

Web and Distributed Programming

Session: Week 1 Session 1

Instructor: Eric Pogue



Agenda:

1. Friendly Conversation & Good Natured Banter... let's make sure that everyone gets a good seat where they can hear and speak comfortably
2. Welcome & Introductions*
3. Review Course Syllabus
4. Introduce this week's Learning Objectives
5. Begin Exploring Distributed Computing and the World Wide Web
6. Assignments, Wrap-up, and Final Comments

Discussion & Questions welcome at any time... please be present with no phones or email during our discussion time

Welcome & Introductions

This is:

Web and Distributed Programming
CS24700
MWF 2pm in Room AS-104-A

And I am:

Eric Pogue

Introduction Topics:

Full and Preferred Name
Family, Home, College background
Programming experience
Likely programming environment
Top two or three things that you would like to get out of this class
Hobby or two
Unique fun fact about yourself

Introduction – Please Introduce Yourself

Full and Preferred Name:

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Family, Home, College background:

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Programming experience:

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Hobbies:

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Top two or three things that you would like to get out of this class

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-
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Fun Fact:

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Welcome & Introductions

Full and Preferred Name:

Eric Pogue

Eric, Mr. Pogue, or Professor

Family, Home, College background:

Married with four+ children, recently relocated from Davenport, IA to Chicago area

Undergraduate in CS and Masters in Business... teaching online/evening for many years

Programming experience:

Decades in the industry as a developer, architect, project manager, manager, vp

Part of many teams that have delivered products to ten's of millions of customers globally

Parsons Technology, Intuit, The Learning Company, Jasc Software, and John Deere

... and currently working on a startup with my oldest son

Welcome & Introductions

Likely programming environment

Personal Laptop/Tablet, Windows 10, Chrome browser, and Visual Studio Code text editor

Hobbies:

Wilderness Canoeing & Camping (Quetico) and Triathlons

Top two or three things that you would like to get out of this class

- **help each of you be successful in this class**
- **explore software development techniques together and motivate you to look deeper**
- **and for us to find a little enjoyment and fun along the way***
- **... oh yes, and it would be wonderful if I could help you build something that made you proud during the semester**

Fun Fact:

At one point I had the very dubious “honor” or being the most traveled John Deere employee to India with just over 40 trips over 5-6 years

CPSC-24700 Web and Distributed Programming Course Syllabus

MWF 2pm-2:50pm, Room AS-104-A

Instructor – Eric Pogue

Office location:	Virtual [link]
Office hours:	Monday noon-1pm and Thursday 11-noon (and by appointment)
Phone:	331-551-8085
Email:	epogue@epogue.com or epogue@lewisu.edu

Virtual Meeting Information – Eric Pogue

Virtual Meeting and Lecture Information:

Join the meeting at: <https://join.me/ericpogue>

On a computer, use any browser. Nothing to download. I recommend using Chrome or Firefox.

On a phone or tablet, launch the join.me app (<https://join.me/app>) and enter meeting code: ericpogue

You should be able to utilize your speaker and microphone on your computer to participate. Otherwise, you can get audio via your phone.

Dial-in Number: (646) 307-1990

Access Code 332-234-179#

Course Objectives

On the successful completion of this course we will be able to:

1. Understand the ideas of Distributed Computing & the World Wide Web
2. Create web pages with HTML5 and CSS
3. Utilize a cloud based computing platform (Microsoft Azure) to host a basic website
4. Understand the best Web design practices
5. Create dynamic and interactive web sites using JavaScript
6. Understand XML and Web services
7. Understand basic database concepts and make simple SQL queries
8. Write PHP scripts to process forms and interact with databases
9. Understand the basics of the various software development lifecycle processes
10. Provide an overview of Perl, Java, and Ruby
11. Understand the Hadoop framework and MapReduce programs... or alternatively the Angular JS JavaScriptJS framework

Textbook

Programming the World Wide Web 8th Edition, Robert W. Sebesta, Addison-Wesley, 2015
(ISBN 978-0-13-377598-3) [\[link\]](#)

Development Environment/Tools

To successfully complete this course, you will need a:

- Windows, Macintosh, or Linux / Unix computer and a place to store programming files
- Web browser
- Text editor
- FTP client
- Microsoft Azure (or alternative website hosting) account

Note that class examples we be done primarily on Windows 10 using the Chrome browser, Microsoft Code editor, the FileZilla FTP client, and the Azure cloud service.

Course Requirements

Projects

You will have 6 programming projects due during the semester. I consider these projects to be the most important part of the class. The purpose of these assignments is for you to be able to apply the knowledge learned from the lectures and readings to develop concrete real-life programming solutions. You are welcome to suggest alternative projects or changes to the project assignments.

Presentations/Demos

At least once during the semester you will be asked to demo your project and provide an overview how it was developed. This is a time to share and appreciate each other's work. It is intended to be an interactive, positive, and fun experience. It is each of our responsibility to make sure it works out that way for the person presenting and for the group as a whole.

Lectures/Labs

The course will consist of interactive lectures and labs times where we will work on exercises. Please come ready to participate and to do your part in creating an enjoyable and interactive environment. If you could arrive a minute or two early, silence your phone, and refrain from email/messaging during this time it would be greatly appreciated

Participation in lectures/labs is required; however, I sincerely hope that you will be there and be fully present because you find the experience to be valuable and enjoyable. We each have an obligation to make our time together interesting and valuable.

Quizzes

There will be 6 quizzes posted on BlackBoard throughout the semester. The main purpose of these quizzes is to test your understanding of material covered by the lectures and the reading materials. You will take these quizzes on your own time through BlackBoard by the required due date. Each quiz consists of 5-10 true/false, multiple choice, or fill-in-the-blank type questions. You will have exactly 20 minutes to complete each quiz. You may retake the quiz twice, but you may have different questions. Your grade will be based on the quiz with the highest score.

Exams

There will be two in-class midterm exams and a final exam. In case of the second midterm and the final, the exam will focus mainly on material covered since the last exam, but may include questions from material covered by previous exams.

Feedback

Your sincere feedback is requested throughout the semester. We will be meeting for several months which should allow us to make continuous improvement adjustments to the course. Your participation in the final course evaluation survey is also valued/requested; however, the higher priority is for us to make this semester the best it can be by adjusting as needed.

Grading Policies

Your final grade in the course will be based on the following:

Projects	40%
Presentation/Demo	10%
Quizzes	10%
Midterm Exam 1	10%
Midterm Exam 2	10%
Final Exam	20%

Final course letter grade will be determined using the following scale:

A	94-100	C	74-76
A-	90-93	C-	70-73
B+	87-89	D+	67-69
B	84-86	D	64-66
B-	80-83	D-	60-63
C+	77-79	F	59 and below

Key Drop Dates:

Friday, Sep 1: Last Day to Drop Fall Class with 100% Refund

Friday, Sep 8: Last Day to Drop Class at 50% Refund

Friday, Nov 3: Last Day to Withdraw from 16-Week Course with a "W" Grade

Course Policies

Class **attendance is mandatory**. It is your responsibility to know what goes on in class. Students must turn in all assignments and take all scheduled tests. Extensions for assignments and make-up tests will not be given. **Late assignments will not be accepted**

You will need to regularly check BlackBoard for any new announcements or changes to the course. I may post an announcement about the exam day and time or the programming assignment, etc.

Any form of plagiarism will result in a severe consequence for all parties involved. Please see the “Lewis University Copyright and Intellectual Property Guidelines” document [\[link\]](#).

Specifically for this course, the policy is that you are not allowed to look at anyone else’s code to allow someone to look at your code. I reserve the right to use code plagiarism detection software to check for plagiarism occurrences. In any situation in which I have reason to believe that you have copied program code or allowed anyone else to use your code, you will receive, at the minimum, a grade of zero for that assignment and possibly an F grade for the entire course. So, while you may and in fact are encouraged to discuss the assignments with other students, you need to be careful to make sure you write and understand your own code. The same expectations exist for various other course content include quiz and test questions/answers.

How to Be a Successful Programmer

Top-ten list on how to be a successful programmer, and successfully complete course project:

1. Start early on project assignments
2. Establish a physical work environment that allows you to focus for extended periods of time
3. Become comfortable with your development environment/tools
4. Read or re-read the project assignment and related materials
5. Suggest changes to the assignment if you feel there is a better (or more entertaining) way
6. Save and deploy working versions of your project regularly... this allows you to experiment without risking what you have already accomplished
7. Ask for help if you are stuck... often simply articulating the problem/question will lead you to finding your own answer
8. Look for similar examples... but write your own code that you understand
9. Come to class and participate in class exercises... ask questions during or after class
10. Review the textbook and review the lecture slides

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Hobbies:

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Top two or three things that you would like to get out of this class

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Fun Fact:

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9. Understand the basics of the various software development lifecycle processes
10. Provide an overview of Perl, Java, and Ruby
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Distributed Computing & the Web

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Wrap-up

Wrap-up:

I will be available after class if you need anything

Please turn in your Introduction papers – **Thank you for participating!**

Assignment

Assignment (before next class):

- Review Syllabus thoroughly
- Read Ch.1.1 through 1.5 of Programming the World Wide Web 8th Edition, Robert W. Sebesta
- Prepare for Wednesday Lab by verifying access to:
 1. Personal laptop or a lab computer
 2. Web browser
 3. Text editor
- Come ready to discuss on Wednesday

Final Questions or Comments?

End of Session

Course Number: CPSC-24700

Instructor: Eric Pogue

Sparse header

- Sparse body

Dense Header

1. Describe what a thread is and why it can be useful to distribute tasks among multiple threads
2. Review our multi-threaded application development activities
3. Explain why it is important to synchronize threads that need to share data source access
4. Review Object Oriented Programming benefits including the associating Data & Functionality, Encapsulation & Information Hiding, Inheritance, and Polymorphism
5. Review databases, database servers, and the SQL language
6. Understand how databases support (or don't support) work within a Object Oriented Programming environment
7. Understand client-server (two-tier), three-tier, and n-tier architectures
8. Introduce network programming concepts
9. Understand Web Services network programming
10. Develop a middle-tier data server using network programming

☐ - We covered these topics in week 5/6 and week 1 respectively.

Default Header

- Default Body