Summer 2008

CS 242: Computer Programming III

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Computer Programming III

CS 242

Summer Quarter, 2008

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Professor's Office: Joshi 383
Office Hours: 5:30-6:20 MW; other office hours by appointment (via email).
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Office Phone: (937) 775-5066
Class Room & Time: Russ 148, 4:10-5:25 MW
Prerequisite: CS241 and (MTH 229 or EGR 101).

TA: Delroy Cameron
Email: Cameron.20@wright.edu
Office: Joshi 380
Office hour: Thursday 11am-1am, and email for additional appointments.

Schedule (subject to change):

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Reading</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Basic C++ Syntax</td>
<td>Chapters 1-5</td>
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<td>2</td>
<td>Functions (Parameter Passing)</td>
<td>Chapter 6</td>
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<td>3</td>
<td>Arrays, Sorting and Searching</td>
<td>Chapters 7-8</td>
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<td>4</td>
<td>Pointers and Classes</td>
<td>Chapters 9, 13</td>
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<td>5</td>
<td>Mutemr and More Classes</td>
<td>Chapter 14</td>
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<td>6</td>
<td>Inheritance, polymorphism, virtual functions, Exceptions, Template, STL</td>
<td>Chapters 15-16</td>
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<td>7-9</td>
<td>Linked Lists, Stacks and Queues, Recursion</td>
<td>Chapters 17, 18, 19</td>
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<td>9-10</td>
<td>Binary Trees and Final</td>
<td>Chapter 20</td>
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It is neither possible, nor desirable, to discuss every detail of the material covered in the
text book during our limited class time. Students should consult the text book for details
that are not covered in class.

Grading: Students' demonstration of their ability to discuss issues and solve problems,
and their demonstration of mastery of (a) programming in C++, (b) fundamental data
structures, and (c) computer science concepts and techniques will be the underlying
metric for the determination of students overall grades in this course. Students will be
provided the opportunity to demonstrate their mastery through examinations, weekly
laboratory assignments, and several programming projects. The overall course grade will
be determined as follows:
Programming projects 36% \([4 @ 9\%]\)
Laboratory assignments 24% \([8 @ 3\%]\)
Mid-term examination 20%
Final examination 20%

Grades will be assigned on a standard A/90%, B/80%, C/70%, D/60%, F/60%- scale. Clustering of grades may cause the thresholds to be lowered; they will not be raised. The instructor reserves the right to fail any student who does not attain an overall passing grade of 70% in the programming projects.

**Programming Projects and Laboratory Assignments** The instructor will provide a number of opportunities for students to develop their mastery of the subject throughout the course through graded assignments. Laboratory assignments are subject to changes specified by the TA during the laboratory period. All students are required to attend their scheduled laboratory each week. Assignments must compile to receive credit. Programs that do not compile will not be graded. All programs must have comments at the top that identify the student, the course, and the project type/number. Points will be deducted for projects submitted late. The deduction will be 10% of the total possible points per 24 hours (or portion thereof) elapsed from the moment that the project was due. No points will be awarded for projects that are more than one week late. Begin your projects immediately to guarantee that you have time to get help if necessary and complete them on-time. Deadlines will only be extended for documented emergencies or pre-arranged special needs. Poor time management, corrupt files, or network outages will not be considered a sufficient excuse to extend this deadline. Important note: Murphy's law states that computers go down, networks fail, and data gets destroyed on the day that a project is due. Plan ahead. Back up your work. Start early!

**Examinations:** Examinations will occur at the normally scheduled class time and location unless announced otherwise in class. Students may use one (two-sided) 8.5"x11" page of hand-written notes on the examinations.

**Academic Integrity:** Student-teacher relationships are built on trust. For example, students must trust that teachers have made appropriate decisions about the structure and content of the courses that they teach, and teachers must trust that the assignments which students turn in are their own. Acts which undermine this trust undermine the educational process. It is the policy of Wright State University to uphold and support standards of personal honesty and integrity for all students consistent with the goals of a community of scholars and students seeking knowledge and truth. Furthermore, it is the policy of the university to enforce these standards. Students should follow the following recommendations:

1. Be honest at all times.
2. Act fairly towards others. For example, do not seek an unfair advantage over others by cheating with or by looking at other individual's work during examinations or laboratory assignments.

3. Take group as well as individual responsibility for honorable behavior. Collectively, as well as individually, make every effort to prevent and avoid academic misconduct, and report acts of misconduct that you witness.

4. Know the policy -- ignorance is no defense. Read the policy contained in the student handbook. If you have any questions regarding academic misconduct, contact your instructor.

Students are encouraged to get together in small study groups to discuss the course topics and ungraded homework problems. However, students must work on all graded course assignments and examinations on an individual basis.

What IS allowed: Students are allowed to discuss the general requirements of lab assignments to make certain that they understand the problem and its goal. Students are allowed to ask another student (who has completed the assignment) for (brief) help with a syntax error or other minor problem that does not require extensive exploration of the solution. If another student asks you for help debugging AFTER you have finished the lab assignment, then you may help them briefly, but you may NOT show them your solution. Students may go to their TA, the CS help room, or the instructor for more detailed help. If you work with other student in an allowed manner, you are required to acknowledge the collaboration and its extent in the lab assignment's comments. This will allow the instructor to comment on and correct the degree of collaboration if necessary. Unacknowledged collaboration will be considered a violation of course policy.

What IS NOT allowed: Students may NOT discuss, look at, or debug other student's projects. Help on projects should come only from the course instructor and the CS helproom. Students may NOT work together on lab assignments - students can discuss the lab and/or provide certain help with debugging (see above) but may NOT work together for any extended period of time. Students may NOT use code created by other students or during previous offerings of the course. Students may NOT look at code created by another student (even to debug) until after they have completed the entire lab assignment themselves. Students absolutely may NOT turn in someone else's solution with simple cosmetic changes (say, changed variable names) to the solution -- this is a gross break of academic integrity and will result in a failing grade for the course. You are responsible for ensuring that other students do not have access to your work - do not give another student access to your files, do not leave printouts in the recycling bin or printer, do not leave your workstation unattended, etc. If you suspect that your work has been compromised notify your instructor immediately.

Conduct for Examinations: The academic code demands that no student should have an unfair advantage over any other student during examinations. Thus, it is strictly forbidden for any student to refer to information from previous offerings of this course unless this information is provided by the instructor to all students fairly. Thus, the use of test banks
of previous quizzes or asking questions about examinations or laboratory assignments to prior students is strictly forbidden.

**Absences:** Class attendance will not be a direct factor in your grade but will strongly affect the quality of your education. Students who miss class are responsible for the material or announcements presented. Any extenuating circumstances which impact on your participation in the course should be discussed with your instructor as soon as those circumstances are known. Make-ups for examinations may be arranged ONLY if a student's absence is caused by documented illness or documented personal emergency. It is the student's responsibility to provide a written explanation (including supporting evidence) to the instructor in a timely manner. Students registering after the term begins are responsible for all missed assignments and cannot expect that due dates will be altered. If you miss a lecture or plan to miss a lecture, you may be able to make arrangements to sit in on the same lecture in another concurrent offering of the course. (This can’t happen in Summer Quarter of 2008.)

**Additional Information:** Copies of the transparencies used in lecture and additional course-related information will be made available (either via course web page, WebCT, or copying after the class – to be announced).

**Additional Needs:** Students with disabilities or any additional needs are encouraged to set up an appointment at their convenience to discuss any classroom accommodations that may be necessary.

CS 242: http://www.wright.edu/~gdong/CS242