MAT 103 Syllabus Fall 2015
TTh 10:00 – 11:40 am, C160

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Office Hours: Mondays - Thursdays 12:00-12:50 pm and by appointment

1. **Text/Materials Needed for Class:** Starting on the first day of class you must have…
   - A 2 or 3 inch binder with a minimum of 5 tabs labeled as "Handouts", "Workbook", "Lecture Notes", "ALEKS Notes", and "Class Work". All the handouts e-mailed to you must be included in their proper sections in this binder.
   - About 200 sheets of paper in the last tab.
   - Writing utensils, colored pens/pencils, and a 12-inch ruler.
   - A scientific calculator. Cell phones or other electronic devices will NOT be allowed to be used as calculators.
   - Download the free e-text from http://banimahd.weebly.com/resources.html.
   - Either download and print the entire workbook or purchase it in the bookstore. You must have the entire workbook in your binder starting first day of classes.
   - You must have your ALEKS account set by using the links provided in the homework sheet for the first day of classes. You will purchase an 18-week ALEKS license: Go to **www.aleks.com** and, when prompted, enter the following code: **3CXDF-W49YK**

   Note: Please _finish your initial assessment_; and all the _homework_ before you come to your first day of classes.
2. **Topics Covered:** See the "Calendar".
3. **Objectives:** This course is intended to prepare the students to succeed in the College Algebra course Mat110. Some of the objectives for this course are listed below
   - Apply the order of operations in arithmetic and algebraic expressions.
   - Extend the rules of integer exponents to rational exponents and apply these rules in simplifying algebraic expressions.
   - Explore various linear equations, their graphs, and the interpretation of their parameters.
   - Become familiar with a variety of factorization techniques and their use in solving equations involving polynomials, rational expressions, and radicals.
   - Work in the rectangular/Cartesian coordinate system with linear and other equations.
   - Formulate simple real world applications in one or more variables and solve them algebraically and/or graphically.
   - Where appropriate, use a scientific/non-graphing calculator to explore and answer various algebraic questions.

4. **Course information:** Introduction to College Algebra (MAT103 which is made up of Mat 103A + Mat 103B) is a four credit course approved throughout the University Wisconsin System. Mat 103B is worth 3 credits and counts as elective credits, Mat 103A is a non-degree credit. Introduction to Basic and Intermediate Algebra course is an accelerated math course that covers basic algebra and will be far more sophisticated than a high school algebra course. Expect to have the material covered at two to three times the pace of high school. Upon successful completion of this course (C or better in both parts of the course), students should be able to complete the subsequent course like MAT 110.

5. **Calculator Policy**: A calculator will be needed on some in-class written exams and quizzes, but no calculators are allowed on ALEKS assignments. On ALEKS assignments, a calculator button will show up if one is needed. No cell phone or other electronic device will be allowed to be used as a calculator. If a calculator is needed, only a scientific calculator is allowed.

7. **Important Dates** (dates for **Exams I-IV** are based on the tentative schedule):

	Day, Date	Event
a.	Wednesday, September 2	First day of classes
b.	Monday, September 7	Labor Day Holiday
c.	Wednesday, September 16	Last day to drop without a "W" grade
d.	Thursday, October 1	Exam I
e.	Thursday, October 29	Exam II
f.	Wednesday, November 11	Last day to drop
g.	Tuesday, November 24	Exam III
h.	Thursday-Friday, November 26-27	Thanksgiving Break
i.	Monday, December 14	Last day of Class
j.	Wednesday, December 16	Paper/Pencil Final Exam 8:00-10:00am

8. **Workload and Grading Policy**

➢ <u>Workload</u> estimation is based on the average student.

Item	Hours Spent
Class time (4 credits)	~4 hrs/wk (~58 hours)
Out-of-class time: **1.** Watching videos/reading text **2.** Taking notes/writing summaries on lectures/reading **3.** Doing problems from Video Logs **4.** Filling ALEKS Pie/meeting Intermediate Objectives	~8-12 hrs/wk (~116-174 hours)
Make-up exams (when needed to satisfy 100% mastery goal)	~8 hrs
Total for the Semester	**~182- 240 *hrs***

➢ Your <u>grade</u> in Mat 103 will be determined by <u>many factors</u>: % on each of the 3 in-class exams (written/oral ALEKS and non-ALEKS exams), final exam, 6 quizzes, Video Logs, % on the 9 ALEKS Objectives, and % on class participation, attendance quizzes, and binder.

➢ The total % breakdown for your grade is as follows:

Item	%	Variable
Quizzes (7 quizzes total, one dropped)	6	A
Exam 1 Part A (ALEKS homework exam)	3	B
Exam 1 Part B (Paper-pencil in-class exam)	6	C
Exam 2 Part A (ALEKS homework exam)	5	D
Exam 2 Part B (Paper-pencil in-class exam)	7	E
Exam 3 Part A (ALEKS homework exam)	5	F
Exam 3 Part B (Paper-pencil in-class exam)	10	G
Final Exam Part (Paper/Pencil)	25	H
Video Log	10	I
Class Participation/Attendance Quizzes	5	J
Binder	1	K
ALEKS Intermediate Objectives (IO), There are 9 Intermediate Objectives; the first one is worth 1% of your grade the rest are all 2% of your grade	17	L
Total	100	

Grading Scale: Standard grading scale is used where scoring above 93% is an A, 90-92% is an A-, 87-89% is a B+, and so on. To compute your grade, the following formula will be used

Total %
$$= 0.06A + 0.06B + 0.03C + 0.07D + 0.05E + 0.10F + 0.05G + 0.25H + 0.10I + 0.05J + 0.1K + 0.17L$$

Example: If a student earns 75% on the final exam, 80% on the rest of the components the student will earn a grade of a C+.

➤ **Exams and Quizzes:** See course calendar on the last page for the tentative dates of exams and quizzes.

➤ All ALEKS and Non-ALEKS assessments/exams/Quizzes including the final exam are cumulative.

➤ Exams and quizzes are not timed, and the goal is mastery-based learning. That means if you do not finish exams in class, then you may occasionally have to finish them outside class by making an appointment with your instructor. Since there are no noon classes that would be a good time keep free so you have time to make-up your exams.

➤ Taking a quiz or an exam is a privilege and before you will be allowed to take each quiz or an exam, you must meet the 4 requirements. <u>Failure to meet these requirements means you may be denied the opportunity to take that in-class exam</u>. Please see the instructor on what to do if you do not meet the requirements below.

    ☐ You must have met the required ALEKS topics target required for the exam or Quiz.
    ☐ You must have completed review exams/quizzes assigned at an 100% mastery level
    ☐ You must have ≥94% on your Intermediate Objectives, Quizzes, Video Logs, and Attendance Quizzes

➤ You must score ≥80% on all the three in-class exams. If you do not, then you are expected to retake the exams that are under 80%, but **only if** you

    ☐ Meet the required make-up exam criteria (see below)
    ☐ Contact your instructor within one week of receiving your exam score.

➤ Based on my experience, students who score ≥80% on all exams typically score C or higher on the final exam.

➤ See the makeup exam section (below) for retaking exams that are under 80%.

Retake/ Make-up Exam Policy: If you score under 80% on an exam, or due to extenuating circumstances you miss an exam, then a retake/makeup exam will be considered only if (or by instructor's consent) you meet the same criteria as being able to take an exam. To decide if you are ready for the make-up/retake exam, an oral exam may be administered by the instructor. Scheduling the exam may be restricted by the availability of the computer labs. Your instructor is going above and beyond to provide this extra opportunity; it is your responsibility to come to the agreed-upon make-up/retake exam on time.

➤ **There are no makeup quizzes one lowest score will be dropped.**

➤ **Mat 103A only option only after midterm:** If you are not making sufficient progress in Mat 103B by midterm, your instructor might ask you to drop the Mat 103B to prevent you from getting a bad grade. In this case you will only completer Mat 103A part. A grade of C or better in Mat 103A is equivalent to getting a C or better in Mat 091. If it is determined that you will complete Mat 103A only, your grade will still be computed the same way as listed for MAT 103 A and B, you will simply complete a different ALEKS pie and only parts of the video log from that point forward and only part A of all exams from that point on will be used to compute your grade. It is very important to keep an eye out regularly on your progress in this class and do not hesitate to talk to your instructor at any point regarding your grade status.

➤ A grade of C or better in Mat 103 B is equivalent to getting a C or better in Mat 105. So if you finish both parts you will be eligible to take any course that has a prerequisite of Mat 105. A grade of C or better in Mat 103A is equivalent to getting a C or better in Mat 09 1.

➤ **ALEKS Intermediate Objectives:** Your ALEKS pie is broken into 9 Intermediate Objectives. You must complete these objectives by the stated deadlines (listed in the pie itself and in the tentative schedule). The percentage of the objective mastered by the deadline will determine your grade on that Intermediate Objective. After each objective an automatic assessment is given to make sure you are retaining the material.

➤ **Class Participation/Attendance Quizzes/Binder/Video Logs:** Points are reserved for in-class participation which involves group work and solving problems on the board. Binders refer to your 3-ring binders. Each class period, you are required to bring your binder that contains summaries and notes of lectures/readings, all the work from video log questions, ALEKS work, and classwork (e.g., attendance quizzes). See below for information on attendance quizzes and video logs.

➤ **Attendance:** You are expected to attend <u>all</u> class periods barring any unforeseen circumstances. If you are working at an accelerated pace, you must still attend all class periods until you have completed your ALEKS pie. If you have to miss a class, please inform your instructor as soon as possible so you can learn the missed materials. No penalty is applied towards your grade for missing up to 3 class periods (1.5 weeks of class). If you miss more than 3 class periods, please check with your instructor for the penalty. Exceptions to this policy are at the instructor's discretion.

➤ **Quizzes:** Seven short quizzes some paper/pencil some in ALEKS will be given to you. See tentative schedule for the dates. One lowest score will be dropped. Each quiz is worth 1% of your grade.

➤ **Attendance Quizzes:** Questions for these quizzes are based on YouTube lectures/reading, video logs, projects, material taught in the class, and ALEKS Intermediate Objectives. These quizzes may be oral and administered one-on-one or in a group. The student/group will use appropriate mathematical terminology to explain their work. No student is forced to demonstrate their mastery orally in front of the whole class.

- **Video logs:** Prior to each class period, you are required to **watch** the video lectures, or read appropriate text book pages. You must take notes from your lectures or readings, and **write** a summary. Please turn in the summary, notes, and cover sheet to your instructor in the first 5 minutes. At the end of the class you will also turn in the appropriate workbook pages with solutions discussed from class. If you turn in your work 5 minutes late, then it will be marked "not turned in."
- **Extra Credit %**: From time to time, your instructor may choose to give you opportunities to earn extra credit.
- In all work, especially for the attendance quiz problems and the video logs, your handwriting should be legible, and the steps should be easy to follow. I recommend using a #2 pencil and an eraser. The general format should conform to the sample problems done in class, or as shown in the textbook or ALEKS. Following such guidelines will help your mathematical writing and thinking abilities.

9. **Special Needs**: If you are a student with a disability, please come and talk to me so we can accommodate them as well as possible.

10. **Classroom Etiquette or ground rules**

    Most students do not need this section. However, there have been some exceptions over the years that have disrupted class and students' understanding of the material. So please follow these guidelines:

    - All cellular phones, beepers, and electronic devices that could disrupt class should be in sleep mode or off while class is in session. If one is accidentally turned on or must be kept on for emergencies, then please leave the classroom to respond or turn it off immediately. **No electronic device (like I-phones, cell phones, MP3-players,…) should be handled during class**. If you are caught using any of these devices during class (e.g., texting), you may lose access to the device until the end of the class.
    - Do not talk to a classmate during class while I am trying to explain something to the class. This is mainly for non-math talk, but even math talk should not occur while I am talking. Other students who have paid to learn in the course may be distracted by your conversation, and at times I also can become distracted. I am also concerned that you yourself might be missing some important information at the board. At any point if you do not understand the material or have questions, don't hesitate to ask questions. Raise your hand and I can address your question.
    - I know the material is sometimes difficult and some students have trouble following what I'm doing at the board at times. Please let me know when this occurs so that I can address it. Please do not get vocally upset about it during class time. Pouting or venting is usually a healthy reaction to stress, but it is not appropriate in class and can be disruptive to other students' learning.
    - If possible, please recycle all plastic bottles, aluminum cans, and paper. I respectfully ask that you do not throw these items in the classroom garbage.

Semester Calendar for Math 103 Course Fall 2015

The video/text assignments are to be viewed/read and Video Log Questions Attempted before class. Video links are embedded in the appropriate section of the e-text and the workbook. At the intermediate objective due dates, your percentage mastery will be recorded for your grade on that Intermediate Objective.

	Sunday	Mon.	Tuesday	Wed.	Thursday	Fri.	Sat.
			1.	**2.**	**3. Module 0, Counting Project, 1.1 on decimal number system, Complete ALEKS Initial Assessment prior to first Day!!**	**4.**	**5.**
September	**6.** ALEKS Intermediate objective 1 due (IO # 1)	**7.**	**8.** 1.2, 1.4,1.5 Number sets, Fractions, irrationals, equiv. fractions, sci. not., number lines, rounding	**9.**	**10.** 1.6-1.7, Natural, Integer and rational exponents and radicals, **Quiz 1, ALEKS Target 53**	**11.**	**12.**
September	**13.** ALEKS IO # 2 due	**14.**	**15.** 1.8, 1.9 Rational exponents and radicals	**16.**	**17.** 1.10, 2.1 Polynomial and rational expressions, functions, **Quiz 2, ALEKS Target 90**	**18.**	**19.**
September	**20.** ALEKS IO # 3 due	**21.**	**22.** 2.2 Polynomial and rational expressions, functions, begin addition of "like" objects	**23.**	**24.** 2.3, Factoring numbers, greatest common factors and least common multiples. **ALEKS Target 135**	**25.**	**26.**
September	**27.** ALEKS IO # 4 due	**28.**	**29.** 2.3, 2.4, Factoring numbers and greatest common factor and least common multiples. Review for exam I, ALEKS practice exam is available.	**30.**	**1. Exam I, ALEKS target of 160 topics.** .	**2.**	**3.**
October	**4.**	**5.**	**6.** 2.5 Factoring Trinomials and binomials	**7.**	**8.** 2.6, Multiplication of rational and radical expressions, rationalize, **Quiz 3, ALEKS Target 190**	**9.**	**10.**
October	**11.** ALEKS IO # 5 due	**12.**	**13.** 2.6 Multiplication of rational and radical expressions, rationalize	**14.**	**15.** 2.6, 2.7 Multiplication of rational and radical expressions, rationalize, Division of whole #'s, rational expr., polynomials, **Quiz 4, ALEKS target 210**	**16.**	**17.**
October	**18.**	**19.**	**20.** 2.7 Division of whole #'s, rational expr., polynomials	**21.**	**22.** 2.8 Division algorithm for decimals, polynomials, order of operations. **ALEKS target 235**	**23.**	**24.**
October	**25.** ALEKS IO # 6 due	**26.**	**27.** 3.1, 3.2, Interval and graphs of inequalities, additive and multiplicative prop of = Review for exam II, ALEKS practice exam is available.	**28.**	**29. Exam II, Target of 265 topics, ALEKS target of**	**30.**	**31.**
November	**1.** ALEKS IO # 7 due	**2.**	**3.** 3.3 Percentage, proportion and variation problems, Zero Product property and solving equations by factoring	**4.**	**5.** 3.4, Absolute value equations and inequalities, Power and radical equations, **Quiz 5, ALEKS target 290**	**6.**	**7.**
November	**8.**	**9.**	**10.** 3.5 Quadratic eqations by completing the square and quadratic formula	**11.**	**12.** 4.1, 4.2 Rectangular Coordinate System, Midpoint and Distance between two points, and graphing solutions to equations **Quiz 6, ALEKS target 325**	**13.**	**14.**
November	**15.** ALEKS IO # 8 due	**16.**	**17.** 4.3 Lines and linear equations in two variables, slope-intercept and point-slope form for equations of lines.	**18.**	**19.** 4.3. Solving 2 by 2 linear systems graphically, by substitutions and by elimination. Review for exam III, ALEKS practice exam is available.	**20.**	**21.**
November	**22.** ALEKS IO # 9 due	**23.**	**24. Exam III, ALEKS Target all pie pieces must be completed.**	**25.**	**26.** Thanksgiving Break	**27.**	**28.**
November	**29.**	**30.**	**1.** 4.4, 4.5, Interpreting graphs, Linear Models, Linear systems and Mixture Problems.	**2.**	**3.** 4.6, 4.7 Rate Problems, Multistep Problems. **Quiz 7,**	**4.**	**5.**
Dec.	**6.**	**7.**	**8.** Review for Final Exam	**9.**	**10.** Review for Final Exam	**11.**	**12.**
Dec.	**13.**	**14.**	**15.**	**16.** Final Exam at 8:00:10:00amMust have Review Sheet Completed			