of Kentucky

# School of Information Science (SIS) ICT 302 - 001 Content Management Systems

**Instructor**: Dr. D. Nemer

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**Office hours**: Tuesday and Thursday, 4:00 to 5:00 PM

**Virtual Office hours:** Same as above in Canvas

**Preferred method of contact:** Email

I usually respond to questions within 1 day.

#### **COURSE INFORMATION**

## **Course Description**

The course focuses on the practice and theory of designing, building and maintaining content management systems.

## **Course Objectives**

By the end of the course, you will:

- Be able to build an advanced CMS using open source code (Drupal 7)
- Understand the technological foundation of CMS (markup languages, styling, web applications, relational databases)
- Understand the theoretical foundation of CMS (content strategy, information architecture, analytics, usability, responsive design)

## **Prerequisites**

No programming or coding knowledge is necessary. Previous experience with web design and development is a plus, but a complete beginner can succeed in this course as well.

## Course Outline (see course calendar for more details)

- Core components of a web server using Drupal
- Setting up Drupal on Openshift.com
- Content types
- Blocks
- Views
- Menus
- Taxonomies
- Media
- Rules
- Panels
- Themes

#### **Class Information**

This is a face-to-face course. You are required to attend scheduled classroom sessions. The Canvas course management system will also be used to facilitate the class. You will need access to an appropriate computer with a broadband Internet connection. *It is imperative that you have a laptop computer (tablets can work too as long as they are Windowsbased or Linux) and bring your personal device with you to class*. I can provide support for Windows and Linux computers for the tasks needing to be completed in the course but my experience with Mac OS X is limited. You must be patient. This is a hands-on class with theory presented through practice, participation is therefore required.

#### **Required Reading**

Some readings listed in the calendar will be delivered through Canvas.

### **Required Textbook:**

Byron, A., Berry, A., & De Bondt, B. (2012). Using Drupal 2nd Edition O'Reilly Media, Centative and Subject to Incorporated. ISBN: 978-1449390525

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#### STUDENT EVALUATION AND ASSIGNMENTS

#### **Grading Parameters**

• **Practice Site Participation**: 30% (of which 6% is setting up the sites)

• **Demo Site Tasks**: 20%

• **Quizzes**: 10%

• Final Project & Final Project

**Presentation**: 40%

#### **Grading Scale**

90% - 100% = A (Exceptional Achievement)

80% - 89% = B (High Achievement)

70% - 79% = C (Average Achievement)

60% - 69% = D (Below Average Achievement)

0% - 59% = E (Failing)

#### **Participation**

You will be required to be present and prepared as well as to participate in class.

#### **Submission of Course Assignments**

- All assignments should be submitted before 12 o'clock midnight on the day of the due date.
- All due dates are posted on the course calendar (canvas).
- Demo tasks and quizzes delivered on time will have a bonus 2 points added to them. This results in 12 points extra for the semester.
- Late demo tasks and quizzes will be accepted.
- Late practice site participation will <u>NOT</u> be accepted.
- A late submission of the final project will NOT be accepted. This is very important!
- Practice, demo and final project websites along with administrator information need to be provided. If they are not provided or incomplete, the evaluation of the assignments will not be possible.

## **Drupal assignments (Projects and Tasks)**

Start working early, these take more time to complete especially when technical issues may occur.

#### **Competence vs Skills**

Technology changes rapidly. When I first touched a computer I was using MS-DOS as my operating system. All the skills that I obtained during that era are almost completely obsolete. The competence of understanding how software is built and structured stayed with me, helping me transition through a variety of operating systems as times and needs changed. Computer efficacy is gained largely through personal effort and may at times include frustration. Be mindful of this, as it is through a process of searching and trial and error that competence is gained. Please bare that in mind also, that while I will give you breadcrumbs to follow and get you to completing your assignments, I require you to put a personal effort

as my goal is to make you competent administrators of CMSs, not just skilled at Drupal 7.0 and the specific modules and themes that you will encounter during your time in this class.

#### Backups!

It is <u>your</u> responsibility alone to maintain backups of your work. Using services such as cloud (e.g., dropbox) or flash drives to maintain backups will prevent you from losing your work due to unfortunate circumstances such as computer theft etc. Losing your work does not account for an excuse in this course.

#### **Asking for Help**

Since this is a technical course you are most likely to encounter issues or get stuck with an assignment. The process of addressing these issues and moving forward should be followed in this specific order:

- 1. Use a search engine such as Google to search for the issue using a variety of keywords (you can also use descriptive terms related to your problem)
- 2. Attempt to read the search results and try out their solutions
- 3. Ask your classmates on BB
- 4. Post your issue on a forum or community such as stackexchange.com or stackoverflow.com
- 5. Email your instructor about the issue. In your email you should demonstrate that you have attempted to resolve the issue on your own by including what you have found through a search engine or your post on a forum. Please be specific about your problem. Descriptions like "I have a problem with HTML" are hardly informative about what your problem may be.

**Note**: Contact me far enough in advance so that I can respond and you can make adjustments or corrections. While I may respond the same afternoon for emails I receive in the morning, I may not respond until the next weekday (excluding holidays). Do not email me on the due date of the assignment. Get assignments done as far in advance as possible to avoid problems or to give you time to contact me with questions that might arise. You never know when you might need clarification before an assignment is due. This is also a good way to avoid any issues with technology that can and will happen.

## Group Work and Collaboration

Although you will be individually evaluated, group collaboration is allowed and encouraged. You are advised to ask questions and collaborate to solve any issues you may encounter with the website development.

#### **TECHNOLOGY INFORMATION & RESOURCES**

This course will be conducted asynchronously via the Blackboard course management system. There are also synchronous classroom sessions which is advisable to have laptop/tablet. Please visit the links below to learn about this system and the login requirements:

- <a href="http://www.uky.edu/DistanceLearning/current/technology/blackboard.html">http://www.uky.edu/DistanceLearning/current/technology/blackboard.html</a>
- http://www.uky.edu/Blackboard/

In order to have a successful educational experience, there are minimum technology requirements that should be met. You can review the minimum recommendations are guidelines for your computer at

http://www.uky.edu/ukit/hardwareguide.

You are also encouraged to acquire the following hardware, software, and internet connection to ensure that all systems used will function properly:

- Internet Connection
- The latest version of Java (Available through <a href="http://java.com/ex/">http://java.com/ex/</a>)
- The latest version of Adobe Flash (Available through <a href="http://get2.adobe.com/flashplayer/">http://get2.adobe.com/flashplayer/</a>)
- The latest version of Adobe Acrobat Reader (Available through <a href="http://get.adobe.com/reader/">http://get.adobe.com/reader/</a>)
- Microsoft Office (Available free to students through <a href="http://download.uky.edu">http://download.uky.edu</a>)
- 1 MBPS Connection

To test your Internet connection to see if it is sufficient, run the speed test at <a href="http://www.uky.edu/DistanceLearning/current/technology/techReqs.html">http://www.uky.edu/DistanceLearning/current/technology/techReqs.html</a>.

Students are expected to have a minimum level of technological acumen and the availability of technological resources. Students must have regular access to a computer with a reliable Internet connection.

Please be certain that your computer and/or browser allows you to view Adobe Reader documents (.pdf). Microsoft Office and other software products are free for students: <a href="https://iweb.uky.edu/MSDownload/">https://iweb.uky.edu/MSDownload/</a>.

As your instructor, I am your first go-to person for technology problems. If you need more immediate assistance, please contact UKIT.

Information Technology Customer Service Center (UKIT) <a href="http://www.uky.edu/UKIT/">http://www.uky.edu/UKIT/</a>; 859-218-4357

## **Library Services**

## **Distance Learning Services**

http://www.uky.edu/Libraries/DLLS

- Carla Cantagallo, DL Librarian
- Local phone number: 859 257-0500, ext. 2171; long-distance phone number: (800) 828-0439 (option #6)
- Email: <a href="mailto:dllservice@email.uky.edu">dllservice@email.uky.edu</a>
- DL Interlibrary Loan Service:

http://www.uky.edu/Libraries/libpage.php?lweb\_id=253&llib\_id=16

#### **Course Reserves**

http://www.uky.edu/Libraries/page.php?lweb\_id=23&ltab\_rank=3

#### **GENERAL COURSE POLICIES**

Policies concerning academic integrity, excused absences and academic accommodations ault/file:

A line a li due to disability are available online at:

http://ci.uky.edu/lis/sites/default/files/pol/eies.pdf

## **COURSE CALENDAR**

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(Schedule and readings is subject to change. Changes will be posted in the Announcements.)

Modules &	nd readings is subject to change. Changes will be posted in t Topics & Readings	Due Due
Dates	, , , , , , , , , , , , , , , , , , , ,	
Module 1	<ul> <li>Learning to Troubleshoot</li> <li>Getting to know web server technologies</li> <li>Setting up Drupal Sites (Practice &amp; Demo)</li> <li>Setting up new users on Drupal (through Drupal)</li> </ul>	Submitting Demo and Practice site information
	<ul> <li>Navigating server's MySQL database and accessing files</li> <li>Reading: Chapter 1 - Byron, A., Berry, A., &amp; De Bondt, B. (2012). Using Drupal. O'Reilly Media, Incorporated.</li> </ul>	
Module 2	<ul> <li>Adding content on Drupal and changing menus, blocks and permissions</li> <li>Reading: Chapter 1 &amp; 2 - Crumlish, C., &amp; Malone, E. (2009). Designing Social Interfaces: Principles, Patterns, and Practices for Improving the User Experience. O'Reilly Media.</li> <li>Chapter 2 - Byron, A., Berry, A., &amp; De Bondt, B. (2012). Using Drupal. O'Reilly Media, Incorporated.</li> </ul>	<ul> <li>Submitting idea for final project ideas</li> <li>Quiz 1</li> <li>Demo 1</li> <li>Practice Site Participation 1</li> </ul>
Module 3	<ul> <li>Themes and contact forms</li> <li>Reading: Chapter 1 &amp; 10 - Rogers, Y., Sharp, H., &amp; Preece, J. (2011). Interaction Design: Beyond Human-Computer Interaction. John Wiley &amp; Sons.</li> </ul>	<ul> <li>Quiz 2</li> <li>Demo 2</li> <li>Practice Site Participation 2</li> </ul>
Module 4	<ul> <li>Views: Creating a job/job application system</li> <li>Reading: Chapter 1 &amp; 2 - Bloomstein, M. (2012).         Content Strategy at Work: Real-world Stories to         Strengthen Every Interactive Project. Morgan         Kaufmann.</li> <li>Chapter 3 - Byron, A., Berry, A., &amp; De Bondt, B.         (2012). Using Drupal. O'Reilly Media, Incorporated.</li> </ul>	<ul> <li>Demo 3</li> <li>Practice Site         Participation 3     </li> </ul>
Module 5	<ul> <li>More Views, Access, and, Media &amp; Taxonomies:         Creating a media upload with tags system (just like Flickr)</li> <li>Reading: Chapter 3 &amp; 4 - Bloomstein, M. (2012).         Content Strategy at Work: Real-world Stories to Strengthen Every Interactive Project. Morgan Kaufmann.</li> <li>Chapter 4 - Byron, A., Berry, A., &amp; De Bondt, B. (2012). Using Drupal. O'Reilly Media, Incorporated.</li> </ul>	Practice Site Participation 4
Module 6	<ul> <li>Fivestar: Adding feedback and voting capabilities</li> <li>Reading: Chapter 5 &amp; 6 - Bloomstein, M. (2012).         Content Strategy at Work: Real-world Stories to         Strengthen Every Interactive Project. Morgan         Kaufmann.</li> <li>Chapters 5 &amp; 6 - Byron, A., Berry, A., &amp; De Bondt, B.         (2012). Using Drupal. O'Reilly Media, Incorporated.</li> </ul>	<ul> <li>Demo 4</li> <li>Practice Site         Participation 5     </li> </ul>
Module 7	<ul> <li>Rules &amp; Panels: Creating Advanced layouts</li> <li>Reading: Chapter 7 &amp; 8 - Bloomstein, M. (2012).         Content Strategy at Work: Real-world Stories to         Strengthen Every Interactive Project. Morgan         Kaufmann.</li> <li>Chapters 9 - Byron, A., Berry, A., &amp; De Bondt, B.         (2012). Using Drupal. O'Reilly Media, Incorporated.</li> </ul>	Practice Site     Participation 6
Module 8	Project Review and Questions	<ul> <li>Final Project         Presentations and         Final Project     </li> </ul>

Note: <u>Modules can span a week to three weeks depending on pace and feedback. Deadlines for</u> assignments are posted on Canvas and will also be announced in class.

#### **COURSE ASSIGNMENTS**

#### **Practice site participation**

You are expected to complete the changes made for your Drupal practice site as instructed in the active sessions. Tasks need to be completed by the end of the due date (posted canvas) for each module. Additionally a question may be posted for each module based on the inclass lectures.

#### Demo tasks

Instructions are given through canvas for completing the demo tasks on the demo website.

#### **Final Project**

The Final project will involve the creation of your own website by the end of the semester. It should allow enough leeway to include social features and other features taught in class. An example of the depth to be expected is the school's website (http://ci.uky.edu/sis). You will have to demonstrate the use of things that you've learned throughout the semester in both theory and practice. A short statement should be added in the discussion forums along with the URL of the final project stating how and why the website was developed and design the way it was. Further instructions can be found on Canvas.

#### **Final Project Presentation**

You will be evaluated based on your ability to present your website to an audience and defend the choices you made. Do not focus solely on the contents, but also on the way you communicate and defend your ideas.

