



CS161 Introduction to Computer Science 1

Instructor Information

Joe Paris

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Office: MKH-116

Office Hours: by appointment

Course Information

Section Number: 01

CRN: 21025

Number of credits: 4

Scheduled time/days: MWF 2:00–3:50

Classroom: MKH-101

Course Description

CS161 introduces the principles of computer programming using an object-oriented language. It includes problem-solving concepts, verification and validation, representation of numbers, sources of errors, debugging techniques and algorithm development.

Prerequisites

- CS160 Orientation to Computer Science, with a “C” or better.
- MTH95 Intermediate Algebra or equivalent with a “C” or better.

Student Learning Outcomes

- Demonstrate an understanding of objects in the context of an object-oriented programming language.
- Demonstrate the use of good program development, debugging techniques and documentation.
- Write object-oriented code that includes control statements, while loops, for loops, output to the screen and input from the keyboard and from a file.
- Write, compile and run simple GUI applications using components and containers.
- Write simple, user-designed classes that demonstrate an understanding of encapsulation.
- Write object-oriented code that includes the use of common data structures

Course Materials

Required:

- Practical Programming: An Introduction to Computer Science Using Python 3.6, 3rd Edition by Gries Campbell, and Montojo; ISBN 978-1680502688 available through the college library electronically at bit.ly/practicalpro
- Will be using Moodle in this course. You are not required to visit your Moodle shell before our first class, but please make sure that you are able to log in to

identity.linnbenton.edu. Before logging in for the first time, you will have to claim your account, also at identity.linnbenton.edu. If you have any problems claiming your account or logging into Moodle, please let the Student Help Desk know (541-917-4630, student.helpdesk@linnbenton.edu).

- Python 3.6+ (<https://www.python.org/>). A well-written guide for installing Python on Windows, Mac, and Linux can be found at <https://realpython.com/installing-python/>.
- A text editor of your choice. Thonny (<https://thonny.org/>) is an excellent beginner's editor for Python. Visual Studio Code (<https://code.visualstudio.com/>) is installed on the classroom computers. Both will be used for in-class demonstrations. Other good, Python-oriented options include PyCharm (<https://www.jetbrains.com/pycharm/>, available with a free license for students) and Spyder (<https://www.spyder-ide.org/>).
- A GitHub account.
- A USB thumb drive with a minimum capacity of 4GB.
- Internet access.

Class Policies

Behavior and Expectations

You are held accountable to the [Student Code of Conduct](#), which outlines expectations pertaining to academic honesty (including cheating and plagiarism), classroom conduct, and general conduct.

A “normal” class generally asks you to read pages from your textbook(s), then attend a lecture where your instructor covers that same material before giving you an assignment that you are expected to complete on your own time. This class will be different, utilizing a *flipped classroom* approach to learning. Instead of the traditional model above you will still be given reading assignments to do outside of class, however class time will largely be devoted to working on various projects to reinforce what you have learned.

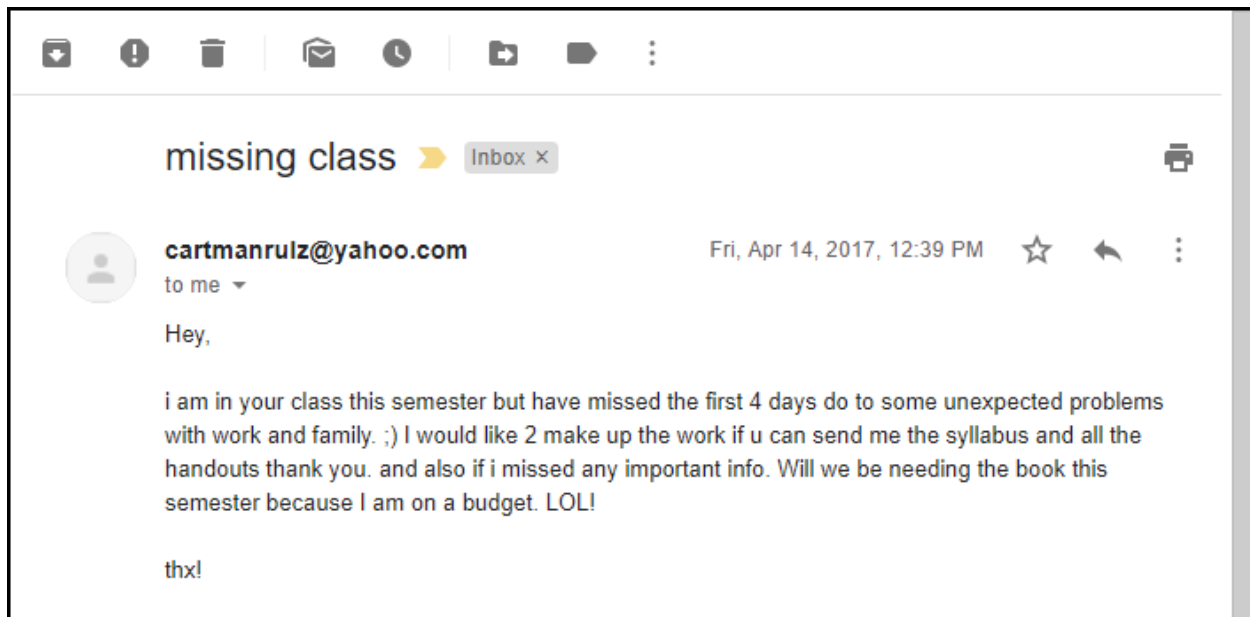
Instead of hours of lecture your instructor will facilitate your work as you do it in class. Further discussion or demonstration will be given for any material that needs it followed by an assignment which you will begin working on, in class, while you have access to both your instructor and your peers. Some of these assignments will be individual, some will be small group, all will be collaborative.

Because of the nature of the course you will get the most from it only if you attend every day. Class discussions will likely diverge into material not found in the assigned reading or viewing. Additionally, a lot of your learning will involve class discussion which can only happen if you are present.

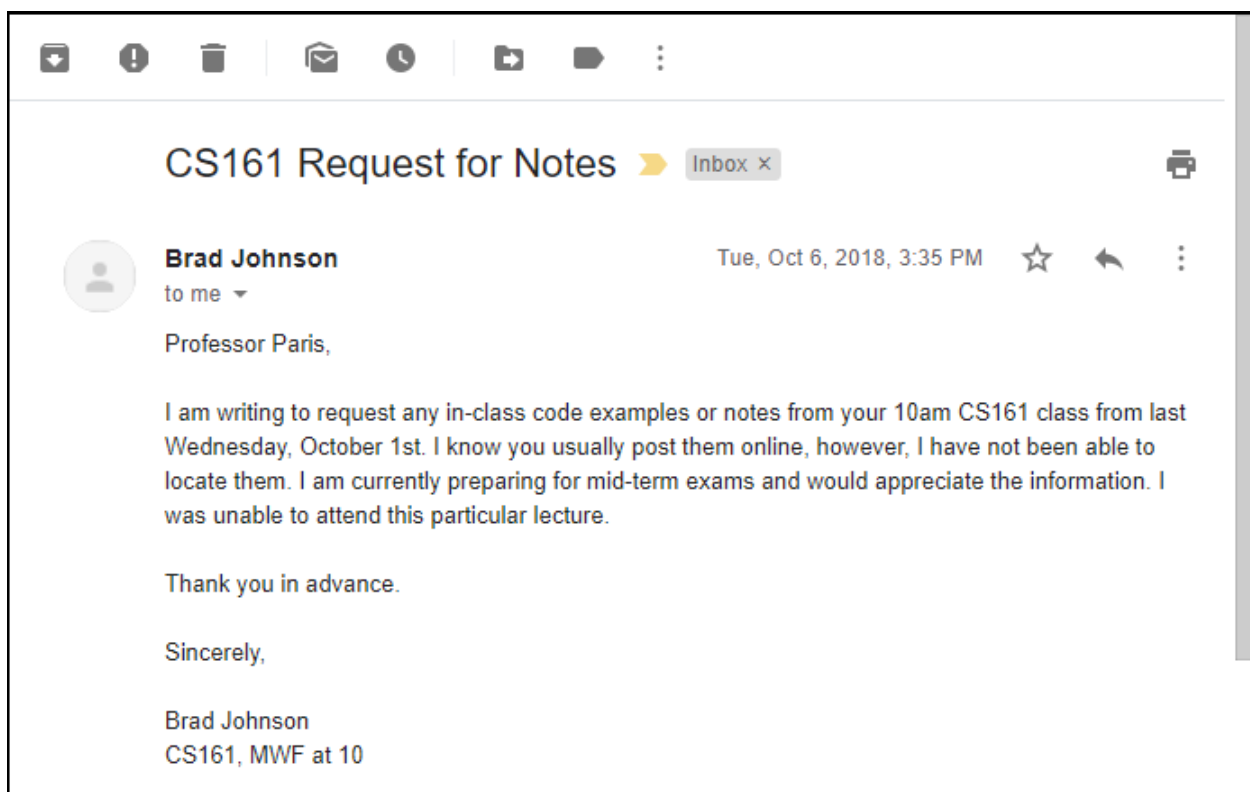
Guidelines for Communication

The *best* way to reach your instructor is by email. I check my email regularly throughout the day and your message will receive a prompt reply. While they need not be strictly formal your emails should be concise, list necessary details, and written in a manner that would be appropriate for communicating with your boss.

Here is an example of a poorly written email:



And here is an example of a much more appropriate email:



The wikiHow page [How to Email a Professor](#) has many excellent tips on writing these kinds of emails and you are strongly encouraged to read it.

The *worst* way to reach your instructor is by phone. Please, don't call me.

Students come from many different backgrounds and have unique life experiences which can enhance class discussions. For this reason, it is crucial for students to share their thoughts and insights on course-related topics. In this class we are all expected to show respect for each other at all times.

Use of Cell Phones

While in class, please set your cell phone to vibrate. If you need to take a call, please step out of the room to do so.

Attendance/Tardiness Policy

As stated above, it is in your best interest that you attend every class. Accordingly, class participation will constitute a portion of your grade. Attendance will be taken daily. Any student arriving more than five minutes late will be counted absent.

Course Work

All work, unless specifically stated otherwise, is to be submitted electronically. Details of how to do this will be covered in class.

All written assignments must be word processed and both spell- and grammar-checked.

All assignments are to be submitted by midnight on the due date.

Assignments may not be submitted via email.

Late assignments will not be accepted. No exceptions.

Programming Assignments

All programming assignments must include a header in the form of a Python docstring (see <https://www.python.org/dev/peps/pep-0257/>) which includes a brief description of the assignment; a longer, more detailed explanation of your solution; your name; and the names of anyone you collaborated or worked with. See [this gist](#) (<https://gist.github.com/joeparislbcc/b8b5b947504a3c9c063a1b3a86550e0b>) for details.

Programming assignments must also follow the coding conventions laid out in PEP-8 (<https://pep8.org/>) although individual lines of code are allowed to reach 100 characters.

Labs

Labs are required to have the same file header and coding conventions as the regular programming assignments. Again, see [this gist](#) for an example.

Lab work is due no later than midnight of the Thursday following the lab session in which it was assigned.

Participation during lab class will constitute 30% of the possible points for each assignment.

Missed Work

In case of absence from class, students are responsible for announcements made and materials covered.

Collaborative Work

As students, you are encouraged to discuss assignments and course materials with your peers. However, you are responsible for making sure you understand the work you turn in; i.e. you should be capable of explaining it verbally to the instructor if asked.

Work that appears to be directly copied from another student will not be given credit.

Testing

There will be a cumulative exam given on Wednesday, December 11 in MKH-101. You will be allowed one, four-inch by 6-inch notecard for notes, handwritten on one side of the card. You will be required to turn in this notecard along with your exam.

There will be no early or late exams given without prior arrangement with your instructor. Any such arrangements are at your instructor's discretion.

This exam may be replaced by a final project of an appropriate scope as decided in class.

Grading

Type	Weight
In-class Programming Assignments	30%
Labs	40%
Participation	10%
Final Exam/Project	20%

Letter Grade	Percentage	Performance
A	90%–100%	Excellent Work
B	80%–89.9%	Good Work
C	70%–79.9%	Average Work
D	60%–69.9%	Poor Work
F	0%–59.9%	Failing Work

Campus Resources

Learning Center

Tutors are generally available for this and other computer science classes. Check with the instructor and/or the Learning Center if you feel you need further assistance with this course.

Library

Computers and printing available.

Basic Needs

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the

course, is urged to contact the Roadrunner Resource Center for support via email at resources@linnbenton.edu or visit us on the web at www.linnbenton.edu/RRC. Our office can help students get connected to resources to help. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to provide any resources that they may possess.

College Policies

LBCC Email and Course Communications

You are responsible for all communications sent via Moodle and to your LBCC email account. You are required to use your LBCC provided email account for all email communications at the College. You may access your LBCC student email account through [student email](#) and your [Moodle account](#) through Moodle.

Disability and Access Statement

You should meet with your instructor during the first week of class if:

1. You have a documented disability and need accommodations.
2. Your instructor needs to know medical information about you.
3. You need special arrangements in the event of an emergency.

If you have documented your disability, remember that you must make your request for accommodations through the Center for Accessibility Resources (CFAR) [Online Services webpage](#) every term in order to receive accommodations. If you believe you may need accommodations but are not yet registered with CFAR, please visit the [CFAR Website](#) for steps on how to apply for services or call (541) 917-4789.

Important Board Policies and Administrative Rules

- [BP7030 Student Conduct and Discipline](#)
- [AR7030-01 Student Rights, Responsibilities, and Conduct Code](#)
- [AR7030-02 Academic Integrity and Honesty](#)

Statement of Inclusion

To promote academic excellence and learning environments that encourage multiple perspectives and the free exchange of ideas, all courses at LBCC will provide students the opportunity to interact with values, opinions, and/or beliefs different than their own in safe, positive and nurturing learning environments. LBCC is committed to producing culturally literate individuals capable of interacting, collaborating and problem-solving in an ever-changing community and diverse workforce.

Title IX Reporting Policy

If you or another student are the victim of any form of sexual misconduct (including dating/domestic violence, stalking, sexual harassment), or any form of gender discrimination, LBCC can assist you. You can [report](#) a violation of our sexual misconduct policy directly to our Title IX Coordinator. You may also report the issue to a faculty member, who is required to notify the Coordinator, or you may make an appointment to speak confidentially to our Advising and Career Center by calling 541-917-4780.

Public Safety/Campus Security/Emergency Resources

[Linn-Benton Community College Safety & Loss Prevention Office web page.](#)

Public Safety is also responsible for lost and found.

In an emergency, call 911. Also, call LBCC Campus Security/Public Safety at [541-926-6855](tel:541-926-6855) and [541-917-4440](tel:541-917-4440).

From any LBCC phone, you may alternatively dial extension 411 or 4440. LBCC has a [public safety app](#) available for free. We encourage people to download it to their cell phones. Public Safety also is the home for LBCC's Lost & Found. They provide escorts for safety when needed. Visit them to learn more.

Changes to the Syllabus

I reserve the right to change the contents of this syllabus due to unforeseen circumstances. You will be given notice of relevant changes in class, through a Moodle Announcement, or through LBCC email.