

CS 151

Revision as of 14:19, 22 August 2023 by [Jkinne](#) ([talk](#) | [contribs](#) | [block](#))
([→ Announcements/Assignments/Quizzes](#))
([diff](#)) [← Older revision](#) | [Latest revision](#) ([diff](#)) | [Newer revision](#) [→](#) ([diff](#))

CS 151 Introduction to Computer Science is taken by CS majors after CS 101 or passing a placement exam.

This page contains the syllabus for **Jeff Kinne's section** of CS 151 and is used to keep track of assignments, etc. as well for the most recent offering (fall 2023). For announcements, click the link in the table of contents.

For Devon Kinne's section of CS 151, check in Canvas - Devon's syllabus, assignments, etc. are kept in your section of the course in Canvas.

Note that both sections of the course will use the same homeworks and lab assignments. Quizzes and exams may be slightly different.

Contents

General Information

Announcements/Assignments/Quizzes

- Assignments
 - HW and Labs
 - Quizzes
- Announcements

Course Description and Content

Course Policies, Grading

Assignments

- Grade Meanings

CS-Specific Items

- CS Course Policies
- Lab Help
- Course Announcements
- Classroom conduct
- Academic Integrity
- Office hours (using Teams)
- Canvas
- Lectures (using Zoom)
- Participating online

ISU Required Syllabus Items

- COVID-19 Information
- Special Needs / Disability Services
- Disclosures Regarding Sexual Misconduct

General Information

Course website - https://cs.indstate.edu/wiki/index.php/CS_151

Your Instructor

Jeff Kinne (<https://kinnejeff.com>), jkinne@cs.indstate.edu (<http://mailto:jkinne@cs.indstate.edu>)

Office: Root Hall A-142 and in Microsoft Teams, phone 812-237-2126

Instructor Office Hours: MWF 10am-1pm, 2-3pm; TR 11-12:30pm, 1:30-3pm

Lecture, Exam

Lecture: MWF 9-9:50am in Root Hall A-019, over Zoom (link in Canvas, see below), and recorded

Mid-term exam: TBA

Final exam: Wednesday, Dec 13, 8-9:50pm

Prerequisites - B- or better in CS 101 or departmental placement exam.

CRN numbers - 50602

Required text We will use selections from the following free online sources.

- Automate the Boring Stuff with Python (available free at <https://automatetheboringstuff.com/>)
- Additional online sources as needed.

Class notes - Notes during class will mostly be kept in the **CS 151 OneNote notebook** (https://sycamoresindstate-my.sharepoint.com/:o/g/person/jeffrey_kinne_indstate_edu/Es6Hxn7B1HdDsZXUOvZQg1UB1hsnacRpWV8DBeTxjOkAXA?e=sBepba).

Note that you will need to authenticate with your ISU account to view the notebook.

Announcements/Assignments/Quizzes

This section will be kept up to date with information about assignments, quizzes, and exams. This will be kept as a "stack" with the most recent at the top of the list.

Assignments

HW and Labs

These are posted in Canvas and on the CS server. HWs are due Mondays at 7:59am, Labs are due Fridays at 11:59pm. All times are Eastern US time.

Quizzes

Will normally be taken Wednesdays at 9:30am.

- **q0 - course policies** (<https://indstate.instructure.com/courses/12565/quizzes/252875>) - that is a link to a practice quiz. Can be completed any time once released, can be taken as many times as needed to get 100%. Required to get 100% on this quiz before Aug 28.

Announcements

- Aug 22 - first day of class - how the course will work, cheating policy (automatic F for the course), practice quizzes, math notation.

Course Description and Content

Course Description

The official description of this course from the catalog is

"Core concepts that are foundational in computer science, including programming, use of computers for dealing with files and programs, how data is stored, number systems. Focus on building skills needed for programming and further study of computer science, and intermediate mastery of a particular programming language."

Course Outline

This course outline is subject to change. We will follow along with the other section of CS 151 but may add some additional topics.

Weeks 1-6

- Setup accounts
- Intro to Linux
- Variables
- I/O
- Flow Control
- If-statements
- Turtle
- Loops
- Exam 1

Weeks 7-14

- Functions
- Chapter 4 - Lists
- Chapter 5 - Collections
- Chapter 6 - Strings
- Bits, Bytes, Base and Logic
- Intro to algorithms
- Chapter 9 & 10 (Files)
- Exam2

Week 15-16

- Final project and interviews

Learning Outcomes

- Able to use Linux systems and terminal - managing files, running code, using utility programs.
- Basic mastery of core programming concepts - data types, conditionals and loops, Boolean logic, functions, string operations, reading and writing files. In particular,
- Can take a specification and produce code implementing it.
- Can take code and "play computer" to determine the precise results of running the code on a given input.
- Can take a partially complete program and specification for how it should work, and complete it.
- Can take a program with syntax or logical errors and fix the errors.
- Understanding of good coding style and able to practice good coding style - use of functions to avoid redundant code, whitespace formatting, variable and function names, comments.
- Understanding of base systems, including ability to convert between binary, hex, octal, and decimal.
- Understanding of and ability to explain different file types - text versus binary.
- Able to read and write data with programs, including parsing simple file formats (e.g., csv).
- Understanding of sorting algorithms - able to "play computer" to execute sorting algorithms that were covered in class on small test cases.

Course Policies, Grading

See [Jeff Kinne Course Policies](#) for course policies and how your overall letter grade will be determined.

Assignments

Start Assignments and Quiz Studying Early - I suggest attempting an assignment the day it is given, or the day after, so that if you have a problem you can ask early. If you continue to have problems in trying to complete the assignment, you will have time to ask again. Many of the assignments require thought and problem solving, which takes "time on the calendar" not just "time on the clock". By that I mean that spending an hour on 3 consecutive days is likely to be more productive than trying to spend 3 hours at once on the assignment.

Expected Amount of Work - If you take this class seriously and get what you should out of it, some weeks you will likely be spending around **6-10 hours or more** on the class. The students who get A's in their CS courses and have an easy time finding jobs do spend this much time on this course. Not everyone would need to spend this much time and not all weeks will be the same, but you should plan on putting in whatever time it takes. Note that the federal government definition of 1 credit hour as requiring 2 hours worth of time on the course for each credit hour of lecture, so you should think of this as the default for all of your courses.

Note - your classes should be more important than your part-time job.

Each week, you will be having 3 regularly scheduled assignments:

- Quiz – this is based off of the reading and Monday lecture material. It opens on Monday at 8:00 am and must be completed by Wednesday at 11:59pm. Quizzes cannot be made up.
- Smaller lab assignment – This lab assignment will be a smaller assignment and due by Friday at 11:59pm. This will typically be submitted on the CS server. This assignment counts towards your Lab grade.
- Bigger programming assignment – This programming assignment will be a little larger in content, and will be submitted on the CS server. This counts towards your Homework grade. It will be due by Monday morning at 7:59am

Checkpoint assignments – In CS 151, the first assignment (allAboutLinux) is a "checkpoint" assignment. This assignment must be completed and receive a 100% to pass the course. You must complete the first assignment by specified due date, and receive a 100% on the assignment. You may resubmit the assignment multiple times to try to receive 100%, but you must have 100% by the specified due date.

Why? There will be some key points where if you fall behind too much then there would not be much hope of passing. Key checkpoints are set to make sure you at least keep up the minimum amount needed.

Grade Meanings

The letter grades are intended to have the following rough meaning. The list of achievements needed for each was chosen with this in mind.

- A+/A: You understand everything and probably could teach the course yourself.
- B+/A-: You understand nearly everything, and should be all set to use this knowledge in other courses or in a job.
- C/C+/B-/B: Some things you understand very well and others you don't (more towards the former for a B and more towards the latter for a C).
- D-/D+/C-: You did put some effort in, and understand many things at a high level, but you haven't mastered the details well enough to be able to use this knowledge in the future.
- F: Normally, students that get an F simply stopped doing the required work at some point.

CS-Specific Items

This section contains items that are generally the same for all CS courses (and in particular those taught by this instructor).

CS Course Policies

Note that this course follows all standard CS course policies. In particular, (a) cheating/plagiarism by graduate students results in an F in the course, (b) and there will be no makeup exams. See <http://cs.indstate.edu/info/policies.html> for details.

Lab Help

We have a few lab assistants who are available to help students in beginning computer science courses. Please see https://cs.indstate.edu/wiki/index.php/Unix_Lab_and_Help for details. The lab hours are in a calendar on the CS homepage, at http://cs.indstate.edu/info/index.php#lab_hours. You can join the lab when working on your programs. You can ask the lab assistants to look at your programs, and you can work with any other CS students that are there (you could use the lab as a regular meeting place to work with your classmates).

Course Announcements

Announcements regarding the course will be made both during class and via email to your @sycamores.indstate.edu email address. You should regularly check this email account or have it forwarded to an account that you check regularly. You can set the account to forward by logging into your indstate.edu email online (if you aren't able to find the option, try a different browser or search online for things like - outlook online forward email setting).

Classroom conduct

You may not use cell phones, iPods/music players, etc. during class. You should be civil and respectful to both the instructor and your classmates, and you should arrive to class a few minutes before the scheduled lecture so you are ready for lecture to begin on time. You may use your computer during class if you are using it to follow along with the examples that are being discussed. You should avoid spending time on email, Facebook, work on other courses, etc. during the lecture for this class (be fully present wherever you are, make the most of each experience).

Academic Integrity

See also **Jeff Kinne Course Policies** for additional information for more specifics about how I am handling these things for this course.

Please follow these guidelines to avoid problems with academic misconduct in this course:

Homework: You may discuss the homework assignments, but should solve and finish them on your own. To make sure you are not violating this, if you discuss with someone, you should DESTROY any work or evidence of the discussion, go your separate ways, SPEND at least an hour doing something completely unrelated to the assignment, and then you should be able to RECREATE the program/solution on your own, then turn that in. If you cannot recreate the solution on your own, then it is not your work, and you should not turn it in.

Note on sources: if you use some other source, the web or whatever, you better cite it! Not doing so is plagiarism.

Exams: This should be clear no cheating during exams. Each instructor has different rules for what is allowed on exams in terms of notes, etc. If not noted otherwise, you should assume that a quiz or exam is closed notes, no computer, no calculator.

Projects: You should not copy from the Internet or anywhere else. The project should be your own work. It will be fairly obvious to me if you do copy code from the Internet, and the consequences will be at the least a 0 on the project. If cheating is observed, you will at the least receive a 0 for the assignment (and may receive an F for the course), and I will file a Notification of Academic Integrity Violation Report with Student Judicial Programs, as required by the university's policy on Academic Integrity. A student who is caught

cheating twice (whether in a single course or different courses) is likely to be brought before the All University Court hearing panel, which can impose sanctions up to and including suspension/expulsion. See <http://www.indstate.edu/sjp/docs/code.pdf> and <http://www.indstate.edu/academicintegrity/> for more information.

Please ask the instructor if you have doubts about what is considered cheating in this course.

Office hours (using Teams)

Office hours will be through Microsoft Teams by default. If you would like to meet in person you should reserve an appointment using <http://cs.indstate.edu/jkinne-meeting> to reserve an in person meeting with Jeff Kinne. I am normally in my office during my listed office hours, but by making an appointment you can be more certain. For meeting through Teams, you should start Teams in your browser or start the application. You should be logged in using your ISU credentials. Once you have Teams open you can message me to ask me questions or to ask to talk. We can use Teams to message (better than emailing back and forth repeatedly if you have questions about something that you just want to write about) or to talk and share screens (e.g., to take a look at your code). I normally have Teams open on my computer all of the time, including during my office hours. During my office hours I will normally reply right away; at other times I will reply when I get a chance.

Canvas

The course has a canvas site. Click <https://indstate.instructure.com/> to go to canvas. You should see this course listed under your courses for the current term. If you don't you may need to click on the Courses icon and then click the "All courses" link. The canvas site is used for giving you your grades, for quizzes/exams, and for getting to online lectures (which are done using Zoom). Announcements will be sent through canvas and to your university email. Links and such will be kept on this website.

Lectures (using Zoom)

Here at ISU section numbers starting with the number 3 (e.g.3xx: 301, 302, etc.) are generally online sections. There are 2 types of online sections, synchronous online and asynchronous online. Sections that are synchronous should be joined at the regularly scheduled time of the course, whereas sections that are asynchronous generally keep up with the material independently without regularly scheduled meetings. In general async sections are more difficult to stay on top of, and require a great deal of self-discipline (it is much easier to think "I can watch the videos tomorrow" and just get behind). So if you are in one of these sections make sure you get off to a strong start, and ask for help sooner rather than later. If you are in an online section, check your course schedule for course meeting times; if you have a meeting time, then your section is synchronous, otherwise it is asynchronous (or there is an error in the system).

This course has a 301 section (synchronous online) and 001 section (face to face). Students in either section can participate in whatever way you need to.

For ISU's links to information on getting started with Zoom, see <https://indstate.teamdynamix.com/TDClient/1851/Portal/KB/ArticleDet?ID=107534>. You can also see the information linked at <https://www.indstate.edu/services/student-success/cfss>. You will get to the lectures for this course by going to Canvas, select this course, click Modules on the menu on the left, and click on the Zoom module. Once there you should see a schedule of lectures and be able to view recorded lectures. Note that you should install the Zoom application for your computer, and you will need to be logged into Zoom with your ISU credentials to be able to connect. Also note that the lectures are recorded and only available to those in our class. Recorded lectures normally appear later the same day as the lecture.

Note that if you have not used Zoom with your ISU account previously, you need to go to <https://indstate-edu.zoom.us> and login with your ISU email address and password to get it setup.

Participating online

If you are participating online, please see the information at <https://www.indstate.edu/services/student-success/cfss> about participating in online courses. You are expected to either join lectures live through Zoom or watch the recordings once they are available. You will complete assignments, quizzes, and exams on the same schedule as the rest of the class. For quizzes and exams you will normally have a 24 hour period during which to take the quiz/exam (note that different students will have slightly different questions and any communication between students about quiz/exam content is academic misconduct).

So also the General Information section at the top of this page for setting up a normal check-in time with the instructor.

ISU Required Syllabus Items

The items in this section are required and are the same for every ISU course.

COVID-19 Information

Information specific to CS courses - [Start of Term Announcements](#)

Standard ISU language required in all syllabi (read this all once, then skim for your other courses)...

Students are expected to adhere to course attendance policies, as stated in the course syllabus. Documented COVID-related absences will be treated like any other serious medical issue. Following University policy, students with a documented, serious medical issue must contact the Office of the Dean of Students for assistance. The Office of the Dean of Students will supply documentation for faculty. Students with a documented serious medical issue should not be penalized and will be given a reasonable chance to complete exams or assignments. Once notification is made, faculty will make reasonable efforts to accommodate the student's absence and will communicate that accommodation directly to the student. Please note that faculty are not required to accommodate a serious medical issue with virtual content options, like streaming or recorded lectures. To avoid the potential of missing significant class time, students are strongly encouraged to receive the COVID vaccination that has been made available on campus. For more information about the vaccines or to find a vaccination site, go to: <https://ourshot.in.gov>. The ISU Health Center also administers COVID-19 vaccines by appointment.

Students should contact the Office of the Dean of Students with questions by calling 812-237-3829.

The information provided in this section of the syllabus is subject to modification based on guidance by public health authorities. Changes to Covid-related policies or updated information will, as always, be posted on the ISU website and communicated in multiple ways.

Special Needs / Disability Services

Standard ISU language required in all syllabi...

Indiana State University recognizes that students with disabilities may have special needs that must be met to give them equal access to college programs and facilities. If you need course adaptations or accommodations because of a disability, please contact us as soon as possible in a confidential setting either after class or in my office. All conversations regarding your disability will be kept in strict

confidence. Indiana State University's Student Support Services (SSS) office coordinates services for students with disabilities: documentation of a disability needs to be on file in that office before any accommodations can be provided. Student Support Services is located on the lower level of Normal Hall in the Center for Student Success and can be contacted at 812-237-2700, or you can visit the ISU website under A-Z, Disability Student Services and submit a Contact Form. Appointments to discuss accommodations with SSS staff members are encouraged.

Once a faculty member is notified by Student Support Services that a student is qualified to receive academic accommodations, a faculty member is obligated to provide or allow a reasonable classroom accommodation under ADA.

Disclosures Regarding Sexual Misconduct

Standard ISU language required in all syllabi...

Indiana State University Policy 923 strictly prohibits discrimination on the basis of: age, disability, genetic information, national origin, pregnancy, race/color, religion, sex, gender identity or expression, sexual orientation, veteran status, or any other class protected by federal and state statutes in ISU programs and activities or that interferes with the educational or workplace environment.

Title IX of the Educational Amendments of 1972 prohibits discrimination based on sex, including sexual harassment. Sexual harassment includes quid pro quo harassment, unwelcome verbal or physical conduct, sexual assault, dating violence, domestic violence, and stalking.

If you witness or experience any forms of the above discrimination, you may report to:

Office: Equal Opportunity & Title IX; (812) 237-8954; Rankin Hall, Room 426

Email: ISU-equalopportunity-titleix@mail.indstate.edu

Online: https://cm.maxient.com/reportingform.php?IndianaStateUniv&layout_id=10

Disclosures made to the following confidential campus resources will not be reported to the Office of Equal Opportunity and Title IX:

ISU Student Counseling Center: (812) 237-3939; Gillum Hall, 2nd Floor

Victim Advocate: (812) 237-3829; HMSU 7th Floor

UAP Clinic/ISU Health Center: (812) 237-3883; 567 N. 5th Street

Retrieved from "https://cs.indstate.edu/wiki/index.php?title=CS_151&oldid=4289"

Content is available under [GNU Free Documentation License 1.3 or later](#) unless otherwise noted.