

Professor:	James A. Knisely, Ph.D.
Office:	Alumni 64
Office Hours:	MWF 8:00-8:50 a.m.   MWF 3:00-3:50 p.m. by appointment. TH 8:30-9:45 a.m.   TU 8:00-10:50 a.m. and 1:30-3:50 p.m. electronic (during labs)
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Communication Policy:	For class questions that all students might benefit from, please use the class specific MS Teams team. For other types of questions or notifications, please use the chat feature of MS Teams or email. Most questions involving short answers are responded to within four hours, others within 24 hours. Please email or message if you desire a meeting so that a location can be agreed upon that allows for privacy, help, and appropriate distancing.
Classroom:	MB 203
Meeting:	10:00 - 10:50 a.m. MWF
Credit/Load:	3/3
Textbook(s):	<i>Learn Windows PowerShell 3 in a Month of Lunches</i>

### 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.

## General Policies:

**Assignments can receive full credit only if submitted in full at the beginning of class on the day due.** A penalty, up to 25%, will be applied if the assignment is not turned in on time. No credit is possible after one week. There is NO FREE late policy in this class. If you anticipate trouble on an assignment, see the instructor as soon as possible for assistance.

"In their academic lives, students exhibit integrity by being truthful about their own academic work and properly acknowledging sources of ideas and information. Violating the principle of academic integrity is a serious matter." From [Academic Integrity Committee and Testing Policy](#). All work is to be done individually unless group work is explicitly permitted. On programs, students are encouraged to assist each other in debugging programs, but must exercise care when seeking assistance while writing code. Here are some guidelines:

- **Do not look at another student's program code when seeking assistance.** On the other hand, if another student is seeking help from you, **never** use your own program code as an example. The only acceptable reason another student may look at your code is to help you find a problem in **your** program.
- Do not write program code while another student (or lab monitor) is sitting with you. You may work out **designs in pseudocode on paper** with another student, but **you must write program code by yourself**.
- A signed honesty statement **must** be submitted electronically with each assignment listing the source and nature of help received, even if no help was received. When seeking help, have an honesty sheet **in hand** for the other person to sign. If you are providing help, do not walk away without signing an honesty sheet.

The penalty for violating these guidelines or otherwise participating in unauthorized or unreported collaboration may include academic consequences and severe disciplinary action. Only the instructor, or an agent specifically authorized by the instructor, can provide legal help outside of these guidelines.

## Attendance Policies:

You are expected to be in class and come to class on time. In keeping with official university policy, if you are marked late three times, you will be levied a personal absence. If you are more than twenty minutes late, you will be marked absent. The burden of proof will be on the late student to prove that he was not more than twenty minutes late and that he was actually present. The late policy is in place to encourage students to come to class when circumstances arise which cause one to be unable to arrive on time. However, intentionally arriving just prior to being marked absent shows disrespect to the teacher and the class and *should not be done*.

**For planned absences, you are expected to notify me a week ahead of time;** you can do so by e-mailing me. Written assignments and scheduled tests should be completed **before** your planned absence; please contact me to make arrangements for doing so. It is your responsibility to check with me in advance of an absence to verify what is due.

**For absences due to incapacitating illness or emergency,** you should contact me as soon as you realize you will not be in class in order to make arrangements for making up any graded work without penalty. If you contact me in a timely fashion, you will be able to make arrangements for making up any tests without penalty for the first occurrence. Each subsequent time a test is missed because of incapacitating illness or emergency, an additional 10 percent grade penalty for that test will be incurred.

Naturally, if you are absent on a day when you have been informed in advance that work is due, then late-work policies apply regardless of the nature of the absence.

A student returning from a class absence is expected to perform that day just as though he was never gone. He will be expected to take any quiz or test that is given that day, plus he should hand in any work due that day and work due while he was gone. Furthermore, *It is not acceptable to miss a test simply because the student is unprepared for the test*.

## Copyright Policy:

Copyright-2020 (Knisely) as to this syllabus and all lectures. Students are prohibited from selling (or being paid for taking) notes during the course to, or by any person, or commercial firm, without the express written permission of the professor teaching the course.

## Lecture Schedule:

- [2022 Spring Schedule \(schedule.pdf\)](#)