MATH 103  Quantitative Literacy - 3 Credit Hours
Time:  Monday, August 21 – Wednesday, December 13, 2017
Instructor: Shannon Kortan
Email:  shannon.kortan@usd.edu
Phone:  (605)842-2224 – Home  (605)660-0187 – Cell
Office Hours:  e-mail daily and by appointment

COURSE DESCRIPTION
This course is designed to develop critical thinking, data interpretation, and quantitative reasoning skills for the solution of authentic problems. Students will apply mathematics in different contexts and to dynamical processes. Course topics include: linear, quadratic, exponential and logarithmic equations; mathematical modeling; regression; graph theory; and personal finance/financial literacy. This course does not serve as a prerequisite for courses requiring Math 102 (College Algebra).

PREREQUISITE:  Math 101, Math 095 or appropriate mathematics placement

IMPORTANT DATES
- Thursday, August 31, 2017: last day you may add (or drop a class with a full refund).
  Students who do not have my Fall 2017 MATH 103 MyMathLab access by 12 PM CT Wednesday, August 30, 2017 will be dropped from MATH 103.
- Friday, November 3, 2017: last day to drop a class with a “WD” (withdraw) on your transcript.
- Wednesday, December 13, 2017: last day for Final Exam attempt (max 3 attempts permitted) due by 5 PM CT.

COURSE REQUIREMENTS
Students are expected to read, understand, and abide by all policies and procedures provided in this syllabus. I cannot be held responsible for misunderstandings due to you not reading the syllabus or other documents I have posted.

MyMathLab Access:
- Students are required to purchase a MyMathLab (MML) student account to access course content
- This subscription will include an e-version of our textbook
  - If you are waiting for financial aid to purchase your subscription, you may begin the course work with a temporary account that is good for approximately 2 weeks.
- A document with detailed instructions regarding MML registration (including our MML Course ID) will be attached to the welcome email and posted on our D2L homepage.
- If you run into technical issues with MyMathLab, please use the online tech support links in MML. You can also do a live chat with Pearson for help.


Calculator:  A TI-83, TI-84, or TI-84 Plus series graphing calculator is required for this course. Instructions for calculator use in lecture video recordings coincide with the keystrokes dealing with a TI-83/TI-84 type graphing calculator. You will not be permitted to use any other type of calculator on any proctored assessment.
**Student ID:** Your Student ID (or state issued ID) is required at the Testing Centers and with approved proctors to take a proctored assessment.

**EVALUATION PROCEDURES**

**Homework Assignments:**
- In this course, all required homework assignments will be completed in MyMathLab, which provides instantaneous feedback, step-by-step examples, and streaming video instruction.
- The only way to learn mathematics is to practice the material. Homework problems are integral in your mastery of the material. **If you can only get a homework problem correct because you followed an example, PLEASE practice that problem several more times until you can work it without help or you WILL struggle on the quizzes and tests in that unit!!**
- It is highly recommended that students view and listen to the instructor created video recording before attempting homework for that section. Examples presented in the videos are similar to homework problems and viewing/studying this material prior to attempting homework can save you confusion. After viewing the instructor created video, attempt the homework.
- You must attain a grade of at least an 80% on each online homework assignment before you will be allowed to move onto the next homework section or take a quiz over those sections.
- Each homework problem allows up to three attempts. After three incorrect attempts, you may click on the “Similar Exercise” button to get a new version of that problem which you can solve to receive credit.
- If you have successfully submitted a homework assignment but wish to access it again for practice without changing the homework score or receiving a late penalty, click on the Gradebook tab and click on Review to the right of the assignment. While reviewing a homework problem, you can click on Similar Question within this Review without affecting your homework score and without a late penalty.

**Quizzes:**
- Complete the quizzes as “mini” tests without access to notes or additional resources, and view them as a tool to provide you with feedback to assess your understanding of the math ideas, notation, and to use as preparation for tests. **If you cannot pass a quiz without notes, you need more practice before you move on!!**
- The Pearson Lockdown Browser is required before you will be allowed to take a quiz in this course. The link to download it can be found at: [http://media.pearsoncmg.com/cmg/pmmg_mml_shared/mxlplayer_update/mxlplayer_update.html](http://media.pearsoncmg.com/cmg/pmmg_mml_shared/mxlplayer_update/mxlplayer_update.html)
- There are a total of 8 quizzes and due dates are clearly listed in the schedule at the end of this syllabus.
- **Please note that each quiz has a required due date and is due by midnight CENTRAL time on that date.**
- Quizzes can only be completed after receiving at least an 80% on the homework prior to the quiz, so plan ahead to avoid not being able to complete a quiz on time.
- With all quizzes, more than one attempt is allowed with only the highest score for that quiz being averaged into the course grade.
- View each quiz as a learning opportunity which provides you with feedback to assess your understanding of math ideas and to use as preparation for tests. To make sure you understand math mistakes before making any subsequent quiz attempt, complete these steps while in MML:
  1. Click on the Gradebook tab and click on Review next to your quiz attempt. Click on a question that was answered incorrectly. Note the code in the upper left corner of the question, for example P.6.9. This means the question comes from Section P.6.
  2. Exit out of the Quiz review, and while in Gradebook, click on Review next to HW1 Section P.6 and hover your mouse over one question at a time until you see P.6.9 pop up. Click on that question.
  3. After the question opens, click on Similar Question on the bottom right. This will provide a similar problem for you to do. Do the problem for practice; it will not change your homework grade.
  4. Do this process for the other questions which were answered incorrectly on your quiz attempts.
- Do NOT take quiz attempts back to back! Take time to prepare before you attempt it again. Go back and review EVERY failed attempt on the quiz. On every attempt, work out EVERY problem you got wrong (even if the error was small) ON PAPER. You must write it down to practice - looking does no good. Work every problem repeatedly until you can get it correct (the correct answer is given when you review). You must get it correct with NO HELP at all and without looking back. Once you do this, you should be ready for another attempt.
• Though quizzes are not proctored, all quizzes are to be completed in one sitting.
• There is a 1 hour time limit on each quiz.
• Each student will be allowed ONE make-up quiz, after which all incomplete quiz grades will become zeroes. Please e-mail me if you wish to use your make-up quiz so I can adjust any necessary due dates for you.

Exams:
• Each exam must be taken within the week specified in the course outline. If you do not take the test within the specified week, your exam grade will be reduced 10% each business day it is late and no exams can be made up over 1 week after the due date. (You must contact me to get permission to take an exam late or it will not be open for you.)
• There is a time limit of 2.5 hours for each unit exam and 3.5 hours for the final exam.
• You are required to take your unit exams in the presence of an approved proctor. Information regarding proctors and proctor forms is given below.
• All exams are password protected. After verifying your proctor, the Continuing Education staff will email the exam information and passwords to your proctor. It is your responsibility to contact your proctor to set up an appointment for each exam, so please plan ahead for the exams.
• You will not be allowed to use cell phones, books or notes while taking the exams and your proctor may not give you any assistance in working the problems. However, I will provide a list of formulas for you to use for all exams. (These formula pages can be found in D2L, under the content tab.)
• When you report to your proctor or testing center, they should give you a cover page and a page of formulas for every test. All work will then be turned in to your proctor to be returned to me for grading. If you are not given this, PLEASE ask your proctor before you start your test and do NOT test without the formulas.
• Tests will be taken in MML and will be graded immediately by MML, but all work will be sent to me afterwards. Partial credit may be granted for correct work, so it is in your best interest to show all work and be neat and organized so I can easily follow it. In general, points are earned for following the given directions, neatness, organization, and writing down work used to arrive at your answers. Demonstrating that you understand the process of arriving at a solution and clearly writing down your work is important. If no work is shown to support answers, your grade may go DOWN after I receive the work, so please show all work neatly.
• Within 10 days of the exam due date, I will go through your work to determine if you earned any partial credit. After I do this, work will NOT be returned to you, but I will add comments and/or correct work in MML on problems you got wrong to help you understand your errors and will email you when I am done.
• The comprehensive final exam will cover all material from the semester. The final exam is scheduled for the last week of class and MUST be taken no later than Wednesday, December 13th, 2017 at 5 pm CT. Students will not be allowed to take the final exam before this week per university rules.

PROCTOR FORMS AND STATE TESTING CENTERS

<table>
<thead>
<tr>
<th>Site</th>
<th>Centers</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pierre Area</td>
<td>Capital University Center</td>
<td>605-773-2160</td>
<td><a href="mailto:SDSU.CUC@sdstate.edu">SDSU.CUC@sdstate.edu</a></td>
</tr>
<tr>
<td>Rapid City Area</td>
<td>Black Hills – Rapid City Testing Center</td>
<td>605-718-4193</td>
<td><a href="mailto:BHRCTestingCenter@bhsu.edu">BHRCTestingCenter@bhsu.edu</a></td>
</tr>
<tr>
<td>Sioux Falls Area</td>
<td>Sioux Falls University Center</td>
<td>605-367-5989</td>
<td><a href="mailto:testingcenter@sduniversitycenter.org">testingcenter@sduniversitycenter.org</a></td>
</tr>
<tr>
<td>Vermillion Area</td>
<td>USD Testing Center</td>
<td>605-677-6240</td>
<td><a href="mailto:testingcenter@usd.edu">testingcenter@usd.edu</a></td>
</tr>
<tr>
<td>Madison Area</td>
<td>Dakota State Testing Center</td>
<td>605-256-5101</td>
<td><a href="mailto:assessoffice@dsu.edu">assessoffice@dsu.edu</a></td>
</tr>
<tr>
<td>Spearfish Area</td>
<td>Black Hills – Spearfish Testing Center</td>
<td>605-642-6099</td>
<td><a href="mailto:BHSPTestingCenter@bhsu.edu">BHSPTestingCenter@bhsu.edu</a></td>
</tr>
<tr>
<td>Brookings Area</td>
<td>SDSU Testing Center</td>
<td>605.688.6460</td>
<td><a href="mailto:sdsu.testing@sdstate.edu">sdsu.testing@sdstate.edu</a></td>
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</table>

• You can access the website or email of the testing centers by clicking on the links given above.
• All students are required to submit a proctor form to the CDE office for approval. The proctor form can be found on the homepage of D2L for this course, or at http://www.usd.edu/continuing-and-distance-education/upload/Proctor-Form.pdf.
• After verifying your proctor, the Continuing Education staff will email the exam information to your proctor.
• It is your responsibility to contact your proctor to set up an appointment for each exam, so please plan ahead for the exams.
• The office staff at the Continuing and Distance Education Office at USD is in charge of approving proctors, so the form must be sent to that office. I have nothing to do with proctors and am not able to approve a proctor or send out any information to your proctor. All questions regarding proctors must go through the CDE office.

The proctor form can be found on http://www.sdsu.edu/continuing-and-distance-education/upload/Proctor-Form.pdf.
Division of Continuing & Distance Education/Summer School  
McKusick Room 211  
University of South Dakota  
414 E. Clark St. Vermillion SD 57069  
Work Phone: 1-800-233-7937  
Work Phone2: 605-677-6240  
testingcenter@usd.edu  
http://www.usd.edu/usd-online/testing-center

**GRADING**
Your grade will be assigned according to the following guidelines:

<table>
<thead>
<tr>
<th>Grading Opportunities</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Homework for 4 units</td>
<td>20 %</td>
</tr>
<tr>
<td>8 Quizzes</td>
<td>20 %</td>
</tr>
<tr>
<td>4 Unit Tests (100 points each)</td>
<td>40 %</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Total for course</td>
<td>100 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percent Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90% – 100%</td>
</tr>
<tr>
<td>B</td>
<td>80% - 89%</td>
</tr>
<tr>
<td>C</td>
<td>70% - 79%</td>
</tr>
<tr>
<td>D</td>
<td>60% - 69%</td>
</tr>
<tr>
<td>F</td>
<td>0% - 59%</td>
</tr>
</tbody>
</table>

**All current course grades can be found in MyMathLab under the “Gradebook” tab and are automatically updated after every assignment.**

**LIVE ONLINE HELP SESSIONS**
Live online help sessions are available via Collaborate Ultra. To attend a session you have set up with me or with classmates, log into D2L and enter our course. Use the top menu and click the “Communications” tab. Select “Collaborate Ultra” from the drop-down menu.

You do not need to purchase any additional equipment to meet with me on Collaborate, although headphones will make the session much easier for both of us, as will having a microphone equipped on your computer. It is much like being in a classroom with me, except you cannot see me. You will hear me talking, can either talk or type questions and answers to me, and you will see me writing on the whiteboard in the classroom, but we will both be “invisible”. No web cams will be used - just speakers/headphones, microphones, and a whiteboard.

Anyone who is having trouble with the course (or anticipates having trouble) is encouraged to set up regular meetings with me to avoid falling behind schedule, but sessions can be set up at any point a student needs one.

**University and Department Statements**

**Cell Phone Statement**
Cell phone use during proctored assessments is not permissible. If a cell phone is out, the default assumption is that it was intended for cheating purposes and the academic misconduct process will be initiated.

**Academic Integrity**
The University of South Dakota considers plagiarism, cheating, and other forms of academic dishonesty inimical to the objectives of higher education. The University supports the imposition of penalties on students who have been adjudicated to have engaged in academic dishonesty, as defined in the “Conduct” section of the University of South Dakota Student Handbook, and South Dakota Board of Regents policy 2-33 www.sdbor.edu/policy/Documents/2-33.pdf.

No credit can be given for a dishonest assignment. A student found to have engaged in any form of academic dishonesty may, at the discretion of the instructor, be:

- a. Given a zero for that assignment.
- b. Allowed to rewrite and resubmit the assignment for credit.
- c. Assigned a reduced grade for the course.
- d. Dropped from the course.
- e. Failed in the course.
Freedom in Learning
Under Board of Regents and University policy student academic performance may be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards. Students should be free to take reasoned exception to the data or views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled. Students who believe that an academic evaluation reflects prejudiced or capricious consideration of student opinions or conduct unrelated to academic standards should contact the dean of the college or school that offers the class to initiate a review of the evaluation.

Disability Accommodation
Any student who feels s/he may need academic accommodations or access accommodations based on the impact of a documented disability should contact and register with Disability Services during the first week of class or as soon as possible after the diagnosis of a disability. Disability Services is the official office to assist students through the process of disability verification and coordination of appropriate and reasonable accommodations. Students currently registered with Disability Services must obtain a new accommodation memo each semester.

Please note: if your home institution is not the University of South Dakota but one of the other South Dakota Board of Regents institutions (e.g., SDSU, SDSMT, BHSU, NSU, DSU), you should work with the disability services coordinator at your home institution.

Ernetta L. Fox, Director
Disability Services, Room 119 Service Center
(605) 677-6389 Web Site: www.usd.edu/ds E-mail: disabilityservices@usd.edu

Diversity and Inclusive Excellence
The University of South Dakota strives to foster a globally inclusive learning environment where opportunities are provided for diversity to be recognized and respected.

Course Goals
This class fulfills the following Goals of the South Dakota System General Education Requirements:
BOARD OF REGENTS GOAL #5: Students will understand and apply fundamental mathematical processes and reasoning.

Student Learning Outcomes: As a result of taking courses meeting this goal, students will:
1. Use mathematical symbols and mathematical structure to model and solve real world problems.
   a. The student’s use of algebra and algebraic symbols to analyze, graph, and describe the properties and behaviors of relations and functions including linear, quadratic, rational, exponential, and logarithmic functions will be assessed using assignments, quizzes, exams, and a final exam.
   b. The student’s use of algebraic concepts and methods to represent, simplify, and solve equalities, inequalities, and problem applications will be assessed using assignments, quizzes, exams, and a final exam.
2. Demonstrate appropriate communication skills related to mathematical terms and concepts.
   a. Communication skills will be assessed via written responses on assignments, quizzes, and exams.
3. Demonstrate the correct use of quantifiable measurements of real world situations.
   a. Correct units applicable to most story problems in the text that are similar to problems that arise in the real world and student understanding will be assessed using assignments, quizzes, exams, and a final exam.

Expectations of Students:
★ Check D2L regularly for messages, assignments, etc.
★ Be prepared by keeping up with MyMathLab quizzes and reviewing posted class notes and lectures.
★ Complete all assignments on time. This is not a self-paced course. Meet all deadlines.
★ Take responsibility for one’s learning. If you need help, ASK! You will not be successful by avoiding the work and I can only help if you ask me☺.
★ Although it may vary from student-to-student, expect to spend at least 8 hours per week preparing for this class.
★ Show enthusiasm and interest in the subject matter.
★ Show respect for all others in the course.
★ Use proper email and chat etiquette at all times. Correct use of capitalization and punctuation are expected!
**Expectations of the Instructor:**

- Show enthusiasm for teaching and mathematics.
- Encourage students to develop good study habits.
- Feedback on graded exams.
- Be available to answer student questions. You will be able to email me questions at any time.
- Prompt replies to emails (I will reply within 24 hours during weekdays).
- Post notes and recorded lectures for each assigned section on D2L (Desire2Learn).
- Sincerity, honesty, and fairness in all aspects of this course.

**COURSE OUTLINE**

You will be assigned homework and quizzes for each section. It is important that you view the lectures (Content tab in D2L course) and review the online notes for each section BEFORE attempting the MML assignments, as you will find that much easier to comprehend the material.

It is highly recommended that you keep up with the course schedule, submitting each assessment at least two days before it is due to avoid potential conflicts.

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATES</th>
<th>ASSIGNMENTS THIS WEEK</th>
<th>DUE BY DATES @ 11:59 PM CT</th>
</tr>
</thead>
</table>
| 1    | August 21 to August 26 | HW1 Sec 2A Working with Units  
HW2 Sec 2B Problem Solving with Units  
HW3 Sec 2C Problem Solving Guidelines & Hints | Tuesday, Aug 22  
Thursday, Aug 24  
Friday, Aug 25 |
| 2    | August 27 to Sept 2  | Quiz 1 (Sec 2A, 2B, 2C)  
HW4 Sec 3A Uses and Abuses of Percentages  
HW5 Sec 3E How Numbers Deceive: Polygraphs, Mammograms, and More | Monday, Aug 28  
Wednesday, Aug 30  
Friday, Sept 1 |
| 3    | Sept 3 to Sept 9    | HW6 Sec 9A Functions: The Building Blocks of Mathematical Models  
HW7 Sec 9B Linear Modeling | Tuesday, Sept 5  
Friday, Sept. 8 |
| 4    | Sept 10 to Sept 16  | Quiz 2 (Sec 3A3E, 9A, 9B)  
Test 1 (Sections 2A – 9B)  
*Must be proctored and completed this week* | Monday, Sept 11  
Mon, 9/11 – Sat, 9/16 |
| 5    | Sept 17 to Sept 23  | HW8 Linear Regression (not in our textbook)  
HW9 Quadratic Regression (not in our textbook) | Monday, Sept 18  
Friday, Sept 22 |
| 6    | Sept 24 to Sept 30  | Quiz 3 (Linear/Quad Reg)  
HW10 Sec 8A Growth: Linear versus Exponential  
HW11 Sec 8B Doubling Time and Half-Life | Monday, Sept 25  
Wednesday, Sept 27  
Friday, Sept 29 |
| 7    | Oct 1 to Oct 7      | Quiz 4 (8A, 8B)  
Test 2 (Linear Regression – Section 8B)  
*Must be proctored and completed this week* | Monday, Oct 2  
Mon, 10/2 – Sat, 10/7 |
| 8    | Oct 8 to Oct 14     | HW12 Sec 9C Exponential Modeling  
HW13 Sec 4A Taking Control of Your Finances | Tuesday, October 10  
Friday, October 13 |
| 9    | Oct 15 to Oct 21    | Quiz 5 (9C, 4A)  
HW14 Sec 4C Savings Plans and Investments | Monday, October 16  
Friday, October 20 |
<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Assignment(s)</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>10</td>
<td>Oct 22 to Oct 28</td>
<td>HW15 Sec 4D Loan Payments, Credit Cards, Mortgages&lt;br&gt;HW16 Sec 4E Income Taxes</td>
<td>Tuesday, October 24</td>
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<td>Quiz 6 (4C, 4D, 4E)&lt;br&gt;Test 3 (Sections 9C – 4E)&lt;br&gt;Must be proctored and completed this week&lt;br&gt;HW17 Sec 10A Fundamentals of Geometry</td>
<td>Monday, October 27</td>
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<tr>
<td>11</td>
<td>Oct 29 to Nov 4</td>
<td>HW18 Sec 10B Problem Solving with Geometry&lt;br&gt;HW19 Sec 11A Mathematics and Music&lt;br&gt;Quiz 7 (10A, 10B, 11A)</td>
<td>Tuesday, November 7</td>
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<td>Nov 5 to Nov 11</td>
<td>HW20 Sec 11B Perspective and Symmetry&lt;br&gt;HW21 Sec 11C Proportion and the Golden Ratio</td>
<td>Thursday, Nov 9</td>
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<td>Nov 12 to Nov 18</td>
<td>HW22 Sec 12A Voting: Does the Majority Always Rule?&lt;br&gt;Quiz 8 (11B, 11C, 12A)</td>
<td>Friday, Nov 10</td>
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<td></td>
<td>Nov 19 to Nov 25</td>
<td>Thanksgiving Break – Wednesday, November 22 through Sunday, November 26</td>
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<tr>
<td>15</td>
<td>Nov 26 to Dec 2</td>
<td>Test 4 (Sections 10A – 12A)&lt;br&gt;Must be proctored and taken this week</td>
<td>Mon, 11/27 – Sat, 12/2</td>
</tr>
<tr>
<td>16</td>
<td>M Dec 4 to W Dec 6</td>
<td>Review for Final Exam</td>
<td></td>
</tr>
<tr>
<td>FINAL EXAM WEEK</td>
<td>TH 12/7 to W 12/13</td>
<td>Final Exam – cumulative, open Thursday, Dec. 7 – Wednesday, Dec. 13&lt;br&gt;Must be proctored</td>
<td></td>
</tr>
</tbody>
</table>

You have 5 assignments to do to get started in this course:

1. **READ THIS SYLLABUS - THOROUGHLY!** You are responsible for everything in it, whether you read it or not, so please read so you understand the rules and policies it contains.

2. Purchase a subscription to MyMathLab and join my course using the course ID given in the “Getting Started in MML” document sent with the welcome email and posted in our D2L course. *If you cannot afford a subscription right away, you may join with a temporary membership for approximately 2 weeks.*

3. Take the Syllabus Quiz in MML. (You cannot begin any coursework until you receive a 100% on the Syllabus Quiz so try to get it done before class begins.) *Hint: print out the syllabus and HIGHLIGHT any parts covered in the Syllabus Quiz – those are important details and often sent to me as questions.*

4. Log into our D2L course at [http://d2l.sdbor.edu](http://d2l.sdbor.edu) (not available until closer to class starting) and post an introduction on the discussion board containing the information requested on that page. Also read through the other introductions to get to know me and your classmates and check back periodically to read the new introductions.

5. Visit the USD Portal at [http://my.usd.edu](http://my.usd.edu). You can find links for Academics, Technology, Campus, and Administration, along with being able to enter information for single click sign-on to several commonly used sites.