CS-4337.001 SYLLABUS

UTD

Course: CS-4337.0u1 Organization of Programming Languages
Professor: Dr. Chris Irwin Davis
Term: Fall 2015
Meetings: 11:30AM - 12:45PM Mon & Wed, ECSS 2.412

Professor Information

Name: Chris Irwin Davis
Email Address: chrisirwindavis@utdallas.edu
Office Phone: (972) 883-3574
Office Location: ECSS 4.705
Office Hours: TBD
Other Information: All course content on eLearning

Prerequisites

(CE 2336 *or* CS 2336 *or* TE 2336 *or* CS 3333) ***and***
(CE 2305 *or* CS 2305 *or* TE 2305) ***and***
(CS 3340 *or* SE 3340 *or* TE 3340 *or* CE 4304 or EE 4304)

Description

Organization of Programming Languages (3 semester hours) Principles of design and implementation of contemporary programming languages. Formal description including specification of syntax and semantics of programming languages. Language definition structures including binding, scoping, data types, control structures, parameter passing, abstraction mechanism, and run-time considerations. Design issues of imperative languages, object-oriented languages, functional languages and logic languages. Design, implement, and debug programs in various programming language paradigms.

Learning Objectives

- Ability to identify the characteristics of programming paradigms and phases of translation
- Ability to understand the importance of formal syntax and semantics
- Ability to understand the different forms of binding, visibility, scoping, and lifetime
- Ability to understand the semantics of expressions and data types
- Ability to understand the concepts of data abstraction, control abstraction and various parameter passing mechanisms
- Understand the concepts of encapsulation, information hiding, inheritance, and polymorphism
- Ability to understand the concepts of first class values, lists and recursion
- Ability to understand the concepts of the functional programming paradigm and logic programming paradigm
- Design programs using the functional programming paradigm
- Design programs using the logic programming paradigm

Required Textbook

Concepts of Programming Languages, 11th edition, Robert Sebesta, Addison Wesley Pub., 2015.

Grading

The grade distribution for the course is:

Area	Weight
Homework Assignments and Quizzes	5%
Programming Assignments	30%
Midterm Exam	30%
Final Exam	35%
Total	100%

The letter grade thresholds for the overall course grade is:

%	Letter Grade	GPA Credit
[97 – 100]	A+	4.00
[93 – 97)	A	4.00
[90 – 93)	A-	3.67
[87 – 90)	B+	3.33
[83 – 87)	B	3.00
[80 – 83)	B-	2.67
[77 – 80)	C+	2.33
[73 – 77)	C	2.00
[70 – 73)	C-	1.67
[67 – 70)	D+	1.33
[63 – 67)	D	1.00
[60 – 63)	D-	0.67
[0 – 60)	F	0.00
—	NF*	0.00

* Failure for non-attendance

Course & Instructor Policies

- **eLearning** is the official information portal for this course. Course announcements, homework, lecture slides, assignments, and grades will be communicated via eLearning.
- Final course grades will be posted in Galaxy by the Records Office.
- If you are not able to attend a class, you are responsible for any assignments, announcements, and/or handouts.
- All submissions must be your own work. Students guilty of plagiarism will receive zero credit for the plagiarized work and may be subject to further academic penalties.
- If you decide to stop attending class, be sure to drop or withdraw from the course. Otherwise, you risk receiving an 'F' or 'NF' for the course.
- The course Teaching Assistant (TA) will grade all Homework and Programming Assignments. Questions about homework or assignment grades should be directed first toward the TA.
- The instructor will grade the Midterm Exam and Final Exam.
- Any student wishing to review or contest an assignment or exam grade has exactly one calendar week from the time the grade is posted to initiate an inquiry.
- Make up exams for either Midterm or Final will be administered only for verifiable emergencies. A student must make every attempt possible, via telephone or email, to notify the instructor that he/she will miss the exam prior to the examination date and time.Homework and Assignments

Assignments

- All Homework assignments and programming assignments are submitted online through eLearning
- Late submission policy:
  - Homework: Answer keys to homework will be visible online automatically after the deadline passes. Therefore, **late Homework cannot be accepted and will be assigned zero credit**. Submit incomplete work before the deadline for partial credit.
  - Programming Assignments: Late programming assignments will be penalized
    - -10% of possible points for up to 24 hours late,
    - -25% of possible points for up to 48 hours late,
    - -50% of possible points for up to 72 hours late,
    - No credit for more than 72 hours late.
- Assignments and Homework are due _before_ the deadline time. e.g. an assignment due at 11:59PM is LATE if the time stamp is 11:59PM. Please do not wait until the last minute to submit. The unpredictability of your internet connection is not a valid excuse for a late submission. Only a _verified eLearning outage_ will be considered a valid reason to waive late submission policy.
- No additional _individual_ assignments can be assigned for extra credit that are not assigned to the entire class.

Midterm Exam and Final Exam

- Midterm and Final Exam are both _closed book_ and _closed notes_.
- The Final Exam will be comprehensive, although more weight will be given to material presented after the midterm.
- Final Exam will be on the date/time set by the university and published in Galaxy.
- Both the Midterm and Final Exam will be administered in the **Testing Center** (in the basement of the McDermott Library) via eLearning. All Testing Center policies apply with respect to items that are disallowed (jackets, pencil boxes, bottled water, etc.).
- **The Midterm and Final Exam will not be returned**. They will be kept on file by the instructor for one additional semester. Anyone wishing to review his/her exam solutions can make an appointment with the instructor or see him during his office hours.

UT Dallas Syllabus Policies and Procedures

http://coursebook.utdallas.edu/syllabus-policies/

UTD Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

"As a Comet, I pledge honesty, integrity, and service in all that I do."

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.