Bismarck State College

Bismarck State College, an innovative community college, offers high quality education, workforce training, and enrichment programs reaching local and global communities.

Current Semester: Spring 2022

Course: CIS253 PHP

Section: #20169 Online

Credit Hours: 3

Instructor Contact Information:

Amy Helgeson
Tech Center 132D
701-224-5616
amy.helgeson@bismarckstate.edu – I respond to emails M-F 8:30-5.

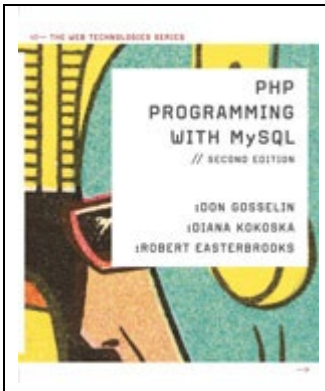
Office Hours: M-Th 1-2 pm, Fri 11-12 pm

I am on-campus 8:30-3 Monday - Friday.

Monday, Tuesday, Thursday, Sunday evenings I will answer emails and can use Bb Collaborate to answer questions virtually. Wednesday is church night so I will not be available.

You must set an appointment with me if you coming to my office (even during my office hours as other students may have already booked that time) or if need my help in the evenings.

Course Materials:

	*PHP Programming with MySQL, 2nd Edition* **by Don Gosselin, Diana Kokoska, and Robert Easterbrooks** ISBN 13: 9780538745840 *Digital Materials (available in Blackboard through the BSC Instant Access Program*):* $37 - this ebook & access will be downloaded into your Blackboard & charged to your BSC Student Account after opt out date of **01/20/22**. You will receive information sent to your BSC email. If you prefer to order a hardcopy of the textbook, please contact the BSC Bookstore at 701-224-5453 or contact Tammy Staudinger at tammy.staudinger@NDUS.edu for pricing and purchase.

Course Description: Students will learn how to design dynamic, data-driven Web pages using PHP. Concepts covered include variables, constants, data types, expressions, operators, functions, controls

structures, strings, forms, files, directories, arrays, databases and MySQL.
Prerequisite(s): CIS154 and CIS250 or department approval.

Course Outcomes:

Course Learning Outcomes	Program Learning Outcomes	Institutional Essential Learning Outcomes (IELOs)
Students will be able to develop dynamic Web pages using PHP.	Develop problem solving strategies and decision making skills to meet requirements and accommodate given constraints for projects.	Evaluative Thought
Students will be able to write and debug code.	Develop problem solving strategies and decision making skills to meet requirements and accommodate given constraints for projects.	Evaluative Thought
Students will use critical thinking skills to complete assignments.		

*** The BSC Institutional Essential Learning Outcomes can be found at**
https://bismarckstate.edu/uploads/0/BSCsInstitutionalEssentialLearningOutcomes.pdf

Unit Objectives:

- Students will have learned the basic structure and syntax of the PHP scripting language.
- Students will have integrated HTML, CSS, and PHP to build interactive Web sites.
- Students will have interfaced with a remote server.
- Students will have used functions to organize their PHP code.
- Students will have used decision-making structures (if, if...else and switch) and loops (while, do...while, for, and foreach).
- Students will have manipulated strings and used regular expressions.
- Students will have handled user input via form processing and URL tokens.
- Students will have performed other Web-based activities such as sending e-mail, uploading files to a server, and managing file directories.
- Students will have manipulated arrays.
- Students will have performed Web-based activities (send e-mail, upload files to a server, manage file directories, authenticate users, handle cookies and sessions, and implement object-oriented programming).
- Students will have used embedded SQL to interact with a database to provide N-tier Web-based applications.
- Students will learn how to debug and error handle.

Assessment Methods: Student achievement will be assessed using lab discussions, lab assignments, review questions, chapter tests and a final project.

Grading: Final grades will be based upon the points accumulated for the lab discussions, lab assignments, review questions, chapter tests and the final project.

The grading scale is as follows:

A	92-100%
B	82-91%
C	72-81%
D	62-71%
F	0-61%

Attendance: BSC's Attendance Policy states "Attendance in classes and laboratories is extremely important, therefore students are expected to attend all class sessions of any course for which they are registered."

With that said, you are expected to "attend" class every week.
1. **You are expected to use this course shell to obtain your assignments, assignment due dates, and how to submit assignments**. Successful students log into the course a minimum of two times per week on a regularly scheduled basis. Schedule a regular "class time" for yourself and be prepared to spend approximately 10 hours per week per course (not all time is online, this includes your viewing of lecture material, reading assignments and project work).

2. Be aware that internet connections are busier at peak times than other times of the day. Failure to submit assignments in a timely manner due to lack of internet connectivity is not excused. **Plan ahead to submit assignments** at less busy times.

3. Since many online learners are full-time workers with careers, I understand that you may be required to travel for work or have big projects with deadlines. However, you are responsible for planning ahead to accommodate these disruptions. **Notify me before impending disruptions to your studies, not after the fact.** You are expected to complete assignments ahead of your "absence" from class.

Makeup: Assignments are due by the due date. This course is part of a technical program designed to prepare you for the workforce. Just as your future clients will expect you to meet deadlines, your instructor and the program does as well.

You are expected to create and maintain a **backup system** which works for you should you experience technical issues. Your backup system should include, at a minimum: A backup USB drive (or other portable storage). Do not depend solely upon your hard drive to save all your work.

Assignments will be graded based upon what was submitted by the due date. Late work will not receive credit partial or full.

Questions to your instructor regarding program code or troubleshooting your code must be received 48-72 hours before the due date. If a question is asked less than 24 hours before the due date, the instructor may not have sufficient time to answer your question. You will not be given additional time to complete the program regardless of any question submitted to the instructor. Asking appropriate and timely questions to supervisors and clients are a necessary skill you must learn and practice.

No late assignments for any reason, including technology/internet issues, will be accepted for full or partial credit. Extended illnesses (1 week and beyond) will need to be documented by a medical excuse in order to receive partial credit. Notification of an extended illness must be received BEFORE the due date. Notifying the instructor after the due date will not allow the assignment to be accepted for credit.

Any questions on this policy should be directed to your instructor.

Course Outline:

Chapter 1: Getting Started with PHP (2 weeks – Jan. 21)

Complete *ALL* example exercises throughout Chapter 1.
Complete Comprehension Check, p. 65 thru 68.
Complete Reinforcement Exercises -

- Exercise 1-3 (SingleFamilyHome.php), p 70-71.
- Exercise 1-4 (DaysArray.php), p 71.

Create a wireframe for the Chinese Zodiac website.
Complete Discovery Project 1-3.

Chapter 2: Functions and Control Structures (1 week – Jan. 28)

Complete *ALL* example exercises throughout Chapter 2.
Complete Comprehension Check, p. 112 thru 116.
Complete Lab Discussion 'Discovery Projects 2-4 and 2-5 for/while loops'**.**
Complete Reinforcement Exercises

- Exercise 2-2 (OddNumbers.php), p 117.
- Exercise 2-4 (GasPrices.php), p 119.

Complete Discovery Projects 2-1 through 2-5, p. 122-123.
Complete Chapters 1-2 TEST.

Chapter 3: Manipulating Strings (2 weeks – Feb. 11)

Complete *ALL* example exercises throughout Chapter 3.
Complete Comprehension Check, p. 172 thru 175.
Complete Lab Discussion 'PerfectPalindrome.php'
Complete Reinforcement Exercises

- Exercise 3-1 (ValidateCreditCard.php), p 175-177.
- Exercise 3-3 (ValidateLocalAddress.php), p 178-180.
- Exericse 3-4 (PerfectPalindrome.php), p. 180.

Complete Discovery Projects 3-1 through 3-5, p. 181-187.

Chapter 4: Handling User Input (2 weeks – Feb. 25)

Complete *ALL* example exercises throughout Chapter 4.
Complete Comprehension Check, p. 219 thru 221.
Complete Lab Discussion 'Paycheck.php'
Complete Reinforcement Exercises

- Exercise 4-4 (Paycheck.html, Paycheck.php), p 228.

Complete Discovery Projects 4-1 through 4-5, p. 229-231.
Complete Chapters 3-4 TEST.

Chapter 5: Working with Files and Directories (2 weeks – Mar. 11)

Complete *ALL* example exercises throughout Chapter 5.
Complete Comprehension Check, p. 285 thru 288.
Complete Discovery Projects 5-1 through 5-6, p. 292-297.

Chapter 6: Manipulating Arrays (2 weeks – Apr. 1)

Complete *ALL* example exercises throughout Chapter 6.
Complete Comprehension Check, p. 366 thru 369.
Complete Discovery Project 6-4, p. 378-379.
Complete Chapters 5-6 TEST.

Chapter 7: Working with Databases and MySQL (1 week – Apr. 1)

Complete *ALL* example exercises throughout Chapter 7.
Complete Comprehension Check, p. 435 thru 438.
Complete Discovery Projects 7-1 through 7-5, p. 443-445.

Chapter 8: Manipulating MySQL Databases with PHP (2 weeks – Apr. 22)

Complete *ALL* example exercises throughout Chapter 8.
Complete Comprehension Check, p. 483 thru 487.
Complete Discovery Projects 8-1 through 8-5, p. 493-495.
Complete Chapters 7-8 TEST.

Chapter 10: Intro to Object Oriented Programming (2 weeks – May 6)

Complete *ALL* example exercises throughout Chapter 10.
Complete Comprehension Check, p. 601 thru 604.
Complete Discovery Projects 10-1 through 10-5, p. 604-611.
Complete Chapter 10 TEST.

FINAL PROJECT: Completed 'Chinese Zodiac' (due: Friday, May 6th)

Institutional Syllabus: The Institutional Syllabus provides additional information related to courses at Bismarck State College. The Institutional Syllabus can be found at https://bismarckstate.edu/uploads/33/InstitutionalSyllabus.pdf

Software Required: You can use **any HTML editor** to type/edit your PHP, HTML and CSS code, however, you will need access to software with file management features as you will need to upload your assignments to your account at a2hosted.com for testing and correction - for on-campus students you can use Adobe Dreamweaver in Tech Center classrooms 118 and 120. Another option for FTP upload is FileZilla - https://filezilla-project.org/

Web Server: Each student will be assigned their own account at a2hosted.com
An email with ftp and account information will be **sent within the first week** of the course.
*If you prefer to use another hosting service that is fine just make sure they support both PHP and MySQL.

Lab Discussions: Each lab discussion assigned is **worth 10 points**.
Post pseudocode (in your own words) of the lab assignment assigned.

Review Questions: Type answers for all questions in either MS Word or NotePad and upload them to the "Review Questions" dropbox for that chapter.

Lab Assignments: These are worth 10 points each.
You will need to upload all projects to your account on the Web server for **testing** and correction.
Please create chapter directories for each chapter before uploading assignments.

Lab assignments that do not function as required on the server will automatically be graded at 0% (0/10). Therefore, it is important that you complete your work a few days before the due date so that I am given ample time to help you debug. **If you need my help in debugging, you MUST submit your code to the server and then either email (or text me). Please do so within 48-72 (2-3 days) before the due date. I will not debug past 2 p.m. on the day of the due date.** Testing and debugging are essential skills to obtain!

Lab Assignments will NOT be graded in advance of any due date.

Chinese Zodiac website: At the end of each chapter, you will apply the concepts you have learned into a single, on-going project - the Discovery Projects in your text. When completed, this project will be a comprehensive website that demonstrates application of many of the PHP concepts covered in the textbook.

Topic: 'Chinese Zodiac' - a scheme that relates each year to an animal and its reputed attributes, according to a 12-year cycle. It has wide currency in several East Asian countries besides China and Taiwan.

This project is **worth 100 points**.

Guidelines and the grading rubric are posted to the left under the **'Chinese Zodiac'** link.

You will be required to create a **Yuja Video Recording** that steps through your website showing grading rubric requirements.

Due date is **Friday, May 6th.**
Project will be published to your a2hosted.com account.
Please upload to the '**zodiac**' directory.

Chapter Tests: There will be a test given for every 2 chapters covered. They will be a combination of multiple choice, true/false and essay.

Extra Credit: No extra credit is offered in this course.

FINAL WORDS: Please don't feel that you cannot ask me questions. My office door is always open to you. My work phone has voice mail, should I not be available, and my e-mail is checked often. I am here to assist you in your learning experience so please contact me with any question you may have!

Syllabus Updates: The instructor reserves the right to change the syllabus for this course as circumstances require.
You will be notified via posted announcements in Blackboard of any updates.