

Program: Web Development & Interactive Design

Term: 3

Course Outline: PHP III

Revision: June 11, 2012

Instructor: Ali Efe

**Brief Course
Description:**

This course builds on the material covered in PHP I and II, with emphasis on creating advanced, highly customizable and scalable web applications. Students are introduced to object-oriented programming, and given the tools to integrate PHP with other technologies, such as AJAX and XML. By the end of the course, students will be able to build highly advanced E-commerce applications using custom built shopping carts.

Object-oriented programming (OOP) and integration with other technologies are the best approach to aid developers in building highly customized and scalable applications.

In-class exercises are designed to develop the students' skills in integrating PHP with other technologies.

Course Prerequisites:

Completion of Terms 1 and 2 in the Web Development & Interactive Design Diploma Program

**Textbooks Required
for this Course:**

Instructor developed course material

**Equipment Required
for this Course:**

Provided materials:

- Adobe CS5.5 Web Premium
- MySQL
- phpMyAdmin
- Personal Computer
- Internet Access

Student supplied materials:

- None

Course Duration:

11 weeks – 2 class per week - 2 hours 15 minutes per class - 48 hours total

Homework Hours:

Average 1 - 2 hours per week

Delivery Methods: On-site delivery

Instructional Method:

Method	%	Total Contact Hours
Classroom (Instructor Led)	75	
Supervised Lab	25	48

Learning Objectives/Outcomes: Upon successful completion of this course the student will be able to proficiently:

- Understand the concepts of Object Oriented Programming
- Use advanced PHP and MySQL
- Implement GD support with PHP applications
- Integrate PHP with XML
- Generate PDF files with PHP
- Produce RSS feeds

Student Progress/Assessment Methods:

Evaluation of the students' work will be in strict adherence to the VanArts grading policy as outlined in the VanArts Student Info Centre

<http://www.VanArts.com/infocentre/VanArts-student-information-centre>

All assignments and projects are expected to be on time. Any late assignments will not be accepted for grading unless under exceptional circumstances as determined by instructor discretion.

Course Assessments	
Individual Skill Critiques	67%
Attendance and Professional Context	33%

Attendance Expectations:

Due to the volume of material being covered, it is important that students attend every class. Instructors will not repeat lecture material. Unexcused absences may directly affect your final mark. Please refer to the Student Info Centre <http://www.VanArts.com/infocentre/VanArts-student-information-centre> for more information regarding our attendance policy.

Course Details:

Week 1: Variables	
<i>Topics</i>	Variables review
	Array functions: manipulate an array
	Search an array
Week 2: Cookies with PHP and JavaScript	
<i>Topics</i>	All about cookies
	Building cookie functions with JavaScript (JS)
	Applications with JavaScript cookies
	PHP cookies vs. JavaScript cookies
Week 3: WYSIWYG Editor Integration with PHP and JS	
<i>Topics</i>	Introduction to FCKEditor
	Integrating FCKEditor using PHP
	Integrating FCKEditor using JS
Week 4: Image Resizing and GD Library	
<i>Topics</i>	Introduction to picture resize in common library
	Examples of picture resizing using common library
	Enabling support for GD library in PHP
	Generating image thumbnails with GD
Week 5: PHP and MySQLi Object XHTML and CSS	
<i>Topics</i>	InnoDB database engine, MyISAM vs. InnoDB
	SQL transactions: commit, rollback
	Foreign keys: referential actions (cascade, no action, set null, restrict...)
	Working with new MySQLi object in PHP5
Week 6: Shopping Cart Integration with PHP and JS	
<i>Topics</i>	Building a shopping cart application
	Implementing sessions with PHP
	Creating a product list
	Creating a cart
Week 7: Shopping Cart Integration with PHP and JS	
<i>Topics</i>	Creating a cart
	Creating a checkout page
	Introduction to PayPal sandbox
Week 8: Manipulating XML with PHP	
<i>Topics</i>	Using the DOM
	Loading XML documents
Week 9: Sanitizing HTML Content	
<i>Topics</i>	Danger of Cross-Site Scripting (XSS) attacks
	Introduction to open source filtering libraries: HTML Purifier
	Integrating HTML Purifier with PHP
Week 10: Creating RSS feeds	

<i>Topics</i>	What is RSS
	Creating your first RSS feed
	Parsing RSS feeds
Week 11: PHP and PDF	
<i>Topics</i>	Generating PDF files with PHP
	Outputting PDF reports