

# CS 151 Introduction to Computer Science Summer 2017 Syllabus and Information

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### General Information

#### Contact Your Instructor

**Name:** Jeff Kinne

**Email:** [jkinne@cs.indstate.edu](mailto:jkinne@cs.indstate.edu)

**Phone:** 812-237-2136

**Office:** Root Hall, room A-120

#### Lecture, Exam, Office Hours

**Lecture:** all online. A normal course would have 4.5 hours per week for the summer. We will likely have 2-2.5 hours per week of lecture videos.

**Exams:** for each exam you have a 48 hour period in which to take the exam, from 12:01am of day 1 to 11:59pm of day two. The exams will be on: June 18/19, July 21/22, Aug 4/5. Note that the last day to drop with no grade is May 26, last days to drop with 100/75/50/25% refund are May 26, May 31, June 4, June 9.

**Instructor Office Hours:** I am available by email almost always. I will hold “virtual office hours” at the following times: TBD based on feedback from students.

**Unix lab:** The CS unix lab, room A-015 in the basement of Root Hall, will be normally open TBD hours during the summer. If you are in Terre Haute and want to work on the CS lab computers, you can come any time the lab is open. Note that during the summer there is not a lab assistant on duty to help.

**Website:** this google doc, or find a link from [kinnejeff.com](http://kinnejeff.com)

## Prerequisites

None.

## Role of this Course

First course in the CS major, required of IT majors, required of a few other majors, and oftentimes the one CS course people take if they're interested in CS a little.

## Recommended text

Most information required for the course is available on-line. Sources that can be used for the course include the following.

- Installing putty: <http://cs.indstate.edu/FAQ/PuTTY/>
- See the Using Linux section at: <http://cs.indstate.edu/info/getting-started.html>
- JavaScript tutorials <http://www.tutorialspoint.com/javascript/>
- "JavaScript: The Definitive Guide" by O'Reilly (ISBN: 978-0-596-80552-4)
- The HTML5 standard: <http://www.w3.org/TR/html5/>
- W3 Schools <http://www.w3schools.com/>
- HTML dog <http://www.htmldog.com/>
- CSS Basics <http://www.cssbasics.com/>
- Quack it <http://www.quackit.com/>
- Blockly games <https://blockly-games.appspot.com/>
- Node.js: [www.nodejs.org](http://www.nodejs.org)

## 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 from Internet Explorer (the "light" version of the webmail client that opens up from Firefox or Chrome does not give the option to forward email).

## 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 may not check email, facebook, work on other courses, etc. during class.

# Course Description

The catalog description for this course is:

"History of computers and computer science, principles of process description, and problem analysis. The basic structures of sequence, iteration, and selection. Programming style, artificial intelligence, current applications."

The course really is an introduction to programming and introduction to the way many of the ISU CS courses are run (i.e., unix and programming). We have chosen to use html/css/javascript as our intro language (for this course only). Why? It is visual, and it is useful.

In terms of depth, the course approximately 1/4 HTML/CSS web design and 3/4 JavaScript programming in the web environment.

## Course Outline

### First Unit

- Unix, files and editing.
- Basic HTML.
- More HTML and introduction to CSS.
- More CSS and an Introduction to JavaScript programming.
- Event-Driven programming and event handlers.
- June 18/19 - Exam #1

### Second Unit

- JavaScript Variables, Data-Types and simple arithmetic operations.
- The Canvas and Numeric Bases (Decimal/Binary/Octal and Hex)
- Functions and Variable Scope. The event object. Simple Boolean logic, the comparison operators and truth tables. Introduction to conditional statements.
- More conditional statements. Introduction to loops.
- Loops (while, do-while)
- July 21/22 - Exam #2

### Third Unit

- More loops (for, for-in)
- Strings and Arrays.
- Objects.
- Multidimensional arrays.
- Nested loops.
- Sorting / Computational complexity
- Aug 3/4 - Exam #3

Note - all exams are cumulative.

**Course goals:** you should be able to do any kind of basic web page layout/design, and also any kind of basic program. Examples: a webpage to do tic-tac-toe, calculator, collect information from a user and check it, factor numbers, sort numbers, simple space-adventure game, etc. And also, familiar and can use unix. And also, some basic CS concepts.

## Grading and Assignments

The students of this course have the following responsibilities: read assigned readings before lecture, attend lecture, complete homework assignments, take in-class quizzes, take exams, and complete a project. The final grade consists of:

- **Project: 15%** of the final grade.
- **Homeworks and Quizzes: 30% total.** Most weeks there will be at least one homework assignment or quiz.
- **Exams: 45% total.** There will be 3 exams. The total exam grade will be calculated as  $\max\left(\frac{.1 * \text{exam1} + .15 * \text{exam2} + .2 * \text{exam3}}{.45}, \frac{.15 * \text{exam2} + .2 * \text{exam3}}{.35}, \text{exam3}\right)$
- **Class Participation: 10% total.** The participation grade will include (1) a component for the required interactions online, and (2) a component determined at the end of the semester based on your attentiveness throughout the semester.

## CS Course Policies

Note that this course follows all standard CS course policies. In particular, (a) cheating/plagiarism by graduate students (for courses with graduate students) results in an F in the course, for undergraduates a second offense of cheating/plagiarism results in an F in the course, (b) missing 20% of the classes results in an F for any student, and (c) there will be no makeup exams. See <http://cs.indstate.edu/info/policies.html> for details.

## Late Homeworks

All homework assignments will be given a preferred due date. Assignments can be turned in past the preferred due date, but any assignments turned in late will have their value multiplied by 50% (so the highest grade you can get on a late assignment is 50%). Each assignment will have a “final due date” past which no credit will be given.

## Start Homeworks Early

I suggest attempting a homework assignment the day it is given, or the day after, so that if you have a problem you can ask early and so that if you continue to have problems in trying to complete the assignment, you will have time to ask again. Many of the homework 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**

My expectation is that an average student will spend about 4-6 hours OUTSIDE of class each week (that is in addition to class time) WORKING PRODUCTIVELY/EFFICIENTLY (not just staring at the computer) to complete their coursework for this class. Some students may spend less time than this, and some students will spend more.

**Note - this is your most important class, by far (for CS majors). Also, your classes should be more important than your part-time job.**

## **Grade Cutoffs**

I will design homework assignments and exams so that a standard cutoff for grades will be close to what you deserve. After the first exam I will create a grade in Blackboard called “Letter Grade” that is what your letter grade would be if the semester ended today. Initially, I will assign the following grades: 93-100 A, 90-93 A-, 87-90 B+, 83-87 B, 80-83 B-, 77-80 C+, 73-77 C, 70-73 C-, 67-70 D+, 63-67 D, 60-63 D-, 0-60 F

My goal is that the different grades have the following rough meaning.

### **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.

## Blackboard

The course has a blackboard site. Click [here](#) to go to blackboard. You should see this course listed under your courses for the current term. The blackboard site is used for (a) giving you your grades (go to the course in blackboard, then click “My Tools”, and then “My Grades”), and also (b) some required online interactions (e.g., discussion of assignments). All course content, schedule, etc. is kept in this google doc (which you are currently viewing). Video lectures for the course are kept in a youtube playlist linked from the top of this document.

## Academic Integrity

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

- **Homeworks:** 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 and quizzes:** This should be clear - no cheating during exams. The exams will be closed-book, closed-notes, no computer, and 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 the [Student Code of Conduct](#) and [Academic Integrity Resources](#) for more information.

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

## Special Needs

If you have special needs for the classroom environment, homeworks, or quizzes, please inform the instructor during the first week of classes. If you have any such needs, you should go to the Student Academic Services Center to coordinate this. See [Student Academic Services Center - Disabled Student Services](#) for more information.

## Disclosures Regarding Sexual Misconduct

Indiana State University fosters a campus free of sexual misconduct including sexual harassment, sexual violence, intimate partner violence, and stalking and/or any form of sex or gender discrimination. If you disclose a potential violation of the sexual misconduct policy I will need to notify the Title IX Coordinator. Students who have experienced sexual misconduct are encouraged to contact confidential resources listed below. To make a report or the Title IX Coordinator, visit the Equal Opportunity and Title IX website:

<http://www.indstate.edu/equalopportunity-titleix/titleix>.

The ISU Student Counseling Center – HMSU 7<sup>th</sup> Floor | 812-237-3939 | [www.indstate.edu/cns](http://www.indstate.edu/cns)

The ISU Victim Advocate – Trista Gibbons, [trista.gibbons@indstate.edu](mailto:trista.gibbons@indstate.edu)

HMSU 7<sup>th</sup> Floor | 812-237-3939 (office) | 812-230-3803 (cell)

Campus Ministries - United Campus Ministries | 812-232-0186

<http://www2.indstate.edu/sao/campusministries.htm>

[www.unitedcampusministries.org](http://www.unitedcampusministries.org) | [ucmminister2@gmail.com](mailto:ucmminister2@gmail.com)

321 N 7<sup>th</sup> St., Terre Haute, IN 47807

For more information on your rights and available resources

<http://www.indstate.edu/equalopportunity-titleix/titleix>