



Department of Mathematics, Computer & Information Science

FALL 2022

## CS 7510 COMMUNICATION AND PRESENTATION

**Instructor:** Frank Sanacory

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**Office:** NAB 2043

**Office Hours:** Tuesday 4:00 – 5:00, Thursday 4:00 – 5:30

**Website:** sanacory.net

**Classtime:** 05:40 pm-07:55 pm on Thursday

### Catalog Description:

Emphasis on writing and public speaking skills and data visualization. Application of report writing fundamentals to technical correspondence, technical reports. Detailed analysis of the problem of conveying technical information to technical and non-technical audiences in written, as well as, oral form. The reports will emphasize visuals to make complex data analysis conclusions easily accessible. Term project involving written paper on a technical subject and an oral presentation of the subject in class. 3 cr.

Prerequisite: CS 6110.

Topics to be discussed

- Data Presentation
  - To explore data for the scientist
  - To explain results to the non-scientist
  - Familiarity with presentation software such as Tableau or matplotlib
- Technical writing
- Oral Presentation
- Professional communication

### Course Learning Outcomes

- Produce or edit a visualization
- Communicate to an audience
- Use bias detection software
- Develop skill-sets in Python, and tableau
- Interactive workbooks

### TEXTBOOKS:

**How Charts Lie: Getting Smarter about Visual Information**

by Alberto Cairo

Publisher : W. W. Norton & Company; 1st edition (October 13, 2020)

ISBN-10 : 0393358429

**Data Visualization in Python** by Daniel Nelson

Publisher : Independently published (September 15, 2020)

ISBN-13 : 979-8582486367

**Responsible AI: Implementing Ethical and Unbiased Algorithms** 1st ed. 2021 Edition

by Sray Agarwal, Shashin Mishra  
Publisher : Springer; 1st ed. 2021 edition (September 17, 2021)  
ISBN-10 : 3030768597

#### **COURSE OUTLINE:**

Python Review  
Program KNN from scratch  
Program KMeans from scratch  
Review of Pandas and Numpy using worksheets  
Concurrent with the review I had the students read the Alberto Cairo Book  
Student presentation of Graphics demonstrating principles in good graphics  
Student presentation of web app in plotly dash or streamlit hosted on PythonAnywhere or Heroku  
Responsible AI chapters 1-5

#### **COURSE EVALUATION & GRADING:**

Midterm	30%
Final	35%
Homework/Projects	35%

A	93-100	B+	87-89	C+	77-79		
A-	90-92	B	83-86	C	73-76	F	0-69
		B-	80-82	C-	70-72		

#### **ACADEMIC INTEGRITY POLICY**

As members of the Old Westbury community, students are expected to adhere to standards of honesty and ethical behavior. Plagiarism and other types of academic dishonesty are condemned at all academic institutions. These acts detract from the student's intellectual and personal growth by undermining the processes of higher learning and the struggle with one's own expression of ideas and information.

Good academic procedure requires giving proper credit when using the words or ideas of others.

Plagiarizing means "presenting somebody else's words or ideas without acknowledging where those words and ideas come from" (Ann Raimes, *Keys for Writers*, 7th ed., p.135). Examples include:

- copying material from the Internet or other sources and presenting it as one's own
- using any author's words without quotation marks; using any quotation without credit
- changing any author's words slightly and presenting them as one's own
- using ideas from any source (even in one's own words) without proper credit
- turning in any assignment containing material written by someone else (including tutor or friend); buying work and submitting it as one's own
- submitting the same assignment in more than one class without permission of the instructor

Know what plagiarism is and how to avoid it; for guidance see Raimes or any other college writing handbook.

Other types of academic dishonesty include unauthorized collaboration or copying of students' work (cheating); falsifying grades or other assessment measures; destroying the academic work of another student; the dishonest use of electronic devices; and others. When detected and verified, plagiarism and other academic dishonesty will have serious consequences.

Please note: In this matter, ignorance of the Academic Integrity Policy is never an acceptable excuse.

#### **ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES:**

If you have or suspect you may have a physical, psychological, medical or learning disability that may impact your course work, please contact Stacey DeFelice, Director, The Office of Services for Students with Disabilities (OSSD), NAB 2065, Phone: 516-628-5666, Email: [defelices@oldwestbury.edu](mailto:defelices@oldwestbury.edu).

The office will help you determine if you qualify for accommodations and assist you with the process of accessing them. All support services are free and all contacts with the OSSD are strictly confidential. SUNY/Old Westbury is committed to assuring that all students have equal access to all learning activities and to social activities on campus. <https://www.oldwestbury.edu/academics/support/OSSD>.

### **COUNSELING RESOURCES**

As a college student, there may be times when personal stressors interfere with your academic performance or negatively impact your daily life. If you or someone you know at this college is experiencing mental health challenges, please contact the Counseling and Psychological Wellness Services at 516-876-3053. We're located at the Student Union, Lower Level, Suite 100, and are open Monday to Friday, 9am to 5pm.

The counseling center continues to operate and offer its services to students even at times of social distancing and remote learning. At such times, services will be offered by telehealth, either via video-chats and phone conversations. If you wish to set an appointment during campus closure, please contact us at [counselingcenter@oldwestbury.edu](mailto:counselingcenter@oldwestbury.edu).

The National Suicide Prevention Lifeline also offers help 24/7, and can be contacted at 1-800-273-8255.