INSTRUCTOR: Michael Kelley
Office: MTC 203
Phone: 410.334.2835
mkelley@worwic.edu

Office Hours:
Tue & Thr: 8:30 AM – 10:30 AM
Monday: 3:00 PM – 4:00 PM

COURSE DESCRIPTION:
This course emphasizes database interaction with SQL and MySQL, the fundamentals of
programming with databases, application techniques, and security. These skills are the foundation
to managing database backed websites, or any relational database application. Students gain
practical experience in the laboratory through a database application language. Prerequisite:
CMP 104 and CMP 130. *This course is usually offered in the fall.*

COURSE MATERIALS:

Materials:
- A Computer with Windows XP or greater with access to the Internet.
- Microsoft Office 2003 or greater (or OpenOffice or LibreOffice, latest version)
- Microsoft Access 2010 (available through MSDNAA)
- Wampserver, Server2Go, or XAMPP (all free downloads)
- Browsers I.E., Firefox, Chrome, Opera, Safari (latest version of each)

Skills:
- Excellent knowledge of the Internet and computers.
- Excellent knowledge of the Microsoft Windows OS.
- Successfully completed CMP 104 and CMP 130
- Able to download and install software independently.
- Be able to work independently and motivated to complete assignments in a timely basis.
- Be able to access the Blackboard Course Management System.

**Blackboard** is being used as a supplemental tool for this course. To access course content in
Blackboard you need to have access to a computer with an Internet connection. Computers are
available on campus in BH 217, FOH 305, HH 100, GH 204 and AHB 108.

Please follow these directions to access course syllabus and other materials posted for this
course:

**Login Information:**
1. From Wor-Wic home page, point to “Quick Links” (top-right) and select “Blackboard
   Login”.
2. Enter your Wor-Wic user ID and password (same as your Wor-Wic email user ID and
   password).
COURSE OBJECTIVES: Each student will be able to:

<table>
<thead>
<tr>
<th>Course Objectives</th>
<th>Assessments Goals</th>
<th>Assessment Strategies</th>
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</thead>
<tbody>
<tr>
<td>1. Use PHP to send data from a database to a web browser. (GEO 7)</td>
<td>Create and Execute a PHP script&lt;br&gt;Demonstrate the use of variables and strings&lt;br&gt;Identify key pieces of an HTML form relate to PHP&lt;br&gt;Handle HTML form data in a PHP script</td>
<td>Exam questions, quizzes, and graded lab exercises.</td>
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<tr>
<td>2. Create databases using database management software. (GEO 7)</td>
<td>Describe and implement elements of a MySQL database&lt;br&gt;Access a MySQL database using the mysql client and phpMyAdmin&lt;br&gt;Create, view, and edit a database</td>
<td>Exam questions, quizzes, and graded lab exercises.</td>
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<tr>
<td>3. Create Advanced Database Design (GEO 7)</td>
<td>Normalize a database to 3NF&lt;br&gt;Use primary and foreign keys&lt;br&gt;Identify relationships between tables&lt;br&gt;Identify and use JOINs</td>
<td>Exam questions, quizzes, and graded lab exercises.</td>
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<td>4. Implement common programming techniques with error handling (GEO 7)</td>
<td>Identify different types of errors in PHP&lt;br&gt;Connect to a MySQL database and access errors&lt;br&gt;Identify and use common programming practices</td>
<td>Exam questions, quizzes, and graded lab exercises.</td>
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<tr>
<td>5. Create Web Application Development (GEO 7)</td>
<td>Using php to work with files from HTML forms&lt;br&gt;Create and validate a login form&lt;br&gt;Validate user's credentials against a database</td>
<td>Exam questions, quizzes, and graded lab exercises.</td>
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<tr>
<td>6 Create appropriate security methods (GEO 7)</td>
<td>Validate data by expected type&lt;br&gt;Prevent spam being sent through PHP&lt;br&gt;Recognize potentially problematic characters used to send spam</td>
<td>Exam questions, quizzes, and graded lab exercises.</td>
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<td>7. Describe additional programming techniques used with databases (GEO 7)</td>
<td>Identify what Perl-Compatible Regular Expressions are&lt;br&gt;Explain what jQuery is and how it fits into Web development&lt;br&gt;Identify how OOP compares to procedural programming</td>
<td>Exam questions, quizzes, and graded lab exercises.</td>
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This course satisfies GEO 7
COURSE GUIDELINES
The course will be 2 lecture and 2 laboratory hours each week. The lecture portion will give the student theory of computing. Laboratory hours are observed to give the student a chance to practice each lesson presented. Lab Exercises are monitored and evaluated during lab hours.

COURSE EVALUATION
1. Quizzes = 10%
2. Final Exam = 20%
3. Electronic Lab Assignment = 10%
4. Laboratory = 20%
5. Message Board Project = 10%
6. User Registration Project = 15%
7. E-Commerce Project = 15%

TOTAL 100%

Letter grade will be assigned as follows:
A = 90-100% – Excellent – An ‘A’ denotes intellectual initiative as well as high academic achievement.
B = 80-89% points – Good – A ‘B’ denotes above average completion of course requirements.
C = 70-79% points – Average – A ‘C’ denotes a satisfactory understanding of course principles and techniques.
D = 60-69% points – Poor – A ‘D’ denotes marginal understanding of course principles and techniques.
F - Less than 60% – Unacceptable – An ‘F’ denotes that course requirements and standards were not met.

I do not GIVE you a grade, you EARN a grade.

ATTENDANCE POLICY
Absence/Lateness: NOT ALLOWED
NO MAKEUP TESTS
If absolutely necessary for a very good reason (death, illness) please:
NOTIFY ME AT (410) 334-2835 or email: mkelley@worwic.edu
ARRANGE TO GET NOTES FROM ANOTHER STUDENT
SET UP MEETING WITH ME DURING OFFICE HOURS OR APPOINTMENT

There are only 26 learning class periods, and 27 sessions total. School is like a job. It is a commitment and absence or lateness will not be tolerated as it would not be tolerated in the workplace. If you miss or are late for classes, you miss important material and you will fall behind. It is YOUR RESPONSIBILITY to make up any missed class work.

ASSIGNMENT POLICY
All Homework, Lab Exercises and Reading Assignments MUST be submitted on time. NO CREDIT FOR LATE WORK. If you do not do your homework and reading, you will not be able to keep up with the class. I will not slow down to pick up students who are not committed to doing reading and homework as assigned. It is YOUR RESPONSIBILITY to make up any missed work even if you will not receive credit.

QUIZZES and TESTS
All Tests will be based on the Text, Labs and Lecture Material. A final assessment will be a teacher made comprehensive final exam (summative). NO MAKEUP TESTS OR QUIZZES
The Final exam will be given at a testing center for online classes or at the scheduled day and time in the classroom and will last two hours. There will be two components to each test. The first component is a Closed Book exam, usually multiple choice questions similar to the Tutorial...
Quizzes. The second component is an open book exam that will test the students programming skills. This use of a computer MAY NOT be required.

**ACADEMIC HONESTY POLICY**

Students are required to maintain a high level of academic performance. Cheating and plagiarism are defined in Wor-Wic's Student Conduct Policy (appendix of College Catalog).

*What is Obvious and Malicious Plagiarism?*

1. **Cut & Paste from a source (not on Works Cited at all);** whole sentences and / or paragraphs not cited/quoted.
2. **Source information is not cited and no attempt has been made to cite it (in-text or on Works Cited/References page);** some information from other sources is cited, but some is not (not on Works Cited/References page either)
3. **Source information is obviously used (paraphrased or quoted) but there are NO in-text citations AT ALL;** either quoted material or material that obviously is not common knowledge.
4. **Submitting another student's paper as one's own;** This is also a serious Violation of Academic Values for Cheating (A), Facilitating Academic Dishonesty (C), and Violations of Civil Conduct for Disorderly Conduct, all as defined in the College Catalog (see current version). Therefore, increased penalties may be applied.

**ELECTRONIC LAB ASSIGNMENT**

The Electronic Lab Assignment (ELA) will be assigned at the first class meeting. You will be assigned a topic and a due date at that time. You are responsible to complete this assignment on time and failure to do so may result in the failure of the course. The ELA is a requirement for all courses by Wor-Wic Community College.

If you need help in writing your ELA, please utilize the writing center at Wor-Wic. You can schedule an appointment online. Go to the Wor-Wic Web Site at www.worwic.edu and the Click on Current Students. Then select Learning Resources and the Writing Conferences. Limited time slots are available so an appointment is required.

**EMERGENCY INFORMATION STATEMENT**

In the event of severe inclement weather or other emergency, information about the closing of the college will be communicated via e2Campus and the College’s website. Faculty will communicate with students about their courses and course requirements, such as assignments, quiz and exam dates, and class and grading policies, via Blackboard. Students will be responsible for completing all assignments in accordance with class policies.

*Required statement concerning use of academic integrity and computer usage policy:*

All students logging into Blackboard affirm that they understand and agree to follow Wor-Wic Community College policies regarding academic integrity and the use of College resources as described in the college catalog. Wor-Wic Community College considers the following as violations of the computer usage policy:

- Using the campus computing network and facilities to violate the privacy of other individuals.
- Sharing of account passwords with friends, family members or any unauthorized individuals

Violators are subject to college disciplinary procedures.
SERVICES FOR STUDENTS WITH DISABILITIES
Wor-Wic provides reasonable accommodations for students with disabilities, in compliance with the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973. If you are in need of accommodations, please contact the counseling office at (410) 334-2899. For more information, see Wor-Wic's Services for Students with Disabilities web page.

NO CELL PHONES PERMITTED IN CLASS.

Grading Rubric

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>F</th>
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<tbody>
<tr>
<td>Practical (Use of technology to obtain information GEO 7)</td>
<td>Each assignment demonstrates an understanding of the objective. The correct use of commands and syntax is evident. Assignments always meet and exceed stated requirements.</td>
<td>Most assignments demonstrate an understanding of the objective. The correct use of commands and syntax is evident. Assignments meet and usually exceed stated requirements.</td>
<td>Some assignments demonstrate an understanding of the objective. The correct use of commands and syntax is usually evident. Assignments meet the stated requirements.</td>
<td>Assignments incomplete or missing. Shows little or no effort in assigned work. Assignment does not meet stated requirements.</td>
</tr>
<tr>
<td>Theory (Use of Technology to communicate information GEO 7)</td>
<td>Each of the problems/answer s is accurate and demonstrates understanding of the objective. Well formatted and saved in the appropriate file format. Work always exceeds stated requirements.</td>
<td>Most of the problems/answers are accurate and demonstrates understanding of the objective. Well formatted and saved in the appropriate file format. Work usually exceeds stated requirements.</td>
<td>Some of the problems/answers are accurate and demonstrates understanding of the objective. Formatted and saved in the appropriate file format. Work meets stated requirements.</td>
<td>Problems/answers usually show no understanding of the objective. Work does not meet the stated requirements.</td>
</tr>
</tbody>
</table>
Date  Topic
Week 1  W – Introduction and Appendix
Week 2  M – Chapter 1 – Introduction to PHP
       W – Chapter 2 – Programming with PHP
Week 3  M – Chapter 3 – Creating Dynamic Web Sites
       W – Chapter 4 – Introduction to MySQL
Week 4  M – Chapter 5 – Introduction to SQL
       W – Chapter 6 – Database Design
Week 5  M – Chapter 7 – Advanced SQL and MySQL
       W – Chapter 8 – Error Handling and Debugging
Week 6  M – Chapter 9 – Using PHP with MySQL
       W – Chapter 10 – Common Programming Techniques
Week 7  M – Chapter 11 – Web Application Development
       W – Chapter 12 – Cookies and Sessions
Week 8  M – Chapter 13 – Security Methods
       W – Chapter 14 – Perl-Compatible Regular Expressions
Week 9  M – Chapter 15 – Introducing jQuery
       W – Chapter 16 – An OOP Primer
Week 10 M – Chapter 17 - Example: Message Board
       W – Wrap up Project
Week 11 M - Chapter 18 – User Registration
       W – Wrap up Project
Week 12 M – Wrap up Project
Week 13 M – Chapter 19 – E-Commerce
       W – Wrap up Project
Week 14 M – Wrap up Project
       W – Review