Syllabus
Calculus and Analytic Geometry 2
Math 208 GH – Spring 2013

Course Title	Calculus and Analytic Geometry 2
Credit Hours	5
Length of Course	16 weeks
Prerequisites	Math 207 with a grade of C or better, or Consent of Department Chairperson
Section	208 GH (section number: 66564)
Classes	Tuesday, Thursday 10:00 AM – 12:15 PM in Room 3140
Instructor	Marta Hidegkuti e-mail: mhidegkuti@ccc.edu Office: Room 3812
Office Hours	Monday 3:45 – 5:00 PM (walk-in) Tuesday, Wednesday, Thursday 12:30 PM – 1:45 PM (walk-in) and Friday 9:30 AM – 11:30 AM by appointment only
Web Sites	All handouts and announcements will be available on the class's web site, at http://www.teaching.martahidegkuti.com/Math208/math208_sp13/Math208.html In case the web site is down, check at Blackboard. Please e-mail to mhidegkuti@ccc.edu if you notice broken links.
Textbook Policy	The Mathematics Department of Truman College uses Calculus, Single Variable by G. Thomas, M. Weir, J. Hass, Pearson, 12th edition, 2010; ISBN: 978-0-321-63742-0. To lower textbook cost, students are welcome to use any previous edition of the textbook, or books by other authors are also acceptable. Some of the recommended authors are: James Stewart, Soo T. Tan, Ron Larson, and Bruce Edwards.

Calculator Policy
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. Any calculator different from TI-30X II S has to be approved by the instructor first. If a calculator is able to compute symbolically, (f.e. that $\sqrt{12} = 2\sqrt{3}$), then it is not allowed to be used during quizzes and exams. **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.**

Supplements
The textbook is bundled with MyMathLab. The use of MyMathLab is **optional**. The course ID of this class is hidegkuti07167 and students can log in at www.mymathlab.com.

Important Dates
First class: Tuesday, January 15
Exam 1: Thursday, February 21
Exam 2 : Thursday, April 4
Last day to withdraw from classes: Monday, April 8
Exam 3 (same as Final Exam): Thursday, May 9
End of Semester: Saturday, May 11

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 arrive after attendance has been taken, check at the end of class that your attendance record has been corrected. 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 two class sessions 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 quizzes and tests up to the midterm (March 13) have been attempted.
2. Less than 50% of class sessions up to the midterm have been attended.
3. Student missed 4 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, April 8. Before withdrawing from the course, students are encouraged to consult the instructor.

Grading Policies

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

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: 45% Quizzes: 55%

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: 15% Exam 2: 20% Exam 3: 35% Quizzes: 30%

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

Please retain all class-related material until you receive your final grade for the course. The final exams will not be distributed. They will be kept by the instructor for a calendar year after the course and then they will be destroyed.

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 by e-mailing to mhidegkuti@ccc.edu. Students need to present written documentation to make-up an exam. Without exception, students can only make up one exam in the course. All make-up exams will take place on Friday, May 3.

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

Class Room Etiquette
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.

Eating is not allowed in the class rooms. Students are allowed to eat only in designated areas such as the cafeteria or student lounge.

Repeated noises such as sniffling, moaning or sighing are generally normal behavior but are very distracting during quizzes and exams. Students are to refrain from making such noises during quizzes and exams. If there is a medical reason making that impossible, the instructor must be notified in advance so that arrangements can be made for a separate room for that student.

Office Hours

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. After your questions are answered, please leave so that the next student can enter. Please do not bring food to the instructor's office.

Contact
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.

If a student wants to receive class-related information via e-mail to an e-mail address different from the student ccc account, they must first complete a release form posted at http://www.teaching.martahidegkuti.com/shared/resources/ferpa.pdf.

Academic Support Services

The Tutoring Center is located in Room 162 in the Larry McKeon Administrative Building. 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
web site: http://www.ccc.edu/colleges/truman/departments/Pages/Tutoring.aspx

The Student Success and Leadership Institute (SSLI) is located in Room 162 in the Larry McKeon Administrative Building.. For students who need various other support services to achieve their educational goals. (773) - 907-4714,
web site: http://www.ccc.edu/colleges/truman/departments/Pages/Career-Services.aspx

TRIO Student Support Services is located in Room 162 in the Larry McKeon Administrative Building. For low-income students, first generation college students, or students with disabilities who need academic support: (773) 907 - 4797. Registration is required at the start of each semester.
web site: http://www.ccc.edu/colleges/truman/departments/Pages/TRiO-Student-Support-Services.aspx

Disability Access Center is located in Room 1428. The Center verifies needs pursuant to the American Disabilities Act (ADA), determines student academic accommodations, and issues accommodation letters. Registration is required at the start of each semester. (773) 907 - 4725, web site: http://www.ccc.edu/colleges/truman/departments/Pages/Disability-Access-Center.aspx

The Wellness Center is located in room 162 in the Larry McKeon Building. Services include: Personal, individual counseling, support groups, stress and time management coaching, referrals to community resources, special support for victims of relationship violence and sexual assault includes one-on-one counseling; safety planning; and referrals to medical care, legal services, and emergency child care. Contact: (773) 907-4786 for an appointment or information. Web site:
http://www.ccc.edu/colleges/truman/departments/Pages/Wellness-Center.aspx

GradesFirst is a student support system that will be used by faculty, advisors and tutors to help students achieve success in their classes. Use GradesFirst to schedule tutoring or advising appointments, or to see communications about your course progress generated by me or your other professors.

Calendar of Events

Please note that the Calendar of Events is subject to change. Last revised: December 27, 2012

	Tuesday	Thursday
Week 1	January 15 — Class 1	January 17 — Class 2
Week 2	January 22 — Class 3	January 24 — Class 4 Quiz 1
Week 3	January 29 — Class 5	January 31 — Class 6 Quiz 2
Week 4	February 5 — Class 7	February 7 — Class 8 Quiz 3
Week 5	February 12 — Class 9	February 14 — Class 10 Quiz 4
Week 6	February 19 — Class 11	February 21 — Class 12 Exam 1
Week 7	February 26 — Class 13	February 28 — Class 14 Quiz 5
Week 8	March 5 — Class 15	March 7 — Class 16 Quiz 6
Week 9	March 12 — Class 17	March 14 — Class 18 Quiz 7
Week 10	March 19 — Class 19	March 21 — Class 20 Quiz 8
☀ ☀ ☀ March 25 – 31 Spring Break ☀ ☀ ☀		
Week 11	April 2 — Class 21	April 4— Class 22 Exam 2
Week 12	April 9 — Class 23	April 11 — Class 24 Quiz 9
Week 13	April 16 — Class 25	April 18 — Class 26 Quiz 10
Week 14	April 23 — Class 27	April 25 — Class 28 Quiz 11
Week 15	April 30 — Class 29	May 2 — Class 30 Quiz 12
Week 16	May 7 — Class 31	May 9 — Class 32 Exam 3
May 11 - End of Spring 2013 term		

Last day for student initiated withdrawal: Monday, April 8

Course Information

Course Description: Derivatives of trigonometric and inverse trigonometric functions, logarithmic, and exponential functions. Techniques and applications of integration. Indeterminate forms and L'Hôpital's rule. Improper integrals, series and power series. Writing assignments, as appropriate to the discipline, are part of the course.

Students the Course is Expected to Serve: This course is intended for those students who require at least two courses in calculus.

Course Objectives:

Differentiate inverse trigonometric, exponential, and logarithmic functions.
Differentiate and integrate in polar coordinates.
Apply the concepts of integral calculus to contextual (real-world) scenarios.
Apply various convergence tests to an infinite series.
Derive and apply the Taylor series of a function.
Apply various integration techniques, calculate improper integrals and numerically estimate definite integrals.

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

Apply integration techniques such as partial fractions, trigonometric substitution, or use of integration tables.
Estimate definite integrals using the Midpoint Rule, Trapezoidal Rule and Simpson's Rule.
Apply L'Hospital's Rule to calculate limits of functions.
Evaluate improper integrals.
Apply integration to computing the area between two curves and the volume of a solid.
Graph a curve, including the conics, using polar coordinates.
Differentiate equations in parametric and polar form.
Calculate the area of regions in polar form using integrals.
Determine the limit of a sequence.
Calculate the sum of a geometric series.
Determine the convergence or divergence of a series using the Integral Test, comparison tests, Alternate Series Test, and Ratio Test.
Determine the interval of convergence for a power series.
Determine the McLaurin and Taylor series representation of a function at a point.
Apply Taylor series to estimate function values and definite integrals.
Calculate integrals using substitution and integration by parts methods.

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.

Projected Course Outline

Please note that the Course Outline is subject to change. Last revised: December 27, 2012
The class's web site will contain a Course Outline that is updated after each class.

Week 1 – January 15, 17
Review of differentiation and integration, Differentiating trigonometric functions and their inverses (3.5, 7.6)

Week 2 – January 22, 24
The fundamental theorem of calculus (5.4), Differentiating logarithmic and exponential functions (7.2, 7.3), Integrating by substitution (5.5)

Week 3 – January 29, 31
Integrating Trigonometric Functions (8.2), Integration by Parts (8.1), L'Hôpital's Rule (7.5)

Week 4 – February 5, 7
Hyperbolic Functions (7.7), Partial Fractions (8.4)

Week 5 – February 12, 14
Numerical Integration (8.6), Improper Integrals (8.7)

Week 6 – February 19, 21
Exam Review and Exam 1

Week 7 – February 26, 28
Areas under the curve, Volumes by cross sections, the disk method, the washer method (6.1), Volume by cylindrical shells (6.2)

Week 8 – March 5, 7
Arc Length (6.3), Work (6.5), Center of Mass (6.6)

Week 9 – March 12,14
The real number system (Appendix 6), Sequences (10.1)

Week 10 – March 19, 21
Series , Geometric Series (10.2)

☀ ☀ ☀ Spring Break - March 25-31 ☀ ☀ ☀

Week 11 – April 2, 4
Exam Review and Exam 2

Week 12 – April 9, 11
Integral Test (10.3), Comparison Test (10.4), Root Test and Ratio Test (10.5),

Week 13 – April 16, 18
Alternating Series (10.6), Power Series (10.7)

Week 14 – April 23, 25
Taylor Series and their Applications (10.8, 10.9, 10.10)

Week 15 – April 30, May 2
Parametric Equations (11.1, 11.2), Polar coordinates (11.3)

Week 16 – May 7, 9
Final Review and Final Exam