Chaminade University of Honolulu

Syllabus for Survey of Math

Spring 2013 MATH 100-01-1
from 14 Jan to 09 May 2013
Mon-Wed-Fri; 9:30 to 10:20a; Room BEHS-102

Instructor: J. Lee Ingamells

Office Hours: Henry Hall Room 1;
Mon-Wed-Fri before and after class; or by appointment

Required Materials:

1. Blitzer, Robert (2011) *Thinking Mathematically.* Prentice Hall. ISBN=0-321-64585-5
2. Personal calculator for professional development.

Description: Mathematical thought is studied through interactions between the foundations of knowledge and the study of the nature of mathematics. Topics include the basis of sets and logic, numbers and operations, algebra, geometry, measurement, financial management, probability and statistics, graphs and functions. This course fulfills the Track A general education requirement in mathematics. The course is intended as a terminal course and is not a prerequisite for any other course in mathematics. Offered every semester. Prerequisites: MA 098 or placement.

Protocol: Use of **music devices and cell phones** is prohibited during all Natural Science and Mathematics classes at Chaminade, unless specifically permitted by your instructor. Use of cellphones and music devices in laboratories is a safety issue. In addition, use of cellphones and music devices in any class is discourteous and may lead to suspicion of academic misconduct. Students who cannot comply with this rule will be asked to leave class and may be subject to laboratory safety violation fines. Please refer any questions to the Dean of Natural Sciences and Mathematics.

Accommodations: Students with special needs who meet criteria for the Americans with Disabilities Act (ADA) provisions must provide written documentation of the need for accommodations from the CUH Counseling Center (Dr. June Yasuhara; phone 735 4845) by the end of week three of the class, in order for the instructor to plan accordingly. Failure to provide written documentation will prevent your instructor from making the necessary accommodations. Please refer any questions to the Dean of Students and review the procedures at …

http://www.chaminade.edu/student_life/sss/counseling_services.php

Format: The purpose of MATH 115 is to give the students the opportunity to discover important applications of mathematics by applying inductive, deductive, and subjective reasoning. Kinesthetic, conversational, and intuitive exercises are balanced to demonstrate the universal language of mathematics. Collaboration is encouraged. In addition to working out exercises found in the Blitzer text, students carry out one or more independent projects and make a brief oral presentation on an application significant to the history of mathematics.

Grading: Grades will be assigned to the following intervals:

A (90.0%-99.9%)	900 to 999 points
B (80.0%-89.9%)	800 to 899 points
C (70.0%-79.9%)	700 to 799 points
D (60.0%-69.9%)	600 to 699 points
F	below 600 points

Grade points are awarded for performance in the following:

Chap 1-2-3	Preparation	50 points
	Exam (Tentatively 06 Feb)	150 points
Chap 6-7-8	Preparation	50 points
	Exam (Tentatively 11 Mar)	150 points
Chap 10-11-12	Preparation	50 points
	Exam (Tentatively 10 Apr)	150 points
Project & Presentation		200 points
Final Comprehensive Exam		200 points

Preparation: This is worth 150 grade points. In the absence of truly compelling reasons, students are expected to 1) do the assigned homework, 2) be present at the beginning of every class and stay until the end, and 3) demonstrate a mastery of practice problems in preparation for respective exams.

Should you miss a class, please obtain the missed material from a classmate.
HOW CAN YOU WORK TOGETHER TO EVERYONE'S BENEFIT**?**
You are not in severe competition with your classmates.

Please read the University Catalog regarding attendance policies.

Exams: The three mid-term exams and one final comprehensive exam are collectively worth 650 grade points. Practice is important to preparing for these exams, which is composed of problems similar to those discussed in class or found in Blitzer's text.

Project: A project (possibly done in groups) is worth 200 grade points. The project must be completed with an **oral presentation**. Details are discussed during the first few weeks of the semester. Students have considerable control over the selection of topics and the scheduling of their projects.

Each presentation should be three to five (3-5) minutes plus a short time to follow up with questions or discussion. Grading criteria may include…

Personal interest in topic	Description of topic	Background or history	Organization & clarity	Correct work
Documentation	Difficulty	Known or suspected applications	Conclusions & Challenges	Other

J. Lee Ingamells (BA Chemistry; MS Agronomic Education; PhD Soil Ecology)

The instructor is a specialist in biometry, experimental design, and applied statistics. He began teaching with Peace Corps Philippines (1970-73) and has since held elementary, secondary and university teaching appointments in science and math, most recently at Sino-British College Shanghai (2010-11) and International Community School Singapore (2011-12). He has twenty-five years of professional experience as project leader and consultant on programs in tropical agriculture, soil systems, and environmental awareness.

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CALLENDAR SCHEDULE
Spring 2013 MATH 100-01-1

UPDATED 08 JAN 2013

BEH-102 -- Mon-Wed-Fri
9:30 to 10:20a

MON	TUE	WED	THU	FRI	SAT	chapter x day mon	wed	fri
14-Jan Introduction **Opening Exercises**	15	16-Jan Ways of Thinking & Solving **Chap 1 -- Overview/Begin**	17	18-Jan Ways of Thinking & Solving	19	14	16 1	18 1
21-Jan Ways of Thinking & Solving	22	23-Jan Set Theory **Chap 2 -- Overview/Begin**	24	25-Jan Set Theory	26	21 1	23 2	25 2
28-Jan Set Theory **Student Presentations** **Chap 7 -- Summary & Review**	29	30-Jan Logic **Chap 3 -- Overview/Begin**	31	1-Feb Logic	2	28 2	30 3	1 3
4-Feb Logic	5	6-Feb EXAM **Chap 1-2-3**	7	8-Feb Equations & Inequalities **Chap 6 -- Overview/Begin**	9	4 3	6	8 6
11-Feb Equations & Inequalities	12	13-Feb Equations & Inequalities	14	15-Feb Equations & Inequalities	16	11 6	13 6	15 6
18-Feb << no class >> **Presidents' Day**	19	20-Feb Graphs **Chap 7 -- Overview/Begin**	21	22-Feb Graphs	23	18 nc	20 7	22 7
25-Feb Graphs	26	27-Feb Graphs	28	1-Mar Financials **Chap 8 -- Overview/Begin**	2	25 7	27 7	1 8
4-Mar Financials	5	6-Mar Financials	7	8-Mar Financials	9	4 8	6 8	8 8
11-Mar EXAM **Chap 6-7-8**	12	13-Mar Geometry **Chap 10 -- Overview/Begin**	14	15-Mar Geometry	16	11	13 10	15 10
18-Mar Geometry	19	20-Mar Counting & Probability **Chap 11 -- Overview/Begin**	21	22-Mar Counting & Probability	23	18 10	20 11	22 11
25-Mar	26	27-Mar << no class >> **Spring Recess**	28	29-Mar	30	25 nc	27 nc	29 nc
1-Apr Counting & Probability	2	3-Apr Statistics **Chap 12 -- Overview/Begin**	4	5-Apr Statistics	6	1 11	3 12	5 12
8-Apr Statistics	9	10-Apr EXAM **Chap 10-11-12**	11	12-Apr	13	8 12	10	12
15-Apr Systems **Chap 13 -- Overview/Begin**	16	17-Apr Systems	18	19-Apr	20	15 13	17 13	19
22-Apr Voting & Apportionment **Chap 14 -- Overview/Begin**	23	24-Apr Voting & Apportionment	25	26-Apr	27	22 14	24 14	26
29-Apr Graph Theory **Chap 15 -- Overview/Begin**	30	1-May Graph Theory	2	3-May	4	29 15	1 15	3
6-May	7	8-May	9	10-May	11			
Final Exam Week								