Course Syllabus

Jump to Today
Tentative Schedule

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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

Course Description

This course provides an introduction to working and living in an increasingly digital world, with an emphasis on teaching students biblical principles for managing their digital lives and critical thinking skills necessary to learn new technology, evaluate online resources, find relevant information pertaining to a given topic and protect their privacy / identity online. 3 credits.

Course Resources

- *Story Telling with Data* (Knaflic)— Available from Library: https://ebookcentral.proquest.com/lib/bju/detail.action?docID=4187267
- *From the Garden to the City (G2C)*. John Dyer. Grand Rapids, MI. Kregel Publications. 2011. 978-0-82-542668-1
- *Blown to Bits* (B2B). Hal Abelson, Ken Ledeen, and Harry Lewis. Upper Saddle River, NJ. Addison-Wesley. 2008. 978-0-13-713559-2 Free PDF

Assignments

Quizzes - Out of class quizzes will be given checking students understanding material.

Labs - Labs are weekly assignments that reinforce concepts covered in lecture while also provided the student exposure to other material.

Presentation - Students will sign up to present a chapter of *From the Garden to the City*. A professional PowerPoint slide deck as well as a recording of the presentation will be submitted to the professor.

Data Visualization Project – Students will analyze several datasets and produce a written report that demonstrates critical thinking skills and the ability to produce appropriate representations/conclusions of the data.

Exams - 3 exams will be given periodically throughout the semester. Exams will check the student's understanding of material covered in labs, lectures, and readings preceding the exam.

Grading

Grading:

Qty	Item	Points	Total
11	Labs	20	220
1	Presentation	30	30
1	Project	100	100
3	Exams	100	300
11	Quizzes	~10	100
3	Other	5	10
Total Points:			760

Scale:

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	<60%

Course Policies

In this course, topics build on the previous topic. Thus, if you fall behind, you will struggle with new content. For this reason, I do not accept late work.

- Work is due *before* the deadline. Work submitted at 11:59 pm is late. Early, impressive work is strongly encouraged.
- Extensions may be purchased with a token.

Professionalism

Emergencies

Handbook Policies

Class Attendance

Accommodations for Students with Disabilities

Technology Usage

Appropriate application of technology is strongly encouraged in this class. Inappropriate use of technology is strongly discouraged.

- Laptops and tablets may be used as needed to engage with course material.
- Cellphone use is prohibited except for scanning QR codes and other class activities.
- Students using technology to answer emails, text, watch videos, play games, browse the internet, scroll social media sites, or work on non-course material will be dismissed from class and reported absent.

Academic Honesty and Integrity Policy

Testing Environment

Course Materials Use

Assignment-Specific Policies

Quizzes are intended to check your understanding of recently presented material. No between-student collaboration is permitted on quizzes; All quizzes are open book, open notes, and open internet.

- Do not share the questions on each quiz with another student.
- Do not share your answers to a quiz with any other student.

Tests are to be completed by yourself with no external resources (notes, books, or the internet).

- Do not have any tabs open besides the tab in which you are taking the tests.
- Do not have any other applications (especially chat programs) open during the test.
- Do not have any electronic devices out during a test.

Labs and Projects provide practice for the course material. Some student collaboration is acceptable on labs; however, under no circumstance are students permitted to share answers or work. If a fellow student is confused on a lab you have completed, you may point out mistakes and describe solutions verbally.

- Do not share your solution with any other student in any form.
- Do not share or receive any files from any other student in any form.
- Do not let another student look over your solution.
- Do not touch another student's mouse or keyboard while helping them.
- No “spoilers”: if an assignment leaves information out for students to figure out, do not share that information. Learning sometimes takes struggling.
- Specifications: assignments that do not meet basic requirements will receiving failing grades and may be re-submitted using a token.

See the Computer Science Department’s Academic Integrity Policy and the BJU Academic Integrity Policy.

Generative AI

Exceptions

In this course, you have permission to use generative AI tools for how-to information, such as how to insert an image or what formula to use. You may also use AI when instructed to do so. Include a note explaining what tool was used and what prompts you gave it. For example, "I used ChatGPT with the prompt, 'Create an Excel formula to add a column of numbers.'"

Getting Help

Start assignments early enough to ask for assistance well in advance. Students struggling with an assignment or concepts in the class are encouraged to ask the instructors for assistance in class, after class, via email, or during office hours.

Curriculum Information

Context

This course supports the following goals of the BJU Core (BJUC):

CS 2. Demonstrate essential communication skills in reading, writing, listening, and speaking.
CS 3. Understand the physical world as God's creation, as a stewardship given to man, and as the physical expression of His glory.
CS 4. Demonstrate critical thinking in analyzing, evaluating, and synthesizing information and ideas.
CS 5. Develop solutions to problems, working independently and with others, through critical and creative thinking.
CS 6. Integrate all of life in a biblical worldview.

This course supports the following computer science program learning objectives (PLO):

- 1. Design and implement efficient solutions to problems in various domains.
- 2. Demonstrate an ability to work effectively in teams.
- 3. Demonstrate an ability to communicate technological information effectively both in written and oral forms.
- 5. Demonstrate an understanding of social, professional, and ethical considerations related to computing.

Course Goals

Specifically, the goals of this course are to

- effectively use technology / internet resources
    - understand the basic components of computing (hardware / files / folders)
    - understand how to effectively and efficiently search for information on an unknown topic
    - understand how to safely use online resources protecting privacy and data
- use technology (office software) to effectively / professionally / creatively communicate
    - Microsoft Word – understand how to perform basic and intermediate tasks
    - Microsoft Excel – understand how to perform basic and intermediate tasks as well as how to represent data

    - Microsoft PowerPoint – understand how to perform basic and intermediate tasks as well as how to use as presentation aid
    - Microsoft OneDrive – understand how to appropriately use shared folders to work in groups
- summarize, interpret, and communicate data
    - understand how to understand the quality of the data based on its source and the information contained
    - understand the limitations of data representation and how to represent data effectively and clearly
    - understand how to communicate information obtained from data to a general audience

Learning Outcomes

Upon successful completion of this course you will be able to

1. articulate a biblical philosophy of technology. (CG1, PLO3)
2. use standard computer applications to retrieve and analyze data, construct models, solve problems, and present the results. (CG2, CG5)
3. demonstrate an understanding of the fundamentals of computers and networks, the digital representation of information, and the social impact of computers and technology. (CG2, CG5)
4. apply a strategy to test solutions and diagnose problems in information technology. (CG3)
5. exhibit algorithmic thinking to program in an object-based language. (CG13)
6. explain safe computing practices derived from information security principles. (CG1)

Tentative Schedule

Week	**Topic**	**Assignments**	**Due**

Week 1 (⅔) 1/14-1/17	Introduction Basics, organization, and collaboration	B2B pg. 4-13 Lab 0	
Week 2 (1⅓) 1/21-1/24	*MLKj Day, no Monday class* Documents (Word)	G2C Intro, Ch. 1 Lab 1	
Week 3 (2⅓) 1/26-1/31	Presentations (PowerPoint)	G2C, Ch. 1 PowerPoint Tutorial Lab 2	**Lab 1** **Lecture Quiz 1** **Presentation Signup**
Week 4 (3⅓) 2/2-2/7	Koans of Bits, Spreadsheets (Excel)	G2C, Ch. 2 Storytelling, Intro Lab 3	**Lab 2** **Book Quiz 1**
Week 5 (4⅓) 2/9-2/14	Test 1 Review Biblical View of Technology	G2C, Ch. 3 Storytelling, Foreword (print pp. ix-x; digital pp. 14-15) Lab 4	**Lab 3** **Lecture Quiz 2**
Week 6 (4⅔) 2/16-2/21	**Test 1** *Bible Conference, no class WThF*	G2C, Ch. 4 Storytelling, Introduction (print pp. 1-17, digital pp. 18-32)	**Book Quiz 2** **Proverbs** **Verses for Lab 8**
Week 7 (5⅔) 2/23-2/28	Data Visualization Generative AI	G2C, Ch. 5 Storytelling, Ch.5 Lab 5	**Lab 4** **Book Quiz 3**

Week 8 (6⅔) 3/2-3/7	Data Presentation Bias	Storytelling, Ch. 6 Lab 6	**Lab 5** **Excel Quiz** **G2C Chapter Presentation**
Week 9 (7⅔) 3/9-3/14	Test 2 Review HTML & CSS	G2C, Ch. 6 Storytelling, Ch. 7-8 Lab 7	**Lab 6** **Quiz: code.org 1**
Week 10 (8⅔) 3/16-3/21	**Test 2** HTML & CSS	G2C, Ch. 7 Storytelling, Ch. 2, 4 Lab: Data Project Project Workday	**Lab 7**
Week 11 (8⅔) 3/23-3/28	*Spring Break, no classes*		
Week 12 (9⅔) 3/30-4/4	The Internet Search Techniques	G2C, Ch. 8 B2B, Ch. 2 Lab 8	**Data Reporting Project**
Week 13 (10⅔) 4/6-4/11	Hardware vs. Software Number Formats	Lab 9 B2B, Ch. 3	**Quiz: code.org 2** **Quiz: HTML, Hex, Decimal, Binary**
Week 14 (11⅓) 4/13-4/18	Secure Communication *University Service Day, no Wednesday class*	Lab 10	**Lab 9** **Quiz: code.org 3**

Week 15 (12⅓) 4/20-4/25	Byte sizes, Compression LMC	G2C, Ch. 9 Lab 11	**Lab 10** **Quiz: code.org 4** **Quiz: Internet, Digital Safety**
Week 16 (13⅓) 4/27-5/2	LMC Final Exam Review	B2B, Ch. 3 G2C, Ch. 10 Lab 12	**Lab 11, Lab 12**
Week 17 (13⅔) 5/4	**Final Exam** Mon., May 4 at 8:00–9:10 a.m.		

Course Summary:

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Date	Details	Due
Sat Jan 17, 2026	Assignment Lab 0: Files, Folders & OneDrive	due by 11:59pm
Thu Jan 29, 2026	Assignment Lab 1: Microsoft Word	due by 11:59pm
Sat Jan 31, 2026	Quiz Lecture Quiz 1: Digital Literacy Concepts, OneDrive, Word Processing	due by 11:59pm
	Assignment Presentation Signup	due by 11:59pm
	Assignment GitHub & Namecheap Registration (3 students)	due by 11:59pm

Course Summary

Date	Details	Due
	Assignment Lab 1: Markdown (201)	due by 11:59pm
Wed Feb 4, 2026	Assignment Lab 2: Presentation (201)	due by 11:59pm
Thu Feb 5, 2026	Assignment Lab 2: PowerPoint	due by 11:59pm
Sat Feb 7, 2026	Assignment Book Quiz 1	due by 11:59pm
	Assignment GitHub & Namecheap Registration (3 students)	due by 11:59pm
Wed Feb 11, 2026	Assignment Lab 3: Excel (201)	due by 11:59pm
Thu Feb 12, 2026	Assignment Lab 3: Excel	due by 11:59pm
Sat Feb 14, 2026	Quiz Lecture Quiz 2: History of Presentations, Design Principles	due by 11:59pm
	Assignment GitHub & Namecheap Registration (3 students)	due by 11:59pm
Mon Feb 16, 2026	Assignment Test 1	due by 9:10am
Sat Feb 21, 2026	Assignment Book Quiz 2	due by 11:59pm
	Assignment GitHub & Namecheap Registration (3 students)	due by 11:59pm

Course Summary

Date	Details	Due
	Assignment Proverbs Verses	due by 11:59pm
Thu Feb 26, 2026	Assignment Lab 4: Interactive Excel	due by 11:59pm
Sat Feb 28, 2026	Assignment Book Quiz 3	due by 11:59pm
	Assignment GitHub & Namecheap Registration (3 students)	due by 11:59pm
Wed Mar 4, 2026	Assignment Lab 5: Data Analysis (201)	due by 11:59pm
Thu Mar 5, 2026	Assignment Lab 5: Advanced Excel	due by 11:59pm
Sat Mar 7, 2026	Quiz Excel Quiz: Spreadsheets: History, Terminology, Formulas, and Notations	due by 11:59pm
	Assignment G2C Chapter Presentation	due by 11:59pm
	Assignment GitHub & Namecheap Registration (3 students)	due by 11:59pm
Wed Mar 11, 2026	Assignment Lab 6: Data Presentation (201)	due by 11:59pm
Thu Mar 12, 2026	Assignment Lab 6: Charts	due by 11:59pm
Sat Mar 14, 2026	Assignment GitHub & Namecheap Registration (3 students)	due by 11:59pm

Course Summary

Date	Details	Due
	Assignment Quiz: code.org Internet part 1	due by 11:59pm
Mon Mar 16, 2026	Assignment Test 2	due by 9:50am
Wed Mar 18, 2026	Assignment Lab 7: Data Communication (201)	due by 11:59pm
Thu Mar 19, 2026	Assignment Lab 7: Analysis and Presentation	due by 11:59pm
Sat Mar 21, 2026	Assignment GitHub & Namecheap Registration (3 students)	due by 11:59pm
Fri Apr 3, 2026	Quiz Lab 8: Paper	due by 11:59pm
Sat Apr 4, 2026	Assignment Data Reporting Project	due by 11:59pm
	Assignment GitHub & Namecheap Registration (Tec 101-1)	due by 11:59pm
Sat Apr 11, 2026	Assignment Quiz: code.org Internet part 2	due by 11:59pm
	Quiz Quiz: HTML, Hex, Decimal, Binary	due by 11:59pm
Wed Apr 15, 2026	Assignment Lab 9: Adafruit (201)	due by 11:59pm
Thu Apr 16, 2026	Assignment Lab 9: Website Creation	due by 11:59pm

Course Summary

Date	Details	Due
Sat Apr 18, 2026	Assignment Quiz: code.org Internet part 3	due by 11:59pm
Thu Apr 23, 2026	Assignment Lab 10: Professional Website	due by 11:59pm
Sat Apr 25, 2026	Quiz Quiz: Internet, Digital Safety	due by 11:59pm
	Assignment Quiz: code.org Internet part 4	due by 11:59pm
Wed Apr 29, 2026	Assignment Labs 10/11: Simon Game (201)	due by 11:59pm
Thu Apr 30, 2026	Assignment Lab 11: Securing Accounts	due by 11:59pm
Sat May 2, 2026	Assignment Lab 12: Little Man Computer	due by 11:59pm
Mon May 4, 2026	Assignment Final Exam	due by 9:10am
	Quiz Final Exam	
	Assignment Final Exam (no charts)	
	Quiz Final Exam Sp25	
	Quiz Final Exam Spring 2025	
	Quiz Final Exam Spring 2025 unfinished	
	Assignment Lab 7: Analysis and Presentation	
	Assignment Test 1 (Section 3)	
	Assignment Test 1 (Sections 1-2) w/ 2^k Rule	

Course Summary

Date	Details	Due
	Assignment Test 1 Copy	
	Quiz Test 2 Fa24	
	Assignment Test 2 Fa24	
	Quiz Test 2 w/ HTML	
	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 Click to view event details
18 January 2026 18	19 January 2026 19	20 January 2026 20	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 Click	30 January 2026 30	31 January 2026 31 Click to view

Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				to view event details		event details
1 February 2026 1 Next month	2 February 2026 2 Next month	3 February 2026 3 Next month	4 February 2026 4 Next month Click to view event details	5 February 2026 5 Next month Click to view event details	6 February 2026 6 Next month	7 February 2026 7 Next month Click to view event details