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# IT 202-011: Internet Applications

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#### IT 202-0XX Syllabus

#### Instructor:

Matt Toegel (matthew.toegel@njit.edu)

Office Hours: M, T, W, Th 2:30 - 3:30 (Timely notice is preferred; times subject to change)

Office: GITC 3420->3901C

#### Academic Integrity:

The work done is expected to be your own, any group work should clearly distinguish ownership of tasks. Use of snippets/material from others should be kept to a minimum and the source should be accredited where applicable.

That being said, please also note the below:

Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at:

http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf.

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu"Any violations of the NJIT Honor Code will be brought to the attention of the Dean of Students.

#### Overview:

This course will discuss concepts and implementation of a web application covering the frontend, backend, and data layers. Topics will range from markup and styling using HTML5 and CSS3, frontend/client-side scripting using JavaScript and jQuery (with usage of AJAX), backend/server-side scripting using PHP running on Apache, and data storage using MySQL. This course will be mostly hands-on with a milestone approach for a final project. Class participation and questions are strongly encouraged.

# Assignments:

Generally there will be small coding samples to go over in class where there will be lab/class time to practice. Most assignments will have grading that'll fall under participation.

There will be a semester long project the you'll incrementally develop as you learn new topics. This project will be agreed upon based on a submitted and discussed proposal. The milestones will check on progress and see if any special topics need focus. Anything including and beyond any reach goal may be considered for extra credit.

#### Illustrative Schedule

The schedule is a guide line and is subject to change to fit the particular instance of the class. All topics in general are planned to be covered. Some may have more focus than others and per class interest other topics may be included.

Week 1: Overview of full stack development and environment setup/prep

Week 2: PHP Intro, DB connectivity, SQL

Week 3: PHP Continued (functions/libraries), Project Intro/Discussion

Week 4: PHP Function Design, Project Proposal Finalization

Week 5: JavaScript topics, debugging, and user-defined functions

Week 6: HTML5, CSS, Lab time for Project

Week 7: PHP Sessions and Cookies, Project Milestone 1

Week 8: Midterm exam, Project Assistance

Week 9: PHP Sessions Continued

Week 10: JavaScript Dynamic HTML, data validation, HTML5 patterns, Project Milestone 2

Week 11: Security Topics (User Input, SQL Injection, XSS)

Week 12: ¡Query Intro and AJAX

Week 13: jQuery Continued, Project Milestone 3

Week 14: Guided development on Projects

Week 15: Final Exam

#### **Grading:**

Milestones (3): 10% Project Proposal: 5%

Midterm: 15% Final Project: 25% Final Exam: 20%

Participation/Attendance: 5%

# Materials/Technology:

AFS / AFS Client

PHP

Online Resources (No book required)

**GitHub** 

VirtualBox (optional)

Apache (optional)

#### Late Policy:

There will be deductions for late submissions of any homework or lab assignments. I will accept assignments up to two weekdays late, however no assignment will be accepted after it's reviewed/discussed in class.

If you are going to miss a class and cannot hand in an assignment, it's your responsibility to let me know.

There also will be no make-up exams (except, at the discretion of the instructor in the case of a documented medical or family emergency).

Syllabus is subject to change, attend class to stay current.