

CMSC389N Summer 2015 (Midterm II Information)



General Information

- **Date:** Mon, Jun 29
- **Time/Location:** Your exam will take place in lecture.
- **Duration:** 75 minutes
- Closed-book, Closed-notebooks, No Computers/Calculators.
- Use a pencil/mechanical pencil (**no pen**) to answer the exam.
- Please take a look at the general exam rules available at [Exam Rules](#).
- Information about taking exams [Taking Exams](#)
- **Posting any information in Piazza about the exam after taking it is considered an academic integrity violation.**

Exam Structure

- **Short answer questions:** This includes for example, multiple choice, true/false and fill-in-the-blank type questions.
- **Code analysis questions:** We will give a short segment of code and you may be asked to identify syntax and logical errors, generate code output, etc.
- **Code Writing:** Write a program/code snippets to solve a given problem. You should be prepared to give a complete program, but we may also ask you to provide just a single function or a code fragment.

Topics

The exam will include all the material covered in lecture and projects including the following topics:

- Only the following HTML
 - How to define tables.
 - How to define ordered and unordered lists.
 - How to define forms using text fields, hidden fields and submit buttons. You don't need to know any other form elements (e.g., radio buttons, etc.)
 - Other tags you should be familiar with:
 - `
`
 - ``
 - ``
 - `<h1></h1>`
 - `<div></div>`
 - ``
 - `<p></p>`
 - `<pre></pre>`
 - ``
 - `<a>`
 - ``
- Only the following CSS properties
 - color
 - font-size
- CSS Selectors
 - id selectors
 - class selectors
 - type selectors
- PHP Language
 - echo
 - print
 - variables
 - superglobals
 - expressions
 - casting
 - constants
 - conditional statements
 - iteration statements
 - functions
 - default arguments

- Arrays
- foreach
- array_keys(), count(), array_values(), functions
- string functions: only explode() and trim()
- include functions: only require_once
- heredoc
- self-referencing scripts
- header function
- type conversions
- processing information submitted via forms using PHP
- Reading/writing from files
- Cookies
- Sessions
- array_map
- rand()
- htmlspecialchars, htmlentities
- SQL
 - how to create a table of strings and integers
 - how to insert a record in a table
 - how to delete a record
 - how to display the table
- Server Side Includes
- Object-Oriented PHP
 - defining classes and interfaces
 - Constructor
 - Using \$this
 - __toString
 - parent::
 - static fields and methods
 - public, private, protected
 - const
 - ::self
 - get_class
- JavaScript
 - JavaScript data types
 - Expressions
 - prompt
 - alert
 - console
 - Iteration constructs(while, for in, etc.)
 - Functions
 - Form Validation Using JavaScript
 - DOM
 - document.getElementById
 - getAttribute, setAttribute
 - innerHTML
 - charAt
- JavaScript object definition
- Object properties
- Objects as associative arrays
- strict mode

The exam will **NOT** cover the following topics:

- XAMPP configuration, jQuery Mobile, PHP date functions, DNS, serialization, security information provided in slides, PHP file_get_contents
- You don't need to know the JavaScript code used to identify which element has been selected in checkboxes, drop-down lists, scrollable lists, radio buttons, textarea.
- prototypes, execution context, constructor/prototype/default pattern, AJAX, private variables, private functions, sealing/freezing objects, Error, regular expressions, JSON, iframe, video tag, audio tag, canvas tag, svg tag, geolocation, local storage.