

## CSE 3302/5307-001: Programming Languages

Summer 2014: MW 1:00 - 2:50, ERB 130

Instructor: Bob Weems, Associate Professor  
Office: 627 ERB (weems@uta.edu, <http://ranger.uta.edu/~weems/> )  
Hours: MW 3:00 - 4:00, TR 12:30 - 1:30

GTA: Information will be posted on web page

Prerequisites: CSE 1325: O-O Programming  
CSE 2320: Algorithms & Data Structures  
(CSE 2312: Comp. Org. & Assembly Lang. Prog. for Fall 2014)

Objective: In future design situations, students will be capable of considering programming language issues.

Outcomes: 1. Understanding of programming language paradigms, including imperative, functional, and object-oriented.  
2. Understanding of the breadth of design issues in defining programming languages, along with those for building compilers, interpreters, and run-time systems.  
3. Understanding, at an elementary level, of the formalisms and notations used with programming languages.

Textbooks: R.W. Sebesta, *Concepts of Programming Languages, 10th ed.*, Addison-Wesley, 2012.

D. Crockford, *JavaScript: The Good Parts*, Yahoo Press, 2008.

D.P. Friedman, et.al., *The Little Schemer, 4th ed.*, MIT Press, 1995.

N. Wirth, *PASCAL -S: A Subset and its Implementation*, ETH Technical Report 12, 1975 (available from webpage).

References: Links on the course webpage.

Readings: Indicated on calendar later in syllabus.

Grade: Based on the following weights:

Exams 1-3: 70% divided evenly among 3 exams.

Exam 3: Monday, August 11, 1:00-2:50

Programs: 30% divided evenly among 4 - 6 assignments.

Policies:

1. Regular attendance is expected. You are expected to know lecture contents and announcements. The lectures are being recorded and will have a link on the web page, but no availability guarantee is made (e.g. this is not a “distance” course).
2. The course web page is <http://ranger.uta.edu/~weems/NOTES3302/cse3302.html>
3. You are expected to have read the assigned readings by the specified date.
4. CHEATING - YOU ARE EXPECTED TO KNOW UNIVERSITY POLICIES. If you are suspected of cheating, the matter must go through university channels outside of the CSE Department.

<http://www.uta.edu/conduct/>

5. Any request for special consideration must be appropriately documented in advance. (Special consideration does not include giving a higher grade than has been earned.)
6. Late programs are penalized according to the following schedule. LABS ARE DUE AT 12:45 PM ON THE DUE DATE, NOT MIDNIGHT. After the due time, assistance will not be provided.

<u>Degree of lateness</u>	<u>Penalty</u>
Up to 12:45 next day	10 pts
Up to 12:45 two days	30 pts
Up to 12:45 three days	60 pts

7. Each lab is graded as follows:

Some Issues

- |                |     |  |
|----------------|-----|--|
| a. Output/Code | 70% | If you know your program has problems, you should let the GTA know what parts are functional. Test cases demonstrating the limited functionality are useful. |
| b. Style       | 15% | The emphasized language features are applied appropriately.  |
| c. Structure   | 15% | Code is not unnecessarily complicated or long. It is often better to rewrite code rather than patching several times.  |

You are responsible for correctly sending each programming assignment to the GTA as an attachment. (cc: yourself)

Points will not be awarded for programs that are not substantially complete.

8. GTA duties:
  - a. Provide first-level of assistance for programs.
  - b. Grade programs and short-answer test problems.

9. Instructor duties:
  - a. Lecture.
  - b. Guidance
  - c. Tests - preparation and grading long-answer test problems.
  - d. Special consideration.
  - e. Design homework and programming assignments.
10. If you require a reasonable accomodation for a disability, please contact me no later than the second week of this semester. Further details are available at <http://www.uta.edu/disability/>
11. Occasional class-wide email messages (e.g. weather situations, clarifications) may be sent to the addresses recorded by MyMav.

Course Content (in chronological order)

Reading Annotations: J = Crockford, P = Wirth, S = Friedman

1. Preliminaries. 1, 2.4, 2.5, 2.11, 2.12, 2.15, 2.16, 2.17, 2.18
2. Three New Friends. 15.1-15.5; J: 1, 10; P: 1-3; S: 1-4
3. Syntax & Semantics. 3.1-3.4, 3.5.1, 3.5.2; J: 2, D; P: A  
Exam 1: Topics 1.-3.
4. Lexical & Syntax Analysis. 4; J: 7; P: 5
5. Names, Bindings, and Scopes. 5 (no 5.5.5, 5.5.6)
6. Data Types. 6; J: 3-6; S: 5-7
7. Expressions & Assignment. 7; S: 8  
Exam 2: Topics 4.-7.
8. Statement-Level Control Structures. 8
9. Subprograms. 9
10. Implementing Subprograms. 10 (no 10.6); P: 4
11. Functional Programming. 15.7, 15.8; S: 9-10  
Exam 3: Items 8.-11.

Calendar - with topic numbers from course content

June		July/August					
2	Syllabus/1.	4	1.	2	No Class		
9	2.	11	2.	7	5.	9	6.
16	2.	18	3.	14	7.	16	8.
23	3.	25	4.	21	Exam 2	23	9.
30	Exam 1			28	10.	30	11.
				4	11.	6	
				11	Exam 3		

Thursday, July 17 is the last day to withdraw.