SOUTHERN MAINE COMMUNITY COLLEGE
COURSE SYLLABUS (SUBJECT TO CHANGE)
MATH 020 – 04, 05; NUMERICAL MATHEMATICS
WITH ANN TURNER, INSTRUCTOR

INSTRUCTOR EMAIL: aturner@smccme.edu

COURSE DATES, CLASS TIMES, LOCATION:
January 19, 2016 – May 14, 2016
Mon.,/Wed.; 1:30p – 2:45p; 3:00p – 4:15p
To be announced

OFFICE HOURS: I will be able to meet with you by appointment only in the SMCC Learning Commons Tutoring Center, Monday, Tuesday, and Wednesday. Please email your request to: aturner@smccme.edu

CREDIT HOURS: 3 hrs./wk.; 45 Contact hrs.

IMPORTANT DATES:
Tue., Jan 26, 5pm – End of Add/Drop (100% refund) Mon., Apr 18 – Patriots’ Day; no class
Mon., Feb 15 – Presidents’ Day; no class Mon., Apr 19, 5:00 p.m.–Last Day to Withdraw
Mon.-Sat., Mar 14 - 19 – Spring Break; no class Sat., May 14, – Spring Classes End

REQUIRED TEXT: BASIC COLLEGE MATHEMATICS by Lial, Salzman and Hestwood, Ninth Edition, Pearson, 2014, packaged with Workbook for Classroom or Lab Practice,

REQUIRED MATERIALS:
• 3D-ring Binder
• Lined 3-hole punched paper (no spiral wire-bound paper!)
• #2 Pencils/eraser
• Scientific Calculator – When permitted, it is preferred that you use a scientific calculator.

• YOU MAY NOT USE YOUR CELL PHONE AS A CALCULATOR IN THIS COURSE.

COURSE DESCRIPTION:
This course covers the basic arithmetic of whole numbers, exponents, roots of perfect squares, the order of operations, fractions, decimals, percents, ratio and proportion, measurement and units, signed numbers, geometry. Applications using these concepts will be included. Students will perform basic skills without the use of a calculator. Study Skills will be included in the course. Math manipulatives will be used for some topics. Students will be introduced to MyMathLab.

3 (non-degree) credits Prerequisite: Placement test

DESIRED LEARNING OBJECTIVES AND OUTCOMES:
(* without the use of a calculator)
Students will complete and achieve objectives with an asterisk * without the use of a calculator.

Upon successful completion of the course, the student will be able to:

* 1. Use whole numbers in the four basic arithmetic operations (+, –, x, /), including applications without the use of a calculator.

* 2. Use exponents, roots of perfect squares, and the order of operations without the use of a calculator.

* 3. Read and understand graphs and tables of data without the use of a calculator.

* 4. Use fractions in the four basic arithmetic operations, including applications without the use of a calculator.

* 5. Use decimals in the four basic operations and round them, including applications without the use of a calculator.

6. Find ratios, rates, and determine true proportions.

7. Solve proportions, including applications.

8. Perform conversions between fractions, decimals, and percents.

9. Solve percent problems, including applications.

10. Calculate measurements using the metric and U.S. systems and perform unit conversions within the systems.

* 11. Perform the four basic operations with signed numbers without the use of a calculator.

12. Find perimeters and areas of rectangles, squares, triangles, and composite shapes.

13. Apply Study Skills to this course.
Lectures and hands-on problem solving will comprise the essence of each class. This is a course in understanding concepts and applying that understanding in problem solving. In addition to the time we spend in the classroom, you will have to spend time outside the class reading text, thinking through problems, and working on homework assignments. It is the student’s responsibility to complete all assignments and projects.

- Students are expected to attend all scheduled classes, do assignments to meet due dates, take tests and be active participants in the class.
- The student should utilize the textbook and the workbook for lab practices as a learning tool and reference to assignment problem solving.
- It is the student’s responsibility to maintain an organized, neat, legible, up-to-date 3D-ring binder notebook showing complete problem solving for intermittent evaluation.
- Students will take part in guided exercises both in and out of class.
- Students should read/understand the definition of Plagiarism stated in the college catalog. All work submitted for grading must be the students own work.

Any student will be considered absent for that class and possibly asked to leave if not adhering to the following rules:
- The student’s cell phone must be turned off, placed in your book bag or coat-not in/on desk.
- Cell phone may not be used as calculators. When permitted, a scientific calculator is required.
- All computers/electronic media devices are not allowed during class sessions unless directed by the instructor.
- No homework assignments completed during class unless it is part of class activity.
- Positive attitude, cooperation, class participation, adherence to course syllabus.
- No visitors / family members allowed in the class during classroom hours.

Assignments completed/maintained/stored in a 3D- ring notebook on lined paper. The notebook will be collected/evaluated intermittently (mostly on Exam Days).
- Assignments must be labeled with the Chapter # and Section # (CH 1.2) same as textbook.
- Assignments must be neat, legible, and in order following the distributed assignment setup guide.
- Assignment problems MUST be solved by following the process covered in class, step-by-step.
- Answers must be circled.

Assignment/Quiz due dates will be strictly enforced. Any assignment/quiz submitted beyond its due date will receive a 5 point reduction per class.
- No assignments are accepted after the In-class exam has been administered; unless Instructor communication and permission has been had.

Special circumstances will be taken into consideration only if you have contacted the instructor prior to a particular deadline.
- Requests for makeup exams must be discussed and pre-arranged with the instructor to be completed within one (1) week of the exam, otherwise, it will not be allowed; hence, ‘0’ grade.

- Attendance is mandatory for success; therefore, the student is expected to attend all classes.
- The student is responsible for all lecture material covered and assignments during an absence.
- Attendance will be taken at every class. Students are allowed three (3) absences for any reason, such as illness, a medical appointment, a court appearance, a family problem or sleeping late.
- If a student is absent for THREE (3) consecutive classes or a total of FIVE (5) classes anytime throughout the course, an administrative failure (AF) grade will be reported. An ‘AF’ does not remove the student from the class list or alter the student’s financial obligation; however does affect the student’s grade point average (GPA) and possible financial aid fund rejections.
- Punctuality to class is expected. For every two (2) occurrences of tardiness to class, the student will receive an official absence. Tardiness = 10+ late minutes. Classroom door may be locked after 15-20 minutes out of respect to fellow students, curriculum/class schedule, and class disruption.
**PLAGIARISM:** Adherence to ethical academic standards is obligatory. Cheating is a serious offense, whether it consists of taking credit for work done by another person or doing work for which another person will receive credit. Taking and using the ideas or writings of another person without clearly and fully crediting the source is plagiarism and violates the academic code as well as the Student Code of Conduct. If it is suspected that a student in any course in which s/he is enrolled has knowingly committed such a violation, the faculty member should refer the matter to the College’s Disciplinary Officer and appropriate action will be taken under the Student Code of Conduct. Sanctions may include suspension from the course and a failing grade in the course. Students have the right to appeal these actions to the Disciplinary Committee under the terms outlined in the Student Code of Conduct.

**END-OF-COURSE EVALUATION:** In order to gain access to final course grades, students must complete evaluations for each course attended at SMCC. Evaluations are submitted online and can be accessed through the student portal site. Students can access the course evaluation report beginning two weeks before the end of classes. The deadline for submission of evaluations occurs 24 hours after the last day of classes each semester. All evaluations are confidential.

**(ADA) AMERICANS WITH DISABILITIES ACT:** Southern Maine Community College is an equal opportunity/affirmative action institution and employer. For more information, please call 207-741-5923. If you have a disabling condition and wish to request accommodations in order to have reasonable access to the programs and services offered by SMCC, you must register with the disability services coordinator, Sandra Lynham, who can be reached at 741-5923 (TTD 207-741-5667). Further information about services for students with disabilities and the accommodation process is available upon request.

**MATH HELP:** If you need help in Math, there are plenty of resources available:
- I am accessible, but you have to let me know. You can speak to me at the end of class to make plans to meet with me.
- You are welcome to contact me by sending me an email at aturner@smccme.edu, to schedule an appointment to meet in the Learning Commons Tutoring Center -2nd floor of the Campus Center for Monday, Tuesday, and Wednesday.
- You can watch the videos that accompany the text.
- You can use Khan Academy, which is available on YouTube, a great learning tool. [https://www.khanacademy.org/math/arithmetic/](https://www.khanacademy.org/math/arithmetic/)

<table>
<thead>
<tr>
<th>Grade Scale</th>
<th>Description</th>
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<th>Grade Points</th>
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<td>Good</td>
<td>B+</td>
<td>87-89</td>
<td>3.33</td>
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<tr>
<td></td>
<td>B</td>
<td>83-86</td>
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<td>B-</td>
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<td>Satisfactory</td>
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<td>C</td>
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Student Evaluation and Course Work Grade Breakdown

Assignments, Quizzes, and Notebook: 40% Total

Assignments and Quizzes: ................................................................. 30%
- Assignments are identified at the beginning of each class.
- Assignments have DUE DATES. It is your responsibility to get the work done on time.
- You are to re-write the problem – not the instructions – to complete the process of working to find the answer.
- Incomplete problem solving, disorganized, illegible work will constitute grade reduction. A list of answers on a piece of paper IS NOT ACCEPTABLE; therefore no work shown = no grade given.
- Late assignments, without Instructor permission, have penalties. See Late Work, pg 2.
- It is suggested to check your answers as you do each problem by looking in the back of the text. (This is not cheating - it is a part of the learning process.)
- Quizzes will be graded as an assignment.
- Quizzes have due dates just like assignments.
- Quizzes will be distributed as a take-home or in-class exercise.
- Quizzes are mock EXAMS as in a practice exam.
- Late Quizzes, without Instructor permission, have penalties attributed. See Late Work, pg 2.
- Study Skills identified throughout the textbook chapters may be incorporated into the quizzes.

Assignment Notebooks (3D-ring binders) ............................................. 10%
- A 2"-3D-ring binder (assignment notebook) with lined paper. (4 labeled divider sections- optional for organizational purposes – can be labeled as follows:
  1. Due Assignments
  2. Class Notes (this section holds all class work and handouts)
  3. Chapter Work (following the assignment format: chapter identification, problem #, problem solving, etc.)
  4. Graded Assignments/Quizzes/Exams
- The assignment notebook serves several purposeful requirements of this course. See Assignment Expectations, pg 2:
  o The Notebook maintains organization, referencing, review, comprehension, class notes, questions, class handouts, etc.
  o The Notebook holds/contains all assignments written out on paper, neatly, legibly, and organized in a 3D-ring binder showing the complete process to the answer.
- Notebooks will be checked intermittently (to be announced). Notebook grade credit is assigned as follows:
  ✓ 100 according to requirements identified herein.
  ✓ 50 3 of the 5 sections
  ✓ 0 ≤ 2 of the 5 sections

Exams: 60% Total
- There will be (5) five major exams during the semester:
  • Exams will have approximately 20+ problems and (1-2) bonus questions.
  • Each exam, if time allows, will be preceded by a partial class period for review.
  • When an exam is returned, look it over to see if you can determine what mistakes you’ve made. You probably won’t improve your grade if you don’t figure out what you did wrong on the exam.
  • No Exam grade will be dropped.
  • Study Skills identified throughout the textbook chapters may be incorporated into the EXAM. Refer to your assignment listing.

Total Grade Percent 100% Total
### Course Work Plan (Subject to Change)

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates(s)</th>
<th>Content or Plan for the Week</th>
<th>Section</th>
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<tbody>
<tr>
<td>1</td>
<td>Jan 18; Jan 20</td>
<td>Intro to Course</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>M L King Day</td>
<td>Chapter 1: Whole Numbers; (1.1 – 1.10)</td>
<td>SS pg viii; 2; 10</td>
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<tr>
<td>2</td>
<td>Jan 25; Jan 27</td>
<td>Chapter 1: continued; (1.1 – 1.10)</td>
<td>1.2; 1.3; 1.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ADD/DROP ENDS TUES, 5PM</td>
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</table>
| 3    | Feb 1; Feb 3             | Chapter 1: continued; (1.1 – 1.10)  
Wrap Up/Review; **EXAM #1 (Ch 1)** | 1.5; 1.6; 1.7;      |
|      |                           |                                                                         | 1.8; 1.9; SS pg 82 |
| 4    | Feb 8; Feb 10            | Chapter 2: Multiply/Divide Fractions; (2.1 – 2.8)                      | 1.10               |
| 5    | Feb 15; Feb 17 President’s Day | Chapter 2: continued; (2.1 – 2.8)  
EARLY ALERT GRADES, TUES, 5PM | 2.1; 2.2; 2.3; 2.4 |
|      |                           |                                                                         | SS pg 119; 138     |
| 6    | Feb 22; Feb 24           | Chapter 2: continued; (2.1 – 2.8)  
Chapter 3: Adding/Subtract’g Fractions; (3.1–3.5) | 2.5; 2.6; 2.7; 2.8;|
|      |                           |                                                                         | 3.1 SS pg 168      |
| 7    | Feb 29; Mar 2            | Chapter 3: continued; (3.1 – 3.5)  
Adding and Subtracting Fractions; (3.1 – 3.5) | 3.2; 3.3           |
|      |                           |                                                                         | SS pg 180; 182; 203|
| 8    | Mar 7; Mar 9             | Chapter 3: Wrap Up/Review; **EXAM #2 (Ch 2-3)**  
Chapter 4: Decimals; (4.1 – 4.6) | 3.4; 3.5           |
|      |                           |                                                                         | SS pg 237; 247     |
|      | Mar 14; Mar 16           | **Spring Break; NO CLASSES**                                           | NO CLASSES         |
| 9    | Mar 21; Mar 22           | Chapter 4: continued; (4.1 – 4.6)  
Chapter 5: Ratio and Proportion; (5.1 – 5.5) | 4.1; 4.2; 4.3; 4.4 |
| 10   | Mar 28; Mar 30           | Chapter 5: continued; (5.1 – 5.5);  
Wrap Up/Review  
ACADEMIC ALERT GRADES, TUES, 5PM | 4.5; 4.6; 5.1; 5.2 |
|      |                           |                                                                         | SS pg 315          |
| 11   | Apr 4; Apr 6             | **EXAM #3 (Ch 4-5)**  
Chapter 6: Percent; (6.1 – 6.6) | 5.3; 5.4; 5.5      |
| 12   | Apr 11; Apr 13           | Chapter 6: continued; (6.1– 6.6);  
Chapter 7: Measurement; (7.1 – 7.4) | 6.1; 6.2; 6.3; 6.4;|
|      |                           |                                                                         | 6.5; obj. 1, 2-6.6; SS pg 459|
| 13   | Apr 18; Apr 20 Patriots’ Day | Chapter 7: continued; (7.1 – 7.4)  
LAST DAY TO WITHDRAW, TUES, 5PM | 7.1; 7.2           |
| 14   | Apr 25; Apr 27           | Chapter 7: continued; (7.1 – 7.4); Wrap Up/Review  
**EXAM #4 (Ch6-7)** | 7.3; 7.4           |
| 15   | May 2; May 4             | Chapter 9: Basic Algebra; (9.1 – 9.3)                                 | 9.1; 9.2; 9.3      |
| 16   | May 9; May 11            | Chapter 8: Geometry; (8.3, 8.5)  
Wrap Up/Review; **EXAM #5 (Ch 8-9)** | 8.3; 8.5           |

*Study Skills are not written assignments – read only; although info may be included in quizzes/exams.*
**STUDY SKILLS (SS)**

In addition to the topics noted above, the textbook does a good job discussing study skills. Study Skills techniques may be included in your quizzes/exams. Look for these as follows:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your Brain Can Learn Mathematics</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Using Your Textbook</td>
<td>1</td>
<td>10</td>
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<tr>
<td>Taking Lecture Notes</td>
<td>1</td>
<td>82</td>
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<tr>
<td>Homework: How, Why, And When</td>
<td>2</td>
<td>119</td>
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<tr>
<td>Using Study Cards</td>
<td>2</td>
<td>138</td>
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<tr>
<td>Using Study Cards Revisited</td>
<td>2</td>
<td>168</td>
</tr>
<tr>
<td>Reviewing A Chapter</td>
<td>2</td>
<td>180</td>
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<tr>
<td>Tips For Taking Math Tests</td>
<td>2</td>
<td>182</td>
</tr>
<tr>
<td>Managing Your Time</td>
<td>3</td>
<td>203</td>
</tr>
<tr>
<td>Making A Mind Map</td>
<td>3</td>
<td>237</td>
</tr>
<tr>
<td>Preparing For Tests</td>
<td>3</td>
<td>247</td>
</tr>
<tr>
<td>Analyzing Your Test Results</td>
<td>4</td>
<td>315</td>
</tr>
<tr>
<td>Preparing For Your Final Exam</td>
<td>6</td>
<td>459</td>
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</table>
SMCC Mentionable Policies

**Pay for Print Policies:**

In an effort to control the escalating cost of supplies and to encourage students to conserve resources, SMCC charges for printing. Students receive a $20 credit every semester. This credit resets for each semester and extra credit is not rolled over to the next semester. Students can monitor their remaining credit and number of pages printed by visiting the IT Help tab on MySMCC or by checking the Printing Information icon in the lower right corner of the screen while logged in to an SMCC computer.

Per page costs are as follows:

<table>
<thead>
<tr>
<th>Size and Type</th>
<th>Cost</th>
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<tbody>
<tr>
<td>8.5&quot;x11&quot; black and white</td>
<td>$0.10 per page</td>
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<tr>
<td>8.5&quot;x11&quot; color</td>
<td>$0.50 per page</td>
</tr>
<tr>
<td>8.5&quot;x14&quot; and 11&quot;x17&quot; black and white</td>
<td>$0.20 per page</td>
</tr>
<tr>
<td>8.5&quot;x14&quot; and 11&quot;x17&quot; color</td>
<td>$1.00 per page</td>
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<tr>
<td>Duplex (two-sided)</td>
<td>discounted 50%</td>
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**Add/Drop Policy:**

Students who drop a course during the one-week “add/drop” period in the fall and spring semesters and the first three days of summer sessions receive a 100% refund of the tuition and associated fees for that course. Please note any course that meets for less than the traditional semester length, i.e., 15 weeks, has a pro-rated add/drop period. **There is no refund for non-attendance.**

**Withdrawal Policy:**

A student may withdraw from a course only during the semester in which s/he is registered for that course. The withdrawal period is the second through twelfth week of the fall and spring semesters and the second through ninth week of twelve-week summer courses. This period is pro-rated for shorter-length courses. **To withdraw from a course, a student must complete and submit the appropriate course withdrawal form, available at the Enrollment Service Center (no phone calls, please).** The designation “W” will appear on the transcript after a student has officially withdrawn. A course withdrawal is an uncompleted course and may adversely affect financial aid eligibility. Failure to attend or ceasing to attend class does not constitute withdrawal from the course. There is no refund associated with a withdrawal.