This course supports the assessments for WPV1. The course covers 4 competencies and represents 3 competency units.

Introduction

Overview
In this course, you will prepare for the WPV1 assessment (1D0-437 CIW Perl Specialist).

The course provides information about Perl syntax and teaches you how to create Perl scripts to process text files, extract data, generate reports, and connect to databases.

Perl scripting skills, coupled with software development skills, will qualify you to design and develop web-based applications in such diverse industries as finance, education, energy, medicine, and online retailing.

Certification exams attempt to measure test-takers' skills rather than their knowledge of a subject, such as a traditional school's tests would measure. This is particularly true for scripting and programming exams since these are active disciplines. For that reason, this course of study has an emphasis on hands-on exercises. Make sure to complete all exercises during your preparation for the assessment. If you lack the skill to complete them, review the corresponding chapter and try again.

Competencies
This course provides guidance to help you demonstrate the following 4 competencies:

- **Competency 430.3.1: Dynamic Programming**
  The graduate demonstrates the basics of dynamic programming.

- **Competency 430.3.2: Regular Expressions, Hashes, and Arrays**
  The graduate manipulates complex variables and regular expressions.

- **Competency 430.3.3: Flow Control**
  The graduate writes code that uses flow control.

- **Competency 430.3.4: Object-Oriented Concepts**
  The graduate uses object-oriented concepts to create flexible and maintainable programs.

Course Instructor Assistance
As you prepare to successfully demonstrate competency in this subject, remember that course instructors stand ready to help you reach your educational goals. As subject matter experts, mentors enjoy and take pride in helping students become reflective learners, problem solvers, and critical thinkers. Course instructors are excited to hear from you and eager to work with you.

Successful students report that working with a course instructor is the key to their success. Course instructors are able to share tips on approaches, tools, and skills that can help you apply the content you're studying. They also provide guidance in assessment preparation strategies and troubleshoot areas of deficiency. Even if things don't work out on your first try,
course instructors act as a support system to guide you through the revision process. You should expect to work with course instructors for the duration of your coursework, so you are welcome to contact them as soon as you begin. Course instructors are fully committed to your success!

You are encouraged to contact your course instructor team as soon as you begin the course.

Successful students report that working with a course instructor is the key to their success. Course instructors are able to share tips on approaches, tools, and skills that can help you apply the content you are studying. They also provide guidance in assessment preparation strategies and troubleshoot areas of deficiency.

Email your course instructors: cmweb@wgu.edu

Schedule a course instructor appointment

Before you Begin

The information in this section is provided to detail the resources available for you to use as you complete this course.

Learning Resources
The learning resources listed in this section are required to complete the activities in this course. For many resources, WGU has provided automatic access through the course. However, you may need to manually enroll in or independently acquire other resources. Read the full instructions provided to ensure that you have access to all of your resources in a timely manner.

Install a Perl Interpreter on Your Computer

A Perl Interpreter must be loaded onto your computer for completing the lab work after studying each lesson. The lab work will support your studies. You can install Perl and run scripts directly through the command line prompt. To more easily create and run scripts, we recommend downloading and installing Padra, the Perl IDE.

Pacing Guide
The pacing guide suggests a weekly structure to pace your completion of learning activities. It is provided as a suggestion and does not represent a mandatory schedule. Follow the pacing guide carefully to complete the course in the suggested timeframe.

- Pacing Guide: Software II

Note: This pacing guide does not replace the course. Please continue to refer to the course for a comprehensive list of the resources and activities.

Working through the Course

Since the assessment for this course of study is difficult, it is important to work through the
content as given in this course of study.

**Begin Your Lessons**

You will begin working through the [CIW: Perl Specialist](#) learning resource from uCertify.

Proceed through each lesson in the following order:

1. Read the content.
2. Complete assigned labs as you encounter them, and then continue reading content.
3. Complete other assignments as given in the activities below.
4. Complete the optional labs, readings, and videos if so directed.

This topic addresses the following competencies:

- **430.3.1: Dynamic Programming**
  The graduate demonstrates the basics of dynamic programming.
- **430.3.2: Regular Expressions, Hashes, and Arrays**
  The graduate manipulates complex variables and regular expressions.
- **430.3.3: Flow Control**
  The graduate writes code that uses flow control.
- **430.3.4: Object-Oriented Concepts**
  The graduate uses object-oriented concepts to create flexible and maintainable programs.

**Getting Started Video**

Watch the following video tutorial to get started with this course:

*Note: To download this video, right-click the following link and choose "Save as...": [download video](#).*

**Lesson 1: Introduction to Perl**

Access [CIW: Perl Specialist](#) and complete the following:

- Lesson 1 ("Introduction to Perl")

Complete the following labs:

- lab 1-1
- lab 1-2

Complete the Lesson Summary Application Project.

Complete optional lab 1-1

**Optional Activities:**
Read the following in the *Beginning Perl* e-text:

- *chapter 2: Working with Simple Values*

View the following Lynda.com video lessons in *Perl 5 Essential Training*:

- all of lesson 2: General Syntax
- under lesson 3: Understanding values and variables
- under lesson 3: Declaring numeric variables
- under lesson 3: Declaring character string variables

**Lesson 2: Flow Control in Perl**

Access [CIW: Perl Specialist](#) and complete the following:

- lesson 2 ("Flow Control in Perl")

Complete the following labs:

- lab 2-1
- lab 2-2

Complete the Lesson Summary Application Project.

Complete optional lab 2-1

**Optional Activities:**

Read the following in the *Beginning Perl* e-text:

- *chapter 4: Loops and Decisions*

View the following Lynda.com video lessons in *Perl 5 Essential Training*:

- all of lesson 5: Conditional Statements
- all of lesson 6: Loops

**Lesson 3: Regular Expressions in Perl**

Access [CIW: Perl Specialist](#) and complete the following:

- lesson 3 ("Regular Expression in Perl")

Complete the following labs:

- lab 3-1
- lab 3-2
- lab 3-3
Complete the Lesson Summary Application Project

Complete optional lab 3-1

**Optional Activities:**

Read the following in the *Beginning Perl* e-text:

- chapter 5: Regular Expressions
- appendix A: Regular Expressions

View the following Lynda.com video lesson in *Perl 5 Essential Training*:

- all of lesson 9: Regular Expressions

Review the following Quizlet flashcards:

- Regular Expressions

**Lesson 4: Arrays in Perl**

Access [CIW: Perl Specialist](#) and complete the following:

- lesson 4 ("Arrays in Perl")

Complete the following labs:

- lab 4-1
- lab 4-2

Complete the Lesson Summary Application Project.

Complete optional lab 4-1

**Optional Activities:**

View the following Lynda.com video lessons in *Perl 5 Essential Training*:

- under lesson 3: Declaring lists and arrays
- under lesson 3: Pulling slices from arrays

**Lesson 5: Hashes in Perl**

Access [CIW: Perl Specialist](#) and complete the following:

- lesson 5 ("Hashes in Perl")

Complete the following lab:
Complete the Lesson Summary Application Project.

Complete optional lab 5-1

**Optional Activities:**

Read the following in the *Beginning Perl* e-text:

- chapter 3: Lists and Hashes

View the following Lynda.com video lessons in *Perl 5 Essential Training*:

- under lesson 3: Understanding hashes and associative arrays
- under lesson 3: Getting value pairs using the each function
- under lesson 3: Understanding the undef value
- under lesson 11: Defining hash references

**Lesson 6: Subroutines in Perl**

Access CIW: Perl Specialist and complete the following:

- lesson 6 ("Subroutines in Perl")

Complete the following labs:

- lab 6-1
- lab 6-2

Complete the Lesson Summary Application Project.

Complete optional lab 6-1

**Optional Activities:**

Read the following in the *Beginning Perl* e-text:

- chapter 8: Subroutines

View the following Lynda.com video lesson in *Perl 5 Essential Training*:

- all of lesson 10: Subroutines

**Lesson 7: File Input and Output**

Access CIW: Perl Specialist and complete the following:
• lesson 7 ("File Input and Output")

Complete the following labs:

• lab 7-1
• lab 7-2

Complete the Lesson Summary Application Project.

Complete optional lab 7-1

Optional Activities:

Read the following in the Beginning Perl e-text:

• chapter 6: Files and Data

View the following Lynda.com video lesson in Perl 5 Essential Training:

• all of lesson 12: File I/O
Lesson 8: Environment Variables and Command Line Arguments

Access CIW:Perl Specialist and complete the following:

• lesson 8 ("Environmental Variables and Command Line Arguments")

Complete the following labs:

• lab 8-1
• lab 8-2

Complete the Lesson Summary Application Project.

Complete optional lab 8-1

Lesson 9: Packages and Modules in Perl

Access CIW: Perl Specialist and complete the following:

• lesson 9 ("Packages and Modules in Perl")

Complete the following labs:

• lab 9-1
• lab 9-2
Complete the Lesson Summary Application Project.

Complete optional lab 9-1

Optional Activities:

Read the following in the *Beginning Perl* e-text:

- chapter 10: Modules

View the following Lynda.com video lesson in *Perl 5 Essential Training*:

- all of lesson 14: Modules

**Lesson 10: Object-Oriented Perl**

Access *CIW: Perl Specialist* and complete the following:

- lesson 10 ("Object-Oriented Perl")

Complete the following lab:

- lab 10-1

Complete the Lesson Summary Application Project.

Complete optional lab 10-1

Optional Activity:

Read the following in the *Beginning Perl* e-text:

- chapter 11: Object-Oriented Perl

**Lesson 11: Database Connectivity and Perl**

Access *CIW: Perl Specialist* and complete the following:

- lesson 11 ("Database Connectivity and Perl")

Complete the labs:

- lab 11-1
- lab 11-2

Complete the Lesson Summary Application Project.

Complete the following labs:
• optional lab 11-1
• optional lab 11-2
• optional lab 11-3

Optional Activity:

Read the following in the *Beginning Perl* e-text:

• [chapter 13: Perl and Databases](#)

**Lesson 12: Debugging Perl Programs**

Access [CIW: Perl Specialist](#) and complete the following:

• lesson 12 ("Debugging Perl Programs")

Complete the following lab:

• lab 12-1

Complete the Lesson Summary Application Project.

Complete optional lab 12-1

Optional Activity:

Read the following in the *Beginning Perl* e-text:

• [chapter 9: Running and Debugging Perl](#)

**Practice Tests**

Practice tests A and B are designed to help you build your skills and identify areas for targeted study. This recommended approach is to complete both Practice Test A and Practice Test B in Learn Mode. Learn why you missed specific questions (not just the correct answer), and make sure you understand exactly what the code is doing.

Type any code into a text editor and run it. See exactly what the code is doing and experiment with changes to the code to see if the outcome is still the same.

**Post Assessment**

Now that you have completed all lessons and reviewed the material, you should take the Post Assessment in Test Mode to get an indication of your readiness to take the final CIW Certification exam.

*Note: If you are not consistently scoring 85% or higher, do not refer for the assessment. First, get help from your course instructor with any content you do not understand. The test bank for this course is not large and it is very easy to unintentionally memorize answers. Be sure that your score reflects your understanding of the material and is not a result of taking the practice*
**Final Steps**

Congratulations on completing the activities in this course! This course has prepared you to complete the assessments associated with this course. If you have not already been directed to complete the assessments, schedule and complete your assessments now.

**First Attempt Checklist**

One of the many things that makes WGU unique is its competency based education model. If you know the material, all you have to do is prove it by passing the exam. If you can do this, you can accelerate the receipt of your degree.

To make sure you have the best chance possible to pass the exam on your first attempt, the following should be completed before you refer to take it:

1. Complete the reading and hands-on exercises for all 12 lessons of the CIW Perl Specialist resource.
2. Pass the Post Assessment with a score of 85% consistently (at least twice consecutively, or three times total).

If this has been done, and you feel comfortable with all of the concepts presented, you are most likely ready to refer for the first attempt of the exam.

If the first attempt is failed, you will be required to get in contact with the course instructor to see what went wrong and how you can prepare to make sure your second attempt is a success. Once the course instructor feels you are ready to refer for the second attempt of the exam, he or she will approve your second exam referral.

**Assessment Information**

The activities in this course of study have prepared you to complete the WPV1 objective assessment. If you have not already completed the assessment, you will do so now.

**What to Expect on the Exam**

This exam tests whether you can read and interpret Perl code. You will not be required to write any code during the exam, but most of the questions will provide you several lines of code. You should be prepared to see a block of code and answer questions about what it is doing, how to complete the code, or to identify errors.

The practice tests for this course are an excellent study tool to prepare you for the types of questions you may see. Run all of the code you see in practice test questions so that you understand how the language handles each scenario presented. In addition, make sure to complete all of the labs as that will allow you to learn the syntax and details of the language.

**Accessing Objective Assessments**

Complete the following outside vendor assessment:
- CIW Perl Specialist exam (Exam ID: 1D0-437)

For details about this assessment, see the "Assessment" tab in this course.

Note: Remember that you will only receive a voucher for this exam, and you should schedule the actual date directly with the testing center you have chosen.

Note: If you attempt and fail any CIW exam two times in a row, you will be required to wait at least 30 days before attempting the same exam again. Please see the CIW Exam Policies webpage for more information.

Submitting Outside Vendor Assessment Scores

If you completed your assessment at a testing center, follow the directions for submitting a score report on the "Following Outside Vendor Assessments" page.

If you completed your assessment online, follow these directions for submitting a score report.