Course Overview

CS 1111
Introduction to Programming
Spring 2019
Goals

• Train you the **skill of programming**

• Expose you to the **art of computer science**

• Become **better programmers**
  • Understand practical ways to design and develop software
  • Understand and be able to create reliable software

• Become **better problem solvers**
  • Understand and be able to approach software problem solving in logical, analytical ways
  • Recognize the application of computing
  • Write a program that will help you do your job quicker and easier
How Do We Get There?

- **Practice** procedural programming language concepts
  - Expressions, decision statements, simple data types, Boolean logic, input/output, loop, function, regular expression, file, ...

- Combine programming techniques to **solve** problems of varying degrees of difficulty

- **Refine** computer programs through testing and debugging to ensure proper operation

- **Understand** programming language documentation to learn new information needed to solve programming problems
Logistics

- **Class URL (CS1110/1111):** [http://cs1110.cs.virginia.edu/](http://cs1110.cs.virginia.edu/)

- **CS1111 schedule:** [http://www.cs.virginia.edu/~up3f/cs1111](http://www.cs.virginia.edu/~up3f/cs1111) or [https://storage.googleapis.com/cs1111/schedule.html](https://storage.googleapis.com/cs1111/schedule.html)

- **Textbook:**
  - Primary text: *The Coder’s Apprentice* by Pieter Spronck
    [Available] [http://www.spronck.net/pythonbook/](http://www.spronck.net/pythonbook/)
  - Optional text: *Starting Out with Python* by Tony Gaddis
    [Available] bookstore

- **Course requirements:** some previous programming experience

- **Discussion board:**
  - Piazza: [https://piazza.com/virginia/spring2019/cs111xs19/home](https://piazza.com/virginia/spring2019/cs111xs19/home)

- **CS 1111 and CS 1110:**
  - Share website, course tools, schedule (slightly different), topics/materials, programming assignments, exams, TAs, office hours, discussion board, ...
Learning Activities

• Programming assignments: 1–4 per week, almost every week
  • 10% deduction for late submissions per day
  • Not accepted after 2 days past the due date

• In-class exercises: almost every meeting, lab-style work

• Additional practice: self-paced

• Game project: team of 2, “work as a team”

• Exams:
  • Test 1 (20-Feb-2019, 50 minutes, closed-book/note, in class)
  • Test 2 (3-Apr-2019, 50 minutes, closed-book/note, in class)
  • Final (4-May-2019, 7pm-10pm, closed-book/note, room assigned by the University)
Programming Assignments

• Click the assignments link on the course website

• Log in using your NetBadge user/password

• Resubmit as many time as you want until the due date (on time submission) or until the late submission due date (late submission)

• Late policy: 25% penalty, not accept after 2 days past the deadline

• Receive feedback in 2 hours. If not, there may be problems in your code that possibly crash the grading system.
  • Modify, test, resubmit
  • If the previous solution is impossible, make a private post on Piazza with a title CS1111 (PA submission): no feedback, tag all instructors and your TAs. In your post, clearly state
    • Your name and computingID
    • Which PA you submitted
    • The time (approximately) you submitted it
    • Additional information we need to know
Assessment

Program assignments 42%
Exams 39%
Exam1 – 12%
Exam2 -- 12%
Final -- 15%
Project 10%
Participation (in-class labs) 9%
# Grading Policy

<table>
<thead>
<tr>
<th>Letter grade</th>
<th>if you score</th>
<th>GPA value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>near the top</td>
<td>4.0</td>
</tr>
<tr>
<td>A</td>
<td>≥ 93%</td>
<td>4.0</td>
</tr>
<tr>
<td>A−</td>
<td>≥ 90%</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>≥ 86%</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>≥ 83%</td>
<td>3.0</td>
</tr>
<tr>
<td>B−</td>
<td>≥ 80%</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>≥ 76%</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>≥ 73%</td>
<td>2.0</td>
</tr>
<tr>
<td>C−</td>
<td>≥ 70%</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>≥ 66%</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>≥ 63%</td>
<td>1.0</td>
</tr>
<tr>
<td>D−</td>
<td>≥ 60%</td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>otherwise</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Rounding:** By default, grades will not be rounded in this course.
Office Hours

• Faculty office hours:
  • Listed on the syllabus
  • You may visit any faculty office hours

• TA office hours:
  • To access, click the OH link on the course website
  • Log in using your NetBadge user/password
  • Specify where you are sitting
  • You must be present in Thornton A-Wing Stacks Lab
  • The TA will come to you
  • The OH tool will be live as soon as the TA office hours are settled
Additional Information

• Install Python, PyCharm, and PyGame
  • [http://cs1110.cs.virginia.edu/lab01-installing.html](http://cs1110.cs.virginia.edu/lab01-installing.html)
  • You may visit CS 1110 lab on Thursday 17-Jan-2019). This is the only CS 1110 lab that is open to CS 1111 students

• More information and policy, please refer to the course website [http://cs1110.cs.virginia.edu/](http://cs1110.cs.virginia.edu/)
Entrance Exam

• Entrance exam
  • 15 minutes
  • Close book/note
  • You will be notified by Wednesday 23-Jan if we think switching section to CS 1110 may help maximize your learning experience
  • You may leave when you are done