SYLLABUS

1)

Course Name	System Programming
Course Code	
Course Hour and Credit	4
Department	Mathematics
Lecturer Name-Surname	Sanjar Erdolatov
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Office No- Phone No	0555770960, 0312631425/157
Office Hours	

2) **Course Description** : The first half of the course is an introduction to C++ for Java programmers. The second half is on systems programming in UNIX.

Course Homepage : The URL for the course homepage is http://www.cs.uga.edu/~rwr/cs1730.html. The readings, projects, announcements,

3) Outline

Weeks	Topics	Subtopics	Chapter	Home Assignments
1	• **C++ topics and their location in the text by Deitel and Deitel :** o Chapters 1, 2 -- Introduction			
2	o Chapter 3 ------ Classes and Objects (first look)			
3	o Chapters 4, 5 -- Control Structures			
4	o Chapter 6 ------- Functions and Recursion			
5	o Chapter 7 ------- Arrays			
6	o Chapter 8 ------- Pointers			
7	o Chapters 9, 10 - Classes (in depth)			
8	o Chapter 11 ----- Operator Overloading o Chapter 12 ----- Inheritance			
9	o Chapter 13 ----- Polymorphism			
10	o Chapter 14 ----- Templates			

11	○ Chapter 15 ----- Input/Output			
12	○ Chapter 16 ----- Exceptions			
13	○ Chapter 17 ----- Files			
14	○ Chapter 21 ----- C Features • **UNIX topics and their location in the text by Stevens and Rago :**			
15	○ Chapter 1 ------ Architecture ○ Chapter 2 ------ Standardization			
16	○ Chapter 3 ------ File I/O ○ Chapter 4 ------ Files and Directories ○ Chapter 5 ------ Standard I/O Library ○ Chapter 6 ------ System Files ○ Chapter 7 ------ Process Environment ○ Chapter 8 ------ Process Control ○ Chapter 9 ------ Process Relationships ○ Chapter 10 ----- Signals ○ Chapter 15 ----- Pipes and FIFOs			
17	Chapter 16 ----- Sockets			

4) Assessment Policy

Midterm, Final and Applications- Home assessment
Students will be evaluated based on a midterm and a final examination as follows:
Midterm- 40% Final 60 %

All tests are closed book and the final is comprehensive. The results will be converted to a letter grade keeping with grading policies of the college.

5) Course Materials:

- **Required Texts :**
  - *C++ How to Program*, ***6th edition***, by Deitel and Deitel, 2008. (The 4th or 5th edition is okay too.)
  - *Advanced Programming in the UNIX Environment*, ***2nd edition***, by Stevens and Rago, 2005. (The paperback or 1st edition is okay too.)

6) Class Rules:

Students are expected to attend and participate in all classes. Attendance is taken at the beginning of each class. Please notify the instructor in advance of any anticipated absence whenever possible. It is your responsibility to make up any material missed whenever you are absent from class. Assignments are taken from exercises in the text. The homework problems are always covered in class and you are expected to read the section of text corresponding to the homework assignment. Questions about the problems should be raised at the next class meeting. The study of mathematics/ computer science requires regular work and plenty of practice. Postponed homework usually results in poor comprehension and performance.

7) General Information :

- All programs will be compiled and run in a Unix environment using using the GNU g++ compiler for C++.
- This class does not support PC's. We expect all work to be done in a Unix environment.
- If you do write your projects on a PC, then it is your responsibility to :
  (i) transfer the programs over to your Unix account, and
  (ii) make sure they work on your Unix account.

8) Prerequest

Prerequisities: CSCI 1301-1301L and CSCI 1302 or permission of the instructor.