Kansas State University
Department of Computing and Information Sciences (CIS)

CIS 209

C Programming for Engineers

Lectures: Rathbone Hall 1073 (Paslay Auditorium)
Labs: Seaton Hall 54

Spring, 2015

Instructor: Stéphane Faroult (sfaroult@ksu.edu)
Office Hours: Nichols 316B, Thu 2pm-3pm, Fri 10am-12am and by appointment.

Teaching Assistants:
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Ian Speer (ispeer@ksu.edu)
SAS Tutoring / Fiedler Library
Mon/Wed 12:00-4:20
Tues/Thurs 1:00-3:45
More information on tutoring on engg.ksu.edu/rdi/sas

Lecture: Lecture slides are available as a PDF document on KSOL (Canvas).
Lecture slides are posted prior to the next lecture, with accompanying notes unless self-explanatory.

Required Textbook: None.
“The C Programming Language”, 2nd edition, by Kernighan and Ritchie is strongly recommended. It assumes some knowledge of programming, so if you are a complete beginner wait for a couple of weeks before starting it.

Prerequisite: MATH 220.

Objectives: The objective of this course is to give strong foundations in programming to engineering students. Once the basics of programming will be well understood, the course will give a wide overview of information technology, and how C programming can be applied to solve various tasks that students may encounter in a later life. A quick introduction to other programming languages will also be given.

The following topics will be covered:

- A history of programming
- How to build a program
• Data types, variables, arrays
• Conditional statements
• Loops
• Algorithms
• Pointers
• Functions
• Input/Output operations
• Memory management
• Data structures
• Accessing databases (overview)
• Network operations (overview)
• Graphical interfaces (overview)
• Numerical methods (overview)
• Operations research (overview)
• Introduction to other languages / Object Oriented programming

Graded Work:

• In-Class Quizzes 10%
• Mid-Term Exam 20%
• Final Exam 30%
• Labs 40%

Labs will consist of exercises to be completed during lab time, as well as of more complicated projects that will become homework. Asking for a hint or debugging help from a fellow student is allowed in labs and for assignments; each handed work, though, must be original. Something directly copied from somebody else will be regarded as plagiarism.

Exams: Paper notes and documents will be allowed during exams, as well as calculators. However, any electronic device allowing communication with other people will be forbidden.

**Course Policies**

**Drop Policy**

It is your responsibility to drop the course if you are enrolled but decide not to complete the course --- there are no “automatic” drops due to nonattendance.

**Academic Honesty**

Kansas State University has an Honor System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor System. The policies and procedures of the Honor System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. The honor system website can be reached via the following URL: www.k-state.edu/honor. A component vital to the Honor System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.
**Students with Disabilities**

Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the Student Access Center at accesscenter@k-state.edu, 785-532-6441; for Salina campus, contact the Academic and Career Advising Center at acac@k-state.edu, 785-826-2649.

**Expectations for Classroom Conduct**

All student activities in the University, including this course, are governed by the Student Judicial Conduct Code as outlined in the Student Governing Association By Laws, Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

**Copyright Notification**

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**Campus Safety**

Kansas State University is committed to providing a safe teaching and learning environment for student and faculty members. In order to enhance your safety in the unlikely case of a campus emergency make sure that you know where and how to quickly exit your classroom and how to follow any emergency directives. To view additional campus emergency information go to the University's main page, www.k-state.edu, and click on the Emergency Information button.