Syllabus

Calculus and Analytic Geometry 1
Math 207 GH – Fall 2015

Course Title	Calculus and Analytic Geometry 1
Credit Hours	5
Length of Course	16 weeks
Prerequisites	Grade of C or better in Math 140 and Math 141, or Math 143, or placement test, or consent of department chair
Section	207 GH (section number: 35477)
Classes	Tuesday, Thursday, 9:30 AM – 11:50 AM in Room 3150
Instructor	Marta Hidegkuti e-mail: mhidegkuti@ccc.edu Office: Room 3812
Office Hours	Monday, Tuesday, Wednesday, Thursday 8:30 AM – 9:00 AM in Room 3812 Monday, Wednesday 3:00 PM – 4:00 PM in Room 3812 Tuesday, Thursday 12:00 PM – 1:00 PM in Room 3812 Friday 1:00 – 2:00 PM in the Math Center Some office hours might be cancelled or re-scheduled due to meetings.
Web Sites	All handouts and announcements will be available on the class's web site, at http://www.teaching.martahidegkuti.com/Math207/math207_fa15/Math207.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	**Due to price consideration, students are welcome to use previous editions of the official textbook, which is** Calculus, Early Transcendentals by James Stewart, 7th edition, Books/Cole, 2012; ISBN Number: 978-0-538-49790-9). Most topics will be also covered by handouts posted on the course's web site.

Supplements
Some of the quizzes will take place online, at www.MyOpenMath.com. The use of MyOpenMath is free and it will be a mandatory part of the course. Students can enroll in the MyOpenMath course using the Course ID **6496** and enrollment key **Hidegkuti207Fa15**.

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.**

Important Dates
First class: Tuesday, August 25
Exam 1: Thursday, September 17
Exam 2: Thursday, October 15
Exam 3: Thursday, November 12
Last day to withdraw from classes: Monday, November 16
Holiday, no class: Thursday, November 26
Exam 4: (same as final exam) Thursday, December 10
End of Semester: Sunday, December 13

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 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 have been attempted.
2. Less than 70% 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, November 16. Before withdrawing from the course, students are encouraged to consult the instructor.

Quizzes and Quiz Reviews

In this class, there will be two types of quizzes.

Online Quizzes: Quizzes 1, 3, 5, 6, 8, 10, 12, 13, 14, 16, 18, 19, and 20 will be taken online, using MyOpenMath. The deadline for the online quizzes will be 11:30 PM on the night before the class as shown on the Calendar of Events. After the deadline passed, the link to the quiz will no longer be available. To practice for online quizzes, students are provided with online Quiz Reviews that can be repeated many times. These reviews cover the necessary course material and also prepare the students to give answers in the format in which MyOpenMath will accept it as correct. MyOpenMath is a free service and some of its aspects are frustrating. Students will always get credit for a correct answer. If a student thinks that their work was incorrectly marked wrong on a quiz, they should immediately notify the instructor by e-mailing to mhidegkuti@ccc.edu. The e-mail must contain the student's name, and also the quiz number and the number of the problem in question.

In-class Quizzes: Quizzes 2, 4, 7, 9, 11, 15, and 17 will take place during classes on Thursdays.

Please note that some of the quizzes described above may be cancelled.

Grading Policies

Students who register late are responsible for all course work they missed due to their absence. **All assessments (quizzes and exams) will be cumulative.**

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: 30% Exam 2: 35% Quizzes: 35%

Before determining the grade given for quizzes, the lowest two quiz scores 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%

Exam 2: 15% Exam 4: 25% Quizzes: 30%

Before determining the grade given for quizzes, the lowest three 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. 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, December 4.

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 cannot 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 and chewing gum are 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.

If you are contacting me about an assignment, please be sure to include your full name in the message and identify the assignment. Please use grammatically correct sentences in your email with punctuation and correct capitalization. Communications such as "can u pls reset my quiz thnx" are not acceptable in this course just as much as they will probably not be acceptable at your future job.

Academic Support Services

Math Center: Room 1220 B. The Math Center is a free service open to all students, and is highly recommended for Foundational Studies, Math 98, and Math 99 students. The Math Center is a place where students can do their homework, study for tests, and participate in group study sessions to gain a better understanding of the course material. The Math Center also serves credit level math classes during specific block times during the week. Visit the Math Center for more information.

Tutoring Center: Larry McKeon Bldg Room 177, (773) 907-4785
http://www.ccc.edu/colleges/truman/departments/Pages/Tutoring.aspx

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.
http://www.ccc.edu/colleges/truman/departments/Pages/TRiO-Student-Support-Services.aspx

Disability Access Center: Verifies needs pursuant to the American Disabilities Act (ADA), determines student academic accommodations, and issues accommodation letters. Room 1435, (773) 907-4725, Registration is required at the start of each semester.
http://www.ccc.edu/colleges/truman/departments/Pages/Disability-Access-Center.aspx

The Wellness Center is located in Room 1145. Current hours: Monday-Thursday 9am-5pm, Friday 9am-12pm. Contact: (773) 907-4786 for an appointment or information. 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.
http://www.ccc.edu/colleges/truman/departments/Pages/Wellness-Center.aspx

The Writing Center offers free writing assistance to Truman students enrolled in any credit course. Writing consultants, who are also professors at the college, provide feedback and instruction on any stage of the writing process in any class subject. Students can visit the Center to make half-hour or one-hour appointments with writing consultants for tutoring sessions on essays or other writing assignments, as well as resume or cover letter assistance, placement test preparation, and writing workshops on various topics. The Writing Center is located in Room 1435 of the main building and is open Monday-Thursday from 9 am to 9pm and Friday-Saturday from 9am to 4pm.
http://www.ccc.edu/colleges/truman/departments/Pages/Writing-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.
https://ccc.gradesfirst.com/cas/schools/211-city_colleges_of_chicago/ldap_sessions/new

Calendar of Events

Please note that this is subject to change. Last revised: August 24, 2015.

	Tuesday	Thursday
Week 1	**Class 1 – August 25**	**Class 2 – August 27**
Week 2	**Class 3 – September 1** **Quiz 1** online due Monday, August 30 at 11:30 PM	**Class 4 – September 3** **Quiz 2 – in class**
Week 3	**Class 5 – September 8** **Quiz 3** online due Monday, September 7 at 11:30 PM	**Class 6 – September 10** **Quiz 4 –** in class
Week 4	**Class 7 – September 15** **Quiz 5** online due Monday, September 14 at 11:30 PM	**Class 8 – September 17** **Exam 1**
Week 5	**Class 9 – September 22** **Quiz 6 online** due Monday, September 21 at 11:30 PM	**Class 10 – September 24** **Quiz 7 –** in class
Week 6	**Class 11 – September 29** **Quiz 8 online** due Monday, September 28 at 11:30 PM	**Class 12 – October 1** **Quiz 9 –** in class
Week 7	**Class 13 – October 6** **Quiz 10 online** due Monday, October 5 at 11:30 PM	**Class 14 – October 8** **Quiz 11 - in class**
Week 8	**Class 15 – October 13** **Quiz 12 online** due Monday, October 12 at 11:30 PM	**Class 16 – October 15** **Exam 2**
Week 9	**Class 17 – October 20** **Quiz 13 online** due Monday, October 19 at 11:30 PM	**Class 18 – October 22**
Week 10	**Class 19 – October 27** **Quiz 14 online** due Monday, October 26 at 11:30 PM	**Class 20 – October 29** **Quiz 15 - in class**
Week 11	**Class 21 – November 3** **Quiz 16 online** due Monday, November 2 at 11:30 PM	**Class 22 – November 5** **Quiz 17 - in class**
Week 12	**Class 23 – November 10** **Quiz 18 online** due Monday, November 9 at 11:30 PM	**Class 24 – November 12** **Exam 3**
Week 13	**Class 25 – November 17** **Quiz 19 online** due Monday, November 16 at 11:30 PM	**Class 26 – November 19**
Week 14	**Class 27 – November 24** **Quiz 20 online** due Monday, November 23 at 11:30 PM	**November 26 – No Class**
Week 15	**Class 28 – December 1**	**Class 29 – December 3**
Week 16	**Class 30 – December 8**	**Class 31 – December 10** **Exam 4**
End of Semester: Sunday, December 13		

Last day for student initiated withdrawal: Monday, November 16

Course Information

Course Description: This is the first course in calculus and analytic geometry. It explores various characteristics and equations of conics and covers techniques of differentiation for algebraic and trigonometric functions. It also includes an introduction to the Fundamental Theorem of Calculus. Technology and writing as appropriate to the discipline will be emphasized throughout the course.

Students the Course is Expected to Serve: This course is intended for students requiring the first course in calculus.

Course Objectives:

Discuss the equations and characteristics of various conics.
Understand the concepts of a limit, continuity, and differentiability.
Apply the sum, product, quotient, and chain rules of differentiation.
Differentiate algebraic and trigonometric functions.
Apply the concepts of differential calculus to contextual (real-world) situations.
Understand the definition and basic properties of the Riemann sum.
Understand the concept of an antiderivative and its role in the Fundamental Theorem of Calculus.

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

Estimate limits and derivatives graphically and by using tables of values.
Calculate limits of functions algebraically.
Calculate derivatives of functions using the definition of a derivative.
Identify points where a function fails to be continuous or differentiable.
Calculate derivatives of functions using the sum, product, quotient and chain rules.
Determine derivatives of functions using implicit differentiation.
Determine the equation of a tangent line to the graph of a function.
Approximate changes in a function using differentials.
Apply the Intermediate, Mean, and Extreme Value Theorems to a function defined on a closed and bounded interval.
Apply derivatives to problems involving optimization and related rates.
Analyze the behavior of functions and their graphs using first and second derivatives (e.g.,determine local and absolute extrema, concavity, and inflection points).
Determine antiderivatives of functions.
Apply the concepts of first and second derivatives and antiderivatives to motion problems.
Calculate a Riemann sum of a function on a closed interval.
Evaluate definite integrals by using the Fundamental Theorem of Calculus
Integrate functions using the methods of substitution, parts, and partial fractions.
Evaluate improper integrals.

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: August 1, 2015
The class's web site will contain a Course Outline that is updated after each class.

Week 1
Functions and their Graphs (1.1, 1.2), Exponential and Logarithmic Functions (1.5, 1.6), Inverse Functions (1.6)
Circles (handout)

Week 2
Complete Analysis of a function, Average velocity (2.1), Limits (2.1, 2.2)

Week 3
Limits (2.1- 2.4), Continuity (2.5)

Week 4
Definition of the Derivative (2.1, 2.7), Differentiating Polynomials (3.1)

Week 5
Review and Exam 1

Week 6
The Product Rule (3.2), Finding local Extrema (4.3, handout), Differentiating Exponential Functions (3.1)

Week 7
Differentiating Trigonometric Functions (3.3), Differentiating Logarithmic Functions (3.6), Optimization 1 (handout, 4.1)

Week 8
Review and Exam 2

Week 9
The Quotient Rule (3.2), Second Derivative test (4.3), Concavity and Curve Sketching (4.4, 4.5), Antiderivatives (4.9)

Week 10
Chain Rule (3.4), Differentiating Inverse Functions (handout), Related Rates (3.9), Linearization (3.10)

Week 11
Implicit Differentiation (3.5), Optimization (4.7)

Week 12
Review and Exam 3

Week 13
L'Hôpital's Rule (4.4), Areas and sums (5.1)

Week 14
Definite Integral (5.2), Fundamental Theorem of Calculus (5.4)

Week 15
The Substitution Rule (5.5), Hyperbolic functions (3.11)

Week 16
Final Review and Final Exam