Syllabus

So Who uses Python Anyway?

- Why Python?
- Industrial Light + Magic
- Walt Disney Feature Animation
- Blender 3D modeling
- Google
- Yahoo
- Lawrence Livermore Labs
- Red Hat
- NASA
- National Weather Service
- YOU DO!
- Python is #5 in the world!

COURSE INFO

- **Lecturer: Jay Summet**
- **Email: summetj [at] gatech.edu**
- **Office: CCB 135**
- **Office Hours:**
  - **Click Here for Jay's office hours.**
  - **...or by appointment.**

Course Objectives

- To understand the basic concepts of computer programming in a high-level language.
- To be able to use and combine control flow constructs to form useful programs.
- To understand and become familiar with a number of simple data structures.
- To understand the process and skills necessary to effectively deal with problem solving in relation to writing programs.
- To be able to test and debug programs.
- To understand and employ functions and modularity.
- Through labs become comfortable with common software packages in use today.
- Click here to download the complete list of Learning Outcomes

Lectures and Recitations

- Lecture A: Mon/Wed/Fri 9:05-9:55am :: KACB 1443
- Lecture B: Mon/Wed/Fri 1:05-1:55pm :: KACB 1443 (Lecture B is Team Based Learning, and follows a different syllabus.)
- Lecture C: Mon/Wed/Fri 2:05-2:55pm :: KACB 1443
- Recitations: See TA Helpdesk for schedule of Recitations

Course Materials

- **Required Text:** Learning Computing With Robots (ISBN: 9781257971305)
- **Required Reference Text:** How to Think Like a Computer Scientist: Learning with Python (3rd edition) by: Peter Wentworth, Jeffrey Elkner, Allen B. Downey, and Chris Meyers. Free Online Version: Open Book Project A printed version for Python 2 is avaliable as well ISBN: 978-1449330729

- **Required Robot:** IPRE Robot Kit including both a Red Scribbler 2 Robot and IPRE Fluke 2
- **Recommended USB Bluetooth adaptor (if needed)** Azio BTD-V201 [Drivers zip file]

Grading Policies

There is no curve in this course. The grading breakdown is as follows:

- Homework & Labs: 35%
- Tests: 40%
- Final: 25%

LETTER GRADES

Letter grade assignments are given according to the following cutoffs with no rounding:

- **90.0 <= A <= 100**

Homeworks & Labs: You will have between 9-11 homeworks due in this class. You will have between 5 to 15 days to complete each homework. The last homework assignment may be due in the final week of class. You will also have 3-5 "labs" that are typically self-directed assignments training you in how to use basic computer technology (Discussion Groups / Forums, Your OIT file system, HTML/CSS (building webpages), Excel, Powerpoint, 3D printing, etc..) The last homework and lab may be due the final week of class.

- **80.0 <= B < 90.0**
- **70.0 <= C < 80.0**
- **60.0 <= D < 70.0**
- **0 <= F < 60.0**
- **70.0 or above for an Satisfactory (S/U scale)**

Timely handling of grade disputes: Disputes of grading on assignments, exams, etc must be discussed within one week of their return or posting. Should you find yourself having an issue with a grade, contact **your** TA. After you talk with your TA, if you are not satisfied you may contact the Head TA or course instructor.

Late Work and Missed Exam Policy: Assignments must be turned in **before** the date and time indicated to be considered "on-time". Assignments will be accepted up to one school day late, but late assignments will have their score reduced by 10%. Assignments later than 1 school day will receive no credit. There are no makeups for missed exams. Any request for exceptions to this policy should be made in advance when at all possible. Requests should be due to incapacitating illness, death in the family, or something similarly serious and be accompanied by supporting documentation.

Email Policy for this Course

Please try to use your official Georgia Tech email when sending email to us. **Please attach [cs1301]** to the beginning of the subject of your email! Please also indicate who you are within your email. :)

TA Help Desk

- When? Click on the TA Help Desk Link
- Where? The College of Computing Building, Room 107-A.
- TAs will be available in this room according to the schedule posted. Take advantage of this useful opportunity for help!

Assignment Submission

Almost all assignments will be submitted electronically via T-Square.

Access T-Square at https://t-square.gatech.edu/

Collaboration

Collaboration with other students in this CS 1301 class is an important learning method. We require pair programming for several Homeworks in this class because programming in pairs creates higher quality code and improves student learning. The following guidelines will help you understand the difference between collaboration and plagiarism.

- Students may only collaborate with fellow students currently taking CS 1301, the TA's and the lecturer. Collaboration means talking through problems, assisting with debugging, explaining a concept, etc. You should not exchange code or write code for others.
- For individual assignments, each student must turn in a unique program. For pair programming assignments, you and your partner should turn in identical assignments.
- Your submission must not be substantially similar to another student's submission. Collaboration at a reasonable level will not result in substantially similar code. See the What Is Allowed document for specific examples.
- For all assignments, you must write comments at the top of each file you turn in detailing the following information:
    - Include your name (and partner's name(s) for pair programming assignments)
    - Include your gt email address
    - Include your collaboration statement - the wording of the collaboration statement should be:
        - "I (we for pair programming assignments) worked on the homework assignment alone, using only this semester's course materials." **OR**
        - "I/We worked on this homework with [give the names of the people you worked with] and referred to [cite any texts, web sites, or other materials not provided as this semester's course materials for CS 1301]."

Keep in mind that you are allowed to work with other students currently in CS1301. Do give credit though using the collaboration statement. Jay and the current TA's should be treated as course material and need not be listed in the collaboration statement.

Course Expectations

- Lecture and workshop attendance is expected.
- Keep up with the reading. *Readings should be completed before class on the date indicated on the Calendar.*
- Use the course discussion forums wisely to have discussions about course material with your classmates and the TAs. You are also expected to follow good Internet etiquette.
- Do your homework and labs! Learning to program is like learning a sport. It takes actual practice and time to get good. The assignments that are given are opportunities to learn the material that you will be responsible for on exams. Use collaboration wisely to help you learn.
- Take responsibility for your course work submissions; it is your job to make sure that you successfully turned in what you meant to turn in. Be sure to verify your submission. This is how you make sure that you get credit for the work you do.
- Be prepared when you go to get help from a TA or your instructor. Bring your work with you.
- Take initiative. Begin your assignments early and if you think you need help, come prepared. Use the resources that are provided for you, and be determined to succeed from the start.
- Read, understand, and follow the Georgia Tech Academic Honor Code
- The Institute does not discriminate against individuals on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status in the administration of admissions policies, educational policies, employment policies, or any other Institute governed programs and activities. The Institute's equal opportunity and non-discrimination policy applies to every member of the Institute community. Full Policy