Basic Course Information

Semester	Fall 2014	Instructor Name	Jill Nelipovich
Course Title & #	Discrete Math – Math 240	Email	jill.nelipovich@imperial.edu
CRN#	10406	Webpage (optional)	
Room	2728	Office	2768
Class Dates	8/18/2014 - 12/13/2014	Office Hours	M: 5:00 - 6:30 p.m.
			T: $7:30 - 8:30$ a.m.
			W: $8:00 - 8:30$ a.m.
			TR: $8:00 - 8:30$ a.m.
			3:30 – 4:00 p.m.
Class Days	T/TR	Office Phone #	760-355-6297
Class Times	8:35 – 10:00 a.m.	Office contact if	jill.nelipovich@imperial.edu
		student will be out or	or
Units	3 units	emergency	760-355-6297

Course Description

This course is an introduction to the theory of discrete mathematics and introduces elementary concepts in logic, set theory, graph theory, number theory and combinatorics. This forms a basis for upper division courses in mathematics and computer science, and is intended for the transfer student planning to major in these disciplines. The topics covered in this course include methods of proof, sets and relations, number theory, induction, recursion, counting principles, permutations, combinations, and graph theory. (CSU, UC)

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

- 1.Use a truth table to test the validity of an argument. (ILO1, ILO2, ILO4)
- 2.Construct proofs of mathematical statements using standard techniques, including induction. (ILO1, ILO2, ILO4)
- 3. Apply graph theory to real world situations. (ILO1, ILO2, ILO4)

Course Objectives

Upon satisfactory completion of the course, students will be able to:

- 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 technique combinations.
 - 3. Demonstrate an understanding of the concept of sets and the ability to carry out set opera-
 - 4. Demonstrate an understanding of number theory as it applies to finite sets.
 - 5. Solve recurrence relations.
 - 6. Demonstrate an understanding of introductory graph theory with its application to real-life;

Textbooks & Other Resources or Links

Required Course Materials:

1. Discrete Mathematics, Susanna Epp, 4th edition

Course Requirements and Instructional Methods

<u>Out of Class Assignments</u>: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time <u>and</u> two (2) hours of out-of-class time per week over the span of a semester. Included in Out-of-Class Assignments are textbook homework and projects.

Course Grading Based on Course Objectives

- Homework turned in on the day of the exam
- Projects assigned periodically throughout the course

GRADING (point totals subject to change)

Homework	10%
Projects	5%
Exams (3) – 20% each	60%
Final Exam	25%

Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed
 the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to
 complete required activities for two consecutive weeks may be considered to have excessive absences and may be
 dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette

- <u>Electronic Devices:</u> Cell phones and electronic devices must be turned off during class.
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception.
- <u>Disruptive Students</u>: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.

• <u>Children in the classroom:</u> Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Academic Honesty

- <u>Plagiarism</u> is to take and present as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to correctly 'cite a source', you must ask for help.
- <u>Cheating</u> is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials, or assisting others in using materials, which are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment ;(c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment, (e) use of a commercial term paper service

Additional Help – Discretionary Section and Language

- <u>Blackboard</u> support center: <u>http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8543</u>
- <u>Learning Labs:</u> There are several 'labs' on campus to assist you through the use of computers, tutors, or a combination. Please consult your college map for the **Math Lab (ROOM 2500)**, Reading & Writing Lab, and Learning Services (library). Please speak to the instructor about labs unique to your specific program
- <u>Library Services:</u> There is more to our library than just books. You have access to tutors in the learning center, study rooms for small groups, and online access to a wealth of resources.

Disabled Student Programs and Services (DSPS)

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. The DSP&S office is located in Building 2100, telephone 760-355-6313 if you feel you need to be evaluated for educational accommodations.

Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a fulltime mental health counselor. For information see http://www.imperial.edu/students/student-health-center/. The IVC Student Health Center is located in the Health Science building in Room 2109, telephone 760-355-6310.

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities please refer to the IVC General Catalog available online at http://www.imperial.edu/index.php?option=com/docman&task=doc/download&gid=4516&Itemid=762

Information Literacy

Imperial Valley College is dedicated to help students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/

Anticipated Class Schedule / Calendar

Math 091 – Tentative Schedule

Week	Date	Topics
1	Aug 18 - 22	Chapter 1
2	Aug 25 - 29	Chapter 1
3	Sept 1 - 5	Chapter 2
4	Sept 8 - 12	Chapter 3
5	Sept 15 - 19	Chapter 3
		Chapter 4
6	Sept 22 - 26	Exam 1 – Chapters $1 - 3$
		Chapter 4
7	Sept 29 – Oct 3	Chapter 4
		Out of Class Assignment
8	Oct 6 - 10	Chapter 4
		Chapter 5
9	Oct 13 - 17	Chapter 5
10	Oct 20 - 24	Chapter 6
11	Oct 27 - 31	Chapter 7
		Exam 2 – Chapters 4, 5 & 6
12	Nov 3 - 7	Chapter 7
13	Nov 10 – 14	No Class
	Holiday Nov 11	Chapter 8
14	Nov 17 - 21	Chapter 9
		Chapter 10
	Nov 24 – 28	No School
15	Dec 1 - 5	Exam 3 – Chapters 7 – 9
16	Dec 8 - 12	Final Exam
		Thursday, December 11 th , 8:35 a.m.