

**CS250 Assignment 1 Rubric  
Pacific University Courses**

**Name:**

**Grade:** \_\_\_\_\_ / 30

Project on time (-10% if one day late)	_____
Electronic copy submitted (-40% if not)	_____
Hard copy submitted (-20% if not)	_____
Project builds without errors (-40% if no)	_____
Project builds without warnings (-10% if no)	_____

**Successful Execution (40% 12pts):**

Outputs program title correctly and menu correctly (1 pts)	_____
Menu accepts only the numbers 1-4. Otherwise it displays the menu again. Selecting option 4 quits. (1 pts)	_____
<b>Test 1:</b> (2pts) Given Input. <b>See assignment handout</b>	_____
<b>Test 2:</b> (2pts) 9 courses. None full. <b>See below</b>	_____
<b>Test 3:</b> (2pts) 10 courses. All Full. <b>See below</b>	_____
<b>Test 4:</b> (1pts) 11 Courses. <b>See below</b>	_____
<b>Test 5:</b> (1pts) 1 Course with prefix ENGL. <b>See below</b>	_____
<b>Test 6:</b> (2pts) User types invalid course. <b>See below</b>	_____

**Successful Design (40% 12pts):**

Used a suitable struct (1 pt)	_____
Used a suitable array (1 pt)	_____
Good use of functions: (6 pts) readCourse printCourse addStudent	_____
Main function is mostly variable declarations and function calls (2 pts)	_____
Each function is small and focused on a particular task (2 pts)	_____

**Acceptable Style (20% 6pts):**

Project and solution named correctly (1 pt)	_____
Code formatting and style (5 pts, 0.5 each)	
• Constants are used appropriately. No magic constants.	_____
• Formatting of code: braces and indentations are correct	_____
• Tabs set to 2	_____
• No line wraps – 80 chars per line	_____
• File header comments are complete/correct	_____
• Function header comments are complete/correct	_____
• One space before & after each operator	_____
• Well named variables using prefixes	_____
• Correct program organization (order of items in your solution)	_____
• One space before each parenthesis for control structures (if, for, while, etc.)	_____

## Test 1: EXPECTED OUTPUT

Input/Output: See  
assignment handout.  
(See CS 250 public folder. File  
named: test1.txt)

## Test 2: EXPECTED OUTPUT

(See CS 250 public folder.  
File named: test2.txt)

```
*****  
PACIFIC UNIVERSITY COURSES  
*****
```

1. Print all courses.
2. Find one course.
3. Add student.
4. Quit.

Option: 1

```
CS 250 Cap: 48 Available: 12  
CS 460 Cap: 24 Available: 15  
CS 494 Cap: 24 Available: 15  
MATH 121 Cap: 25 Available: 2  
MATH 240 Cap: 30 Available: 10  
CS 251 Cap: 48 Available: 12  
CS 461 Cap: 24 Available: 15  
CS 495 Cap: 24 Available: 15  
MATH 122 Cap: 25 Available: 2
```

1. Print all courses.
2. Find one course.
3. Add student.
4. Quit.

Option: 2

```
Prefix: CS  
Number: 251
```

```
CS 251 Cap: 48 Available: 12
```

1. Print all courses.
2. Find one course.
3. Add student.
4. Quit.

Option: 3

```
Prefix: CS  
Number: 251
```

```
CS 251 Cap: 48 Available: 11
```

1. Print all courses.
2. Find one course.
3. Add student.
4. Quit.

Option: 1

```
CS 250 Cap: 48 Available: 12  
CS 460 Cap: 24 Available: 15  
CS 494 Cap: 24 Available: 15  
MATH 121 Cap: 25 Available: 2  
MATH 240 Cap: 30 Available: 10  
CS 251 Cap: 48 Available: 11  
CS 461 Cap: 24 Available: 15  
CS 495 Cap: 24 Available: 15  
MATH 122 Cap: 25 Available: 2
```

1. Print all courses.
2. Find one course.
3. Add student.
4. Quit.

Option: 4

### Test 3: EXPECTED OUTPUT

(See CS 250 public folder. File named: test3.txt)

```
*****
PACIFIC UNIVERSITY COURSES
*****

1. Print all courses.
2. Find one course.
3. Add student.
4. Quit.

Option: 1

CS 250 Cap: 10 Available: 0
CS 460 Cap: 10 Available: 0
CS 494 Cap: 10 Available: 0
MATH 121 Cap: 10 Available: 0
MATH 240 Cap: 10 Available: 0
CS 251 Cap: 10 Available: 0
CS 461 Cap: 10 Available: 0
CS 495 Cap: 10 Available: 0
MATH 122 Cap: 10 Available: 0
MATH 241 Cap: 10 Available: 0

1. Print all courses.
2. Find one course.
3. Add student.
4. Quit.

Option: 3

Prefix: CS
Number: 250

Course already full.

1. Print all courses.
2. Find one course.
3. Add student.
4. Quit.

Option: 4
```

## Test 4: EXPECTED OUTPUT

(See CS 250 public folder. File named: test4.txt)

```
*****  
PACIFIC UNIVERSITY COURSES  
*****  
  
TOO MANY COURSES
```

## Test 5: EXPECTED OUTPUT

(See CS 250 public folder. File named: test5.txt)

Input:

```
*****  
PACIFIC UNIVERSITY COURSES  
*****  
  
Invalid course in file
```

## Test 6: EXPECTED OUTPUT

(See CS 250 public folder.  
File named: test6.txt)

```
*****
PACIFIC UNIVERSITY COURSES
*****

-----

1. Print all courses
2. Print one course
3. Add a student to a course
4. Quit

-----

Option: 1

CS 250 Cap: 48 Available: 12
CS 460 Cap: 24 Available: 15
CS 494 Cap: 24 Available: 15
MATH 121 Cap: 25 Available: 2
MATH 240 Cap: 30 Available: 10

-----

1. Print all courses
2. Print one course
3. Add a student to a course
4. Quit

-----

Option: 2

Prefix: ENGL

Prefix: CS
Number: 315

That course does not exist

-----

1. Print all courses
2. Print one course
3. Add a student to a course
4. Quit

-----

Option: 2

Prefix: ENGL

Prefix: CS
Number: 494

CS 494 Cap: 24 Available: 15

-----

1. Print all courses
2. Print one course
3. Add a student to a course
4. Quit

-----

Option: 4
```