

CSCI 5060 Syllabus (10)

COURSE NUMBER: CSCI 5060
COURSE TITLE: Graduate Server-side Web Development
CREDITS: 3
PREREQUISITES: CSCI 5020
SEMESTER / YEAR: Fall 2026

INSTRUCTOR:	Name:	Leong Lee
	Office:	Maynard 206 / 207
	Office Hours:	Tue/Thu: 8:00am-10:00am, Fri: 12:00pm-1:00pm, or by appointment
	Office Hours Format:	In-person OR Microsoft Teams. New Chat "leel@apsu.edu", followed by video call if needed
	Phone:	931-221-7038
	E-mail:	leel@apsu.edu

CLASS WEB SITE: Please refer to D2L.

PROGRAMMING TUTORING

Check out [programming peer tutoring service/timing/venue at this link](https://www.apsu.edu/csci/opportunities_resources/computer-science-tutoring-services.php), or use the following URL: https://www.apsu.edu/csci/opportunities_resources/computer-science-tutoring-services.php

COURSE DESCRIPTION

This course covers the server-side development of web-based platforms. A server-side language will be used to respond to client-side data requests and generate dynamic results. The course will also cover reading from and writing to a database as part of server-side functionality.

COURSE OBJECTIVES

At the completion of the course, the student will be able to:

1. Apply programming concepts such as functions, data types, operators, and control structures in a server-side language.
2. Generate dynamic HTML, CSS, and data using a server-side language
3. Understand the different types of HTTP requests and respond appropriately in code.
4. Use standard design patterns to organize server-side code.
5. Design and develop database-driven web applications.



STUDENT LEARNING OUTCOMES

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions. (SLO1)
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline. (SLO2)
- Support the delivery, use, and management of information systems within an information systems environment. (SLO6-CIS)
- Use systemic approaches to select, develop, apply, integrate, and administer secure computing technologies to accomplish user goals. (SLO6-CIT)

TIME AND PLACE OF CLASS:

Tue/Thu 12:45pm-2:10pm, Maynard 129

DUAL-LIST NOTICE

Although this course is dual-listed with CSCI 4000, all CSCI 5060 assignments are different from CSCI 4000 assignments. CSCI 5060 assignments are more challenging than CSCI 4000 assignments.

REQUIRED LEARNING RESOURCES

Textbooks

- Murach's PHP and MySQL, 4th Edition, by Joel Murach, Ray Harris, ISBN-13: 978-1943873005, Mike Murach & Associates. (You can use an earlier edition, 3rd Edition.)

Others

- Laptop Computer with Internet Access
- A USB Flash Drive
- A 2nd Monitor is highly recommended (not required)

MINIMUM TECHNOLOGY REQUIREMENTS

- **Microsoft Windows**-based Computer with webcam, and mouse
- Everyday Internet access capable of supporting video conferencing
- **Microsoft Teams** Client
 - MS Teams is part of MS Office 365.
 - APSU students can install Office 365 Apps on up to 5 personal devices, FREE.
 - To install Office 365 Client
 - i. [External Link to "APSU Office 365 Student"](#)
 1. Install Office 365
 2. Login in using apsu login
 - ii. After login to outlook, look for "Install apps" icon (interface changes)



- Install MS Teams Client, login with apsu login

ATTENDANCE POLICY

Students are expected to attend all classes, arrive on time and participate in classroom discussions. Students are expected to remain in class until the class is finished unless extenuating circumstances such as illness require the student to leave. If a student leaves class early, the instructor must be notified as to the reason that the student left.

A grade of **FA** (to include the last date of attendance) will be reported within **14 days** of the last day of attendance. A grade of **FN** and an entry of the first date of class in the last date of attendance column will be reported within the first **14 days** of class. The **FN** grade is considered to be an official withdrawal from the class and may impact the enrollment status of a student (full-time to part-time).

ASSIGNMENTS / PROJECTS

Assignments (projects) will be both written and programming. The instructor will not make any adjustments to a student's code when grading, so if any submitted program does not run the student will get a zero on the "correctness" portion of the grade (or **50 points off** the overall grade), with no exceptions. Program source code will be turned in electronically.

LATE POLICY AND MAKEUP EXAMS

Assignments (projects) are due on the stipulated due dates, and may be turned in **up to 7** calendar days late with a **25% late penalty**. No assignment will be accepted more than 7 calendar days after the original due date! Students with planned absences, whether for university events, religious observance, or other reason, are expected to make arrangements with the instructor to turn in assignments or take exams before the scheduled date of the assignment or test.

Exam/test dates are on the schedule on the following page — if there are any changes, they will be announced at least one week in advance if possible. A missed exam may be made up only if it was missed due to an extreme emergency and arrangements are made before the exam date. Exams may not be taken early or late due to personal travel plans.

EVALUATION AND GRADING

Each student activity will contribute to the final grade in the class according to the following percentages.

Table 1 Activity and Percentage

Activity	Percentage
Assignments	50%
Exam 1	10%
Exam 2	15%
Final exam (Comprehensive)	25%



Table 2. Final Percentage and Grade

Final Percentage	Final Grade
90 - 100	A
80 - 89	B
70 - 79	C
60 - 69	D
Below 60	F

POLICY ON MINORS

Minors accompanying staff, faculty, students, or visitors on campus are not permitted in classrooms. However, affiliated minors may utilize classrooms designated for use by a program approved by the university in which they are a participant.

SERVICE ANIMALS IN THE CLASSROOM

Consult [APSU Policy 3:007 Animals on Campus](#) for appropriate situations allowing service animals in the classroom.

DISABILITY POLICY

Any student who has a disability that may affect his/her academic performance is encouraged to make an appointment with me to discuss this matter, or you may contact Disability Services; telephone 221-6230; tty 221-6278; fax 221-7102.

ACADEMIC AND CLASSROOM MISCONDUCT

Students are expected to conduct themselves appropriately at all times. Academic and classroom misconduct will not be tolerated. Students must read the “Code of Student Conduct” in the new [Student Handbook](#) for an understanding of what will be expected of them within the academic setting. [APSU Policy 3:005 Student Academic and Classroom Misconduct](#) will be followed in reporting any suspected cases of academic misconduct.

Students are required to turn in their own work and not the work of others. Collaboration on homework, assignments, quizzes, and exams is prohibited, unless otherwise specified by the instructor. Likewise, **plagiarism** of other's work or web-related sources constitutes a serious infraction. This includes submitting work very similar to another student's project, copy and paste from Internet searches, using code found on another computer, and using Internet sites for hiring coders or tutors to complete a project. “Penalties for academic misconduct will vary with the seriousness of the offense and may include, but not limited to, a grade of “F” on the work in question, a grade of “F” in the course, reprimand, probation, suspension and expulsion.” (Quoted from APSU Academic and Classroom Misconduct). Protect your own work. Do not leave your assignments on the hard drives of the computers or printers in the lab for others to see. If you are ever worried that anything you do may be flagged for academic dishonesty, please contact me for help and guidance.



TOPICAL OUTLINE/CALENDAR

Table 3. Calendar

Week / Date	Topic	Reading	Remarks / Due / Exam
1 8/24, Mon	Introduction to web development with PHP	PHP Ch. 1	8/24: APSU Day of Service: No classes, go volunteer
2 8/31	How to code a PHP application	PHP Ch. 2	
3 9/7	How to code control statements How to create and use arrays	PHP Ch. 8 PHP Ch. 11	9/7: Labor Day Holiday – No classes, University Closed Assignment 1 Due – 9/13 Sun
4 9/14	Introduction to relational databases with MySQL	PHP Ch. 3	
5 9/21	How to use PHP and MySQL database	PHP Ch. 4	Assignment 2 Due – 9/27 Sun
6 9/28	How to use PHP and MySQL database	PHP Ch. 4	Exam 1 – 10/1, Thu
7 10/5	How to work with strings and numbers	PHP Ch. 9	Assignment 3 Due – 10/11 Sun
8 10/12	How to use MVC pattern to organize your code	PHP Ch. 5	10/12-10/13: Fall Break (No classes, University is Open)
9 10/19	How to use MVC pattern to organize your code	PHP Ch. 5	10/23 - Mid Term Grades Due by Noon
10 10/26	How to use MVC pattern to organize your code	PHP Ch. 5	10/26: Last day to Drop or Withdraw from a class with a “W” Grade Assignment 4 Due – 11/1 Sun
11 11/2	How to work with form data How to work with dates	PHP Ch. 7 PHP Ch. 10	Exam 2 – 11/5, Thu
12 11/9	Create and use arrays (advanced)	PHP Ch. 11	11/11: Veteran's Day - No classes, University Closed Assignment 5 Due – 11/15 Sun
13 11/16	AJAX	JavaScript Examples	
14 11/23	AJAX	JavaScript Examples	11/25-27: Thanksgiving Holiday - No classes 11/26-27: University Closed
15 11/30	Exam Revision		Assignment 6 Due – 11/30 Mon 12/2, Wed: Last day of classes



Week / Date	Topic	Reading	Remarks / Due / Exam
			12/3, Thu: Study Day 12/4-10: Final Exam Period
16 12/7	12/8, Tue, 10:30am-12:30pm: Final Exam		Final Exam

LAPTOPS AND OTHER ELECTRONIC DEVICES IN THE CLASSROOM: Cell phones must be turned off or on vibrate during class. NO cell phone can be answered during class unless there is an emergency situation and you have discussed the emergency with the instructor prior to class. No text messaging is permitted during class. Laptops/tablets are permitted whenever the student considers the laptop/tablet as an enhancement of his/her learning experience. However, the student **MUST** be using the laptop/tablet in a manner that directly relates to the content of this class such as viewing the slides from the lecture or taking notes. The laptop/tablet must not be a distraction to others in the class. No other electronic devices will be allowed in class without prior consent of the instructor.

CAVEAT: Policies and procedures may change due to extenuating circumstances.

SYLLABUS SUPPLEMENT

Video and/or Audio Recording Guidelines

Some or all of the class sessions may be audio/visually recorded. The video and/or audio recordings may be used for educational purposes and may be made available to all students currently enrolled in the course and to university officials with a legitimate educational interest in reviewing the recording. The recording is made for educational purposes to provide a resource to students during the remainder of the course.

Students should not make their own recording of the class session or distribute a copy of the instructor's recording of the class session unless appropriate approval has been received prior to making the recording. Distributed recordings are not a transfer of any copyrights in the recording. Public distribution of such materials by students may constitute copyright infringement in violation of federal or state law, or University policy. Further, the University prohibits the recording or transmission of classroom lectures and discussions by students unless written permission from the instructor has been obtained and all students in the class as well as guest speakers have been informed that audio/video recording may occur. Violators may be subject to disciplinary action pursuant to the Student Code of Conduct.



Statement from APSU Academic Affairs and Legal Affairs

APSU is committed to the free and full exchange of ideas and perspectives that is central to the educational enterprise. We are also committed to encouraging students—and all people—to be exposed to, and think critically about, sensitive topics and issues. This is an essential element of higher education and necessary to better prepare students for community participation and robust civic engagement. Curricular materials on concepts including but not limited to racism, sexism and classism may be presented and discussed in this class; while students are expected to master course content, it is not expected that students endorse or subscribe to any theory or viewpoint.

AI policy

AI-based assistance, such as ChatGPT and Github Copilot, will be treated the same way as collaboration with other people: you are welcome to talk about your ideas and work with other people, both inside and outside the class, as well as with AI-based assistants. However, all work you submit must be your own. You should never include in your assignment anything that you yourself did not write. You should not copy/paste any code, text, image, etc., generated by an AI system and submit it as your own work. Anything found in your assignment that you did not personally write, whether from another student or an AI-based system, will be treated as an academic misconduct case.

If something is found that could be considered created by an AI-based system, students will not automatically be accused of academic misconduct. In this case, the instructor will talk with the student and verify whether the student actually understands the code and concepts related to the area in question. Students who demonstrate understanding and knowledge of the material during these conversations may be considered to not have committed academic misconduct.

This course is dual listed between UG and GR (Separate Syllabi for UG students and GR students)

Undergraduate courses are primarily divided between lower division courses numbered 1000 and 2000 level courses and upper division courses numbered 3000 and 4000 level courses. Upper division courses are considered progressively more complex in terms of learning outcomes and the demonstration and application of knowledge. If you are in a dual listed course with both graduate and undergraduate students, ensure that you complete the coursework as outlined by the instructor that is appropriate for your student status.

This course is dual listed between UG and GR (Separate Syllabi for UG students and GR students)

Graduate level courses are considered progressively more advanced, complex, and rigorous in academic content and expectations on student performance than undergraduate courses. Graduate level courses are number based on levels of progressive rigor and content whereas 5000 and 6000 level courses are considered master-level and



7000 to 9000 are considered doctoral-level. If you are in a dual listed course with both graduate and undergraduate students, ensure that you complete the coursework as outlined by the instructor that is appropriate for your student status.

