

University of New Mexico- Valencia Campus
Department of Science & Mathematics
Math 193- Sec. 503- CRN # 53634
Teaching Critical Thinking for Mathematics
Fall 2015

Instructor: Khaled Kassem (Mr. K) **Classroom:** C-108
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Phone Number: 505-925-8609 **Office Room:** A-142E.
Instructor's Website: <http://www.unm.edu/~khaled>. (Currently under modification)
Class Schedule: Monday & Wednesday 07:10 - 08:00PM.
Office Hours: Monday & Wednesday 04:15 - 05:30 PM Tuesday & Thursday 04:15 - 06:30 PM.
Text (Optional): *Math 193, Critical Thinking, Problem Solving, and Math Study Skills* (Booklet & Handout) Revised: December 2013. Get it only from UNMVC bookstore.
UNM Learn course URL: <https://learn.unm.edu>. Check this location frequently for course material, emails, and announcements. Also, find the syllabus of the course there and print a hard copy for yourself.
Final Exam: *The Portfolio as described below will serve as a final exam for this course.*

I. Course Description:

Math 193-501: 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.

Co-requisite: Math 100.

II. Course Materials: Booklet mentioned above (optional), The World Wide Web, All Math 021, and 022 course materials, provided handouts, and handouts posted on <https://learn.unm.edu>.

III. Attendance Policy:

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

IV. Grading Policy:

A+	98% +		
A	93 – 97%	<u>Graded Categories:</u>	
A-	90 – 92%	Attendance & Participation*	40%
B+	88 – 89%	Binder Organization	10%
B	83 – 87%	Portfolio**	50%
B-	80 – 82%		
C+	78 – 79%		

C	73 – 77%
C-	70 – 72%
D	60 – 69%
F	below 60%

* Students are required to bring their Math100/193 notebooks/binders to every class.

**** All portfolios are due on Wednesday, December 2nd, 2015. NO late portfolios will be accepted.**

Graded Categories details and explanation:

-Attendance & Participation: (40%)

The student must be on time and must remain in class 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 phone message within 24 hours. Since nearly all of the Math 193 work will be completed in class, each absence will reduce the Attendance& Participation grade.

-Binder Organization (10%):

1. Section 1 – Math 193 Syllabus and Important forms. In this section the student will collect the class syllabus and all forms to be used. Also, the Learning Style Assignment, and Math Anxiety assignment can be placed here.
2. Section 2 – Math 021/ and Math 022 Class Notes, Practice Problems, and Tests. This section will store class notes, practice problems and tests from Math 021/ 022 in chronological order as described in their syllabi. At least one chapter worth of notes is needed.
3. Section 3 – Math 193 bi-Weekly Problem Solving Exercises. In this section, you will list all Problems discussed in class, the solution of each problem, and the related write-up form. Problems must be copied or described completely and dated.
4. Section 4 – Math 193 Video Evaluation Form. This section will be used to record the required information about math videos we have watched in-class, and how did you evaluate each one.
5. Section 5 – Math 193 Journal Math Articles. This section will be used to record the required information about the assigned math articles. Write-ups must be dated. Instructions on these write ups will be given.

6. Section 6: Math 021/022 quizzes, quiz error item analysis, and mock final exams. In this section, you should collect all quizzes and mock finals for Math 021/022 in addition to the item error analysis for at least two quizzes.
7. Section 7- Extras. In this section, store any item that was not mentioned above.

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-Ups (problems will be distributed/posted later-The Write up forms are posted on <https://learn.unm.edu>.)
3. Notes From math 100 (Include Math 100 notes taken in-class or out of class)
4. Set of study Materials for one Math 100 Exam at least. This can be the mock final or any two quizzes.
5. Item Error Analysis for two quizzes.
6. Video evaluation forms.
7. Math Journal Article Analysis Forms
8. 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.

(Some of these items are the same items described above in your binder organization section)

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. Highway to Success, the Learning Center (925-8907) offer tutoring at no cost to the student. The online tutor, Ryan Baltunis, can be reached at 925-8553 or found in LRC 118.

VI. Expectations: Students are expected to conduct themselves in a polite, courteous, professional and collegial manner. Cell phones must be set on silent. Please step into the hall if you need to take a call during class in higher level emergency cases.

VII. Disability Statement: If you have a documented disability, please provide the instructor with a copy of your letter from Equal Access Services as soon as possible to ensure that accommodations are provided in a timely manner. The Equal Access Office can be reached at 925-8560.

VIII. 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.

IX. Major Students Learning Outcomes:

At the conclusion of the course, students will be able to

1. Develop academic skills as a foundation for college learning
2. Employ critical thinking skills in problem solving
3. Utilize multiple problem-solving strategies & methods
4. Develop a mathematical awareness of the world
5. Expand confidence in mathematical ability

Important Dates:

08/28 (Friday) Last day to add courses or change sections

09/04 (Friday) Last Day to Drop without a grade, Last Day to Drop with a Refund

09/07 (Monday) Labor day Holiday (NO Class)

09/11 (Friday) Last day to change grading options

October 08-09 – Fall Break – No Classes

11/ 06 (Friday) Last day to withdraw without the Dean's approval

November 26-27 – Thanksgiving Holiday – No Classes

12/ 04 (Friday) Last day to withdraw with the Dean's approval

Math 193 Portfolio is due on Wednesday, December 2nd, 2015. Turning –in a complete portfolio is your Final Exam for this course.

Math 193 Tentative Schedule-Fall 2015

<u>Week</u>	<u>Date</u>	<u>Topic/s</u>
<u>1</u>	<u>8/17</u>	Introduction/ Learning styles
<u>2</u>	<u>8/24</u>	Math Anxiety/ Problem Solving 1
<u>3</u>	<u>8/31</u>	Calculator Activity/ Video 1
<u>4</u>	<u>09/07</u>	Labor Day Holiday 09/07 09/09 Math article 1
<u>5</u>	<u>09/14</u>	Math Puzzles Math 021 Review
<u>6</u>	<u>09/21</u>	Problem Solving 2 Discover Math resources on the web
<u>7</u>	<u>09/28</u>	Video 2 Math Article 2
<u>8</u>	<u>10/05</u>	Math 021 Review Final Exam for Math 021 (8 weeks)
<u>9</u>	<u>10/12</u>	Math Games
<u>10</u>	<u>10/19</u>	Problem Solving 3 Video 3
<u>11</u>	<u>10/26</u>	Math Article 3 Math word problems
<u>12</u>	<u>11/02</u>	Math Essay/ portfolio cover letter
<u>13</u>	<u>11/09</u>	Video 4 Catch up
<u>14</u>	<u>11/16</u>	Problem Solving 4 Math Article 4
<u>15</u>	<u>11/23</u>	Start working on a Mock Finals
<u>16</u>	<u>11/30</u>	Portfolio is Due 12/02/15 Math 021/022Mock Final
<u>17</u>	<u>12/07</u>	Math 021/022 In-class Cumulative Final Exam