

HISTORY OF MATHEMATICS
MATH 409/409G – A75 (3 HOURS)
CRN – 27200/27201
Summer 2015 Syllabus

Instructor: Dr. Kanita K. DuCloux
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Course Hours: *On-Line*

Course Location: Web Course Delivery

Materials:

- **Textbook:** ISBN – 0-88385-736-7

Berlinghoff, W. P., & Gouvêa, F. Q. (2004). *Math through the ages: A gentle history for teachers and others* (Expanded edition). Farmington, ME & Washington, DC: A Joint Publication of Oxton House Publishers & The Mathematical Association of America.

Note: The textbook will be used as one of the many resources we will have for the class. Therefore, we utilize it partially, but not necessarily completely.

- This course will utilize *Blackboard*. Course documents, such as the syllabus, handouts, or supplemental materials to the textbook will be posted on Blackboard. The instructor will post announcements, grades, comments, and etc. via Blackboard. **You will also complete all of your assessments (tests) electronically via Blackboard.** Please contact the Information Technology Helpdesk at 270-745-7000 for more information and questions regarding Blackboard.
- This course will utilize the **TI-83 and/or TI-84 graphing calculators** throughout the semester. Students will use the TI-83 and TI-84 graphing calculators to solve problems and to complete assignments and assessments, when necessary.

Course Description:

This course traces the history of mathematics from ancient times through the development of calculus with emphasis on famous problems. The study of history in this course provides knowledge and appreciation useful in the classroom. Term papers will be required. This course cannot be accepted as part of the 35-hour requirement for the non-certifiable mathematics major.

Prerequisites:

Six hours of approved mathematics courses at the 300- and/or 400-level or permission of instructor is required.

Important Dates:

<i>Classes Begin</i>	<i>Monday, June 8, 2015</i>
Independence Day observed (no classes)	Friday, July 3, 2015
Final Exam	Friday, July 10 – Saturday, July 11th, 2015, Due Electronically

University Policies:

- *In compliance with university policy, students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the Office for Student Disability Services in Downing University Center A-200. The OFSDS telephone number is (270)745-5004; TTY is (270)745-3030. Per university policy, please DO NOT request accommodations directly from the professor or instructor without a letter of accommodation from the Office for Student Disability Services.*
- **Academic dishonesty will not be tolerated.** This includes any form of cheating or plagiarism. The policy is found on the web at <http://www.wku.edu/coursecatalog/>.

Student Assistance/Tutoring:

Should you require academic assistance with this course, or any other General Education Course, there are several places that can provide help. The Learning Center, located in the Academic Advising and Retention Center, DUC A-330, has tutors in most major undergraduate subjects and course levels throughout the week—they can also direct you to one of many tutoring and assistance Centers across campus. To make an appointment, or request a tutor for a specific class, call (270)745-6254 or stop by DUC A-330. Log on to TLC's web site at <http://www.wku.edu/tlc> for tutoring for students at a distance. TLC hours: Monday-Thursday, 8:00am-9:00pm, Friday 8:00am-4:00pm, and Sunday 4:00pm-9:00pm.

Course Design:

This course will be divided into five modules as listed below. Each module consists of readings, problems, and explorations of particular **Sketches** from the textbook. Assigned readings and assigned textbook problems are detailed in each of the Module's menu folders on Blackboard.

Please note: The term *Sketches* in this course's textbook is analogous to *Chapters* in other textbooks.

Module 1: Sketches 1, 2, 3, & 4

Module 2: Sketches 5, 6, 7, & 8

Module 3: Sketches 9, 10, 11, 12

Module 4: Sketches 13, 14, 15, & 16

Module 5: Sketches 17, 18, 20, 21, & 23

Learning Outcomes:

Through problem applications involving critical analysis, problem posing, and synthesizing historical underpinnings of mathematics, after the completion of this course, students will be able to:

1. Reason and communicate proficiently in various areas of mathematics.
2. Understand historical mathematical concepts embedded in algebra, geometry, logic, probability, and statistics through different representations and connections.
3. Understand the utility of mathematics during ancient times and the contributions to modern day mathematics.

Criteria for Determination of Grade, Including Evaluation Methods:

The quality of all course activities should be excellent and demonstrate extensive effort. All class participation should be active, inquisitive, and non-confrontational. Additional considerations for evaluating your progress toward achieving course objectives include:

1. Effort: Accuracy, thoroughness, and quality of the intellectual effort with respect to requirements established for each component of this course are expected.
2. Quality of class participation: Extensive class participation is expected and will enhance your learning experience in this course. You are expected to participate in all course activities, including discussion boards, computer explorations, individual and small-group problem-solving activities, and online group investigations.
3. Grade determination: The total number of possible points for this course is **1450 points (1550 points for graduate students)**.
4. Grades will be determined by dividing the total number of accumulated points by the total number of possible points to determine a percentage.

5. Grades will be based on the following **EIGHT** – point scale:

Percentage	Letter Grade Equivalent
92 – 100%	A
84 – 91%	B
76 – 83%	C
68 – 75%	D
Below 67%	F

6. Final course grades will be calculated as follows:

Getting Acquainted (50 POINTS):

Your Getting Acquainted assignment is in the Content folder. Please answer the questions and post your responses on the Discussion Board under Getting Acquainted.

Module I/Q Discussion (200 POINTS):

Every week, you will be expected to participate in class discussions on the Blackboard. By noon Friday of each week, you will be expected to have read the assigned sketches, posted an I/Q for each sketch and read and responded to 2 classmates' posts.

What is an I/Q? I/Q is an acronym for a Statement of **Interest** or a **Question**. After reading each sketch, post something you found interesting about the reading OR a question that the reading raised for you.

To help your classmates and the discussion, please identify the Sketch # and whether you are posting a statement of interest or a question.

Your grade for Module I/Q Discussions will be evaluated on the following (to name a few): participation in class discussions on Blackboard and/or via e-mail, thoughtful reflection and quality of your communication with your peers and instructor.

Module Assessments (800 POINTS; 200 points each):

There will be 4 module assessments. **All students will complete each of these assessments (tests) electronically on Blackboard prior to the scheduled due dates.** The only exceptions will be for students that have written permission from the *Office of Student Disability Services*.

Please note: There will be no planned make-up tests, and missing a test will result in a grade of zero. Only under the most extenuating circumstances will a make-up test be considered if the instructor is aware in advance.

Final Exam (400 POINTS):

A comprehensive final exam is required for this course. **All students will complete the final exam electronically on Blackboard prior to the scheduled due date.** There are no makeups for the final exam.

Graduate Credit:

Students enrolled in this course for graduate credit should consult the *Graduate Credit* menu in the Content folder for a description of the additional requirements for this course.

Tentative Course Schedule:

The schedule below provides the due dates for each of the Module Assessments and the due date for the Final Exam. Please consult Blackboard for a more detailed description of course activities. ***Please note that the instructor reserves the right to augment and/or amend the course schedule at any point during the course when it is deemed necessary for the benefit of the class.***

Assessment	Due Date
Module 1	Due by Midnight, Saturday Night , June 13, 2015
Module 2	Due by Midnight, Saturday Night , June 20, 2015
Module 3	Due by Midnight, Saturday Night , June 27, 2015
Module 4	Due by Midnight, Thursday Night , July 2, 2015
Final Exam	Due by Midnight Saturday Night , July 11, 2015