

Math 580.001 and 01W: History of Mathematics (23419 & 23418) COURSE SYLLABUS: Spring 2020, 3 semester credit hours

## INSTRUCTOR INFORMATION

**Instructor:** Dr. Pamela S. Webster

**Office Location:** Binnion 315

**Office Hours:** M/W = 1:00pm - 3:00pm;

T 1:00pm – 2:00pm; and by appointment

**Office Phone:** 903-886-5950 **Office Fax:** 903-886-5945

University Email Address: Pamela.Webster@tamuc.edu

**Preferred Form of Communication:** Email

**Communication Response Time:** Within 48 hours, unless over a weekend, holiday, or

during school cancellation, such as bad weather days.

# **COURSE INFORMATION**

#### **Materials - Textbooks, Readings, Supplementary Readings:**

**Text & Supplement:** No textbook required; sections will be provided inside D2L. Your reading of the text topics should be at least one day ahead of the related lectures. You WILL be required to find a book on a topic in Math History (I will give some suggestions) on which to do a book review.

**Supplies Needed:** A three-ring binder or folder for handouts. You may also want access to a ruler (metric and standard), stapler, and colored pencils. You may have a need during the semester to print something, so you'll need access to printing supplies/a printer.

Each student's average for the course will be posted in your MyLeo account. To access the course, you will go into MyLeo and the "Apps" and look for the app for "MyLeo Online (D2L Brightspace)". You should see directions to choose your course from the course grid that looks like:

Once you have chosen the correct course, you will be able to see your "grades" option.

**Calculators:** A calculator is recommended during this course. Some material may be worked best with a graphing calculator. **I highly recommend a TI-83 or TI-84** be used when appropriate throughout the course. If you chose to use a different calculator, please note that the instructor *will not be a good resource for you to be able to use your calculator.* 

**Scanner:** A scanner or scan app MUST be used for uploading homework; **NOT** the camera on your phone or tablet. Homework and other documents should be loaded as .pdf files, NOT as .jpg files. This allows for an easy upload and download and clean documents (no black outlines/edges, etc.) I have personal experience with the free app Cam Scanner, but there are several apps available. As long as it will load to MyLeo as a .pdf and there aren't a lot of dark edges or shadows, you should be okay.

#### **Course Description:**

<u>MATH 580 – Topics in the History of Mathematics</u>: A chronological presentation of historical mathematics. The course presents historically important problems and procedures. Prerequisites: Math 332 or Math 500, or consent of Instructor. 3 sch.

**Student Learning Outcomes:** Upon successful completion of this course, students will:

- 1. Demonstrate in writing and problem solving an awareness of how certain mathematical ideas developed and why they are important.
- 2. Recognize, analyze, describe, and represent data in various historical forms.
- 3. Demonstrate problem solving ability that includes but is not limited to knowledge of number systems, geometry, algebra, calculus, and number theory.
- 4. Make connections between topics from the course and applications to other sciences, the progress of civilization, and the teaching of mathematics.
- 5. Demonstrate historical computation techniques, and awareness of the importance of notation, and the relevance of mathematics to general education.
- 6. Demonstrate an ability to present historical mathematical thoughts/arguments in both written and verbal presentations, including but not limited to a book review and journal articles reviews.
- 7. Judiciously use appropriate technology to achieve these outcomes.

# **COURSE REQUIREMENTS**

#### Minimal Technical Skills Needed:

Students must have a minimal amount of technical skills to be successful in this course. Skills needed include, but are not limited to: using the online learning system (D2L) in MyLeo; using Microsoft Word, Excel, and PowerPoint; and the use of email.

#### **Instructional Methods:**

**Instructional Methods**: Instruction will include lectures, demonstrations and models, and some group and individual work, based on the time available. This course will be taught as a lecture course with activities mixed throughout. In particular, students will be expected to work on projects and activities that deal with book reviews, journal article reviews, and other presentations of the material learned.

#### **Student Responsibilities/ Tips for Success in the Course:**

**Attendance/Participation:** I will be taking roll every class. All students are expected to be present, and attendance will be reflected in your Daily Work grade. In addition, students must participate in class each day in order to receive full points for this category. If you miss a class, come see me for any missed assignments. **Please do not approach me as I am beginning a class period**, unless it is an emergency, so that we might start ON TIME. Please be in your seat and ready to work when class begins. **Class Participation:** In addition, students must participate in class each day in order to receive full points for this category.

**Amount of weekly study:** The "rule of thumb" for a math class is that for every hour of class time, you should spend approximately 3 hours of study time outside of the classroom. This study time may include a variety of activities, including but not limited to: re-organizing notes; working on homework; participating in a study group, tutoring, workshops, or Supplemental Instruction session; attending review sessions; and studying for quizzes and exams.

### **GRADING**

#### **Grading Policy:**

<u>Type of Assessment:</u> <u>Portion of the Grade:</u>

Daily Work (Homework, Quizzes, etc.) 15%
Projects/Presentations/Reflections 15%
Midterm Exam 35%
Comprehensive Final Exam 35%

Grading Scale: Grades will be assigned using the standard scale:

A = 90-100+, B = 80-89.9, C = 70-79.9, D = 60-69.9, F = 59.9 or below

#### **Types of Grades/Assessments:**

Daily Grades: The daily grade is composed of several categories of assessments, including attendance, participation, homework, and quizzes. Attendance/Participation: I will be taking roll every class. All students are expected to be present, and attendance will be reflected in your Daily Work grade. In addition, students must participate in class each day in order to receive full points for this category. Homework: Homework will be assigned most class periods. It is extremely important for you to work all homework in order to be prepared for the exams. We will also be working on certain supplemental assignments which will often have to be completed as homework. The total number of assignments that are completed and turned in (punctually) by the student will be reflected in the Daily Work grade. A grade will be taken on select problems from each homework assignment. In general, late work will not be accepted. A missed homework assignment or two, due to legitimate absence, will not adversely affect your grade as long as you have kept up with all other assignments. Quizzes: Both individual and group quizzes may be given occasionally. Since regular attendance is expected, In general, NO make-up quizzes will be given. This class covers

enough material that there is no time to be missed that is a "good time", and each quiz will be over material to be emphasized on exams. Quizzes will be averaged into your Daily Work grade.

In addition, please ensure that your name is written on all homework pages so that, when graded, you will receive proper credit for your work. Please, no spiral "chads" and, when possible, staple multiple pages in the same assignment together.

**Projects/ Presentations/Reflections:** Special projects will be assigned for students to work on outside of class. These projects will vary in their scope and should be completed neatly and punctually. In addition, you will be expected to keep a record of your reflections on the class and its material, as well as your reactions and future uses for the material. Each time you need to do a reflection, a prompt will be given to the class. You will need to keep up with your completed reflections in a separate location from notes, homework, etc. The reflections will be taken up at various, unannounced times throughout the semester. The reflections must be turned in when requested or they will not be graded. In general, late projects and reflections will not be accepted without a documented university excuse. Further information about the projects and reflections will be communicated to you during the semester. Regular attendance will assist students with being able to participate in these activities and projects. In addition, there will be a presentation grade at the end of the semester that is based on research you have done throughout the semester.

**Midterm Exam:** There will only be one "during semester" exam: the Midterm Exam. This exam will be announced at least a week in advance. **CELL PHONES and other electronic devices must be turned off and stored out of the student's reach.** The only electronic device allowed during tests and quizzes is an approved stand-alone calculator, and only with the instructor's consent. Note: Calculators that solve problems for students, including but not limited to the TI-NSpire, TI-89, Casio Prizm, Casio Touch, or higher, are **NOT** allowed to be used for exams.

Students should expect the bulk of the questions on exams to be problem solving. Partial credit may be given on exams IF all work is neatly shown so that I can easily determine the student's mistakes. When pictures are drawn, students should be careful that figures are clearly marked and easily understood. Explanations should be explicit and understandable to the audience given. Items should NOT need interpretation if full credit is to be given. Tentative date for the Midterm Exam (although not in stone): March 4<sup>th</sup>. See the schedule below for details.

In general, make-up exams will NOT be given unless confirmed ahead of time and accompanied by a documented, University excused absence.

**Final:** Our final is a comprehensive exam. The Class Schedule gives our time to have our final exam as **Wednesday, May 6<sup>th</sup>, during our class time (5pm). Note: the final will run for a two-hour period, and that is slightly different from our normal class meeting time!!. Do not expect a makeup exam for the final, outside of times we discuss in class.** 

# **TECHNOLOGY REQUIREMENTS**

#### **Instructor Specific Technology Requirements:**

- **Calculator:** A TI-83 or TI-84 calculator (or equivalent) is REQUIRED for this course.
- **Internet access is REQUIRED**. Projects, etc., may be given online.
- **Word processing software is REQUIRED.** (Microsoft Word preferred/compatibility required)
- **Email access is REQUIRED**. Please utilize your A&M-Commerce email address, or make me aware of your alternate email address.

#### MyLeo Online Learning Management System (LMS):

**D2L in MyLeo:** All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the. Below are technical requirements LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\_support.htm YouSeeU Virtual Classroom Requirements:

https://support.vouseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

#### ACCESS AND NAVIGATION in MyLeo/D2L:

**MyLeo Support:** You will need your campus-wide ID (CWID) and password to log into your course in D2L. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or <a href="https://excellence.need/belower.need/">helpdesk@tamuc.edu</a>.

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

# **COMMUNICATION AND SUPPORT**

If you have any questions or are having difficulties with the course material, please contact your instructor:

#### **Interaction with Instructor Statement:**

Students will be expected to interact with the instructor(s) in class or via electronic means in an appropriate manner. All instructor contact information is listed on this syllabus and should be used. Please use email to facilitate a quick response.

#### Technical Support:

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here: <a href="https://community.brightspace.com/support/s/contactsupport">https://community.brightspace.com/support/s/contactsupport</a>

# **COURSE AND UNIVERSITY PROCEDURES/POLICIES**

#### **Course Specific Procedures/Policies:**

**Getting Help Outside of Office Hours:** <u>The Math Skills Center</u>, located in Binnion 328, is open Monday and Wednesday, 8am – 8pm; Tuesday and Thursday, 8am – 6pm; Friday, 8am – noon. For information on which tutors would be best to help, and when they are working, feel free to see me or the bulletin board outside the lab. <u>Mach III/TRIO Services</u>, located in the Halladay Student Services building, Room 300, is available to students who meet certain criteria, such as being a first-generation college student, etc. Contact TRIO at 903-886-5833. The <u>Academic Success Center</u> offers tutoring in the library, as well as Supplemental Instruction. Their hours can be found on the university web site.

**Comments:** I will do my best to make a quality presentation each day and, in return, I expect that you will do your best to learn the material presented in class and in the text. This course will be taught as hands-on as possible, and student participation is necessary daily. It is important that you be actively engaged in any group activities. Questions are welcome in the classroom, and I will gladly schedule outside help sessions if necessary. I know that together, these efforts can contribute significantly to your education in this class.

#### Syllabus Change Policy:

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

#### **University Specific Procedures:**

#### Student Conduct:

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the <a href="Student Guidebook">Student Guidebook</a> (See link below). All students are expected to exercise self-discipline and respect for the rights of others at all times. Behavioral disruptions that interfere with the business of the classroom or with an individual's ability to learn may be referred to the Dean of Students. Please be sure that cell phones and other electronic devices are off or silent. If you expect to have to get up, please select an inconspicuous position to minimize disruptions. Courtesy to others is important. That means respecting the opinions of others, and in general, doing your part to make this a positive learning environment for all students. Food and beverages should be consumed as quietly as possible, and you must clean up after yourself.

 $\frac{http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.asp}{x}$ 

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <a href="https://www.britannica.com/topic/netiquette">https://www.britannica.com/topic/netiquette</a>

Appropriate classroom behavior is required to attend this class. <u>All cell phones and other such devices must be put on silent or turned off during class.</u> Phones are a distraction for me and the other students in the class. NOTE: THIS INCLUDES BLUETOOTH AND OTHER DEVICES THAT ARE PLACED IN THE EAR. All people will be treated with respect and I will not allow talking that will disrupt my lectures. If disruptions occur during class lectures, you will be asked to leave class and will earn a zero on any applicable grades for that class period. Serial disrupters will be asked dealt with individually, including referral to the Dean of Students.

#### TAMUC Attendance Policy:

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure</u> 13.99.99.R0.01.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

 $\frac{http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf$ 

#### Academic Integrity:

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

<u>Undergraduate Academic Dishonesty 13.99.99.R0.03</u>

 $\frac{http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf}$ 

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonestv.pdf

As stated in the Student Handbook, academic dishonesty in the class will not be tolerated. If any materials or equipment are found to be available to the student at any time which is considered inappropriate by the instructor, the very fact that the materials are inappropriately available to the student is grounds for an accusation of academic dishonesty. The instructor reserves the right to fail the student for the assignment or the course, as well as report the student to the Academic Dean and/or the Dean of Students, and the Committee for Academic Retention in Teacher Education. The above committee and deans have the ability to terminate a student's enrollment in the University. The

instructor considers this an extremely serious matter. Please make sure you are not in a situation that could be viewed negatively.

I find that a majority of students are honest in doing their school work. However, measures must be taken to protect the academic integrity of the classroom. I have a NO TOLERENCE policy for cheating and if you are caught cheating, you will probably fail that portion of the course, as well as possibly the entire course. Cheating in this course is defined as (but not limited to) the following:

- Giving or receiving answers during an exam or quiz.
- Viewing the exam or quiz answers of nearby classmates.
- Having notes/practice work/etc. available during quizzes or tests.
- Possession or access to test items before the test is given.
- Deception in getting an excused absence to obtain the undeserved opportunity to make-up work.
- Use of cell phones or text messaging technology/other devices during exams or quizzes. **You may not use the calculator on your cell phones.**
- Improper citations in written works, or using another person's ideas and words as your own without giving proper credit.
- **Any** method, no matter how well rationalized or accepted, which gives an unfair advantage and/or improves a person's grade by any means other than study and skillful performances on exams and/or other assignments.

Students found guilty of an act of academic dishonesty in this course will be subject to receiving an "F" in this course, as well as the below-mentioned disciplinary actions, as deemed appropriate.

# Specific additional disciplinary action for these offenses may include any combination of the following:

Point deduction of an assignment Failure of an assignment A grade of zero for an assignment Failure of this course

Referral to the Academic Integrity Committee or department head for further action Referral to the Dean of the College of Science and Engineering, and other Deans as appropriate Referral to the University Discipline Committee

#### Students with Disabilities -- ADA Statement:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

# Office of Student Disability Resources and Services Texas A&M University-Commerce Gee Library, Room 162 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148

Email: <u>StudentDisabilityServices@tamuc.edu</u>
Website: <u>Student Disability Resources & Services</u>

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

#### Non-Discrimination Notice:

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information, or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

#### **Concealed Carry Statement:**

<u>Texas Senate Bill - 11</u> (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

#### Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34Safety OfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

# **COURSE OUTLINE/CALENDAR**

#### **Topics Covered (tentative schedule):**

- Week #1 (Jan. 13 17) Syllabus, Introduction and Getting Started/Ancient Civilizations
- Week #2 (Jan. 20 24) MLK DAY (school closed) & Ancient Civilizations continued
- Week #3 (Jan. 27 31)- Ancient Greeks; assign Project #1 and Book Review Project dates to be assigned during class
- Week #4 (**Feb. 3 7**) Ancient Greeks
- Week #5 (Feb. 10 14)- Complete Ancient Greeks
- Week #6 (**Feb. 17 21**)- Begin Romans and Arabs; assign Project #2
- Week #7 (**Feb. 24 28**)- Complete Arabs & Begin The Awakening/Renaissance;
- Week #8 (Mar. 2 6) Assign Reflection #1 Review & MIDTERM Exam;

#### \*\*\* March 9 - 13 SPRING BREAK!!! \*\*\*

- Week #9 (Mar. 16 20)- Continue the Renaissance
- Week #10 (Mar. 23 27) Complete the Renaissance of Mathematics
- Week #11 (Mar. 30 Apr. 3)- Begin the "Dawn" of Modern Mathematics; assign Project #3
- Week #12 (Apr. 6 10) Complete the study of "Modern" European Mathematics & America;
- Week #13 (**Apr. 13 17**)- **Presentations**; assign Reflection #2
- Week #14 (Apr. 20 24) Review & Exam 2
- Week #15 (Apr. 27 May 1)- Review for Final
- Week #16 (Week of May 4) FINAL EXAM Wednesday, May 6<sup>th</sup>, during class time, but running for a
  FULL two hours. Note: time is slightly different from class meeting time!!.

<u>Please note:</u> There are multiple days during the semester when I will be attending conferences and unable to meet class as normally scheduled. Although you will not be meeting me in class, there will be outside activities assigned to help you complete the course material in a timely manner. These activities may include watching video lectures and working on projects, to list a couple. You are responsible for these activities, just as if you were in class in person. More details will be shared during our class meetings.

# Remaining enrolled in this course constitutes acceptance of all policies contained in this syllabus.

Any changes to this syllabus and/or schedule will be communicated directly to you in class by the instructor. You are responsible for being aware of any such changes.

## **Good luck and work hard!!**