CS 3723 / CS3721 Programming Languages SYLLABUS, Fall 2013

Course Name: CS 3723/3721, Programming Languages

Semester: Fall 2013

Instructor Name and Contact Info: Neal R. Wagner, Email: neal.wagner@gmail.com

Number and Time:

- CS 3723, MWF 9-9:50 am
- CS 3721, M 11-11:50 am, W 8:50 am (informal), F 10-10:50 am

Final Exam: Tue, 17 Dec 2013, 7:00-9:30 am

Course Web Pages: www.cs.utsa.edu/~wagner/CS3723/fall13/index.html

Course Description: Prerequisites: CS 2233 and (2213 or 3443). An introduction to highlevel procedural, functional, and object-oriented programming languages, their theoretical foundations, organization, and implementation. Topics include formal syntax, compilers and interpreters, type systems, scoping and activation records, control structures, and data abstraction.

Textbooks: None required

Grade (Tentative factors and percentages):

- Recitations (12 or 13, none dropped): >= 40%
- In-class quizzes (>= 0 of them): $\leq 5\%$
- Mid-term exam (1, no make-ups): >= 20%
- Final exam (emphasis on second half): >= 25%
- Attendance (sign-in sheets): $\leq 3\%$

Outline of Topics:

I. *Regular Expression Processor.* During the first 2 or 3 weeks we will show how a programming language can handle a regular expression. Specifically, we will show how the language can take an input regular expression R and determine the match data for an input string S.

II. *Compiler for a Small Language*. During the next 5 or 6 weeks we will write a compiler program. This will be much more challenging than Part I because you will write complete working code in C or in Java.

III. Investigate Several Other "Strange" Languages. These may include Lisp and Ruby.

Academic Support: This is available from the instructor, the teaching assistant, from CS tutors, and from the Tomás Rivera Center (see www.utsa.edu/trcss).

Course Credit for Completing the Course Evaluation: It's not good policy to tell instructors which students have completed the evaluation before grades are assigned, so I won't be giving any points for filling out the form. (But, hey, you should fill it out, and please be nice!)

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