

## Washtenaw Community College Comprehensive Report

### CIS 161 Introduction to PowerShell Effective Term: Spring/Summer 2019

#### Course Cover

**Division:** Business and Computer Technologies

**Department:** Computer Instruction

**Discipline:** Computer Information Systems

**Course Number:** 161

**Org Number:** 13410

**Full Course Title:** Introduction to PowerShell

**Transcript Title:** Introduction to PowerShell

**Is Consultation with other department(s) required:** No

**Publish in the Following:** College Catalog , Time Schedule , Web Page

**Reason for Submission:** Course Change

**Change Information:**

**Consultation with all departments affected by this course is required.**

**Rationale:** Change to requisites

**Proposed Start Semester:** Winter 2019

**Course Description:** In this course, students are introduced to Windows PowerShell. Students develop basic scripts and learn commands for managing the Windows environment.

#### Course Credit Hours

**Variable hours:** No

**Credits:** 4

**Lecture Hours: Instructor: 60 Student: 60**

**Lab: Instructor: 0 Student: 0**

**Clinical: Instructor: 0 Student: 0**

**Total Contact Hours: Instructor: 60 Student: 60**

**Repeatable for Credit:** NO

**Grading Methods:** Letter Grades

Audit

**Are lectures, labs, or clinicals offered as separate sections?:** NO (same sections)

#### College-Level Reading and Writing

College-level Reading & Writing

#### College-Level Math

Level 3

#### Requisites

**Level II Prerequisite**

CNT 211

or

**Level II Prerequisite**

CNT 223

or

**Level II Prerequisite**

CNT 224

**General Education****General Education Area 7 - Computer and Information Literacy**

Assoc in Arts - Comp Lit

Assoc in Applied Sci - Comp Lit

Assoc in Science - Comp Lit

**Request Course Transfer****Proposed For:****Student Learning Outcomes**

1. Use cmdlets, filters, selection, and piping to manage the Windows environment.

**Assessment 1**

Assessment Tool: Multiple choice, short answer questions and skill tasks on a departmental exam

Assessment Date: Winter 2021

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 70% of the students will score 70% or higher

Who will score and analyze the data: Department faculty

2. Identify appropriate use of simple object-oriented concepts.

**Assessment 1**

Assessment Tool: Multiple choice and short answer questions on a departmental exam

Assessment Date: Winter 2021

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 70% of the students will score 70% or higher

Who will score and analyze the data: Department faculty

3. Use Windows Management Instrumentation (WMI) to control the environment.

**Assessment 1**

Assessment Tool: Multiple choice short answer questions and skill tasks on a departmental exam

Assessment Date: Winter 2021

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 70% of the students will score 70% or higher

Who will score and analyze the data: Department faculty

4. Create basic PowerShell scripts.

**Assessment 1**

Assessment Tool: Multiple choice, short answer questions and skill tasks on a departmental exam

Assessment Date: Winter 2021

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 70% of the students will score 70% or higher

Who will score and analyze the data: Department faculty

### Course Objectives

1. Use cmdlets to manage files and folders.
2. Use cmdlets to manage process and services.
3. Use filters and functions to act on selected objects.
4. Write basic scripts that use the properties and methods of objects.
5. Develop pipelines using different cmdlets.
6. Use .Net objects to interact with the Windows environment.
7. Use WMI to control the local or remote server environment.
8. Write scripts that use string objects.
9. Write scripts that use date-time objects.
10. Write scripts that use various forms of iteration structures including FOR and FOREACH.
11. Write scripts that use the different forms of the IF statement.
12. Write scripts that use cmdlets to updated Active Directory.

### New Resources for Course

#### Course Textbooks/Resources

Textbooks

Don Jones. *Learn Windows PowerShell in a Month of Lunches*, 1 ed. Manning, 2011, ISBN: 9781617290213.

Manuals

Periodicals

Software

#### Equipment/Facilities

Level III classroom

Computer workstations/lab

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
<b>Faculty Preparer:</b> <i>Michael Galea</i>	<i>Faculty Preparer</i>	<i>Oct 27, 2018</i>
<b>Department Chair/Area Director:</b> <i>Philip Geyer</i>	<i>Recommend Approval</i>	<i>Oct 29, 2018</i>
<b>Dean:</b> <i>Eva Samulski</i>	<i>Recommend Approval</i>	<i>Nov 01, 2018</i>
<b>Curriculum Committee Chair:</b> <i>Lisa Veasey</i>	<i>Recommend Approval</i>	<i>Nov 26, 2018</i>
<b>Assessment Committee Chair:</b> <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Nov 28, 2018</i>
<b>Vice President for Instruction:</b> <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Dec 04, 2018</i>

