Computer Science CS 33011-001 Speed Programming Techniques
Call Number 13634
SYLLABUS
Fall, 2013

Time and Place: Monday,   5:30 - 8:30,   in lab 139.
Wednesday,   5:30 - 6:45,   in lab 139.

Description: This course is different from many other courses: to begin with, though there is homework, it is voluntary (though credit will be given if you do it), in addition, it will only meet until November 11, after the date of the field trip to the ACM Programming Contest.

The field trip will take place on November 8th and 9th, we will leave in the afternoon of the 8th for Youngstown we will return on November 9th, after the contest, which concludes at 6:30 or so. Only six people will get to go, those six people to be determined by mid-October.

Since I am shortchanging you on the contact hours by cutting the course short on November 6, I will hold longer sessions Mondays starting October 1, eventually as long as 10:30, to simulate the 5 hours of a real contest. We will also schedule a contest tryout on a Saturday from 10 to 3. This will probably be in September or early October and be synchronized with National ACM. (That is, many teams from other Universities will participate also). To alleviate hunger pangs, food will be made available during these longer class periods.

Instructor: Michael Rothstein, 268 MSB, phone 330-672-9065.

Email address: rothstei at cs.kent.edu
Although I also receive email at my mrothste at kent.edu address, I do so less frequently. (replace "at" by "@")

Web address: http://www.cs.kent.edu/~rothstei

Office Hours:
Monday, Wednesday 2:00-3:30 (often extended to 5:00 PM)

Also, you can always send email with questions and/or to set up an appointment. Usual turnaround for email addressed to the cs address will often be a few hours during the day. Email use is to be preferred over voicemail, which will not be checked as often.

Suggested Bibliography: Skiena, Steven S. and Revilla, Miguel A. *Programming Challenges, The Programming Contest Training Manual* Springer, 2003, ISBN 0-387-00163-8
Any decent C++ reference
An Algorithms textbook.

Course Goals: The goal of this course is to train for the ACM Programming Contest of November 9 and participate in it: participants will get the trip paid, an Attendance Certificate, a one year student membership in ACM, and, of course, a T-shirt.

Course Description: The idea of this course is preparation for the programming contest which will happen this year on November 9; the suggested bibliography is designed to be read independently; in this course, and used as a reference. I expect you to read the bibliography and ask me questions; class time will be devoted to solving exercises similar to the ones in the book, corresponding to the chapters read.

Prerequisite: Though the main prerequisite for this course is a C in CS 23001, Data Structures, we will use (and cover some) material from other courses; if you already have that material, you will be better off.

Attendance policy By initiative of the Provost of the University, I have been charged with keeping full attendance records, at least for the first ten weeks of the semester. As far as this course is concerned, that is the whole course period; attendance and effort will be a major component of the final grade. The method of taking attendance will be different from other courses; instead of calling the roll on Mondays, you will have to submit at least one solution to one of the posed problems (I will call the roll on Wednesdays). Note that the solution posed does not have to be correct (though it is better if it is correct; note also, that, since the problems will be on the web, distance attendance on Mondays after Mid-September is perfectly acceptable, provided it doesn't get in the way of teamwork.

Grading: Your grade in this course will depend both on effort and on results; since there will be very little homework after the first few weeks, attendance will be an integral part of the grade; so is class participation; if you have a bad attendance record, you will get an "F"; otherwise: in order to get an "A", you need to be the person who gets the most problems solved (or closed to that); the less problems you actually get solved, the lower your grade, though I guarantee that somebody with "perfect attendance" (i.e. tried honestly to solve at least one problem each week), will get at least a "C". If your attendance is not perfect and you have not solved many problems, your grade may slip below that. I cannot over-emphasize the importance of attendance in the grade in this course.

This syllabus may be changed during the semester if necesary: changes will be announced in class; they will also show up on the instructor's website.

Special accommodations for Students with Disabilities: University policy 3342-3-01.3 requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you

have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through Student Disability Services (contact 330-672-3391 or visit:

http://www.kent.edu/sas for more information on registration procedures). Note that, since this is an elective course, that is preparation for a contest, "additional time for tests" cannot be considered.

(Think of requiring additional time for programming like a runner who needs additional time for the run.)

Registration Requirement: The official registration deadline for this course is September 8, 2012. University policy requires all students to be officially registered in each class they are attending. Students who are not officially registered for a course by published deadlines should not be attending classes and will not receive credit or a grade for the course. Each student must confirm enrollment by checking his/her class schedule (using Student Tools in FlashFast) prior to the deadline indicated. Registration errors must be corrected prior to the deadline.

The last day to withdraw is November 3, 2012.

On cheating, plagiarism and other unethical behavior For this course cheating consists of submitting a program available on the web to one of the problems posed in class for credit. For information on the University's cheating policy, see the University policy register on cheating:
http://www.kent.edu/policyreg/policydetails.cfm?customel_datapageid_1976529=2037779
In addition, the University has a very stringent policy, (see:
http://www.kent.edu/policyreg/policydetails.cfm?customel_datapageid_1976529=2038373
on "responsible use of information technology". It includes attempting to subvert the security of the contest grading system either here or at one of the shared sites.

Notes:

1. By default, the penalty for cheating in this course is an "F" in the course.

2. University regulations require me to notify Student Conduct in case of violations.

3. Any attempt at cracking one of the judging systems may end up with a disciplinary action, and an F in the course.