GCCIS-ISTE-405 Web Integration & Application

instructor & meeting times	John-Paul Takats **Information Technology Strategist** Undergraduate Admissions **Adjunct Professor** IST Department **Office Hours**: Schedule during business hours at: https://jxtadm.youcanbook.me/ (it may say something about interviews when you register as I use this form for multiple purposes). It is actually easier for me to meet outside business hours, but please email me to arrange a time. **Office:** Bausch & Lomb Center (BLC) 2256 **e-mail:** jxtadm@rit.edu Skype: johnpaul.takats **Phone:** (585) 475-7431 (Please note that phone is not an effective way to contact me.) ~~**Ronald P. Vullo, Ph.D.**~~ ~~Associate Professor~~ ~~Information Sciences and Technologies~~ ~~Rochester Institute of Technology~~ ~~152 Lomb Memorial Drive~~ ~~Rochester, New York 14623~~
course description & prerequisites	The final course in the minor in Web Design and Development (for non-GCCIS majors). Students will develop a deeper understanding of technologies underlying the web and how to combine them. This course builds upon the work from the preceding four courses in the minor and emphasizes integrating multiple technologies and content sources to create sophisticated web sites and web applications for desktop and mobile devices. This course is not available to GCCIS majors. **Prerequisites** • GCCIS-ISTE-105 • GCCIS-ISTE-205 • GCCIS-ISTE-206 • GCCIS-ISTE-305 **Co-requisites** • none

Important note for GCCIS students: This course is not intended for computing majors and will not count toward your degree. It is restricted to non-computing majors.

topics
covered

Server-Side Programming

- constructs
- functions
- data structures
- includes and code organization

Maintaining State

- cookies
- session variables

Structured Content

- normalization
- structured files (CSV, INI, XML)
- databases

Site Architectures and Approaches

- Pages and Directories
- Model-View-Controller
- two- and three-tiered architectures
- Integrating Web Services & Data Sources
- Security Issues

Web Applications

- AJAX
- Mobile Apps

Approach: Work toward building a dynamic site including an extensible architecture and content-management features, with security woven in throughout the quarter.

texts &
materials

The following texts are available at the bookstore, or via online booksellers such as amazon.com and bn.com. Note that all of the texts are *optional*. They make a good supplement to the online readings found at the end of this syllabus.

- *XHTML For the World Wide Web*
  (Not the Student Edition)
  by Elizabeth Castro
- *Bulletproof Web Design*
  by Dan Cederholm
- *CSS Pocket Reference*
  by Meyer

grading &
enrollment
issues

Your grade will be based on your in-Class exercises (25%), and a project done in three stages (25% for each stage) three of the in-class exercises are comprised of a small group activity.

Assignments submitted after the due date/time, without prior approval from me, will be subject to losing up to one full letter grade for each day that they are late. If you know that a situation will prevent you from turning something in, contact me in advance of the deadline to make alternate arrangements.

If you wish to dispute your final course grade, you must do so before the end of the quarter following this one; otherwise documentation of your work may not be available.

Last Day to Drop the Class: Drop/Add is the first 6 Class days of the semester. After that date, you must withdraw from the course, which will show on your transcript as a W.

Last Day to Withdraw: The deadline for withdrawing from a course with a W grade is the end of the 11th Week of the semester. After that date, a grade will be assigned based on the work that you have submitted.

"Incomplete" Grades: You may request an incomplete, or "I" grade, only in cases where exceptional conditions beyond your control, such as accidents, severe illness, family problems, etc., have kept you from completing the course. You *must* alert us to these circumstances as soon as possible--telling your instructor in Feburary that you were sick in January is not acceptable. If your request for an incomplete is granted, you must complete the work for the course within the time limits set by the instructor. The maximum time is two (2) academic quarters. Unfinished "I" grades automatically become "F".

Incomplete grades are *not* given to students who have simply fallen behind in their work.

project   The project will be discussed in class, and the 3 stages linked from here. Due dates and rubrics are included in the assignment pages.

Individual Assignments:

- **Stage 1**
- **Stage 2**
- **Stage 3**

academic
integrity
policy   It is important that you understand what consitutes academic dishonesty, and what the penalty associated with it is. Read this policy carefully. Please note, in particular, the definitions of cheating and collusion. There is a fine line between asking for a classmate's help in solving a technical problem, and using their work as your own. Don't cross it. Similarly, while it's fine to get ideas from web sites, you must credit your source. If you violate the academic dishonesty policy, you will fail the course. It's just not worth it.

course
outline   # Week 1

Class 1

- Discuss Syllabus, expectations, assignments, etc.

Class 2

- History of PHP

Week 2

- PHP Programming Basics

- Data Structures
    - scalars
    - arrays
    - associative arrays

- [Stage 1: Due Saturday, February 25, 2017 at Midnight](#)

- Reading & Writing Files
    - File I/O

Week 3

- More Files - ICE/Demo
- Security

- parse_ini_file()

Week 4

- Serenity, Configuration & Debugging
    - .htaccess
    - bug.php
    - etc.

- Intro to Databases and SQL
- PHPMyAdmin ICE

Week 5

- Using Databases
- ICE: Using mySQL from PHP
    - MySQL Functions
    - Database access (fetching)

Week 6

- **DELAYED START OF WEEK 6 due to server issues with mysqli vs mysql**

- Repeat of Week 5! Make sure you get the mysql stuff working!
- ICE: Using mySQL from PHP
    - MySQL Functions
    - Database access (fetching)

Week 7 (Former Week 6)

- Dynamic CSS

- Dynamic Images

Week 8 (Former Week 7)

- Superglobals
- Stage 2 Foundations

--SPRING BREAK--

Week 9 (Former Week 8)

- Stage 2 Assignment
- Cookies

Week 10

- Installing Molly

Week 11

Stage 2 Q & A & Demo & Work

Beginning MAML

Week 12

- Stage 2 Due
- AJAX with Molly

- Molly Architecture Overview
- Do you have any skin in the game?

Week 13

- Stage 2 Demos
- Stage 3 Assignment

- Turning Templates (like Stage 1) into Molly Skins
- Starter Files

Week 14

- TBD (Regex maybe?)

Week 15

- TBD