Course Information                                                                       Fall 2008
Math 240   Discrete Math   3 credits
Description: This course is an introduction to the theory of discrete mathematics and includes
elementary concepts in logic, set theory, graph theory, number theory and combinatorics. The topics
covered in this course include methods of proof, sets and relations, number theory, induction, recursion,
counting principles, permutations, combinations and graph theory.
Objectives: The student will
1. use proof techniques in logic to determine the validity of logic statements
2. solve problems in which the number of possibilities is finite using basic counting techniques,
   permutations and combinations
3. demonstrate an understanding of the concept of sets and the ability to carry out set operations
4. demonstrate an understanding of number theory as it applies to finite sets
5. be able to solve recurrence relations
6. demonstrate an understanding of introductory graph theory with its application to real-life
   problems

Book: Discrete Mathematics with Graph Theory, 3rd Edition
Author: Goodaire and Parmenter
Class Day and Times: MW  4:45 – 6:10 pm  Room: 506

Any student with a documented disability who may need educational accommodations should
notify the instructor or the Disabled Student Programs and Services (DSP & S) office as soon as
possible. Room 2117 Health Sciences Building   (760) 355 6312

Instructor Information  Sherry Zobell
Office: 405     Office Hours: MW 11 – 11:50  MTTH 3 – 3:50
Phone: 355-6297
email sherry.zobell@imperial.edu
web page www.imperial.edu/sherry.zobell

Basic Philosophy
Technology is an important part of this course. For this class you will be required to
know how to use a graphing calculator. You will also be expected to learn to use math software.
I will be using the TI 83 or 89. If you choose to use a different calculator, you are responsible
for making the connection to the material, mathematical ideas, techniques, and technology being
used in class. You are expected to be able to use a word processor and graphing programs on the
computer to complete your projects.

Respectful Conduct
I try to treat all students with respect and fairness. Since I expect the same consideration, please
observe the following courtesies:
Absences. After the third absence, I may drop you from the class, but it is your responsibility to
drop before the withdrawal deadline.
Arrive for class on time. Late class arrivals are disruptive and inconsiderate; moreover, they may
be regarded as absences. Students who frequently arrive late may be asked not to return to class.
Stay for the entire class. If you must leave early, do so without causing a disruption. Sit near
the exit and inform me in advance if you must leave.
Silence pagers and cell phones. Use of cell phones in the class room will not be permitted; you
should not bring one into the classroom unless the ringer is turned OFF. If you carry a pager, it must
be set on silent mode or left outside of the classroom. Students in violation of this policy may be
asked not to return to class.
Food/Drink are not allowed in the classrooms at IVC.
No children are allowed in the classroom.
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<tr>
<th>Assessment</th>
<th>Points</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework, quizzes, in-class work</td>
<td>60</td>
<td>10%</td>
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<tr>
<td>Projects</td>
<td>300</td>
<td>50%</td>
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<tr>
<td>Midterm</td>
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<td>Final</td>
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Homework: Read and study the material in the book that corresponds to the assignment. Complete the assignments as they are assigned (and before the next class period.) Be neat, complete, and organized in showing your work and circle or box your answer. Bring your assignment for the current section with you to class each day. It is to be folded, with your name on the outside and the number of problems completed (do not use spiral note paper). Assignments will be collected and graded for completeness at my discretion. **Late assignments will not be accepted.**

Quizzes: will usually be unannounced and will be given the first 10 minutes of the class period. **Students arriving late or missing class will not be permitted to take the quiz.** Homework exercises may be used as quiz items as well as lecture and reading from the text. Students will not be allowed to use cell phones, calculators that do symbolic manipulation (such as the TI-89 or TI-92), laptop computers, or personal digital assistants (such as Palms) on any quiz.

Projects: There are 4 scheduled projects that will cover specific topics or application of a topic in depth. This are designed to give you practice solving extended problems and communicating math by reading, writing, and discussing math. Your grade will be based upon clarity, neatness, organization and accuracy of the write-up. Each project is worth 75 points. Cheating is defined as turning in someone else's work as your own (this someone may be another student, a tutor, a member of the faculty, or an author). It is not cheating to work with others, but make sure all work is in your own words. Projects are to be typed, using complete sentences (where appropriate), proper English and correct spelling. Proofread your project before turning it in for grading.

Tests: There will be 2 tests: midterm and final. Attendance is required. **There will not be any make up exams.** Students will not be allowed to use cell phones, calculators that do symbolic manipulation (such as the TI-89 or TI-92), laptop computers, or personal digital assistants (such as Palms) on any exam. If you leave the classroom during a test, for any reason, you will not be allowed to return.

All material in the course is cumulative and once covered in class, or assigned, may be used on any test or quiz. If cheating or plagiarism is discovered, a student will receive a 0 on the assignment for the first offence and will be sent to student affairs for disciplinary action.

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<tr>
<th>Grading Scale</th>
<th>Percent</th>
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<tbody>
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<td>90 - 100</td>
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<td>80 - 89</td>
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<td>70 - 79</td>
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