Course Name: CS 3723/3721, Programming Languages

Semester: Spring 2014

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

Number and Time:

- CS 3723, TR 11:30 am – 12:45 pm
- CS 3721, T 2:30 – 3:30 pm, R 1:00 – 1:50 pm

Final Exam: Tue, 6 May 2014, 09:45 am - 12:15 pm

Course Web Pages: www.cs.utsa.edu/~wagner/CS3723/spr14/index.html

Course Description: Prerequisites: CS 2233 and (2213 or 3443). An introduction to high-level 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): $\geq 40\%$
- In-class quizzes ($\geq 0$ of them): $\leq 5\%$
- Mid-term exam (1, no make-ups): $\geq 20\%$
- Final exam (emphasis on second half): $\geq 25\%$
- Attendance (sign-in sheets): $\leq 3\%$

Outline of Topics:

I. Compiler for a Small Language. During the first 5 or 6 weeks we will write a compiler program. You will write complete working code in C or in Java.

II. Regular Expression Processor. During the next 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.

III. Investigate Several Other "Strange" Languages. These may include Lisp, Python, and Prolog.

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!)