Tec 101/201 Digital Literacy Spring 2023

College of Arts and Science

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Office Hours: F 8:10 - 8:50 am (937) 321-5167 for urgent texts
MWF 2:00 - 2:30 am
MWF 12:00-12:50 pm (by appointment)

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

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

Assignments

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*. Both an outline of the presentation in Word and a professional Power Point slide set as well as a recording of the presentation will be submitted to the professor.

Data Visualization Project – Students will select from several datasets to analyze 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 students understanding of material covered both in labs, lectures and readings preceding the exam.

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

Grading

Grading:

Qty	Item	Points	Total
11	Labs	20	200
1	Presentation	30	30
1	Project	100	100
3	Exams	100	300
11	Quizzes	100	100
Total Points:		760	

Scale:

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

Course Policies

In this course, topics builds 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 at the deadline. **Late work receives a 0**. Notify me immediately if a situation arises necessitating an **extension**. Early, impressive work is encouraged and may result in extra credit.

Do not share class notes with anyone who is not enrolled in the same class section as you are during the same semester.

Professionalism

University classes are a place to sharpen your professional habits. Arrive on time. Dress appropriately. Engage with the material. Take pride in your work. Build relationships. Encourage growth in others.

University Policies

Handbook Policies

Compliance with student handbook policies is expected during class.

Attendance Policy

You are expected to attend class and be on time: https://home.bju.edu/bju-policies/ Links to an external site.. A partial attendance will be recorded when you miss the beginning or end of a class. If you miss more than 15 minutes of class, you will be marked absent. Students who exceed the 3 allowed absences may be withdrawn from class.

If you need to miss class any reason, please contact me as soon as possible. Assignments and tests should be completed before planned absences.

Accommodations for Students with Disabilities

Students are required under Section 504 to communicate the need for accommodations and provide documentation to the Academic Resource Center Accommodations Office in AL 213. Visit https://success.bju.edu/ Links to an external site.for more information. Students are encouraged to seek an appointment in the first week, as accommodations are not provided retroactively.

Academic Honesty and Integrity Policy

See the Computer Science Department's Academic Integrity Policy: https://cs.bju.edu/academics/policies/academic-integrity-policy/Links to an external site.

Taking credit for someone else's work is unethical in any setting. In a university setting, it undermines the ability of faculty to accurately evaluate your competence, harming you and the reputation of the department. For these reasons, the penalties for academic dishonesty may be severe.

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, 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 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.

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)