This is CS 50.  

Harvard College’s Introduction to Computer Science I

COMPUTER SCIENCE 50

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http://www.cs50.net/
This is CS 50.
Enrollment has increased by 168%
Are you taking CS 50 for concentration credit, core credit, or as an elective?
"Does everyone know more than me?"

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I'm among &quot;those less comfortable&quot;</td>
<td>34.4%</td>
</tr>
<tr>
<td>I'm among &quot;those more comfortable&quot;</td>
<td>13.6%</td>
</tr>
<tr>
<td>I'm somewhere in between</td>
<td>51.9%</td>
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Prior Coursework in CS

<table>
<thead>
<tr>
<th>0</th>
<th>71.5%</th>
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<tbody>
<tr>
<td>1</td>
<td>19.6%</td>
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<tr>
<td>2</td>
<td>6.2%</td>
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<tr>
<td>3</td>
<td>2.1%</td>
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<tr>
<td>4</td>
<td>0.3%</td>
</tr>
<tr>
<td>5</td>
<td>0.3%</td>
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Gender Ratio

Fall 2007

- Male: 71%
- Female: 29%

Fall 2008

- Male: 62%
- Female: 38%
Expectations

- Attend all lectures and sections.
- Complete nine problem sets.
- Take two quizzes.
- Produce a final project.
Workload

<table>
<thead>
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<th>Time Range</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>0 - 5 hours</td>
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<tr>
<td>5 - 10 hours</td>
<td>38.4%</td>
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<td>10 - 15 hours</td>
<td>33.3%</td>
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<tr>
<td>15 - 20 hours</td>
<td>17.4%</td>
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<tr>
<td>20+ hours</td>
<td>6.9%</td>
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Resources

- Lectures (+ Videos)
- Sections (+ Videos)
- Walkthroughs (+ Videos)
- Office Hours (+ Virtual)
- Website (PDFs)
- Scribe Notes
- Bulletin Board (Anonymized)
- help@cs50.net
- ...
#include <stdio.h>

int main(int argc, char *argv[]) {
    printf("hello, world\n");
}
hello, Scratch!
int main(int argc, char *argv[]) {
    printf("hello, world\n");
}

Scratch Meets C
Statements

Scratch v. C

printf("hello, world\n");
Boolean Expressions

Scratch v. C

\[(x < y) \and (y < z)\]
if (x < y)
{
    printf("x is less than y\n");
}
else if (x > y)
{
    printf("x is greater than y\n");
}
else
{
    printf("x is equal to y\n");
}
Loops

Scratch v. C

while (1)
{
    printf("Hello!\n");
}

for (int i = 0; i < 10; i++)
{
    printf("Hello!\n");
}
Variables

Scratch v. C

```c
int counter = 0;
while (1) {
    printf("%d\n", counter);
    counter++;
}
```
Arrays

Scratch v. C

```c
char *inventory[SIZE];
inventory[i] = "Orange";
```
Lectures

Week 0

Lectures

Week 1


```c
#include <stdio.h>

int
main(int argc, char *argv[])
{
  printf("hello, world\n");
}
```
Lectures

Week 2

Lectures

Week 3

Lectures

Week 4

Lectures

Week 5

Lectures

Week 7

Lectures

Week 8

TCP/IP. HTTP. XHTML. PHP. SQL.
Lectures

Week 9

CS 50 in the Cloud

teh intertubes

front-end VM
LDAP server, NAT router, NFS server

cloud.cs50.net

back-end VM
SSH server

back-end VM
SSH server

you

Harvard Hall
CS 50 in a Box
O, hai!

0: Scratch
3: Game of Fifteen
4: Sudoku
5: Forensics
Teh Computer Science 50 learnz you about intertubes in teh cloudz. David J. Malan will pwn u ftw so watch out!

6: Mispellings
Address:
1 Oxford St
Cambridge, MA 02138

Get directions: To here - From here
Search nearby - Save to My Maps
Edit Map

8: Mashup
The CS 50 Fair

<table>
<thead>
<tr>
<th>Language</th>
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<tbody>
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<td>ActionScript</td>
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This is CS 50.