

Syllabus

General Education Mathematics

Math 118 PRY - Fall 2011

Course Title	General Education Mathematics	
Credit Hours	4	
Prerequisites	Placement test, or grade of C or better in Mathematics 112, or grade of C or better in Mathematics 99, or consent of department chair.	
Section	118 PRY (section number: 33135)	
Classes	Wednesday 6:00 PM – 9:35 PM in Room 3979	
Instructor	Marta Hidegkuti e-mail: mhidegkuti@ccc.edu	Office: Room 3812
Office Hours:	Monday 10:30 AM – 11:45 AM Wednesday 10:30 AM – 11:30 AM and 5 PM – 5:45 PM Tuesday, Thursday 12:30 PM – 1:30 PM	

Web Sites http://faculty.ccc.edu/mhidegkuti/Math118/math118_fa11/Math118.html
In case the Truman web server is down, a copy of the class's web site is maintained at www.martahidegkuti.com

Textbook The Nature of Mathematics by Karl J. Smith, 12th edition, Brooks/Cole, 2012; ISBN Number: 978-0-538-73758-6. **Due to cost considerations, students are welcome to use any previous edition of the text.** Some topics will be covered by handouts posted on the course's web site.

Supplements
The textbook is bundled with WebAssign. **The use of WebAssign is optional and will not be part of the course.** If students want to use WebAssign, they can log in at <https://www.webassign.net/login.html> and should use the course code **trumancollege 2542 7786**.

Calculator
The use of a scientific calculator is strongly recommended. Students are expected to bring the calculator to class. The optimal calculator is **TI-30X II S**. The price of this model is between \$15 and \$20. Do NOT purchase a different calculator if it is significantly more expensive.

Calculator Policy
Any calculator different from TI-30X II S has to be approved by the instructor first. **During quizzes and exams, students are not allowed to use a graphing calculator. Students are not allowed to use a cell phone as a calculator any time during class.**

Important Dates
First class: August 24 Last day to withdraw from classes: Monday, November 14
Exam 1: September 21 Exam 4 (same as Final Exam): December 7
Exam 2: October 19 End of Semester: Sunday, December 10
Exam 3: November 16

Attendance Policy
Attendance is an essential part of the course. Regular attendance is expected of all students in the course. Attendance will be taken each class period. Students are expected to be on time and to attend the entire session. Please make every effort to arrive to class on time. If you are absent, you are responsible for all work and assignments covered in lecture that day.

No-Show Withdrawal (NSW)

Students who do not attend the first class session will be withdrawn from the class by the instructor and issued an NSW.

Administrative Withdrawal (ADW)

Students will be administratively withdrawn at midterm if at least two of the following apply:

- 1 Less than 70% of assignments up to the midterm have been completed.
- 2 Less than 70% of quizzes and tests up to the midterm have been attempted.
- 3 Less than 50% of class sessions up to the midterm have been attended.
- 4 Student missed 3 consecutive classes.

Withdrawal from the course

Not attending classes does not constitute withdrawal from the course. After midterm, instructors can no longer drop students from the course. If students stop attending classes after the midterm, the instructor can only assign a grade of F. **If you no longer attend classes, it is essential that you stop by at the registrar's office and officially withdraw from the course to protect your average.** The last day for student initiated withdrawal is Monday, November 15. Before withdrawing from the course, students are encouraged to consult the instructor.

Grading Policies

Grading Scale

Grading of all assignments, quizzes, and exams will be based on the following scale.

90-100: A 80-89: B 70-79: C 60-69: D 0-59: F

Midterm Grade

The midterm grade will be the weighted average of the grades shown below with their weights.

Exam 1: 25% Exam 2: 35% Quizzes: 35% Homework: 5%

Before determining the grade given for quizzes, the lowest quiz score will be dropped.

Final Grade

The final grade will be the weighted average of the grades shown below with their weights.

Exam 1: 10% Exam 3: 20% Quizzes: 25% Essay: 5%
Exam 2: 15% Exam 4: 20% Homework: 5%

Before determining the grade given for quizzes, the lowest two quiz scores will be dropped.

Makeup Policy

Without exception, there will be no making up quizzes. Permission to make-up an exam is subject to the discretion of the instructor, and will be granted only in cases of emergency. If an absence is anticipated, the student should notify his/her instructor prior to the absence. Students need to present written documentation to make-up an exam. All make-up exams will take place on Friday, December 2.

Homework

Homework is an essential part of the learning process; do not expect to do well in this course without keeping up with the homework. Homework is expected to be turned in at the beginning of class, stapled, written neatly and legibly, graphs drawn on graph paper. Please do not ask the instructor for a stapler. To earn full credit, always show all work. A solution turned in without work shown will receive a maximum of 20% credit. Homework assignments will consist of problem sets. Within a problem set please present the problems in the order they were assigned and circle your final answers. After homework assignments have been graded and returned to students, they may re-submit them with corrections, for full credit.

Late Homework Homework assignments turned in late will receive up to 50% credit. If an assignment is more than one week late, no credit will be given.

Academic Integrity

The CCC has no tolerance for violations of academic integrity., Plagiarism and cheating of any kind are serious violations of these standards and will result, minimally, in the grade of F. All course work will be checked for academic integrity. In this course, the first violation will result in an F for the assignment; the second violation will result in course failure. Make-ups and revisions are not available after an infraction of academic integrity. For further information, please refer to the student policy manual.

General Information

At all times, please treat the instructor, other students, and their opinions with respect.

Before arriving to class, please turn off all cell phones, pagers, and other loud devices. Please make every effort to arrive on time for class. Please refrain from talking while the instructor is lecturing. If you need an extensive review (for example, due to absence) of material presented in class, please see the instructor during office hours. Valuable class time can not be spent on assisting one or a few students to the detriment of the entire class. Office hours are designated to address these problems.

Arrive to office hours prepared. If you have missed a class, be sure to obtain and read all class-related material (handouts, text book section, and class notes). Have a list of specific questions. If you need help with a problem, bring your work on the problem with you.

Please retain all class-related material until you receive your final grade for the course.

Students that register late are responsible for all course work they missed due to their absence.

Eating is not allowed in the class rooms.

At all times, email is the fastest and most efficient method to contact the instructor. If you wish to contact the instructor about grades or attendance or other administrative issues via email, please use your CCC student account. FERPA (Family Educational Rights and Privacy Act) is a federal law that protects the privacy of student educational records: www.ed.gov/policy/gen/guid/fpco/ferpa/index.html. Faculty cannot reveal information about students, or discuss student records over the phone or unsecure e-mail. CCC student e-mail meets FERPA requirements.

Academic Support Services

The **Tutoring Center** is located in Room L129. Students are encouraged to seek help and guidance during the course. Students have already paid for this service as part of tuition fees. Please note: in order to receive tutoring, students need to sign up in advance. (773) 907- 4785 www.trumancollege.edu/studentsservices/tutoring.

The Student Success and Leadership Institute (SSLI). For students who need various other support services to achieve their educational goals: Room 1435, (773) - 907-4714, www.trumancollege.edu/studentsservices/ssli.

TRIO Student Support Services. For low-income students, first generation college students, or students with disabilities who need academic support: Room 1435, (773) 907 - 4797, www.trumancollege.edu/trio. Registration is required at the start of each semester.

Disability Access Center. The Center verifies needs pursuant to the American Disabilities Act (ADA), determines student academic accommodations, and issues accommodation letters. Room 1428, (773) 907 - 4725, www.trumancollege.edu/studentsservices/dac. Registration is required at the start of each semester.

Calendar of Events

Please note that the Calendar of Events is subject to change. Last revised: August 7, 2011

Class 1	August 24
Class 2	August 31 – Quiz 1
Class 3	September 7 – Quiz 2
Class 4	September 14 – Quiz 3
Class 5	September 21 – Exam 1
Class 6	September 28 – Quiz 4
Class 7	October 5 – Quiz 5
Class 8	October 12 – Quiz 6
Class 9	October 19 – Exam 2
Class 10	October 26 – Quiz 7
Class 11	November 2 – Quiz 8
Class 12	November 9 – Quiz 9
Class 13	November 16 – Exam 3
Class 14	November 23 – Quiz 10
Class 15	November 30 – Quiz 11
Class 16	December 7 – Exam 4
December 10 – End of Fall 2011 term	

Last day for student initiated withdrawal: Monday, November 14

Course Information

Course Description: This course is designed to fulfill general education requirements. It is not designed as a prerequisite for any other college mathematics course. This course focuses on mathematical reasoning and the solving of real-life problems. Three topics are to be studied in depth from among the following list: counting techniques and probability, game theory, geometry, graph theory, linear programming, logic/set theory, mathematics of finance, and statistics. Mathematical modeling must be integrated in any combination of topics selected. Technology and writing assignments will be used throughout the course as appropriate. Applications involving problem-solving skills are emphasized throughout the course.

Truman College General Education Goals:

Upon successful completion of this course, students will demonstrate the ability to

- think critically, abstractly, and logically.
- communicate effectively in written and oral forms.

Course Objectives:

Interpret and draw inferences from mathematical models such as formulas, graphs, tables, and schematics.

Represent mathematical information symbolically, visually, numerically, and verbally.

Use arithmetic, algebraic, geometric, and/or statistical methods to solve problems.

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

Set Theory:

Illustrate relations between sets using Venn Diagrams.

Counting Techniques and Probability:

Apply the addition and multiplication rules of counting to a contextual situation.

Apply permutations and combinations to a contextual situation.

Determine and count the outcomes in an experiment.

Apply the addition and multiplication rules of probability.

Formulate and apply discrete probability distributions to a contextual situation.

Identify mutually-exclusive and independent events from contextual situations.

Geometry:

Apply formulas (i.e., perimeter, circumference, and area) for 2-dimensional figures to a contextual situation.

Apply formulas (i.e., volume, and surface area) for 3-dimensional figures to a contextual situation.

Apply the concepts of circles and spheres to a contextual (real-world) situation.

Apply the Pythagorean Theorem to a contextual situation.

Solve applications involving parallel and perpendicular lines.

Apply the concepts of congruence and similarity to a contextual situation.

Mathematics of Finance:

Apply the concepts of simple and compound interest, future and present values, and the yield rate of investments to contextual situations.

Apply the concepts of simple and compound interest, future and present values, and the yield rate of investments to contextual situations.

Statistics:

Construct and interpret frequency distribution tables and graphs.

Determine and interpret the measures of descriptive statistics (i.e., central tendency, dispersion, and position) in contextual situations.

Apply the properties of the normal distribution to contextual situations.

Number Theory:

Apply the rules of divisibility by 2, 3, 4, 5, and 10.

Determine the prime factorization of a natural number.

Compute the least common multiple and greatest common divisor of several natural numbers.