



**Transition to College Mathematics II Syllabus
CHS Mathematics Department**

Contact Information: Parents may contact me by phone, email, or visiting the school.

Teacher: Mrs. Tara Nicely

Email Address: tara.nicely@ccsd.us

Phone Number: (740) 702-2287 ext. 16228

Online: <http://www.ccsd.us/1/Home>

Teacher Contact Websites:

- Google Classroom

CCSD Vision Statement: The Chillicothe City School District will provide tomorrow's leaders with a high quality education by developing high expectations and positive personal relationships among students, staff, and community members.

CCSD Mission Statement: The Chillicothe City School District empowers students to learn, to lead, and to serve.

Course Description and Prerequisite(s) from Course Handbook:

Transition to College Mathematics II - 277

State Course #: 111850

Prerequisite: Algebra II (College Prep)

Required Option

Grade: 10-12

Graded Conventionally

Credit: .5

Course Description:

This course is designed to help students learn and retain mathematical concepts with a focus on polynomials, quadratic functions, rational equations, roots, and radical equations. One goal is to prepare students for the transition from skills oriented algebra courses to more concept oriented college-level mathematics courses. A second goal is to teach students critical thinking skills and problem-solving techniques to help them excel on college entrance exams.

Learning Targets: Defined below for clarity are the Unit Titles, Big Ideas of every Unit taught during this course, and the Essential Questions to be answered to better understand the Big Ideas. A student's ability to grasp and answer the Essential Questions will define whether or not he or she

adequately learns and can apply the skills found in Big Ideas. This will ultimately define whether or not a student scores well on assessments administered for this course.

- **1st or 3rd Quarter**
 - **Unit I Title: Multiplication and Division of Polynomials**
 - **Big Idea #1:** I can use the properties of exponents to simplify expressions.
 - *Essential Question #1: How do I Write numbers in scientific notation*
 - *Essential Question #2: How do I perform operations involving nonnegative real number exponents?*
 - *Essential Question #3: How do I perform operations involving positive and negative exponents and scientific notation?*
 - **Big Idea #2:** I can multiply polynomials.
 - *Essential Question #1: How do I recognize different types of polynomial factors?*
 - *Essential Question #2: How do I multiply polynomials?*
 - *Essential Question #3:*
 - **Big Idea #3:** I can divide polynomials.
 - *Essential Question #1: How do I recognize different types of polynomials in division problems?*
 - *Essential Question #2: How do I divide polynomials?*
 - **Unit II Title: Factoring and Solving Quadratic Equations**
 - **Big Idea #1:** I can factor polynomials.
 - *Essential Question #1: How do I factor by finding a greatest common factor?*
 - *Essential Question #2: How do I factor by grouping?*
 - *Essential Question #3: How do I factor trinomials?*
 - *Essential Question #4: How do I factor by using special factoring patterns?*
 - **Big Idea #2:** I can solve equations by factoring.
 - *Essential Question #1: How do I solve a quadratic equation using factoring?*
 - *Essential Question #2: How do I reduce rational expressions by factoring?*
 - *Essential Question #3: How do I solve a quadratic equation by using the Quadratic formula?*
 - *Essential Question #4: How do I solve a quadratic equation by Completing the Square?*
- **2nd or 4th Quarter**
 - **Unit III Title: Rational Expressions and Equations**
 - **Big Idea #1:** I can simplify rational expressions.

- *Essential Question #1: How do I reduce and build equivalent rational expressions?*
- *Essential Question #2: How do I identify restrictions in the domain of a rational expression?*
- *Essential Question #3: How do I multiply and divide rational expressions?*
- *Essential Question #4: How do I use the LCM as the LCD and write equivalent rational expressions?*
- *Essential Question #5: How do I add and subtract rational expressions?*
- *Essential Question #6: How do I simplify complex fractions?*
- **Big Idea #2:** I can graph rational functions.
 - *Essential Question #1: How do I identify holes and asymptotes of rational functions?*
 - *Essential Question #2: How do I sketch rational functions?*
 - *Essential Question #3: How do I analyze rational functions?*
- **Big Idea #3:** I can solve rational equations.
 - *Essential Question #1: How do I solve rational equations algebraically?*
 - *Essential Question #2: How do I identify extraneous solutions?*
 - *Essential Question #3: How do I write and solve real world problems using rational equations?*
- **Unit IV Title: Roots and Radical Equations**
 - **Big Idea #1:** I can simplify radical expressions.
 - *Essential Question #1: How do I identify perfect powers of integers?*
 - *Essential Question #2: How do I identify parts of a radical expression?*
 - *Essential Question #3: How do I find roots when radicands contain variables?*
 - **Big Idea #2:** I can simplify radical expressions involving arithmetic operations.
 - *Essential Question #1: How do I identify equivalent forms of radical expressions?*
 - *Essential Question #2: How do I multiply and divide radical expressions?*
 - *Essential Question #3: How do I identify like radicals?*
 - *Essential Question #4: How do I add and subtract radical expressions?*
- **END OF COURSE EXAM**

Course Materials:

- Google Chromebook
- Composition Notebook
- Pencils
- Colored Pencils
- Glue Sticks
- Scissors
- Loose Leaf Paper

Electronic Resources:

- Google Classroom
- Connect Ed <https://connected.mcgraw-hill.com/connected/login.do>
- Khan Academy <https://www.khanacademy.org/>
- Purplemath <http://www.purplemath.com/modules/index.htm>

Course Expectations:**Rules:**

1. Be **RESPECTFUL** at all times.
2. Employ the **4P's** every day.
 - a. Be **PROMPT!**
 - b. Be **PREPARED!**
 - c. Be **POSITIVE!**
 - d. **PARTICIPATE!**
3. Work from **BELL TO BELL.**
4. 3 Before Me!
5. Be **HONEST!**
6. **NEVER GIVE UP**

Procedures:**Entering the class room:**

1. Enter **quietly** and sit down in your assigned seat.
2. Look at the board to see what materials you will need out on your desk.
3. Start on your Bell Ringer (**BR**) up on the SMART Board.
4. You may quietly talk to the person next you **UNTIL THE TARDY BELL RINGS!**
5. Once finished with your **BR** wait quietly in your seat for us to go over it together.

Heading your papers:

- Top Right of the paper Put the assignment, your First and Last Name, and the Date assigned.
- Ex. If assigned Pg. 345 # 4-30 Even

Turning in Homework and Assignments:

1. Look to make sure you headed the paper correctly.
2. More than one page:
 - a. Students need to make sure their name is on all pages.
 - b. Students are to quietly get up and go to the teacher's desk.
 - c. They are to staple all the pages together in the correct order.
 - d. Then they are to hand the paper to the student sitting in the front row closest to the teacher's desk.

Taking Notes:

Students are to have their notebook, a pencil, and a Chromebook with them every day. Students are to responsible for keep their notebooks organized and up to date. Notebook quizzes over the notes taken will be given after every unit or at least every 9 weeks.

Pencil Sharpening:

- Students can quietly get up one at a time to sharpen their pencil at anytime, unless if testing, and sit back down without bugging or talking to anyone else. **If testing the student needs to ask for permission first.**
- If the teacher or anyone else is up talking:
 - o Student needs to walk to the back of the classroom and around by the computers up to the electric sharpener by on the white shelf, and take the same trip back. This way you are not distracting others by crossing in front of the board or the person talking.

Getting a Tissue:

- Students can quietly get up one at a time to grab a tissue at anytime, unless if testing, and sit back down without bugging or talking to anyone else. **If testing the student needs to ask for permission first.**
- The same procedure for pencil sharpening is in place for tissues. Please walk along the back of the classroom.
- There is a trash can beside my desk so students do not need to walk all the way across the room to throw their tissues away.
- **USE HAND SANITIZER AFTER BLOWING YOUR NOSE!** We don't want your germs, and I will call you out in class and make you go back and use it.

Cavalier Café:

Students are to order from the café the first 3 minutes of class. When the order is delivered, students are to walk quietly to the back of the classroom and around by the cabinets to the door and take the same trip back. This way you are not distracting others by crossing in front of the board or the person talking. Ordering from the café is a privilege that can be taken away at any time. Students must clean up after themselves.

Tests and Quizzes:

1. Students will have until the bell rings to quickly review.
2. Once the tardy bell rings, students will need to clear their desks of everything but their Chromebook (if applicable), paper, and a pencil. All other things need to be placed at the front of the room and this includes cell phones! **NO CELL PHONES** are permitted on your person while testing. If you do not have a bag to place it in you may put it in the technology box provided on by desk.
3. **There is to be no talking at all!** Unless the teacher has given permission to do so, for instance if you have raised your hand to ask a question. All other talking will be considered cheating and will result in the test being taken and the student given an F.
4. Once finished with the test they are to work on the given assignment.
5. **No electronic devices except for the calculator and Chromebook will be permitted during a test!** If seen it will be considered cheating and the test or quiz will be taken from the student and they will be given an F.
6. **Making up a test or quiz is the student's responsibility! If they are absent on the day of a test or quiz the student is to come to Mrs. Nicely either at the very beginning or very end of class to setup a time to take it. I will not chase down students to take tests! If they forget to make it up they will receive an F for the Test or Quiz!**

Electronic Devices:

1. Students will be required to put their cell phones in the provided container. All other electronic devices, iPods, mp3 players, and etc., are to be placed in their bag.
2. Students will only be allowed to use them when instructed for class use.
3. Students will not be permitted to listen to music during instructional time. All ear buds should be out of ears!

Late/ Missing/Makeup Work:

Students are to place all late, missing, or makeup work in their period folder in the pink crate sitting by my desk at the beginning of the class period (before we go over BR together). This box will be cleaned out and graded **every Friday**. So if the student turns in the assignment on Monday it will not show up on Progress Book until the following Monday.

Students are responsible for finding out what work they missed. I will tell them, but only if asked! They will also be able to find missing work on the Google Classroom and on Progress Book.

Graded Assignments:

With the exception of test and quizzes all graded assignments will be placed in the student's period Crate, crates are under the cabinets. Students will be given the opportunity to go over and get their graded assignments during any

free time they have in class. This box will be cleared out and papers will be trash after every interim report and nine weeks, approximately every 4.5 weeks.

All tests and quizzes will be passed back out by Mrs. Nicely, once all students have finished or made up the test or quiz. Tests and quizzes will not be passed back until that time.

Grading:

Unit Exams	50%
Assessments (Including: Quizzes, Essays, Labs, and Projects)	30%
Class work/Homework	20%

- Each nine week's grade comprises 40% of a student's final grade.
- The End of Course Exam comprises 20% of a student's final grade.

Grading Scale:

The grading scale for Chillicothe High School can be found in the student handbook or online at

<http://www.chillicothe.k12.oh.us/1/Content2/studenthandbook>.

Late Work: Late work will be subject to the Board-adopted policy on assignments that are submitted late (to be reviewed in class).

- Regardless of the absence type (excused, unexcused, OSS, etc.), students are expected to make up work and be held accountable for learning all material they missed.
- Any student who is absent from school will receive one (1) additional day for every day he/she missed to make up his/her work for full credit (100%).
- Any student who exceeds the allotted time to turn in an assignment for full credit may still submit work late for partial credit.
 - Any student who turns in work up to 1 week late must at least be given the opportunity to earn 75% on that assignment.
 - Any student who turns in work between 1 and 2 weeks late must at least be given the opportunity to earn 60% on that assignment.
- The end of the 9 weeks is the cut off point for teachers to accept late work from students for full or partial credit unless the teacher decides to give the student an incomplete for the 9 weeks due to extenuating circumstances.

Performance Based Section: Writing Assignments/Exams/Presentations/Technology

One or more of the End of Unit Exams may be Performance Based. According to the Ohio Department of Education, "Performance Based Assessments (PBA) provides authentic ways for students to demonstrate and apply their

understanding of the content and skills within the standards. The performance based assessments will provide formative and summative information to inform instructional decision-making and help students move forward on their trajectory of learning.” Some examples of Performance Based Assessments include but are not limited to portfolios, experiments, group projects, demonstrations, essays, and presentations.

CHS Transition to College Mathematics II Course Syllabus

After you have reviewed the preceding packet of information with your parent(s) or guardian(s), please sign this sheet and return it to me so that I can verify you understand what I expect out of each and every one of my students.

Student Name (please print):

Student Signature:

Parent/Guardian Name (please print):

Parent/Guardian Signature:

Date:
