

CS 3723 / CS3721 Programming Languages SYLLABUS, Spring 2014

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 (≥ 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!)

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Postage will be paid by addressee. If condition persists, consult your physician. Subject to change without notice. Times approximate. One size fits all. Colors may, in time, fade. For office use only. Edited for television. List was current at time of printing. At participating locations only. Keep away from fire or flame. Avoid contact with skin. Sanitised for your protection. Employees and their families are not eligible. Beware of the dog. Limited time offer. No purchase necessary. Not recommended for children under 12. Precordered for this time zone. Some of the trademarks mentioned in this product appear for identification purposes only. Freshest if eaten before date on carton. Subject to change without notice. Please allow 4 to 6 weeks for delivery. Not responsible for direct, indirect, incidental or consequential damages resulting from any defect, error or failure to perform. Slippery when wet. Substantial penalty for early withdrawal. For recreational use only. No Canadian coins. List each check separately by bank number. This is not an offer to sell securities. Read at your own risk. Ask your doctor or pharmacist. Parental guidance advised. Always read the label. Do not use while operating a motor vehicle or heavy equipment. Do not stamp. Breaking seal constitutes acceptance of agreement. Contains non-milk fat. Date as postmark. Lost ticket pays maximum rate. Use only in well-ventilated area. Price does not include taxes. Not for resale. Hand wash only. Keep away from sunlight. For a limited time only. No preservatives or additives. Keep away from pets and small children. Safety goggles required during use. If rash, irritation, redness, or other device use. Do not use on face, eyes, or mouth. Please remain seated until at web page his content is complete. Return after opening. Flammable. Make the back or other backs and tray tables must be in the upright position. Repeat as necessary. Do not look directly into light. 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