$Id: syllabus-cmps112.mm,v 1.97 2017-09-26 13:27:29-07 - - $
PWD: /afs/cats.ucsc.edu/courses/cmps112-wm/Syllabus
URL: http://www2.ucsc.edu/courses/cmps112-wm/:/Syllabus/

1. General Information

The generic part of the syllabus contains detailed information about prohibiting cheating, due dates and times, submitting assignments, and verification of the submit. Read it carefully, as you will be held responsible for it.

Directory: The directory **`/afs/cats.ucsc.edu/courses/cmps112-wm/`** and its subdirectories contain all assignments, handouts, examples, old exams, etc.

Piazza: **`https://piazza.com/`** is for questions and discussions that are appropriate in the classroom or lab section.

Assignments: All assignments must be submitted electronically and must work on the IC Linux servers (**`unix.ic`**) in order to receive a grade. Submit programs using the submit command:

```
submit cmps112-wm.f17 ...
```

Due Dates: Due dates are announced in the **`README`** files in the course directory and in the newsgroup. You must frequently check the **`README`**. ***Late submissions or makeups will not be accepted except in case of emergency (illness or injury) requiring a physician's attention.***

Cheating: ***Cheating will not be tolerated. See the secion on cheating in the generic part of the syllabus.***

Grades: In order to pass the course, both the programming component and the testing component will be taken into consideration. Failing either component may be cause to fail the course. Your final grade and narrative evaluation will be based on the following allocation of points:

Programming assignments:	4 × 12% =	48%
Midterm test:		20%
Final exam during exam week:		32%

The final exam will be ***two*** hours long, during the first two hours of the time slot scheduled by the registrar.

2. Course Description from Catalog

CMPS-112. Comparative Programming Languages. Covers several programming languages and compares styles, philosophy, and design principles. Principles underlying declarative, functional, and object-oriented programming styles are studied. Students write programs emphasizing each of these techniques. Prerequisite: CMPS-101 or CMPS-109.

3. Textbook

`/afs/cats.ucsc.edu/courses/cmps112-wm/Languages/`
`/afs/cats.ucsc.edu/courses/cmps112-wm/Lecture-notes/`
`https://www.google.com/`

No textbook is explicitly listed for this course. Tutorials for the various languages we will be discussing can be found for free on the web.

4. Syllabus

The course will follow two parallel tracks, each occupying about half of the lecture time. One track will consist of programming language principles and paradigms, and the other will detail some specific programming languages.

Principles. The following topics will be covered, with examples taken from various programming languages.

- Language design principles.
- Syntax and semantics.
- Data types.
- Expressions, statements, and procedures.
- Abstract data types and modules.
- Object-oriented programming.
- Functional programming.
- Logic programming.
- Parallel programming.

Practice. There will be four programming assignments, each in a different language, each showing a different programming paradigm :

- A dynamically typed functional language.
- A statically typed functional language.
- A dynamically typed object oriented language.
- A logic language.

5. Generic Syllabus

Also read the generic syllabus in the directory `generic-syllabus/`.

6. Pair Programming

You may do pair programming if you choose. You are responsible for choosing a partner with whom you can work. Read the guidelines in the directory `pair-programming/`.

7. Submit checklist

Carefully read the submit checklist in `submit-checklist/` and make sure you understand how to use `submit`. All programs will be graded on the files you submit before the due date. Programs which work in your directory but not in the submit directory are not relevant to anything and will not be considered.

Forgetting to submit even a single file or submitting the wrong version of a file will have a very significant negative impact on your grade.