Marshall University
College of Science
School of Mathematics and Informatics
MTH 127 Syllabus

Course
MTH 127 – College Algebra Expanded – Section 106 CRN 2982

Course Description
A brief but careful review of the main techniques of algebra. Polynomial, rational, exponential, and logarithmic functions. Graphs, equations and inequalities, sequences.

Credits
5 credit hours

Prerequisites
ACT Math 17 or SAT Math 440 or above.

Courses that have MTH 127/130 as a prerequisite:
- Graduation Requirement for College of Business
- MTH 122 - Trigonometry, MTH 132 - Precalculus, MTH 140 - Applied calculus
- CHM 111, CS 110, CI 248, ENGR 221, IST 420/421, PS 109, PHY 101, PHY 201

Term/Year
Fall 2018

Class Meeting Days/Times
1:00 – 1:50 MTWRF

Location
SH 409 MWF and SH 624 TR

Academic Calendar
For beginning, ending, and add/drop dates, see the Marshall University Academic Calendar (URL: http://www.marshall.edu/calendar/academic).

Instructor

Shannon Miller-Mace

Contact Information

Office: SH 741B

Office Hours: MTW 9:00am – 11:00am, and by appointment.

Office Phone: (304)696-3796

Marshall Email: miller207@marshall.edu

Required Texts, Additional Reading, and Other Materials

1. Access to Knewton Alta homework management system.
2. Free student account for Desmos website.
3. TI-30 (any TI-30 is acceptable (TI-30X IIS recommended),TI-34 or 36 are not). Cell phone, smart device, or internet calculators are not permitted during exams.
4. Computer with internet access to MUOnline, Knewton Alta, and Desmos.

Course Student Learning Outcomes

The table below shows the following relationships:

Course student learning outcomes	**How students will practice each outcome in this course**	**How student achievement of each outcome will be assessed in this course**
Identify and implement appropriate solution methods for single-variable equations	Knewton Alta lessons, Desmos activities, In-Class Activities	Knewton Alta Assignments, Desmos Submissions, Module Tests, and Final Exam
Identify and graph standard algebraic functions	Knewton Alta lessons, Desmos activities, In-Class Activities	Knewton Alta Assignments, Desmos Submissions, Module Tests, and Final Exam
Interpret graphs of functions	Knewton Alta lessons, Desmos activities, In-Class Activities	Knewton Alta Assignments, Desmos Submissions, Module Tests, and Final Exam
Construct functions to model applications	Knewton Alta lessons, Desmos activities, In-Class Activities	Knewton Alta Assignments, Desmos Submissions, Module Tests, and Final Exam

Course Requirements/Due Dates

Students will utilize MUOnline/Blackboard (www.muonline.marshall.edu) to participate in **Discussion Forums** and complete other **Instructor Assignments** posted by the course. Some of these course learning materials consist of community building, metacognitive ideas, reflective writing, and professional development skills.

The course content will be deployed Week-by-Week through MUOnline/Blackboard using **Knewton Alta** and **Desmos.** These assignments and activities are open book, open notes assignments and may be completed collaboratively until mastery is achieved. Students should resubmit until they earn full credit.

Students will be assessed by taking **Module Tests** and the **Final Examination.** The course will be rolled out Week by Week as the semester progresses. Tests and the Final Exam are closed book/closed notes assessments, and to help preserve the integrity of the course, will be taken in-class with your instructor.

The **Summary Due Dates** (including hard and soft due dates) are provided below and embedded in the MUOnline/Blackboard course to provide a steady pacing through the material.

Grading Policy

In-Class Exams (5 @ 10% each)	50%
Knewton Alta Assignments	15%
Common Final Examination	20%
Desmos Activities	10%
Other (Instructor Assignments)	5%
Total	100%

Letter Grade:

A student's final letter grade will be determined on the following scale:

90 – 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
Below 60%	F

Course Homework Information:

The **Knewton Alta Assignments** will be assigned to correspond with lecture-based material. They are designed as all-encompassing assignments that include written instruction, videos, examples, and homework questions (both multiple choice and free response). If completed before the due date, students will automatically receive 100% (10 out of 10 points) in their MUOnline gradebook for that assignment. Otherwise, students will earn the percentage of the lesson that they have completed by the due date, i.e 70% (7 out of 10 points). The only way to overwrite the grade earned on the due date is to return to the assignment and complete it to get a 100% (10 out of 10 points).

The **Desmos Activities** are a collection of unique and engaging digital activities that are free, designed to introduce new ideas and/or deepen existing knowledge based on their placement in the curriculum, helping students discover the meaningfulness of the mathematics studied in the course. Students will work through slides with graphs, interactive applets, multiple choice and free response questions to complete the activity. Grades are input manually by the instructor using a Rubric in the MUOnline Grade Center. All Desmos activities that are not initially graded at 100% (10 out of 10 points) will receive specific written feedback from your instructor. Students are encouraged to revisit these Desmos activities to adjust their responses and resubmit in order to earn full credit. Worksheets may also be assigned in-class to structure the learning through these activities.

Exams: There will be five in-class exams as outlined in the course schedule. Tentative dates are September 6, September 27, October 16, November 2, and November 30.

- Students must notify the instructor by phone or e-mail **prior** to an exam if they cannot take a scheduled exam.
- Students must present a serious reason for missing any exam (illness with a doctor's excuse, death in the family, university excused absence, etc.).
- If you have an **excused absence**, you will be allowed to make up assignments or exams. Makeup exams will be given to students outside of class time at the convenience of the instructor.
- If you are tardy to class on test day, no extra time will be given to finish the exam.

Common Final Exam: The common final exam for MTH 127 will take place on **Saturday December 8** from 2-4 pm. You may use the required calculator for the course (TI-30), but no other assistance (formula sheets, notebooks, phones, or other internet connected devices) will be permitted. **You must bring your own calculator or do without. There will be NO sharing of calculators permitted during the exam.**

CLASSROOM ETIQUETTE: During class, cell phones must be turned off and out of sight. Please make the instructor aware ahead of time if access to these devices is needed. If I determine that cell phones or other electronic devices are becoming a problem during class time, I will give the class a quiz over all recent topics daily until cell phone use is no longer an issue. If the issue persists, the person will be asked to leave the class. All conversations during class time should be on topic. If personal conversations become distracting to the class or myself, those students will be asked to leave the class to continue their conversations elsewhere.

Attendance Policy

Students are expected to attend each class. Attendance is taken daily. If you are not present, then you will be counted as absent; and this "absence" cannot be corrected after the class has dispersed for the day. There are many activities that will be conducted in class. Therefore, you must be present to participate.

Students who miss one or two class periods can turn in the excuse directly to their instructor. If the absence is 3 or more days, please go to the Dean of Students' Office in the MSC. Students must notify the instructor by phone or e-mail prior to an exam if they cannot take a scheduled exam. Students must present a serious reason for missing any exam (illness with a doctor's excuse, death in the family, university excused absence, etc.). Makeup exams will be given to students who have an excused absence for a test either outside of class time or during the last week of the semester at the convenience of the instructor.

Tutoring Facilities

Marshall University provides multiple options for free on-campus tutoring. The Mathematics Department tutoring lab is located in Smith Music Hall 625. The current schedule can be found at https://www.marshall.edu/math/tutoring/. University College has a tutoring lab on the second floor of Smith Hall. Their tutoring options can be found online at http://www.marshall.edu/uc/tutoring-services/. It is the student's responsibility to take advantage of these facilities in addition to utilizing office hours.

University Policies

By enrolling in this course, you agree to the University Policies. Please read the full text of each policy (listed below) by going to Academic Affairs: Marshall University Policies. (URL: http://www.marshall.edu/academic-affairs/policies/)

- Academic Dishonesty Policy
- Academic Dismissal Policy
- Academic Forgiveness Policy
- Academic Probation and Suspension Policy

- Affirmative Action Policy
- Dead Week Policy
- D/F Repeat Rule
- Excused Absence Policy for Undergraduates
- Inclement Weather Policy
- Sexual Harassment Policy
- Students with Disabilities (Policies and Procedures)
- University Computing Services Acceptable Use Policy

Course Schedule

MTH 127 Summary Due Dates Fall 2018			
In this chart, there are deadlines for each week to help students pace themselves through the material and **hard deadlines** at the end of each module which are **bolded** on the chart. These are the dates that the Knewton Alta assignments, Demos activities, and Module Tests are **DUE**. Students should not wait until the day a lesson is due to begin it. These lessons should be mastered well in advance of the due dates, and tests shall be taken by the due date. *Last updated: Sunday, August 18th, 2018*			
Week	**Other MUOnline Assignments**	**Knewton Assignments and Desmos Activities**	**Due Date (Sunday, 11:59 pm)**
Module 1: Functions, Graphs, and Models			
1	Self-Introduction Discussion Forum	1.1a, 1.1b, 1.2a, 1.2b, 1.3a, 1.3b, 1.4a, 1.4b	August 26th
2	Time Management Weekly Planner	1.5a, 1.5b, 1.6a, 1.6b, 1.7a, 1.7b, 1.8a, 1.8b, 1.9a, 1.9b,	September 2nd
3	**Review Center for Module 1 Test**	1.10a, 1.10b, 1.11, **Module 1 Test**	**September 9th**
Module 2: Linear Models and Systems			
4	Send Course Message to your Instructor	2.1a, 2.1b, 2.2, 2.3a, 2.3b, 2.4, 2.5, 2.6a, 2.6b	September 16th

5	Reply to Course Message from your Instructor	2.7, 2.8a, 2.8b, 2.9, 2.10, 2.11a, 2.11b	September 23rd
6	**Review Center for Module 2 Test**	2.12, 2.13, **Module 2 Test** 3.1a, 3.1b	**September 30th**
Module 3: Quadratic and Piecewise Functions			
7	Mid-Term Grade Calculation	3.2a, 3.2b, 3.3a, 3.3b, 3.4a, 3.4b, 3.5a, 3.5b, 3.6a, 3.6b	October 7th
8	Study Group Discussion Board	3.7, 3.8a, 3.8b, 3.9, 3.10, 3.11	October 14th
9	**Review Center for Module 3 Test**	**Module 3 Test** 4.1, 4.2a, 4.2b, 4.3	**October 21st**
Module 4: Polynomial and Rational Functions			
10	Improve Study Habits Discussion Forum	4.4a, 4.4b, 4.5a, 4.5b, 4.6a, 4.6b, 4.7a, 4.7b	October 28th
11	**Review Center for Module 4 Test**	4.8, 4.9a, 4.9b, 4.10a, 4.10b **Module 4 Test**	**November 4th**
Module 5: Exponential and Logarithmic Functions			
12	State of Being Stuck Self-Assessment	5.1, 5.2a, 5.2b, 5.3, 5.4, 5.5a, 5.5b	November 11th
13	Best Review Strategy Discussion Forum	5.6, 5.7, 5.8a, 5.8b, 5.9, 5.10	November 18th
14	**Review Center for Module 5 Test**	5.11a, 5.11b, 5.12, 5.13a, 5.13b, **Module 5 Test**	**December 2nd**
15	**Review Center for the Final Exam**	Module 1, 2, 3, 4, and 5 Review, **Final Exam**	**Saturday December 8th 2:00pm – 4:00pm**