

University of New Mexico- Valencia Campus
Department of Mathematics, Engineering, & Science & (MES)
Math 193- 503 (CRN # 36616)
“Critical Thinking for Mathematics”
Spring 2017

Instructor: Khaled Kassem (Mr. K) Office Phone Number: (505) 925-8609

Email: Use the message button within UNM LEARN. You may also use: khaled@unm.edu

Class Schedule: Monday & Wednesday @ 09:00 – 09:50 am - C-108

Office Room: A-142 (E)

Office Hours:

Monday: 09:55-11:55 am, 01:20-02:50 pm (Faculty Help), and 04:20-04:50 pm

Tuesday: 04:20-05:20 pm (Math Center Hour)

Wednesday: 09:55-11:55 am, 01:20-02:50 PM (Faculty Help), and 04:20-04:50 pm

Thursday: 04:20-05:20 PM (STEM Center Hour)

UNM LEARN URL: learn.unm.edu. Check this location frequently for messages and announcements. Also, find the syllabus of the course there and print a hard copy for yourself.

Textbook: *Math 193, Critical Thinking, Problem Solving, and Math Study Skills* (Booklet & Handout)

Revised: November 2016. Get it only from UNM-Valencia bookstore.

Final Exam: The Portfolio as described below will serve as a final exam.

I. Course Description: Math 193: Critical Thinking for Math (2 credits) will develop strategies for successful achievement in mathematics including developing academic skills as a foundation for college learning, employing critical thinking skills in problem solving, utilizing multiple problem-solving strategies & methods, developing a mathematical awareness of the world and expanding confidence in mathematical ability that will be valuable throughout a college career. Placement: Math 193 is required of all students who place into Math 021 and Math 022. Co-requisite: Math 021 and Math 022. **Class meets on Mondays and Wednesdays in room C108 from 3:30 PM to 4:20 PM.**

II. Course Materials: Math 193 Booklet & Handouts. All Math 021 and Math 022 course materials.

III. Attendance Policy: Students are expected to attend regularly and to be on time. Two unexcused absences in the first 2 weeks or three consecutive absences, or five total unexcused absences are considered to be excessive and the student may be dropped from the class list at the discretion of the instructor. If you are dropped from Math 193, you will be dropped from Math 021 and Math 022 as well.

IV. Grading Policy: A+ 98% + , A 93 – 97% , A- 90 – 92% , B+ 88 – 89%, B 83 – 87%, B- 80 – 82%, C+ 78 – 79% , C 73 – 77%, C- 70 – 72% , D 60 – 69% , F below 60% The graded categories, roughly described below, are: **Attendance & Participation 50%** **Portfolio 50%** . Students are required to bring their Math 021 and Math 022 /193 binders to every class. All portfolios are due the last class day the week before final exams. NO late portfolios will be accepted.

Attendance & Participation (50%): The student must be on time and remain for the entire class session, have the necessary course materials on hand and participate in class to receive full credit for attendance & participation each day. If absent, the student must see the instructor in person, contact him by email or leave a message within 24 hours to change an unexcused absence to an excused absence. Since nearly all of the Math 193 work will be completed in class each absence will reduce the Attendance & Participation grade as follows:

1st unexcused absence will drop your attendance grade to 90%

2nd unexcused absence will drop your attendance grade to 85%

3rd unexcused absence will drop your attendance grade to 80%

4th unexcused absence will drop your attendance grade to 75%

5th unexcused absence will result in you being dropped from the class

Portfolio Requirements: (50%) More details will be given as needed and as the semester progresses but essentially the Portfolio Requirements include:

1. Cover Letter (A detailed explanation about this item is in your booklet)
2. 4 Required Math Problems' Write-Up Forms. The forms are posted on <https://learn.unm.edu>. (problems will be distributed/posted later)
3. Notes From math 021/022 (Include notes taken in-class and/or out of class)
4. A Set of study Materials for one Math 021/022 exam at least. This can be the mock final or any two quizzes.
5. Item Error Analysis for one Math 021/022 exam.
6. 4 Video evaluation forms.
7. 4 Math Journal Article Analysis Forms
8. A five-hundred-word, typed Mathematical Essay on an approved topic. More details about the math essay will be posted on <https://learn.unm.edu>.
9. Teacher selected items: These will include the Math Anxiety Scale, Calculator use exercises, Learning Style activity... etc.

Binder Organization:

- **Section 1** – Syllabus. Math 021 and Math 022 & Math 193 Course Organization. This section will store Calendar Pages or Planner. A calendar will be used to track the schedule of Math 021 and Math 022 and Math 193 class meetings, the amount of time spent studying and working in Aleks, the students own attendance, and other scheduled obligations and progress. Calendar pages can be printed from the Internet and must cover the entire semester and be dated.
- **Section 2** – This section will be used to record and describe all supplemental material you use to succeed in your Math 021/022 and Math 193 classes. This section can have notes from tutoring sessions, video lessons, and other math supplemental resources.
- **Section 3** – Math 021 and Math 022 **Class Notes**, Practice Problems and Tests. This section will store notes, practice problems and tests from Math 021 and Math 022. Taking notes and working problems on paper while working in Aleks is required and is part of the final grade.
- **Section 4** – Knowledge check assessments work including dates
- **Section 5** – This section will be used to record and describe all supplemental material you use to succeed in your Math 021/022 and Math 193 classes. This section can have notes from tutoring sessions, video lessons, and other math supplemental resources.
- **Section 6** – **Math 193 Problem Solving Exercises**. The work on word problems and related write-ups will be stored in this section. Problems must be copied or described completely and dated.

V. Support Services: The Valencia Campus Library provides a quiet atmosphere for study and is an excellent resource for supplementary materials. Audiotapes and videotapes are available for student use through the library. It will also have a link to all your course syllabi. The Open Computer Lab (V123) provide free access to word processors, email, Internet access and other software that students may find useful in the course of their studies. The Learning Center (TLC, which includes The Math Center) can be reached at 925-8907. It provides tutoring at no charge for all UNM-Valencia Campus students.

VI. Expectations: Students are expected to conduct themselves in a polite, courteous, professional and collegial manner. Cell phones must be turned off or in silent mode. Please step into the hall if you need to take a call

during class. Any disruption of a class caused by a cell phone will result in the student being asked to leave the class at once.

VII. Disability Statement: Students with Disabilities and Special Learning Needs: Student Services provides a number of services for students with documented special needs. The Equal Access Office number is 925-8510. If you have a documented disability, please provide me with a copy of your letter from Equal Access Services as soon as possible to ensure that your accommodations are provided in a timely manner.

VIII. UNM'S Policy on Gender Discrimination: In an effort to meet obligations under Title IX, UNM Faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see p 15- <http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf>). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: <https://policy.unm.edu/university-policy.unm.edu/university-policies/2---/2740.html>.

IX. UNM'S Policy on Academic Honesty: Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, including dismissal, against any student who is found responsible for academic dishonesty. Any student who has been judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course. Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests or assignments, claiming credit for work not done or done by others; hindering the academic work of other students; and misrepresenting academic or professional qualifications within or outside the University.

X. Major Students Learning Outcomes: At the conclusion of the course, students will be able to

- develop academic skills as a foundation for college learning
- employ critical thinking skills in problem solving
- utilize multiple problem-solving strategies & methods
- develop a mathematical awareness of the world
- expand confidence in mathematical ability

XI. Important Dates:

01/16(Monday) Martin Luther King, JR. Day (NO Classes)

01/27 (Friday) Last day to add courses or change sections

02/03(Friday) Last Day to Drop without a grade, Last Day to Drop with a Refund

02/10(Friday) Last day to change grading options

March 12-19 Spring Break – No Classes

04/ 14 (Friday) Last day to withdraw without the Dean's approval

05/ 05 (Friday) Last day to withdraw with the Dean's approval

Final Exam (Portfolio): Portfolios are due by **Wednesday, May 03, 2017 at 09:00 am in class.**

Math 193 Tentative Schedule-Spring2017

Week	Date	Topic/s
1	1/16	Monday: Martin Luther King, JR. Day (NO Classes) Introduction/ Learning styles
2	1/23	Math Anxiety/ Problem Solving 1
3	1/30	Calculator Activity/ Video 1
4	2/06	Math article 1/ Math Puzzles
5	2/13	Math 021 Review
6	2/20	Problem Solving 2 / Discover Math resources on the web
7	2/27	Video 2 / Math Article 2
8	03/06	Math 021 Review / Final Exam for Math 021 (8 weeks)
9	03/13	Spring Break March 12-19, 2017 (No Classes)
10	03/20	Math Games
11	03/27	Problem Solving 3/ Video 3
12	04/03	Math Article 3/ Math word problems
13	04/10	Math Essay/ portfolio cover letter
14	04/17	Video 4 / Problem Solving 4
15	04/24	Math Article 4/ Start working on a Mock Finals
16	05/01	Portfolios are due by Wednesday, May 03, 2017 at 09:00 am in class. Continue working on Math 021/022Mock Final
17	05/08	Final Exams Week