CIS 201 – Computer Science I
Spring 2021

***Textbooks*:**	Recommended: "*Building Java Programs*, 3rd Edition (2014)" by Reges, Stuart & Stepp, Marty", ISBN-13: 978-0-13-336090-5. ISBN-10: 0-13-336090-3.
Instructor:	Supraja Gurajala, Phone: 315-267-2091 Email : gurajas@potsdam.edu
Office Hours:	Tuesday - 2:00pm - 3:00pm Wednesday - 10:00am to 12:00 noon Thursday - 9:00am to 11:30am Friday - 10:00am to 12:00 noon Discord Text Channel : dr_gurajala_office Discord Voice Channel : Dr. Gurajala_office
Discord Link:	https://discord.gg/GVd3V5KTEm
Class Time/Place:	MWF – 8:00am to 8:50am, Zoom link provided on moodle course page
Lab Time/Place:	M - 4:00 pm to 5:50 pm, Zoom link provided on moodle course page
Final Exam:	Thursday, May.20, 12:30pm - 2:30 pm

Learning Objectives:

CIS 201 is an introductory course to the Java programming language.

Students who have taken this course should be able to:

- Develop solutions to programming problems using control structures and top-down procedural design.
- Identify basic algorithms.
- Write appropriately modularized code that avoids logical redundancies.
- Work effectively together to solve problems.
- Write code that can be easily read and maintained by others.

Lectures:

This is a virtual course taught synchronously. This class meets three times a week MWF at 8:00am on Zoom (link provided on moodle course page). As professionals, we are expected to:

- show up on time;
- be prepared for our collective work;
- be appropriately attired; and
- try to limit distractions in our individual workplaces.

As members of a community, please consider the effects of your actions on your colleagues, just as you would in a physical classroom:

- keep your video on (when possible and as appropriate to the course session); if a video isn't feasible, you are encouraged to attach a picture to your profile in Zoom so that your classmates can get to know you (https://support.zoom.us/hc/en-us/articles/201363203-Customizing-your-profile);
- mute yourself when not speaking; and
- focus your attention on the speaker.

Please let me know if you are having difficulties interacting in class via Zoom, and if there are reasons you cannot follow the above guidelines.

Caring Community:

I recognize that this is an incredibly stressful time for you, your peers, and our community. Please know that there are resources available to you, both on and off campus, to support you during these very uncertain times. Our excellent Counseling Center staff are available to meet with you; more information can be found on their FAQ page accessed at: https://www.potsdam.edu/studentlife/wellness/counseling-center/coping-covid-19-pandemic/counseling-center-faqs. In addition, information on a variety of on- and off-campus resources can be found our Bear Care site: https://www.potsdam.edu/studentlife/wellness/bear-care. You are an incredibly important member of our Potsdam community; please take care of yourself, and each other.

Grading for the Course:

1. ***Weekly Quizzes: 10 %***

   A quiz will be given starting the second lecture of the course. Quizzes take material from previous lectures, labs, meaning, if you don't finish the lab, or revise lecture materials you may not be prepared for the quiz. This will also be counted as your attendance.

2. ***Programming Assignments: 25 %***

   Several programming assignments will be given based on the concepts discussed in lectures. These programming assignments will be the essential part of the course. Programming assignments will be posted on the moodle page along with the due date. Late assignments are penalized at 20% per calendar day that they are late. Your final submitted assignment should represent your individual work; it is, however, acceptable to discuss the solution approach with other students. You will be responsible for keeping track of programming assignments due dates posted on moodle. Assignment submission policies are detailed in a separate section of this document.

3. ***Exams: 40%***
   a. Midterm 1 – 13 %
   b. Midterm 2 – 13%
   c. Final Exam – 14 %

Exam will be closed book and closed notes. Any request for re-grading must be received in email and within 3 days of receiving your graded exam back. Prior notice must be given to your instructor. No make-ups will be granted unless satisfactory documentation is produced to show an extenuating circumstance.

4. Labs: 25%

- ***Lab:*** Monday 3:00pm to 4:50, Will be on zoom and link is provided on moodle page
- ***Lab instructions:*** Labs will be available on Moodle each week under lab course page
- ***Making the Best Use of Lab:*** Each lab will be based on material that was covered in lecture and the online prelab reading.
- ***To prepare for lab:***
    - Attend lectures on zoom
    - Do the assigned homework as we discuss the associated material in class.
    - Print and read the lab instructions.
    - ***Working through the laboratory exercises:*** For a given lab, you will work through the lab exercises as described in the instructions. The laboratory exercises contain checkpoints. When you reach a checkpoint, your lab instructors will check you off.
    - ***Laboratory Grade:*** The lab component of your grade is simply the percentage of checkpoints that you complete over the semester. For example, if you complete 70 out of 80 checkpoints over the semester, your lab grade will be 70/80 = 87.5%.

5. ***Due Dates***

All due dates for the course will be strictly enforced. Prior approval will be required from the instructor for any late submission.

6. Technical Requirements Summary

Hardware*:* The course is being taught virtually, with all participants working remotely. That means that you will need to have the following computer hardware:

- Laptop or desktop computer – This is a programming-intensive course. You will need a computer to be able to do the programming. If you have only a tablet or a smartphone, please contact me so we can talk about alternatives for you to do the work.
- Camera and microphone – You need these to support video/audio for synchronous class meetings and for using the CS Department Discord server (more information below). Your laptop or desktop system may have built-in camera and microphone, or you could use eternal camera and microphone. You can also use a tablet or smartphone for video/audio communication.

Software*:* Here is a summary of the various software you will need for the course, in addition to the basics of a computer, browser, and typical software.

- **VPN (virtual private network) software** – You may want to connect to the university's VPN so that you can connect remotely to the CS lab in Dunn 302. If you are using Windows or Mac OS, you can find instructions for the software download and setup here: https://www.potsdam.edu/about/administrative-offices/computing-technology-services/services/vpn. If you use Linux, Dr. Ladd has made a video to help you set up to use the VPN. The video is available near the top of the Moodle course page.
- **Command line interface (cli) tool** – If you access the CS lab remotely, you will need a command line tool to work on the lab machines. You will not have access to any graphical user interfaces when working remotely. Windows, Mac, and Linux operating systems have a version of the command line interface available to users.
- **VSCode** – We recommend that you install this free programming environment. It is free (as just noted), available for any OS, easy to use, and allows for users to share code. You can download VSCode from https://code.visualstudio.com/download.
- **Java 11** – This is the version of Java that is installed in the lab, and VSCode will want you to use this version as well.
- **Discord** – The CS Department has Discord server (more information below) that is our "virtual department". My office hours will take place in Discord, our CS tutors will work on Discord, and our ACM chapter has its meetings on their Discord server. You can join our server at https://discord.gg/GVd3V5KTEm and find information about getting started with Discord at https://discord.com/new
- **Zoom** – Our synchronous (real-time) class meetings will take place through Zoom. You can get a free Zoom account here https://zoom.us/.

  At the end of the semester I will calculate what fraction of the possible points you have earned, and your grade may be based on this distribution:
  - 90% >= A
  - 80% - 90 B
  - 70% - 80 C
  - 60% - 70 D
  - < 60% F

  Note that final grades are determined using a class curve of the course-grade averages.

Tentative Schedule:

Week 1	Chapter 1: Basic Computing concepts, Java, Program Errors, Procedural Decomposition	Assignment 1	Lab 01
Week 2	Chapter 2: Basic Data Concepts, Variables	Assignment 2	Lab 02
Week 3	Chapter 2: The for Loop, Managing Complexity	Assignment 3	Lab 03
Week 4	Chapter 3: Parameters, Methods That Return Values	Assignment 4	Lab 04
Week 5	Chapter 3: Using Objects	Assignment 5	Lab 05
Week 6	Review & Midterm 1	Assignment 6	Lab 06
Week 7	Chapter 4: if/else Statements, Cumulative Algorithms, Text processing, Methods with Conditional Execution	Assignment 7	Lab 07

Week 8	Chapter 5: The While Loop, Fencepost Algorithm, The Boolean Type	Assignment 7.6	Lab 7.6
Week 9	Chapter 5: User Errors, Assertions and Program Logic	Assignment 8	Lab 08
Week 10	Review & Midterm 2	Assignment 9	Lab 09
Week 11	Chapter 6: File Reading Basics, Deatails of Token Based Processing, Line based processing	Assignmnet 10	Lab 10
Week 12	Chapter 6: Advance file processing Chapter 7: Array Basics, Array Traversal algorithms	Assignmnet 10.5	Lab 11
Week 13	Chapter 7: Reference Semantics, Advance Array techniques, Multi Dimentional Arrays	Assignmnet 11	Lab 12
Week 14	Chapter 8: Object Priented programming, Object satate and behavior, Object initialization		
Week 15	Chapter 8: Encapsulation & Review	Assignmnet 12	Lab 13

Impact of extracurricular activities on class work

You make the choices about how you will spend your time, including investing your time in non-academic activities. As a student, you need to give priority to your academic work, and prevent extracurricular commitments from negatively impacting your work for classes. You are, of course, free to participate in activities that are meaningful to you; however, do not expect me to give special consideration because of time management issues that arise from those activities. You should not be missing class because of extracurricular activities, nor should you allow yourself to fall behind on assignments. **NOTE: I will not give extensions that relate to participation in extracurricular activities, even if the activity is related to Computer Science.**

Expectations for the Course

- You are expected to ask questions and participate in class discussions. However, talking out of turn, engaging in non class-related discussions with others (including the instructor), and other disruptive behavior will not be tolerated. If you are disrupting class, you may be asked to leave. Repeated offenses could result in your referral to the Office of Student Conduct and Community Standards and possible dismissal from the class.
- In laboratory, you are expected to collaborate actively with your assigned partner, to follow instructions, and to take turns controlling the keyboard. Failure to meet these expectations during scheduled lab sessions could result in a reduced lab grade (possibly 0) and possibly being dismissed from the laboratory session.
- Academic dishonesty: Students are expected follow the "SUNY Potsdam Academic Honor Code" (SUNY Potsdam 2014-2016 Undergraduate Catalog, p. 42) by doing their own work on quizzes, exams and programming assignments unless specifically directed otherwise by the instructor. Copying is strictly forbidden. Students caught cheating will receive a grade of 0 for that evaluation. Repeated offenses will result in dismissal from the course and possible disciplinary sanctions by the university. Academic Misconduct

definitions, procedures, due process, and student rights are described on page 43 of the SUNY Potsdam 2014-2016 Undergraduate Catalog.

- Disability Assistance: Anyone who has special needs that must be accommodated to fulfill the course requirements should notify the instructor and the Director of Accommodative Services, 111 Sisson Hall, 267-3267. The college has resources available to assist qualified students with their academic studies.
- Food and Drink in Class and Lab**:** Beverages are allowed in the classroom as long you clean up after yourself and do not disturb others. In the Unix lab, food and drink are restricted to the coffee table. UNDER -NO- CIRCUMSTANCES ARE FOOD AND BEVERAGES (EVEN GUM) ALLOWED NEAR THE COMPUTERS.
- No devices are allowed during class. Notes must be hand-written
- Accommodation of Religious Observances: We will make reasonable accommodation for a student's religious beliefs. Please notify us within the first week of classes about any scheduled class date that conflicts with a religious observance.

Assignment Submission Policy and Guidelines

- You will receive a new programming assignment every week or so. Programming assignments are to be submitted by the beginning of lecture on the due date. Assignments will be submitted both electronically and on paper ("hard copy"). Hard copies should be handed in at the start of class. Assignments handed in on the due date but after 10 minutes of the beginning of class (hard copy or electronically) will be counted a day late. (I have instituted this policy to discourage students from skipping class to finish an assignment.)
- Late assignments will be penalized by 20% per calendar day that they are late. Extensions that are not subject to penalty may be granted in rare cases when there are extenuating circumstances (such as serious illness or disability, a death in the family, an accident, etc.) and when these circumstances are supported by written documentation.
- Every programming assignment that you submit must have an id-box header like the one shown below.

  /*

  Name: John Doe Course: CIS 201 Computer Science I

  Assignment: 1

  */
- For hard-copy submission, just submit the source code file unless instructed otherwise. Do not use a folder. Staple the pages together in the upper left-hand corner. Make sure that your hard copy is secured together well and that the id-box is conspicuous. Work that we cannot identify or with missing parts will not be graded. Do not hand in the printer header sheet as part of the hard copy.
- You will also be required to submit your source code program files electronically on moodle.

- Work that is not submitted electronically cannot be graded and will receive a grade of zero.
- Programming assignments should reflect your ability to program. We encourage you to talk to others in the class about assignments to discuss approaches to solving programming problems. It is also permissible to look at someone else's code and point out a silly syntactic error. It is also permissible to discuss a programming concept, in general, (for example, if-statements) if it appears that a fellow student does not understand that concept. However, there should be no collaboration on assignments above and beyond this. Specifically,
- You should not be sharing any of your code with anyone else.
- You should not be accepting any code from anyone else.
- Two or more students should not be writing code together so as to essentially produce the same program
- If a tutor is assisting you, that tutor should not be making any suggestions about your code except for general strategies for solving the problem, explaining general programming concepts, or catching simple, syntactic errors as described above.
- If we suspect that students and/or tutors are engaging in unfair collaboration as described above, we reserve the right to call all parties involved in for a code review. If the code review reveals that one or more persons is involved in providing or receiving unfair help, all parties involved will receive a zero on that assignment. Any further problems in this regard with any student or tutor will be brought to the attention of the Dean of Students.
- Since the load on the system and the printer may be very high around the submission deadline, you are urged to get your assignment finished and printed early.

Learning Remotely:

If you find yourself struggling in this course, please don't hesitate to reach out to me so I can assist you. In addition, know there are numerous resources available to help ensure you are successful in your online/virtual courses. I encourage you to check out the SUNY Potsdam Student Health Services page focused on remote learning: https://www.potsdam.edu/studentlife/wellness/healthservices/campus-health-alerts/coronavirus-updates/student-information/learningremotely.

SUNY Potsdam Department of Computer Science Code of Professional Conduct

1. ***Preamble***
   All members of the ACM, including the Computer Science faculty of SUNY Potsdam, are committed to ethical professional conduct as specified in the ACM Code of Ethics and Professional Conduct. Students, taking courses from the faculty, are bound by our commitment.

   All members of the Department are obliged to remind one another to behave professionally. Violations should be reported promptly; however, capricious or malicious

reporting of violations is, itself, a violation. When reporting, bring all relevant aspects of the incident to the faculty's attention.

2. ***Moral Imperatives***
   As a Computer Science student I will...

   2.1. Respect all members of the Department.

      2.1.1. Be professional in face-to-face and electronic interactions.

      2.1.2. Be fair so everyone is free to work and learn.

      2.1.3. Be active in preventing discrimination in physical and electronic spaces frequented by Department members.

   2.2. Accept and provide appropriate feedback.

      2.2.1. Avoid starting or spreading rumors.

      2.2.2. Respect confidentiality.

   2.3. Be honest, trustworthy, and respect intellectual property.

      2.3.1. Only take credit for my own work.

      2.3.2. Respect the privacy of others.

      2.3.3. Access computing resources only when authorized and report any access risks discovered.

   2.4. Contribute to society and human well-being.

      2.4.1. Improve public understanding of computing and its consequences.

      2.4.2. Consider both the direct and indirect impacts of my actions.

Based on the ACM Code of Ethics and Professional Conduct, retrieved https://www.acm.org/code-of-ethics

Student Support

Every student in this class is a valued individual. If you are struggling with issues outside of the classroom, please know that there are professionals both on and off campus who can assist you. If you need immediate assistance, please contact our campus Counseling Center (with free counseling) at (315) 267-2330 or visit their website. Links to other resources are provided below:

- • Rachel Bayliss- Title IX Support Staff & Title IX Core Team
  - Draime Extension S184, (315) 267-2350
  - VanHousen Extension, Rm. 392, (315) 267-2516
  - http://www.potsdam.edu/offices/hr/titleix

- • Bias Incident Reporting-
  - http://www.potsdam.edu/about/diversity/biasincident

- • Center for Diversity
  - 223 Sisson Hall
  - (315) 267-2184
  - http://www.potsdam.edu/studentlife/diversity

- University Police
  - Van Housen Extension
  - (315) 267-2222 (number for non-emergencies; for an emergency please dial 911)

- Student Conduct and Community Standards
  - 208 Barrington Student Union
  - http://www.potsdam.edu/studentlife/studentconduct/codeofconduct

- Reachout (24-hour crisis hotline) (315) 265-2422

- Renewal House (for victims of domestic violence)
  - SUNY Potsdam Campus Office: Van Housen Extension 390 (open Wednesdays, 9-5:00)
  - (315) 379-9845 (24-hour crisis hotline)
  - Renewalhouse_campus@Verizon.net

And please: if you see something, say something. If you see that someone that you care about is struggling, please encourage them to seek help. If they are unwilling to do so, Care Enough to Call has guidelines on whom to contact. Everyone has the responsibility of creating a college climate of compassion.