Course Syllabus

Instructor: Sarah Gothard, Ph.D.
Email: sgothard@bju.edu
Office: Alumni 84

Telephone: (864) 731-0953
                (937) 321-5167 for urgent texts

Office Hours

Daily		8:00-8:50 am
TTh		9:00-9:50 pm
T		10:00-10:50 pm
MWF		1:00-1:50 pm
Daily	(appt. only)	12:00-12:50pm

Textbook

Learn Windows PowerShell in a Month of Lunches Fourth Edition

Catalog Description

Introduction to computer techniques used in a business environment. Topics include office automation via VBA, client-server database
programming and web technologies.

Course Context

The faculty of the Computer Science department has aligned the computer science program with the goals of the Mathematical Sciences Division, BJU's Bible and liberal arts core objectives, and BJU's institutional goals. The goal of the Computer Science department is to align all courses in the Computer Science and Information Technology majors to support one or more of the following departmental goals:

- Design and implement solutions to practical problems

- Use appropriate technology as a tool to solve problems in various domains

- Create efficient solutions at the appropriate abstraction level

- Demonstrate an ability to work effectively in teams

- Demonstrate an ability to communicate technological information effectively both in written and oral forms

- Demonstrate an ability to acquire new knowledge in the computing discipline

- Demonstrate an understanding of social, professional and ethical considerations related to computing

- Demonstrate understanding of fundamental concepts in the student's discipline

- Prepare students for graduate school or to secure employment in a related area

Course Goals

The goals this semester are to

- Develop skills to automate tasks using the Microsoft Office VBA environment,

- Problem solve with scripts using pipelines and Windows PowerShell,

- Gather and communicate information using web technologies such as HTML5, CSS, XML, and XSLT.

Course Objectives

The student will be able to

1. Customize the Office Ribbon.

2. Programmatically interact with MS Word, Excel, and PowerPoint.

3. Design a form with captions, error handling, and context-specific enabling/disabling of fields using VBA or HTML5/JavaScript.

4. Write a PowerShell function that handles input from the pipeline and/or parameters.

5. Write a PowerShell function that automates simple Windows tasks.

6. Convert data from CSV/fixed format to JSON or XML.

7. Fix simple errors in an XML document.

8. Add styling to an HTML page and transform an XML page to accomplish a specified look/feel.

The weekly goal section lists the goals and/or objectives for each week. They are measured in both the weekly quizzes and the tests.

Course Requirements

The grade for this class will be based upon the following categories:

Category	Points	Description
Tests	200	Three tests are scheduled. One will cover Windows PowerShell; the second VBA and HTML basics, and the final will cover web technologies.
Quizzes	100	Expect weekly quizzes.
Assignments	200	Expect weekly assignments.
Professional Development	30	Engage in 2 or more professional development events.

Course Policies

I do not accept late work. Work is due at the deadline. **Late work receives a 0**. Extensions may be purchased with tokens.

Professionalism

Emergencies

Handbook Policies

Attendance Policy

Accommodations for Students with Disabilities

Academic Honesty and Integrity Policy

Generative AI Exceptions

Using generative AI for error-related information or coding library information is permissible if 1) you do not feed in course or textbook content (notes, instructions, solutions, etc.), 2) you do not copy blocks of code (3+ lines of code), and 3) you document which AI tool was used, the prompts used, and the output.

Testing Environment

Course Materials Use

Tentative Schedule

Week	Topic

Week 1 (⅔) 1/14-1/17	LPS Chapters 1/2 LPS Chapters 4/6
Week 2 (1⅓) 1/21-1/24	*MLKj Day, no Monday class* LPS Chapters 5/7 LPS Chapter 3
Week 3 (2⅓) 1/26-1/31	LPS Chapter 8 LPS Chapters 10/11 LPS Chapters 12/9
Week 4 (3⅓) 2/2-2/7	LPS Chapter 13 LPS Chapter 14 LPS Chapter 15
Week 5 (4⅓) 2/9, 2/14	LPS Chapters 16/17 LPS Chapters 19/20 LPS Chapter 21
Week 6 (5) 2/16-2/21	LPS Chapter 23 *Bible Conference, no class WThF*
Week 7 (6) 2/23-2/28	LPS Chapters 24/25/26 WEB1 HTML Basics WEB1 HTML Basics
Week 8 (7) 3/2-3/7	WEB2 Introduction to XML (2 days) VBA1 Working with VBA
Week 9 (8) 3/9-3/14	VBA1 Working with VBA VBA2 Loops and Functions (2 days)
Week 10 (9) 3/16-3/21	VBA2 Loops and Functions VBA3 Word: Content VBA3 Word: Content
Week 11 (9) 3/23-3/28	*Spring Break, no classes*

Week 12 (10) 3/30-4/4	FRMS VBA forms FRMS Office 365 FRMS HTML forms
Week 13 (11) 4/6-4/11	FRMS JavaScript WEB3 Introduction to CSS (2 days)
Week 14 (11⅔) 4/13-4/18	WEB3 Introduction to CSS *University Service Day, no Wednesday class* WEB4 XSLT: Transforming
Week 15 (12⅔) 4/20-4/25	WEB4 JSON and JQ WEB4 JupyterHub and Data WEB5 Web page persistence
Week 16 (13⅔) 4/27-5/2	WEB5 Client-only/Client-server WEB5 Privacy
Week 17 (14) 5/7	Final: Tuesday, May 5 9:30–10:40 a.m.

Course Summary:

Course Summary

Date	Details	Due
Tue Jan 20, 2026	Assignment [APS2	Powershell Chapters 4/6](#)	due by 11:59pm
Fri Jan 30, 2026	Assignment [APS1	Powershell Chapter 3 Lab](#)	due by 9:59am
	Assignment [APS3	Powershell Lab 8](#)	due by 11:59pm
Sun Feb 1, 2026	Assignment [APS5	Powershell Labs 12/9](#)	due by 11:59pm
Mon Feb 2, 2026	Assignment [APS4	Powershell Labs 10/11](#)	due by 11:59pm
Thu Feb 5, 2026	Assignment [APS6	Powershell Lab 13](#)	due by 11:59pm
Tue Feb 10, 2026	Assignment [APS7	Powershell Labs 16/17](#)	due by 11:59pm

Course Summary

Date	Details	Due
Sun Feb 15, 2026	Assignment [APS9	Regular expressions](#)	due by 11:59pm
Tue Feb 17, 2026	Assignment [APSX	Powershell Review](#)	due by 11:59pm
Mon Feb 23, 2026	Assignment [APS8	PowerShell Labs 19/20](#)	due by 11:59pm
Mon Mar 2, 2026	Quiz [T1a	Powershell part I](#)	due by 10am
	Quiz [T1b	Powershell part II](#)	due by 10am
Fri Mar 6, 2026	Assignment [A10: Fix XML errors](#)	due by 11:59pm
Mon Mar 9, 2026	Assignment [A09: Index page](#)	due by 11:59pm
Tue Mar 10, 2026	Assignment [Q10: Fix XML errors](#)	due by 11:59pm
Wed Mar 11, 2026	Assignment [A01: Customize Ribbon](#)	due by 11:59pm
	Assignment [AUI1	MS Forms capability](#)	due by 11:59pm
Thu Mar 12, 2026	Quiz [Q09: HTML Basics](#)	due by 11:59pm
Wed Mar 25, 2026	Assignment [A02: Open text files](#)	due by 11:59pm
Fri Apr 10, 2026	Assignment [T2: VBA w HTML test](#)	due by 11:59pm
Fri Apr 17, 2026	Assignment [A13: CSS](#)	due by 11:59pm
Tue Apr 21, 2026	Quiz [Q11: CSS Basics](#)	due by 11:59pm
Wed Apr 22, 2026	Assignment [A14: XSL Transformation](#)	due by 11:59pm
Thu Apr 23, 2026	Assignment [Q14: XSLT basics](#)	due by 11:59pm
Mon Apr 27, 2026	Assignment [A11: JSON and XML Data](#)	due by 11:59pm
Tue Apr 28, 2026	Quiz [F25: Final Exam](#)	due by 10:50am
Sat May 2, 2026	Assignment [Professional Development](#)	due by 11:59pm

Course Summary

Date	Details	Due
	Assignment [A03: BJU General Wellness Questionnaire](#)	
	Assignment [A03: Email Application obsolete](#)	
	Assignment [A04: Find Answers](#)	
	Assignment [A05: Registration processing](#)	
	Assignment [A06: Powershell log file](#)	
	Assignment [A07: Project CREATE Survey data obsolete](#)	
	Assignment [A07: Using Powershell Help](#)	
	Assignment [A08: Small scripts II](#)	
	Assignment [A08b: Canvas Zip files](#)	
	Assignment [A11: Grab data from StudentCentral](#)	
	Assignment [A12: Toggle field with JS](#)	
	Assignment [A15: Display Offerings Data](#)	
	Assignment [A36: Small scripts I](#)	
	Assignment [EC: Sermon Audio TLS and Other Talks](#)	
	Assignment [Innovation](#)	
	Assignment [Late Work: 50% off](#)	
	Assignment [OBS: Quiz 5 obsolete](#)	
	Assignment [OBS: Quiz 6 obsolete](#)	
	Assignment [Q01: Quiz 1](#)	
	Assignment [Q02: Quiz 2](#)	

Course Summary

Date	Details	Due
	Assignment [Q03: Quiz 3](#)	
	Quiz [Q04: Quiz 4](#)	
	Assignment [Q05	Quiz 5 S21 Replacement](#)	
	Quiz [Q05: Quiz 5](#)	
	Quiz [Q07: Powershell I](#)	
	Assignment [Q08: Regular expressions](#)	
	Quiz [Q13: Javascript](#)	
	Assignment [T1: VBA Take-home Upload](#)	
	Assignment [T2: HTML, XML, CSS, and XSL](#)	
	Assignment [T3: Web Tech / Final](#)	
	Assignment [Tokens Used](#)	

January 2026

Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28 December 2025 28 Previous month	29 December 2025 29 Previous month	30 December 2025 30 Previous month	31 December 2025 31 Previous month	1 January 2026 1	2 January 2026 2	3 January 2026 3
4 January 2026 4	5 January 2026 5	6 January 2026 6	7 January 2026 7	8 January 2026 8	9 January 2026 9	10 January 2026 10
11 January 2026 11	12 January 2026 12	13 January 2026 13	14 January 2026 14	15 January 2026 15	16 January 2026 16	17 January 2026 17

Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
18 January 2026 18	19 January 2026 19	20 January 2026 20 Click to view event details	21 January 2026 21	22 January 2026 22	23 January 2026 23	24 January 2026 24
25 January 2026 25	26 January 2026 26	27 January 2026 27	28 January 2026 28	29 January 2026 29 Today	30 January 2026 30 Click to view event details	31 January 2026 31
1 February 2026 1 Next month Click to view event details	2 February 2026 2 Next month Click to view event details	3 February 2026 3 Next month	4 February 2026 4 Next month	5 February 2026 5 Next month Click to view event details	6 February 2026 6 Next month	7 February 2026 7 Next month

Course assignments are not weighted.