

CMPE 101 Foundations of Computer Engineering (Fall 2006/2007)

Instructors:	(Gr 01) Asst. Prof. Dr. Doğu Arifler (coordinator) (Gr 02) Asst. Prof. Dr. Ekrem Varoğlu (Gr 03) Asst. Prof. Dr. Önsen Toygar (Gr 04) Asst. Prof. Dr. Cem Ergün
Course Web Site:	http://cmpe.emu.edu.tr/cmpe101
Office Hours:	TBA. Please refer to the course Web site.
Textbook:	J. R. Hanly and E. B. Koffman, <i>Problem Solving and Program Design in C</i> , 5th ed., Addison Wesley, 2006.
Reference:	K. F. Lauckner and M. D. Lintner, <i>The Computer Continuum</i> , 2nd ed., Prentice Hall, 2001.

Course Description: This course introduces the student to the fundamental concepts of computer engineering. Topics covered include: Computers and information processing - notion of computers, concepts of data and information, applications of computers, history of computing. Computer hardware -CPU, memory, input/output interface, secondary storage, ports, types of computer systems, computer software -system software, utilities, application software, data communication, an overview of operating systems. General problem solving concepts: basic data types, constants and variables, basic operators and expressions, algorithms, pseudocodes, and flow charts, sequential, and conditional problem solving (IF statements and CASE logic), looping (WHILE/WHILE-END, REPEAT-UNTIL, FOR structures), formatted output, examples in C programming language. (Pre-requisite: none)

Important Dates: Midterm I week: 17–25 November 2006, Tentative Midterm II week (to be set by the Department): 11–15 December 2006, Finals: 9–22 January 2007.

Grading Policy: Midterm I 25%, Midterm II 25%, Final 40%, Labs 10%

Lab Policy: There are **no** exemptions from labs. Consult the course Web site for lab assignments and other lab policies.

Make-Up Policy: Only one **comprehensive** make-up examination will be given to those who miss any of the midterms or the final. The make-up exam will be given to only those who provide a valid excuse in writing within the next three working days following the missed exam. This rule is a University by-law, and we **will** enforce it. Students who miss an exam due to a serious medical condition are required to provide official documentation (doctor's report approved by the Student Health Center). However, eligibility to take the make-up exam will still be subject to the approval of the course coordinator.

Academic Dishonesty: Any conduct that attempts to gain unfair academic advantage is considered academic dishonesty. Copying homework and programs, cheating during exams, substituting for another person are some examples of academic dishonesty. Cases of academic dishonesty **will not** be tolerated and will be punished according to EMU's disciplinary policies.

Tentative outline: Below is a tentative outline for this course. We reserve the right to adjust the pace and topics of the class as the semester progresses.

Week 1	Introduction to basic principles of computing
Week 2	Computer hardware and software
Week 3	Operating systems, networks, ethics
Week 4	Introduction to C and problem solving techniques (Ch. 1, 2)
Week 5	Review
Week 6	Data types, expressions (Ch. 2)
Week 7	Principles of top-down design (Ch. 3)
Week 8	Principles of structured programming
Week 9	Midterm week
Week 10	Selection structures: if (Ch. 4)
Week 11	Selection structures: switch (Ch. 4)
Week 12	Repetition structures and loops (Ch. 5)
Week 13	Repetition structures and loops (Ch. 5)
Week 14	Review and concluding remarks
