e-Commerce and Content Management Systems

Course Outline

**Class:** WA190 - e-Commerce and Content Management Systems

60 hours

**Instructor:**

**Text:**  N/A

**Prerequisite:** WA150 – Data Development Utilizing Database Design and SQL

WA180 - PHP Programming with MySQL

**Equipment:** Each student shall be equipped with a desktop computer with the technical characteristics configured to run the programs used throughout the program:

* 20 desktop computers (including 24” monitors and mice) minimum
* Quad Core processor with Microsoft Windows 7, 8.x, or 10,
* Minimum 16 GB Ram
* Minimum 500 GB HD
* Internet access.

**Grading System:**

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|  | | **Grading Scale** | | |
| Classwork, Homework, Participation, Attendance | 30% | 90–100 | A | I - Incomplete |
| Exams/Quizzes | 10% | 80–89 | B | T - Transfer Credit |
| Presentation/Projects | 30% | 70–79 | C | E - Exempt |
| Final Test | 30 % | 65–69 | D | W - Withdrew |
|  | **100%** | Below 65 | F | I - Incomplete |

**Course Description:**

This is a hands-on course with a focus on preparing students for a career in the field of e-Commerce and CMS development and administration. The course introduces the main components of an e-Commerce solution and enriches the students’ portfolios with practical implementation examples. In the second half of the course, students will learn two of the most popular CMS systems and enrich their portfolios with modern day examples. Knowledge of PHP, JavaScript, HTML and CSS are prerequisites for this course.

**Overview:** This class meets for a total of 60 hours. Day classes are six hours per day, Monday through Friday.

**Objectives:** Upon successful completion of this course, the student will be able to:

1. Understand Content Management Systems
2. Build and Administer a Wordpress Site
3. Build and Administer a Joomla Site
4. Create a custom Joomla template
5. Secure a Joomla site
6. Understand Electronic Commerce
7. Create Catalogs and Products
8. Configure Search
9. Configure Shopping Cart and Checkout
10. Set up Taxes, Shipping and Payments
11. Understand the Aspects of Security

**Requirements:** 1. Meet attendance and academic criteria.

2. Completion of all assignments.

3. Completion of the Final Project.

**Graded Work:** The test average and quiz average each comprise 50% of the final grade point average. Quiz grades are based upon completion of the assignment in the time allotted, ability to follow instructions, observance of safety rules and neatness of work area.

**Attendance:** Daily attendance is required. If you anticipate an absence, consult with your instructor.

Be aware that each absence will require an equal amount of make-up time. Each student is required to maintain a minimum attendance of 85% for each course:

* If you miss more than 15% of the total hours in any one course, you will be required to make-up enough missed hours to meet the minimum course attendance requirement of 85%.
* If at the end of the cycle your attendance is less than 85% you will receive an incomplete (I) for the course, and will have 5 business days immediately following the end of the cycle to make-up the hours missed, otherwise your grade will change from an incomplete to an F, and you will be required to retake the course.
* If you miss more than 30% of the total hours in any one course, you will receive a W (withdrawal) and will be required to retake the course.

**Make-up Work:** All missed work is required to be completed as soon as possible. If you need extra help, it is your responsibility to make an appointment with your instructor at a mutually agreeable time.

**Supplies:** Hunter Business School provides all the necessary supplies.

### **Lesson Plan**

##### Day 1 of 10

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| **Name:** |  |
| **Date:** |  | **Department:** |  |

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| **Subject:** | Content Management Systems |
| **Subject Topics:** | * Introduction to Content Management Systems * WordPress |
| **# of Students in the Class:** |  |
| **Previous Requirements:** | WA150 – Data Development Utilizing Database Design and SQL  WA180 - PHP Programming with MySQL |
| **Aim / Objective:** | After completion of the lesson, students will be able to:   * Understand Content Management Systems * Understand the differences between Joomla, Drupal and Wordpress * Install and configure Wordpress * Build a dynamic web site using Wordpress CMS |
| **Technology:** | * Overhead projector |
| **Materials:** | * PowerPoint presentation |
| **Teacher/Student Input:** | * Question and Answer interactions * Class exercises |
| **Lesson Plan** | 9 AM – 10:45 AM   * Introduction to CMS, slides 2-6 * CMS Comparison   10:45 AM – 11 AM   * Break   11 AM – 12:00 PM   * Lab, slide 13   12:00 PM – 1:00 PM   * Lunch break   1:00 PM – 3 PM   * Lab, slide 14 |
| **Review / Assessment:** | 2 Lab assignments are planned to assess students understanding of the material. Optional homework might be given to students to complete the labs. |

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### **Lesson Plan**

##### Day 2 of 10

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| **Name:** |  |
| **Date:** |  | **Department:** |  |

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| **Subject:** | Content Management Systems |
| **Subject Topics:** | WordPress CMS |
| **# of Students in the Class:** |  |
| **Previous Requirements:** | WA150 – Data Development Utilizing Database Design and SQL  WA180 - PHP Programming with MySQL |
| **Aim / Objective:** | After completion of the lesson, students will be able to:   * Harden the security of a WordPress site. * Customize a WordPress theme |
| **Technology:** | * Overhead projector |
| **Materials:** | * PowerPoint presentation |
| **Teacher/Student Input:** | * Question and Answer interactions * Class exercises |
| **Lesson Plan** | 9 AM – 10:45 AM   * Hardening the WordPress site, slides 2-7   10:45 AM – 11 AM   * Break   11 AM – 12:00 PM   * Lab, slide 8   12:00 PM – 1:00 PM   * Lunch break   1:00 PM – 3 PM   * Lab, slide 9 * Project presentation |
| **Review / Assessment:** | 2 Lab assignments are planned to assess students understanding of the material. Optional homework might be given to students to complete the labs. |

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### **Lesson Plan**

##### Day 3 of 10

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| **Name:** |  |
| **Date:** |  | **Department:** |  |

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| **Subject:** | Content Management Systems |
| **Subject Topics:** | Drupal CMS |
| **# of Students in the Class:** |  |
| **Previous Requirements:** | WA150 – Data Development Utilizing Database Design and SQL  WA180 - PHP Programming with MySQL |
| **Aim / Objective:** | After completion of the lesson, students will be able to:   * Install and Configure Drupal CMS * Build a dynamic web site using Drupal CMS |
| **Technology:** | * Overhead projector |
| **Materials:** | * PowerPoint presentation |
| **Teacher/Student Input:** | * Question and Answer interactions * Class exercises |
| **Lesson Plan** | 9 AM – 10:45 AM   * Introduction to Drupal, slides 2-4 * Lab, slide 5   10:45 AM – 11 AM   * Break   11 AM – 12:00 PM   * Lab, slide 5 (continuation)   12:00 PM – 1:00 PM   * Lunch break   1:00 PM – 3 PM   * Lab, slide 6 * Project presentation |
| **Review / Assessment:** | 2 Lab assignments are planned to assess students understanding of the material. Optional homework might be given to students to complete the labs. |

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### **Lesson Plan**

##### Day 4 of 10

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| **Name:** |  |
| **Date:** |  | **Department:** |  |

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| **Subject:** | Content Management Systems |
| **Subject Topics:** | Joomla CMS |
| **# of Students in the Class:** |  |
| **Previous Requirements:** | WA150 – Data Development Utilizing Database Design and SQL  WA180 - PHP Programming with MySQL |
| **Aim / Objective:** | After completion of the lesson, students will be able to:   * Install and Configure Joomla CMS * Build a dynamic web site using Joomla CMS |
| **Technology:** | * Overhead projector |
| **Materials:** | * PowerPoint presentation |
| **Teacher/Student Input:** | * Question and Answer interactions * Class exercises |
| **Lesson Plan** | 9 AM – 10:45 AM   * Introduction to Joomla, slides 2-6 * Joomla installation, slides 7-12 * Joomla architecture, slides 13-21   10:45 AM – 11 AM   * Break   11 AM – 12:00 PM   * Lab, slide 22   12:00 PM – 1:00 PM   * Lunch break   1:00 PM – 3 PM   * Lab (Team Exercise), slide 23 |
| **Review / Assessment:** | 2 Lab assignments are planned to assess students understanding of the material. Optional homework might be given to students to continue working on the team exercise. |

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### **Lesson Plan**

##### Day 5 of 10

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| **Name:** |  |
| **Date:** |  | **Department:** |  |

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| **Subject:** | Content Management Systems |
| **Subject Topics:** | Joomla CMS |
| **# of Students in the Class:** |  |
| **Previous Requirements:** | WA150 – Data Development Utilizing Database Design and SQL  WA180 - PHP Programming with MySQL |
| **Aim / Objective:** | After completion of the lesson, students will be able to:   * Build a dynamic web site using Joomla CMS |
| **Technology:** | * Overhead projector |
| **Materials:** | * PowerPoint presentation |
| **Teacher/Student Input:** | * Question and Answer interactions * Class exercises |
| **Lesson Plan** | 9 AM – 3:00 PM   * Lab (Team Exercise), slide 24 |
| **Review / Assessment:** | 1 Lab assignment (team exercise, full day) is planned to assess students understanding of the material. Optional homework might be given to students to continue working on the team exercise. |

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### **Lesson Plan**

##### Day 6 of 10

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| **Name:** |  |
| **Date:** |  | **Department:** |  |

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| **Subject:** | Content Management Systems |
| **Subject Topics:** | Joomla CMS |
| **# of Students in the Class:** |  |
| **Previous Requirements:** | WA150 – Data Development Utilizing Database Design and SQL  WA180 - PHP Programming with MySQL |
| **Aim / Objective:** | After completion of the lesson, students will be able to:   * Build a dynamic web site using Joomla CMS |
| **Technology:** | * Overhead projector |
| **Materials:** | * PowerPoint presentation |
| **Teacher/Student Input:** | * Question and Answer interactions * Class exercises |
| **Lesson Plan** | 9 AM – 3:00 PM   * Lab (Team Exercise), slide 25 * Project presentation |
| **Review / Assessment:** | 1 Lab assignment (team exercise, full day) is planned to assess students understanding of the material. |

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### **Lesson Plan**

##### Day 7 of 10

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| **Name:** |  |
| **Date:** |  | **Department:** |  |

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| **Subject:** | e-Commerce |
| **Subject Topics:** | Introduction to e-Commerce |
| **# of Students in the Class:** |  |
| **Previous Requirements:** | WA150 – Data Development Utilizing Database Design and SQL  WA180 - PHP Programming with MySQL |
| **Aim / Objective:** | After completion of the lesson, students will be able to:   * Understand the advantages and disadvantages of e-Commerce * Understand the major e-Commerce platforms * Understand the main components of e-Commerce platform * Install Magento Community Edition software * Understand Magento architectural principles |
| **Technology:** | * Overhead projector |
| **Materials:** | * PowerPoint presentation |
| **Teacher/Student Input:** | * Question and Answer interactions * Class exercises |
| **Lesson Plan** | 9 AM – 10:45 AM   * Introduction to e-Commerce, slides 2-9   10:45 AM – 11 AM   * Break   11 AM – 12:00 PM   * Lab, slide 10   12:00 PM – 1:00 PM   * Lunch break   1:00 PM – 3 PM   * Introduction to Magento Commerce Community Edition, slides 11-16 * Lab, slide 17 |
| **Review / Assessment:** | 2 Lab assignments are planned to assess students understanding of the material. Optional homework might be given to students to complete the labs. |

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### **Lesson Plan**

##### Day 8 of 10

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| **Name:** |  |
| **Date:** |  | **Department:** |  |

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| **Subject:** | e-Commerce |
| **Subject Topics:** | Magento Commerce |
| **# of Students in the Class:** |  |
| **Previous Requirements:** | WA150 – Data Development Utilizing Database Design and SQL  WA180 - PHP Programming with MySQL |
| **Aim / Objective:** | After completion of the lesson, students will be able to:   * Manage products and categories in Magento * Configure checkout options: payments, taxes, shipping * Manage customers and administrative users |
| **Technology:** | * Overhead projector |
| **Materials:** | * PowerPoint presentation |
| **Teacher/Student Input:** | * Question and Answer interactions * Class exercises |
| **Lesson Plan** | 9 AM – 10:45 AM   * Introduction to Magento Project, slide 2 * Magento Catalog Subsystem Lab, slide 3   10:45 AM – 11 AM   * Break   11 AM – 12:00 PM   * Magento Order Subsystem Lab, slide 4   12:00 PM – 1:00 PM   * Lunch break   1:00 PM – 3 PM   * Magento Users Lab, slide 5 * Magento Marketing Lab, slide 6 |
| **Review / Assessment:** | 4 Lab assignments are planned to assess students understanding of the material. Optional homework might be given to students to complete the labs. |

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### **Lesson Plan**

##### Day 9 of 10

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| **Name:** |  |
| **Date:** |  | **Department:** |  |

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| **Subject:** | e-Commerce |
| **Subject Topics:** | Magento Commerce |
| **# of Students in the Class:** |  |
| **Previous Requirements:** | WA150 – Data Development Utilizing Database Design and SQL  WA180 - PHP Programming with MySQL |
| **Aim / Objective:** | After completion of the lesson, students will be able to:   * Create a custom Magento Theme * Apply a theme to the Magento store |
| **Technology:** | * Overhead projector |
| **Materials:** | * PowerPoint presentation |
| **Teacher/Student Input:** | * Question and Answer interactions * Class exercises |
| **Lesson Plan** | 9 AM – 10:45 AM   * Magento Themes, slides 2-3 * Magento Theme Lab, slide 4   10:45 AM – 11 AM   * Break   11 AM – 12:00 PM   * Magento Theme Lab, slide 4   12:00 PM – 1:00 PM   * Lunch break   1:00 PM – 3 PM   * Magento Theme Lab, slide 4 |
| **Review / Assessment:** | 1 (all day) lab assignment is planned to assess students understanding of the material. Optional homework might be given to students to complete the lab. |

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### **Lesson Plan**

##### Day 10 of 10

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| **Name:** |  |
| **Date:** |  | **Department:** |  |

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| **Subject:** | e-Commerce |
| **Subject Topics:** | Magento Commerce |
| **# of Students in the Class:** |  |
| **Previous Requirements:** | WA150 – Data Development Utilizing Database Design and SQL  WA180 - PHP Programming with MySQL |
| **Aim / Objective:** | After completion of the lesson, students will be able to:   * Understand the extensibility of Magento Commerce * Install new components from Magento Marketplace |
| **Technology:** | * Overhead projector |
| **Materials:** | * PowerPoint presentation |
| **Teacher/Student Input:** | * Question and Answer interactions * Class exercises |
| **Lesson Plan** | 9 AM – 10:45 AM   * Magento Connect and Magento Marketplace, slides 2-5 * Magento Extensions Lab, slide 6   10:45 AM – 11 AM   * Break   11 AM – 12:00 PM   * Magento Extensions Lab, slide 6   12:00 PM – 1:00 PM   * Lunch break   1:00 PM – 3 PM   * Magento Presentation, slide 7 |
| **Review / Assessment:** | 1 lab assignment and project presentation are planned to assess students understanding of the material. |

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