Department of Mathematical Sciences
Central Connecticut State University

Course Syllabus

For

Intermediate Algebra

Math 101 Section SN1

Spring 2016

Instructor: Ms Judy Hodgson, MS

Phone: Cell: 860-597-0288
(not answered during class time – leave message)

Email: Campus: jahodgson@ccsu.edu
Personal: 5maidens@comcast.net

Office: Maria Sanford Hall, Room 323
(Also check Room #219 or Room #211)
or as separately arranged

Office Hours: Monday, Wednesday, Friday, 1:30 – 2:30 PM
or as separately arranged.
READ THIS SYLLABUS CAREFULLY. YOU ARE RESPONSIBLE FOR KNOWING THIS INFORMATION! If necessary, refer to it frequently.

Prerequisite: Placement examination scores, a grade of C- or higher in Math 099, and/or Math SAT scores of 500-540 determine placement in Math 101.

Course Description: MATH 101 is the second in a two-course sequence in elementary and intermediate algebra (MATH 099/MATH 101) designed to provide students with a foundation to study college level mathematics. MATH 101 carries three credits which count in determining your grade point average and your status as a full time or part time student. Credit for MATH 101 counts toward meeting the minimum number of credits required for graduation but does not satisfy the general education requirement.

Mastery of material in this course is necessary for success in more advanced courses in mathematics and statistics (courses with numbers greater than 100), and for courses in computer science, natural science, and the social sciences. You must earn a C– or higher in MATH 101 to meet the prerequisite for any Skill Area II general education course.

Intermediate Algebra is designed to fill the algebra gap between basic algebra and pre-calculus. The course covers the topics of rational expressions, roots and radicals, quadratic expressions, relations and functions, the parabola, exponential and logarithmic functions, inequalities, and direct and indirect variation.

Through class attendance and discussion, individual review of the presented topics, and doing designated assignments, the student should be able to demonstrate a working knowledge, comprehension, and implementation of the basic rules of Algebra. The student will develop an understanding for selecting the most efficient method in problem solving.

In a number of areas, the course will be supplemented with applications and verbal problems from other textbooks. Group dynamics will be implemented and study guide effectiveness will be discussed.

The major goals of this course are:

a. to gain an appreciation for the role variables play in constructing mathematical models;
b. to use tables, graphs, and equations to model mathematical situations;
c. to gain facility in using the symbolism of algebra to solve equations and find equivalent expressions;
d. to gain facility in solving word problems; and

e. to gain an appreciation for the applications of algebra to a wide variety of “real world” situations.

Class Meeting Times: This class meets for 360 minutes of instruction each week.

Class meetings: Monday, Wednesday, Friday
10:50 AM-12:50 PM, in Maria Sanford Hall, Room # 323.
Please be punctual.
Attendance: Regular class attendance is expected by the University. (See 2015-2016 Undergraduate/Graduate Catalog) Attendance will be taken for each class. Attendance is mandatory. Written valid excuses may be submitted for consideration. If there are more than four unexcused absences there will be consequences to the final course grade up to a partial drop in letter grade. Any make-up time will be at the discretion of the instructor. Students are expected to notify instructors in advance for absences related to official University trips, conferences, intercollegiate athletic events, musical performances, and other events.


Two different options are available for purchase:

1. Softcover edition (sold in bookstore) – Volume 2 only
   - Contains chapters 6-12
   - ISBN: 978-1-2-85026503

2. Softcover edition (sold in bookstore) – Volumes 1 & 2 packaged together (student may have purchased this for Math 099)
   - Contains chapters 1-12
   - ISBN: 978-1-2-85154879

Note: There is an old hardcover edition (is difficult to find and is NOT sold in the bookstore) which does not contain the changes incorporated in the second, soft cover editions. It is possible to use it for this class.
   - Contains chapters 1-12
   - ISBN: 978-0-6-1810337-9

It is not necessary to purchase the Student Solutions manual which may have been recommended to you. Answers to all the odd numbered problems in the text are on the CCSU Math Department Website www.math.ccsu.edu under Mathematics Help/Textbook solutions. This is with permission of the authors.

Note: Problems used as class examples and in homework/quizzes/tests/practice assignments may be taken from Elementary and Intermediate Algebra, Discovery and Visualization, Second Edition by Elaine Hubbard and Ronald D. Robinson or Basic Algebra, Fourth Edition, by Jack Barker, James Rogers, James Van Dyke. It is not necessary for you to have a copy of either of these texts. Problems may also be taken from final examinations used during previous semesters.

Coverage: In MATH 101 you are responsible for all of the material in Chapters 7-12 except for the optional sections marked with an asterisk (*). The six chapters will not be covered in the order they appear in the text (See planned timetable). Each section has 25 problems at the end, 15 new problems and 10 skill and review problems. Although certain problems will be assigned as homework and you are expected to work all of them, you are also encouraged to work all 25 of the problems for practice. Additional problems will be available for extra practice and possible credit.
You are encouraged to take advantage of the opportunities. See below for further information about homework and extra credit work.

**Course Requirements:** You are expected to attend and participate in class; complete all homework assignments; and take all quizzes and tests, as scheduled or otherwise arranged. A general rule for any college course is that you are expected to put in at least 2 hours of work outside of class for every credit hour. **For MATH 101, the expectation is at least 6 hours per week outside of class.**

**Calculator Use:** Graphing calculators are useful and may be required for some parts of MATH 101. The textbook is based on the TI-82 and the TI-83. Please let me know if you are using some other calculator and having problems. Note: cell phones are not permitted as calculators during quizzes, tests or exams.

**Electronic Devices Policy:** Cell phones, laptops and PDA’s are not to be used during class, exams, or quizzes unless special accommodations are necessary and have been identified beforehand. Cells phones will be collected during the administration of the final exam and will be returned when you have finished.

**Course Etiquette:** Proper attire is required of all students. There will be no smoking in the classroom. Eating or drinking may be permitted but consideration of other students and cleanliness will be of paramount necessity. It is expected that all class participants will act appropriately at all times and work together to create a productive learning environment. This includes giving others a chance to speak and ask questions as well as respecting the rights and opinions of others. Excessive chatting and interruptions during class are distractions to others who are trying to learn and will not be tolerated.

**University Policies:**

1. You must take part of the final examination during the week specified in the University Calendar or as specially arranged as part of your accommodation. The planned days/times are: **Part 1**, Friday 06 May (Reading Day), 10:50 AM - 12:50 PM, **Part 2**, Wednesday 11 May, 11:00 AM - 1:00 PM (University assigned day/time), all in Maria Sanford Hall, Room #323.

2. Please contact me privately to discuss your specific needs if you believe you need course accommodations based on the impact of a disability, medical condition, or if you have emergency medical information to share. I will need a copy of the accommodation letter from Student Disability Services in order to arrange your class accommodations. Contact Stephanie Scapecia in Student Disability Services at: **(860) 832-1952, Willard Hall, Room 101-03**, if you are not already registered with them. Student Disability Services maintains the confidential documentation of your disability and assists you in coordinating reasonable accommodations with your faculty.

3. All students are expected to demonstrate integrity in the completion of their coursework. Academic integrity means doing one’s own work and giving proper credit to the work and ideas of others. It is the responsibility of each student to become familiar with what constitutes academic
dishonesty and plagiarism and to avoid all forms of cheating and plagiarism. Students who engage in plagiarism and other forms of academic misconduct will face academic and possibly disciplinary consequences. Academic sanctions can range from a reduced grade for the assignment to a failing grade for the course. From a disciplinary standpoint, an Academic Misconduct Report may be filed and a Faculty Hearing Board may impose sanctions such as probation, suspension or expulsion. For further information on academic misconduct and its consequences, please consult the Student Code of Conduct (http://www.ccsu.edu/StudentConduct) and the Academic Misconduct Policy (http://www.ccsu.edu/AcademicIntegrity).

4. **Statement on Discrimination and Harassment**
Central Connecticut State University strives to maintain our campus as a place of work and study for faculty, staff, and students that is free of all forms of prohibited discrimination and harassment based upon age; ancestry, color; gender identity and expression; intellectual disability; learning disability; mental disorder; physical disability; marital status, national origin; race; religious creed; sex, (including pregnancy, transgender status, sexual harassment and sexual assault); sexual orientation; or any other status protected by federal or state laws. Any student who has concerns about should contact the Office of Diversity and Equity (ODE) at 860-832-1652, Student Affairs at 860-832-1601, or his/her faculty member. The ODE is located on the main floor of Davidson Hall, room 102.

5. **Sexual Misconduct, Intimate Partner Violence and Stalking**
Central Connecticut State University (CCSU) will not tolerate sexual misconduct against students, staff, faculty, or visitors in any form, including but not limited to: sexual assault, sexual exploitation, sexual harassment or stalking, as defined in CCSU policies. For additional information, please consult the CCSU policies at http://www.ccsu.edu/page.cfm?p=1333.

Note: All faculty members and staff have a duty to report incidents of sexual harassment including sexual violence to Rosa Rodríguez, Title IX Officer, Office of Diversity and Equity, Davidson Hall, 102.

**To file a report contact:** Diversity and Equity (860-832-1652); Student Affairs (860-832-1601); Student Conduct (860-832-1667) or the University Police (860-832-2375).

**For support and advocacy contact:** Office of Victim Advocacy at 860-832-3795 or sarahdodd@ccsu.edu; Student Wellness Services at 860-832-1945 (confidential), the Women’s Center at 860-832-1655, the local YWCA’s Sexual Assault Crisis Services Hotline at 860-223-1787 (confidential) and Prudence Crandall Center for Domestic Violence (confidential) at 888-774-2900 (24-hour hotline).

6. The last day to withdraw from a course without receiving the grade of "W" is Monday, February 8th. Approvals for withdrawal from February 9th to Monday, April 18th are not required; however, it is strongly recommended that students consult with their academic advisors prior to deciding to withdraw and receive a grade of "W". Cessation of attendance, notice to the instructor, or telephone calls to the Registrar’s Office are **not** considered official notice of a student’s intention.
to drop the course. After April 18th, withdrawals are allowed only under extenuating circumstances and require approval of the course instructor and department chair (in that order).

Forms to either drop or withdraw from a course may be found on the Registrar’s website at http://web.ccsu.edu/registrar/forms.asp or may be obtained in the Registrar’s Office in Davidson Hall, Room 116.

7. In the event of a weather emergency which requires curtailment or cancellation of classes: use the university’s website (www.ccsu.edu) or Storm Phone (860-832-3333) for the most accurate information about CCSU’s closings or delays.

The university will also notify the following broadcast media of cancellations or delays. Radio: WTIC (1080 AM), TV: WFSB-TV 3, WTNH-TV 8, and WVIT-TV 30.

Also check your official CCSU email for cancellation notices sent by your instructor.

Resources Available:

1. If you need help in any class, take advantage of the student teaching aide’s availability and/or your instructor’s office hours or arrange alternate meetings. Be proactive and do not wait until just before any test to do so.

2. Free tutoring is also available in The Learning Center -- located in Willard Hall, Room 101. They can be reached at (860) 832-1900. A schedule for the hours the Center is open will be posted soon after the beginning of the semester.

3. Form a study group with other students in your section. Explaining solutions to homework problems to each other is a good way to learn.

4. A list of private tutors for hire is available in the Math Department office, Room 128 Marcus White, (860) 832-2835 and on the CCSU Mathematics website.

Blackboard Learn

A copy of this syllabus and copies of all assignments and any handouts and practice problem sets are posted on Blackboard Learn for this course. Our teaching assistant, Charmaine Goffe, will be taking notes during class and will post those notes on Blackboard, too. There are sets of Power Point slides summarizing the material in this course (sometimes with problems to complete) included as well. You may find it helpful to review these before or after each class. They are available for those instances when class may be cancelled due for any reason or you miss a class.

No assessments will be made on Blackboard Learn.
Evaluation

Minimum averages have been established for each of these grades:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Minimum Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93%</td>
</tr>
<tr>
<td>B+</td>
<td>87%</td>
</tr>
<tr>
<td>C+</td>
<td>77%</td>
</tr>
<tr>
<td>D+</td>
<td>67%</td>
</tr>
<tr>
<td>A-</td>
<td>90%</td>
</tr>
<tr>
<td>B</td>
<td>83%</td>
</tr>
<tr>
<td>C</td>
<td>73%</td>
</tr>
<tr>
<td>D</td>
<td>63%</td>
</tr>
<tr>
<td>B-</td>
<td>80%</td>
</tr>
<tr>
<td>C-</td>
<td>70%</td>
</tr>
<tr>
<td>D-</td>
<td>60%</td>
</tr>
</tbody>
</table>

The grade for the course will be based on the following weights:

- Instructor's evaluation based on three tests (preferably of at least one hour in length) and quizzes/class assignments/attendance.  
- The exact weighting of these factors is up to the instructor.  
- Departmental Final Examination
- Total

All students must pass the departmental final exam with a score of at least 60% in order to pass the course. (This 60% minimum is set by the Department of Mathematical Sciences.) A final course grade of D+ will be issued to any student who does not pass the final exam no matter what grade is achieved with the classroom work.

For our class the Instructor's evaluation will be:

- Tests covering 2 Chapters: 3 x 100 points each = 300 points (45%)
- Quizzes covering 1 Chapter: 3 x 60 points each = 180 points (25%)
- Short Quizzes covering 1 Section: 24 x 5 points each = 120 points (05%)
- Completed Homework turned in on time: 24 x 10 points each = 240 points (15%)
- Attendance: 41 sessions at 1 point each = 41 points (05%)
  (1 point deducted for each unexcused absence over four occurrences)
- Class Participation: 41 sessions at 1 point each = 41 points (05%)

Total 922 points (100%)

Quizzes and tests will be given on scheduled days and will be based on homework problems and material covered in class. Make-up tests or quizzes will be allowed if specifically arranged.

In order to earn the required grade of C– or higher in this course, your overall average must be at least 70% (C-) and your score on the final examination must be at least 60%. Since the final examination will count for 25% of the overall average, the grade you actually need on the final exam will depend upon your average going into the final.

If your average going into the final is: Then on the final you will need at least:

- 73.3% or above 60%
- 70% 70%
- 65% 85%
- 60% 100%.
Therefore, in order to provide a margin of safety, you should aim for an overall average of at least 73.3% going into the final.

The Final Exam is set by the Department and consists of 30% Skills, and 70% Graphs and Problem Solving. All students must pass the departmental final exam in order to pass the course.

Schedule of Important Dates

Definite Dates:

No class Friday 12 February and Monday 15 February (Presidents Holiday), Monday 21 March through Friday 27 March (Spring Break).

Midterm: 14 March Note: Midpoint grades will be posted on WebCentral- BannerWeb

Final Exam:
Part 1: Friday 06 May (Reading Day), 10:50 AM - 12:50 PM
Part 2: Wednesday 11 May, 11:00 AM - 1:00 PM (University assigned day/time)
All in Maria Sanford Hall Room #323

Planned Dates:
Quiz 1: Chapter 7, 16 Sep;
Quiz 2: Chapter 9, 12 Oct;
Quiz 3: Chapter 12, 13 Nov

Test 1: Book Chapters 7 & 8, 30 Sep;
Test 2: Book Chapters 9 & 11, 28 Oct
Test 3: Book Chapters 12 & 10, 02 Dec.

If you will not be able to take a test on the scheduled date please contact me prior to that date to arrange for a make-up date.

Homework

- Homework assignments are learning exercises and an important part of the learning process.
- There will be at least one assignment every class.
- Assignments are listed in the syllabus and will be written on the board and/or on a handout.
- Unless otherwise specifically stated, all homework is due at the next class meeting.
- It is your responsibility to hand in your homework assignments, whether I specifically ask for them or not.
- It will be your responsibility to ensure your homework is placed on the front desk or submitted to the teaching assistant so that I get it for grading.
- All steps should be included for each problem, not just the final answer, so I can tell if you understand the process or not and point out any errors you may have made. If you use a calculator so that some steps are omitted then indicate such appropriately.
• Regular homework assignments will consist of ten problems, each worth one point if completed correctly. If the problem is done incorrectly the error will be indicated. If the problem was skipped a hint on how to complete it will be given. You will have one chance to correct the problem and re-submit the assignment to add missing points. Sometimes I will add comments. I expect you to read everything I write and use it to enhance your learning.
• I plan to return all homework no later than the second class meeting after it was handed in. If handed in on time it will be returned before the test on the material.
• Full credit is available for every assignment handed in on time. Lesser credit may be given for any handed in late.

• Suggestion: work ALL problems at the end of each section of the book, even though I may not assign them, so that:
  o You can be sure you understand all the material.
  o You get practice working problems using the material.

• See separate page below for assigned problems for each section.
• See Planned Timetable for proposed schedule of section coverage.

Brief Bio of Instructor:

• Bachelor’s degree, mathematics, Drew University, NJ
• Master’s degree, applied statistics, Rutgers University, NJ
• Post graduate courses in data analysis, Rutgers University, NJ
• 13 years as biostatistician for two pharmaceutical companies, NJ and MI
• 2.5 years other activities supporting clinical research, OR and CT
• 7.5 years creating and managing a data management, statistics and programming department for a contract research organization, CT
• 12 years Director of Clinical Data Management for a contract research organization, CT
• 6.5 years teaching Math 099, Math 101 and Stat 104 at CCSU, CT
### Spring 2016 Math 101-SN1 Planned Timetable

Subject to change as circumstances dictate, except for the final exam dates.

Homework for each section is to be considered assigned the day the section is covered in class. It is due at the next class meeting unless otherwise stated.

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Monday</th>
<th>Wednesday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/18-1/22</td>
<td>No class</td>
<td>Introduction/Factoring &amp; Exponents Exploration</td>
<td>Zero Product Property Review/7.1</td>
</tr>
<tr>
<td>2</td>
<td>1/25-1/29</td>
<td>7.3 (except vertex &amp; intercepts)</td>
<td>7.2 plus vertex &amp; intercepts</td>
<td>Review Factoring</td>
</tr>
<tr>
<td>3</td>
<td>2/1-2/5</td>
<td>7.4</td>
<td>Questions/Review</td>
<td>Quiz #1 Chap 7</td>
</tr>
<tr>
<td>4</td>
<td>2/8-2/12</td>
<td>8.1</td>
<td>Review Quiz #1/8.2</td>
<td>No class</td>
</tr>
<tr>
<td>5</td>
<td>2/15-2/19</td>
<td>No class</td>
<td>8.3</td>
<td>8.4</td>
</tr>
<tr>
<td>6</td>
<td>2/22-2/26</td>
<td>Questions/Review/Test Preparation</td>
<td>Test #1 Chaps 7 &amp; 8</td>
<td>Review Exponents/6.1 Homework</td>
</tr>
<tr>
<td>8</td>
<td>3/7-3/11</td>
<td>Questions/Review Take Home Quiz #2 Chap 9</td>
<td>11.1</td>
<td>11.2</td>
</tr>
<tr>
<td>9</td>
<td>3/14-3/18 (Midterm)</td>
<td>11.3</td>
<td>11.4</td>
<td>Review Quiz #2 Questions/Review</td>
</tr>
<tr>
<td>11</td>
<td>3/28-4/1</td>
<td>Test Preparation/Take Home Test #2 Chaps 9 &amp; 11</td>
<td>12.1</td>
<td>12.2</td>
</tr>
<tr>
<td>12</td>
<td>4/4-4/8</td>
<td>Review Test #2</td>
<td>12.2</td>
<td>12.3</td>
</tr>
<tr>
<td>13</td>
<td>4/11-4/15</td>
<td>12.3</td>
<td>Questions/Review Take Home Quiz #3 Chap 12</td>
<td>10.1</td>
</tr>
<tr>
<td>14</td>
<td>4/18-4/22</td>
<td>10.2</td>
<td>Review Quiz #3/10.3</td>
<td>10.4</td>
</tr>
<tr>
<td>16</td>
<td>5/2-5/6</td>
<td>Practice Exam Problems</td>
<td>Review Test #3/Practice Exam Problems</td>
<td>Final Exam Part 1 (Reading Day)</td>
</tr>
<tr>
<td>17</td>
<td>5/11</td>
<td>Final Exam Part 2</td>
<td></td>
<td></td>
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</table>

J.Hodgson, Math 101 SN1
Spring 2016