

CNMT 100

Section 1

Spring 2022

Course Information

Course Meeting Times: MWF 1:00 – 1:50 pm A224 SCI

Course Description: Explore the foundations of modern computing to include the creation of computational artifacts, the Internet, big data, digital privacy and security, algorithms, databases, programming, business Intelligence and the societal impacts of computing.

This particular section was created for students who have majors within the School of Mathematics, Computing, Physics and Astronomy and the School of Biology, Biochemistry, and Chemistry. This section will focus more on computational thinking, and programming with Python compared to the other sections of the course.

Credits: 3

Prerequisite: none

GEP: none

Textbook & Course Materials

Required Text: Morley, D. (2015). Understanding computers in a changing society. 6th Edition, Stamford, CT: Cengage Learning. ISBN 9781285767710. This is the official text. We will barely use it.

Handouts: Distributed during class and posted on Canvas

Instructor Information

Brad Hinaus
Office: B107 Science
Phone: 715-254-5141 (cell)
Zoom Address:
Email: bhinaus@uwsp.edu

Office Hours:
T 10-12
W 2-3
Th 11-12
F 9-11

Office Hours

You can stop by my office at the times listed above or make an appointment. I warn you that I wander during office hours. Feel free to send me a text if I am not there. If you know you are coming, let me know. If you would like to meet via Zoom, send me a text and we can meet at our class Zoom Address for our meeting.

Zoom Address: <https://wisconsin-edu.zoom.us/j/99652946308>

My Teaching Philosophy

I think the college classroom should reflect basketball practice or music lessons. Mentally picture what basketball practice looks like or what individual music lessons look like. What do you see? Its active, people (the learners) are moving around and doing things. Players or instrumentalists don't spend 100% of their time watching their coach or teacher draw diagrams on a whiteboard and talk continuously. They spend a good portion of their time working on the skills with each. That is what I want us to do, work on our coding skills during class *with each other*. Will we eliminate the lecture? No, but I hope to reduce the amount of time in that mode so we can practice and ask questions. Most often, we will introduce a topic a lecture, then spend the next 1 or 2 lectures using it in coding.

Inclusivity Statement

It is my intention that students from all backgrounds are well served in this course. Backgrounds can include gender, race, orientation, age, disability, religion, culture, and other ways a person identifies. Other backgrounds that give students various perspectives of this course are their current mathematical abilities, their developing problem-solving abilities, past courses, life experiences growing up, classroom environments they have experienced, preferred learning style and more. In this course, it is expected that each other's thoughts and comments be respectfully listened to and/or responded to during class, lab, and discussion. There are numerous ways to have a computer solve a problem. It is also expected during the course times, that students work to assist each other in the learning process.

To help you with difficulties of this class, I am available in scheduled office hours and meeting by appointment. In past semester's I have had standing 1-hour meetings with individual students each week. I am welcome to those. If you would like the hear a different perspective, the STEM Drop-in tutoring is available in CBB 190 (see below) If you have suggestions for me on how to make this class more inclusive between instructor/student and student/student interactions or activities, please let me know.

Grading Policies

Graded Course Activities

Homework and Projects – 60%

You will have regular homework assignments and projects during this course. These activities are designed to help you practice, learn, and apply the course content. You can expect weekly homework in this course. You will also have several larger projects in which you will design and code the program to solve the problem.

Exams – 40%

There will be two exams in this course. Exams will be given in class . You will be allowed to bring in cheat sheet. Details will be given before the exam. Exams will be designed to test your knowledge and understanding of core course concepts. You will only receive one attempt on exams

Participation

Students are expected to participate in all course activities. Not participating in course activity will result in a grade of 0.

Late Work Policy

Be sure to pay close attention to deadlines—you will be able to turn in an assignment late up until the time the instructor grades it. Exams must be taken during the scheduled day in class.

Viewing Grades in Canvas

Points you receive for graded activities will be posted to Grades. Click on the Grades link to view your points.

Letter Grade Assignment

Letter Grade	Percentage
A	93-100%
A-	90-92%
B+	87-89%
B	83-86%
B-	80-82%
C+	77-79%
C	73-76%
C-	70-72%
D+	67-69%
D	60-66%
F	0-59%

Technology

Protecting your Data and Privacy

UW-System approved tools meet security, privacy, and data protection standards. For a list of approved tools, visit this website.

<https://www.wisconsin.edu/dle/external-application-integration-requests/>

Tools not listed on the website linked above may not meet security, privacy, and data protection standards. If you have questions about tools, contact the UWSP IT Service Desk at 715-346-4357.

Here are steps you can take to protect your data and privacy.

- Use different usernames and passwords for each service you use
- Do not use your UWSP username and password for any other services
- Use secure versions of websites whenever possible (HTTPS instead of HTTP)
- Have updated antivirus software installed on your devices

This course requires posting of work online that is viewable only by your classmates. None of the work submitted online will be shared publicly. Some assignments require account creation for online programs. The instructor of this course will not share your academic records (grades, student IDs). Confidentiality of student work is imperative, so you should not share the work of your peers publicly without their permission. By participating in these assignments, you are giving consent to sharing of your work with others in this class and you recognize there is a small risk of your work being shared online beyond the purposes of this course. Examples of additional risks include data mining by the company providing the service, selling of your email to third parties, and release of ownership of data shared through the tool. If you elect to not participate in these online assignments due to confidentiality concerns, then an alternate assignment will be offered to you. **[UWSP Handbook Chapter 9 Section 5]**

Course Technology Requirements

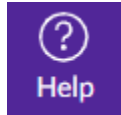
- View this website to see [minimum recommended computer and internet configurations for Canvas](#).
- If you will be using your personal computer, you will need to install the Python programming language on it. There are numerous ways to do this and a variety of editors to use.
-

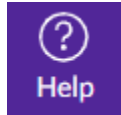
UWSP Technology Support

- Visit with a [Student Technology Tutor](#)
- Seek assistance from the [IT Service Desk](#) (Formerly HELP Desk)

- o IT Service Desk Phone: 715-346-4357 (HELP)
- o IT Service Desk Email: techhelp@uwsp.edu

Canvas Support



Click on the  button in the global (left) navigation menu and note the options that appear:

Support Options	Explanations
<p>Ask Your Instructor a Question Submit a question to your instructor</p>	Use Ask Your Instructor a Question sparingly; technical questions are best reserved for Canvas personnel and help as detailed below.
<p>Chat with Canvas Support (Student) Live Chat with Canvas Support 24x7!</p>	Chatting with Canvas Support (Student) will initiate a <i>text chat</i> with Canvas support. Response can be qualified with severity level.
<p>Contact Canvas Support via email Canvas support will email a response</p>	Contacting Canvas Support via email will allow you to explain in detail or even upload a screenshot to show your particular difficulty.
<p>Contact Canvas Support via phone Find the phone number for your institution</p>	Calling the Canvas number will let Canvas know that you're from UWSP; phone option is available 24/7.
<p>Search the Canvas Guides Find answers to common questions</p>	Searching the Canvas guides connects you to documents that are searchable by issue. You may also opt for Canvas video guides .
<p>Submit a Feature Idea Have an idea to improve Canvas?</p>	If you have an idea for Canvas that might make instructions or navigation easier, feel free to offer your thoughts through this Submit a Feature Idea avenue.

All options are available 24/7; however, if you opt to email your instructor, s/he may not be available immediately.

Self-train on Canvas through the [Self-enrolling/paced Canvas training course](#)

Course Policies

Netiquette Guidelines

Netiquette is a set of rules for behaving properly online. Your instructor and fellow students wish to foster a safe online learning environment. All opinions and experiences, no matter how different or controversial they may be perceived, must be respected in the tolerant spirit of academic discourse. You are encouraged to comment, question, or critique an idea but you are not to attack an individual. Working as a community of learners, we can build a polite and respectful course community.

The following netiquette tips will enhance the learning experience for everyone in the course:

- Do not dominate any discussion.
- Give other students the opportunity to join in the discussion.
- Do not use offensive language. Present ideas appropriately.
- Be cautious in using Internet language. For example, do not capitalize all letters since this suggests shouting.
- Popular emoticons such as 😊 or / can be helpful to convey your tone but do not overdo or overuse them.
- Avoid using vernacular and/or slang language. This could possibly lead to misinterpretation.
- Never make fun of someone's ability to read or write.
- Share tips with other students.
- Keep an "open-mind" and be willing to express even your minority opinion. Minority opinions have to be respected.
- Think and edit before you push the "Send" button.
- Do not hesitate to ask for feedback.
- Using humor is acceptable

Adapted from:

Mintu-Wimsatt, A., Kernek, C., & Lozada, H. R. (2010). *Netiquette: Make it part of your syllabus*. *Journal of Online Learning and Teaching*, 6(1). Retrieved from http://jolt.merlot.org/vol6no1/mintu-wimsatt_0310.htm

Shea, V. (1994). *Netiquette*. Albion.com. Retrieved from: <http://www.albion.com/netiquette/book/>.

Build Rapport

If you find that you have any trouble keeping up with assignments or other

aspects of the course, make sure you let your instructor know as early as possible. As you will find, building rapport and effective relationships are key to becoming an effective professional. Make sure that you are proactive in informing your instructor when difficulties arise during the semester so that we can help you find a solution.

Understand When You May Drop This Course

It is the student's responsibility to understand when they need to consider unenrolling from a course. Sept 14, 2021, with no grade, and Nov. 5, 2021 to receive a W on your transcript. These are posted on the UWSP [Academic Calendar](#). After this period, a serious and compelling reason is required to drop from the course. Serious and compelling reasons includes: (1) documented and significant change in work hours, leaving student unable to attend class, or (2) documented and severe physical/mental illness/injury to the student or student's family.

Incomplete Policy

Under emergency/special circumstances, students may petition for an incomplete grade.

Inform Your Instructor of Any Accommodations Needed

If you have a documented disability and verification from the [Disability and Assistive Technology Center](#) and wish to discuss academic accommodations, please contact your instructor as soon as possible. It is the student's responsibility to provide documentation of disability to Disability Services and meet with a Disability Services counselor to request special accommodation *before* classes start.

The Disability and Assistive Technology Center is located in 609 Albertson Hall and can be contacted by phone at (715) 346-3365 (Voice) (715) 346-3362 (TDD only) or via email at datctr@uwsp.edu

Statement of Policy

UW-Stevens Point will modify academic program requirements as necessary to ensure that they do not discriminate against qualified applicants or students with disabilities. The modifications should not affect the substance of educational programs or compromise academic standards; nor should they intrude upon academic freedom. Examinations or other procedures used for evaluating students' academic achievements may be adapted. The results of such evaluation must demonstrate the student's achievement in the academic activity, rather than describe his/her disability.

If modifications are required due to a disability, please inform the instructor and contact the Disability and Assistive Technology Center in 609 ALB, or (715) 346-3365.

Commit to Integrity

As a student in this course (and at this university) you are expected to maintain high degrees of professionalism, commitment to active learning and participation in this class and also integrity in your behavior in and out of the classroom.

UWSP Academic Honesty Policy & Procedures

Student Academic Disciplinary Procedures

UWSP 14.01 Statement of principles

The board of regents, administrators, faculty, academic staff and students of the university of Wisconsin system believe that academic honesty and integrity are fundamental to the mission of higher education and of the university of Wisconsin system. The university has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Students who violate these standards must be confronted and must accept the consequences of their actions.

UWSP 14.03 Academic misconduct subject to disciplinary action.

(1) Academic misconduct is an act in which a student:

- (a) **Seeks to claim credit for the work or efforts of another without authorization or citation;**
- (b) Uses unauthorized materials or fabricated data in any academic exercise;
- (c) Forges or falsifies academic documents or records;
- (d) Intentionally impedes or damages the academic work of others;
- (e) Engages in conduct aimed at making false representation of a student's academic performance; or
- (f) Assists other students in any of these acts.

(2) Examples of academic misconduct include, but are not limited to: cheating on an examination; collaborating with others in work to be presented, contrary to the stated rules of the course; **submitting a paper (i.e. code) or assignment as one's own work when a part or all of the paper or assignment is the work of another;** submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas; stealing examinations or course materials; submitting, if contrary to the rules of a course, work previously presented in another course; tampering with the laboratory experiment or computer program of another student; knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

Religious Beliefs

Relief from any academic requirement due to religious beliefs will be accommodated according to UWS 22.03, with notification within the first three weeks of class.

Week	Monday	Wednesday	Friday
1	Syllabus	Monte Hall Problem	Cushion
2	Variables, Print	Install Python w/Anaconda	Lab Exercise- Hello World, Strings, Simple Math
3	Strings	Lists	Lab- A "Listed" Phone Number
4	While Loops	While Loops	Lab- Averages with Loops
5	Lab- Calculate Pi	Lab- Calculate Pi	Modules – Random, Math
6	Module – Matplotlib	Lab- Graphing with Matplotlib	Intro to SIR Model of Infectious Disease
7	SIR Model Hand Calc.	Lab- Program SIR	Lab- Graph SIR
8	Test #1	For Loop	For Loops, Lists, Items, and Indices
	Spring Break	Spring Break	Spring Break
9	Lab – Sierpinski Gasket	Lab – Sierpinski Gasket	IF Statements
10	Lab – A Roll of the Dice	User Defined Functions	Lab- Passing Variables and Returning Data
11	Cushion	Lab- Game with Lame Name	Lab – Game with Lame Name
12	File Input and Output	Lab – Benford’s Law	Vote Counting Methods
13	Monte Carlo Methods	Lab- Shall We Play a Game – Chutes and Ladders	Lab- Shall We Play a Game- Chutes and Ladders
14	Cushion	Cushion	Cushion
15	Final Project	Final Project	Final Project

Test #2 During Final Exam Period.

