MET CS602: Syllabus

Overview of CS602: Server-side Web Development

This class focuses on PHP, NodeJS with both MySQL and MongoDB. Students should bring their laptops to every class for the hands-on laboratories and practice.

Instructor

asheehan@bu.edu Office hours are by appointment. Please reserve and time and place with me.

Classroom Location

"CAS" - College of Arts and Sciences

725 Commonwealth Avenue, Room 214, Brookline, MA 02446

Required eBooks

- NodeJS Notes For Professionals (Free PDF/online)

    https://medium.com/easyread/e-book-node-js-notes-for-professionals-book-e13db79d7b08

- Murach's PHP and MySQL (3rd Edition)

    by Joel Murach and Ray Harris

    ISBN 978-1-943872-38-1

    https://www.murach.com/shop-books/web-development-books/murach-s-php-and-mysql-3rd-edition-detail

- Practical Node.js - Building Real-World Scalable Web Apps.

    by Azat Mardan

Course Policies

- Homework will not be accepted after its due date.
- If you do not participate in class (or do not show up or come), you probably will not succeed in the exams, as they are challenging.

Grading Policies

- Homework/Laboratories: 25%
- Midterm Examination: 25%
- Term Project: 25%
- Final Examination: 25%

Schedule

Week	Topics	Readings
1	Course Introduction, ES6 Review	
2	Syntax, Data and Control Structures	• Mardan. Ch. 1 • Murach. Ch. 1,8
3	Request Processing (Routing)	• Mardan. Ch. 2 • Murach. Ch. 2,12
4	Session Handling, MVC Frameworks and Template Engines	• Mardan. Ch. 4 • Murach. Ch. 5
5	File I/O, Streams	• Mardan. Ch. 1 • Murach. Ch. 23

6	Midterm Examination	
7	Spring Break (No Classes)	
8	Relational Databases (MySQL)	• Murach. Ch. 18,19,20,23 • [MySQL with NodeJS](#)
9	NoSQL Databases (MongoDB)	• Mardan. Ch. 7 • [PHP Manual](#) • [MongoClient](#) • [More Examples](#)
10	Security and Authentication	• Murach. Ch. 21 • Mardan. Ch. 6
11	Sockets	• Mardan, Chapter 9 • [PHP.net](#) • [Ratchet](#)
12	Web Services	• https://www.techiediaries.com/php-rest-api/ • Mardan, Chapter 8 • Free NodeJS PDF: Chapter 30
13	Course Review	
14	Term Project Presentations	
15	Final Examination	