



**Gifted LearningLinks Program
Course Syllabus**

**Instructor name: Vanessa Haleco-Meyer
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Course Title: *Interactive Web Design with PHP & MySQL*

Session Date: Monthly Enrollment, 2011-2012 school year

Course Description:

It's not alphabet soup! PHP and MySQL are free and powerful tools used to create dynamic and interactive web sites. This course involves elements of programming, graphic design, media editing and information management. Learn to use the web tools behind most blogs, wikis, online chats, shopping and social networking web sites. Soon you'll be creating your own version of the next big web trend! Prerequisites include experience with HTML or web editing software; students are advised that this course places strong emphasis upon programming and database design. Every student will be required to complete a capstone project which may be a blog, discussion forum, or e-commerce site.

Outcomes: Upon successful completion of this course, students will:

1. Understand and apply standard database design principles
2. Understand and utilize a variety of functions and data structures within the PHP coding environment
3. Implement PHP and MySQL in tandem to optimize accessibility and user experience
4. Design and implement dynamic, efficient website structures
5. Design and implement a fully functional blog, retail site or discussion forum (or other dynamic site with instructor's approval).

Resources and Materials:

1. Ullman, Larry. PHP and MySQL for Dynamic Web Sites: Visual QuickPro Guide, 4th Edition. (ISBN 978-0-321-78407-0)
2. PHP website: <http://www.php.net/>
3. MySQL website: <http://www.mysql.com>
4. World Wide Web Consortium: <http://www.w3.org>
5. FileZilla ftp client: <http://filezilla-project.org> (recommended)
6. W3Schools website on PHP (while site has been reviewed thoroughly, not all links have been clicked; please use caution when clicking non-tutorial related links particularly ads): <http://w3schools.com/php/default.asp>

Third Party Web Sites

While a staff member (which includes but is not limited to instructors, teaching assistants, residential staff, office staff) may use or refer students to third-party web sites for instructional

purposes, s/he is required to review thoroughly any such web sites for inappropriate content before referencing them. This includes clicking on all links contained in any such web site, reviewing the materials contained on every page within a web site, and ensuring that the web site does not provide links to other inappropriate web sites. If there is any doubt about whether something is appropriate, a staff member is instructed to err on the side of caution and not use the web site or check with a CTD supervisor. If a referenced third-party web site is later determined to contain inappropriate content, the staff member may be subject to discipline.

Schedule:

	Topic/Focus	Activities & Reading Assignments	Discussion Board	What do I need to turn in?
Week 1	Orientation to Online Learning and this Course	Familiarization with NU's Blackboard environment Establish hosting account Download and install FileZilla (FTP) Read Introduction	Post introduction and short biography	
Week 2	Introduction to PHP	Read Chapter 1 Establish domain name and set up FileZilla to transfer files to hosted account	Domain name	Reproduce scripts 1.5 (Variables) and 1.6 (Strings). Change the values in Script 1.6 to information on a book you have read.
Week 3	Programming with PHP: Forms, Validation, Arrays and Loops	Read Chapter 2 We'll also review (if necessary) style sheets for formatting and tabbed browsing	Completed Chapter 1 exercises.	Reproduce scripts 2.4 (Validating Form Data) and 2.9 (Loops). For Script 2.9, add hour and minute drop downs to the form. Feel free to use military or non-military formats, but make sure a user would understand what they're selecting.

Week 4	Dynamic site structures and Introduction to MySQL	<p>Read Chapter 3-4</p> <p>We'll create a simple web site architecture utilizing include() functions to call header, navigation, footer and style sheet components</p>	Completed Chapter 2 exercises.	Complete dynamic site structure that includes calls to external header, footer and style sheet files.
Week 5	Structured Query Language (SQL)	<p>Read Chapters 5</p> <p>We'll examine data types, table structures, keys and schematics. We'll also explore the phpMyAdmin environment</p>	Completed Week 4 assignment	Create a simple database with at least two linked tables.
Week 6	PHP and MySQL	<p>Read Chapters 8-9</p> <p>We'll create PHP scripts allowing us to securely access database content, and script-enabled forms to submit content and edit existing content</p>	Completed Week 5 assignment	Using the database set up in week 5, create input and update forms as described in chapter 9.
Week 7	Sorting and Pagination	<p>Read Chapter 10</p> <p>We'll implement sorting and pagination on Week 6 pages</p>	Completed Week 6 assignment	Using our set-up from our prior two weeks, create scripts that paginate search results, and allow the user to sort by two or three criteria.
Week 8	Mail functions, Date functions, File uploads	<p>Read Chapter 11</p> <p>We'll implement a "Contact Us" mail form (Script 11.1); and we'll configure and implement file upload functionality (Script 11.2)</p>	Completed Week 7 assignment	Create and test mail form; create and test file upload form.
Week 9	Anti-spam strategies and other security	<p>Read Chapter 13</p> <p>Submit final project proposal</p>	Completed Week 8 assignment	No assignment

Week 10	Message Boards	Read Chapter 17 Set up database and create forum site following scripts provided	Final project proposal due	Begin work on Message Board project
Week 11	Message Boards	Read Chapter 17 Set up database and create forum site following scripts provided		Complete Message Board Project
Week 12	E-Commerce	Read Chapter 19 Set up database and create retail site based upon scripts provided	Completed Message Board project	Begin work on E-Commerce Site
Week 13	E-Commerce	Read Chapter 19 Set up database and create retail site based upon scripts provided		Complete work on E-Commerce Site
Week 14	Final Project	Work independently on final project	Completed E-Commerce project	
Week 15	Final Project	Work independently on final project		
Week 16	Final Project		Final Project due	

Student Evaluation and Grading Policies for Credit Courses Only:

Please note that where the instructor requests reproductions, this is to ensure that the students type out the script as described in the book and get a feel of how the language flows. Reproductions anywhere else in assignments will not be acceptable.

Honors Elective students will receive a final evaluation and transcript when the course is complete. Students who are struggling (grade of C or below) may receive an interim progress report.

Final evaluations and transcripts are mailed to the student and the home school, if so designated.

1. Grading Rubric and Breakdown of final grade
 - o 30 points Discussion board participation for weeks 1 to 10

- 3 points per week. 1 point for posting, 1 point for successful completion, 1 point for feedback/reply to others, insightful comment or question, new or useful web resource, or extra work on assignment
- 20 points Message board project
 - 5 points total for message board framed only, no functionality
 - 10 points total for some attempt to create a skeleton of a message board, some functionality
 - 15 points total for mostly functioning message board
 - 20 points total for fully functioning message board
- 20 points E-commerce project
 - 5 points total for e-commerce site framed, no functionality
 - 10 points total for skeleton of e-commerce site, some functionality
 - 15 points total for mostly functioning e-commerce site
 - 20 points total for fully functioning e-commerce site
- 30 points Final project
 - 5 points total for submitting proposal on-time
 - 10 points total for skeleton of final project, some functionality
 - 20 points total for mostly functioning final project
 - 30 points total for fully functional final project

2. CTD Grading scale

A+ 97-100	B+ 87-89	C+ 77-79	D+ 67-69	F Below 60
A 93-96	B 83-86	C 73-76	D 63-66	
A- 90-92	B- 80-82	C- 70-72	D- 60-62	

Instructor Biography:

Vanessa Haleco-Meyer has a BA in Mathematics and Economics from Colby College (Maine) and a MS in Computational Finance from DePaul University. Her first programming experience started right out of her undergrad where she was involved heavily in automation projects and statistical programming. She became involved in web development gradually around 2006 and is now primarily employed as a web developer at the Federal Reserve Bank of Chicago. Throughout her career and education she has been exposed to a wide variety of programming languages but particularly has focused on ColdFusion and ASP.NET. Her other programming interests include Java (particularly for the Android OS) and Python.

Contact Information:

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