**Minnesota Virtual Academy Online Syllabus for**

***Honors Algebra II***

**Course Instructor and Communications**

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**Targeted Instructional Times: 9:00-10:00 am, Wednesday 10:00-11:00 am & Friday 10:30-11:30 am**

**Class Connect times: Tuesday and Thursday at 9:00-10:00 am**

**Teacher Contact Time:**

Class Connect sessions are designed as a way to provide instructional, academic, and social support to our students. These sessions are provided as a way to tie the lessons within the Online Learning System, USATest Prep, and the MN standards together to improve student achievement. Class Connects sessions are conducted via Blackboard. The times scheduled for Class Connects is listed above.

The instructor will also respond to students within 24 hours on scheduled school days, Monday through Friday, unless the teacher has previously notified their students that they will be unavailable for a period of time. Non-verbal communication is the primary communication platform for MNVA-High School teachers, students, Learning Coach, and administration. Often, the information is time-sensitive and many items require a specific response. The majority of communications to MNVA-High School students will be sent via Kmail. However, teachers might use their school email, Skype or phone calls to contact students if that method is preferred.

Each teacher is required to update their Announcement page in each subject on a weekly basis (or more often if desired).

Major projects or research papers submitted by the students will be processed and graded within a week.

**Student-to-Teacher Communications:**

Students may contact the teacher using the following methods: email, Skype, Office hours and Class Connects

**Student Attendance Expectations:**

Daily participation is required in the MNVA program. Learning coaches are responsible for ensuring that their students are actively engaged in all of their courses on a daily basis.

Attendance will be taken daily. Students are required to log in to each of their classes five days per week. Students should spend an average of at least one hour per day per course in their online classes. Failure to log in daily will greatly reduce the student’s ability to be successful in his/her classes. Extended absences from coursework may constitute truancy.

Families requesting excused absences are responsible for notifying the MNVA office about the length and reason for the absence. Absences of three or more days for medical reasons may require verification by the student’s doctor. Families wishing to excuse absences due to travel or family vacations must notify their student’s advisor prior to the vacation. Failure to notify the office in advance of the absence will result in the day(s) being marked unexcused and the student will be subject to MN school attendance laws.

If extenuating circumstances arise prohibiting the student from attending school, please contact the MNVA office toll-free at (866) 215-2292 option 4.

**Academic Support Available:**

Each student, in addition to the availability of scheduling one-on-one sessions with the instructor, has a student advisor and counselor assigned to offer assistance. The student advisor helps the student organize and prioritize the workload and manage the new educational environment that exists in the online world. The counselors serve to ensure the student is enrolled in the necessary coursework, both for graduation requirements and preparation for pursuits beyond high school.

**Technical Support Available:**

If a student is using his/her home computer, the student is responsible for computer hardware and software issues. If a technical need arises in regards to course material or a course CD, the student should contact K12 Technical Support at (866) 512-2273 and the technical support staff will assist him/her with the issue. If an MNVA-HS student is experiencing difficulties with an MNVA-HS-supplied computer, the student should contact K12 Technical Support immediately at (866) 512-2273 so the repair can begin promptly. The student should contact his/her teachers and the MNVA-HS office toll-free at (866) 215-2292 option 4 if he/she is experiencing technical issues.

**Communications with Resident District for Part-time Students:**

**Format and Frequency of Reports:**

The Lead Academic Advisor faxes grades at mid-semester and the end of the semester to the local school contact person, the parent and the student. If requested by the enrolling district, progress reports are faxed on a more regular basis.

**Format and Frequency of Communication:**

The Lead Academic Advisor phones or emails the enrolling district if any of the following issues arise:

 Plagiarism

 Lack of Attendance

 Lack of Progress toward Course Completion

 Compliance requirements due to 504 Plans or IEPs.

**Final Grades and Submission:**

The Lead Academic Advisor faxes final grades within 10 days of the end of the semester unless the enrolling district has requested the grades earlier.

**Course Outline**

**Course Name:** MTH309A Honors Algebra II

**Course Credits:** 1

**Course Prerequisites:** Successful completion of Algebra I and Geometry

**Course Description:** This course builds upon algebraic concepts covered in Algebra. Topics include linear equations and systems, functions, and inequalities. Students are introduced to polynomials and power functions; rational equations, radicals and complex numbers, and quadratic functions.

**Course Goals and Objectives:**

Students will review the order of operations, set definitions, properties of the real number system, and other symbols and terminology.

Students will use various strategies for solving linear and absolute value equations.

Students will use strategies for using formulas to solve real-world applications.

Students will use representations and applications of linear relationships.

Students will interpret and create graphs, tables, and equations that represent linear relationships.

Students will use systems of linear equations to solve real-world problems.

Students will explore real-world situations regarding input and output.

Students will learn how to graph equations and differentiate between functions and relations.

Students will identify functions that are continuous, discontinuous, and discrete-valued.

Students will graph step functions that are least and greatest integer functions.

Students will estimate and calculate domains and ranges of functions and to compose complicated functions from simpler ones.

Students will express situations in function notation, calculate domains and ranges, and write sums, differences, products, quotients, and compositions of functions.

Students will solve and graph linear inequalities in one variable including conjunctions, disjunctions, and absolute value inequalities.

Students will solve and graph inequalities in two variables and systems of inequalities in two variables.

Students will identify, evaluate, graph, and write polynomial functions.

Students will add, subtract, and multiply polynomials as well as algebraic factoring patterns.

Students will use these patterns and the zero product property to solve polynomial equations.

Students will graph power functions and identify the end behavior of various members of the power function graph family.

Students will add, subtract, multiply, and divide rational expressions.

Students will solve and graph rational equations.

Students will identify end behavior of rational functions and properties of graphs including asymptotes and zeros.

Students will identify, add, subtract, multiply, and divide radicals, and factor out perfect squares.

Students will solve real world problems involving applications of radical equations and convert between rational exponent and radical form of an expression.

Students will identify, graph, find the modulus of, add, subtract, multiply, and divide imaginary and complex numbers.

Students will graph quadratic functions and identify the equations of quadratic functions when given a graph.

Students will use the zero product property, completing the square, and the quadratic formula to solve quadratic equations.

Students will relate factors of quadratic polynomials to *x*-intercepts of graphs of quadratic functions.

Students will use quadratics to solve projectile motion, geometry, and other area problems.

**Topic Outline:**



**Required Texts and / or educational materials: Online Text**

**Minimum Technical Requirements:**

Students may use either a Mac or PC with the following capabilities:

 Speed: 1.8 GHz or better

 RAM: 512 MB (minimum)

 Disk space: 20 GB or more

 CD-ROM or DVD drive

 Monitor: 15-inch flat panel

 Audio: 16-bit sound card

 Modem: 56 kbps (minimum)

 Microphone and speakers

 Operating system: Windows XP SP2 or better

 Microsoft® Internet Explorer version 6.0

 Adobe® Reader®

 Macromedia Flash™

 Shockwave™

 QuickTime®

Students are expected to be competent in using current technology appropriate for this class. Such technology may include word processing, spreadsheet, and presentation software. Ability to use the Internet and e-mail, download files from e-mails and the Internet, and attach files to e-mails and upload files is also required.

**Final Exam (Date, Time and Location): January 16, 2018 by 3:00 pm.**

**Extra Credit Option:** Extra credit will be given for attending or watching the test preparation review Class Connects. If there are any other extra credit options, they will be emailed to the students.

**Assessment of Student Work**

**Grading:**

During online courses, students will receive grades for homework assignments, quizzes, tests, projects, participation and other activities. Students will be able to see their grades at any time by going to their grade books. If students have questions about grading procedures, they should contact their instructors.

***Students are required to save their work throughout the semester.*** By saving their work, students will be able to retrieve any assignments in question and review them with their teachers in the event of a dispute or question over a grade.

MNVA-HS Grading Scale

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 93-100 = A  | 4.0 | 83-86 = B | 3.0 | 73-76 = C | 2.0 | 63-66 = D | 1.0 |
|  90-92 = A- | 3.7 | 80-82 = B- | 2.7 | 70-72 = C- | 1.7 | 60-62 = D- | 0.7 |
|  87-89 = B+ | 3.3 | 77-79 = C+ | 2.3 | 67-69 = D+ | 1.3 |  0-59 = F | 0 |

**Policy for Late or Missing Assignments:**

Graded assignments must be completed and submitted no later than 11:59 PM on the Sunday after the due date.

   Zeros are entered as grades for every assignment not received by the Sunday deadline.

   All other work may still be submitted if it is late and the zero will be changed. Students will receive full credit if it is turned in within one week after the due date.  Teacher scored assignments more than one week late will be docked 50%. Students will be notified of their score before points were docked in the comment section returned with the graded assignment.

   Zeros will become permanent for all late work, computer scored and teacher scored, one week prior to the end of the semester.

   I will grant due date extensions on assignments under some circumstances.  ***You should never assume that I will automatically grant these requests, however***.  Due date extensions *must* be requested ***before*** the due date of the assignment and on a school day.  Requests received on or past the due date, or on a non-school day will most likely not be granted.

**Policy for Redoing/Retaking Assignments:**

* + - Lesson quizzes may be redone in office hours to earn back half of the missed points. In order to do this, students must first have spent at least 30 minutes completing the online lesson. These redos must be done before the student takes the unit test.
		- End of unit test scores are final. No retakes are allowed, with one exception. Once a semester, students may retake a test. In order to do this, the student must first meet me in office hours to review for the test.

**Policy for Addressing Academic Dishonesty:**

Students who submit work as their own, when it is not wholly and completely their own, are guilty of cheating and/or plagiarism.

If progress is made in the class without corresponding user minutes in the lessons, the scores will be counted as zeros. The student will be asked to demonstrate step by step the mathematical skills in order to earn back points.

Assisting other students in cheating or plagiarism is also considered academic dishonesty.

If a student is found plagiarizing or cheating, disciplinary action will be taken. The student will be notified by the teacher regarding the plagiarism. The teacher will also send notification of the plagiarism to the MNVA-HS office to be placed in the student’s file.

* **First offense:** the student will be required to redo the assignment. Based on the teacher’s syllabus, the student’s grade will reflect a reduction of points for the plagiarized assignment.
* **Second offense:** the teacher will notify the student and his/her learning coach and arrange a meeting to discuss plagiarism and establish a system to ensure the behavior stops. The student will receive a zero on the assignment or be asked to redo it for partial credit.
* **Third offense:** a meeting will be called between the student, learning coach, teacher, advisor and administrator to address the recurrent plagiarism and discuss an academic plan to correct the problem and increase the student’s understanding of academic integrity.

Repeated offenses may result in the recommendation that the student be removed from the course. Removal from a course is subject to authorization by administration and, where necessary, will result in a failing grade in the course for the semester.

**Minnesota Academic Standards Alignment (If no Minnesota Academic Standards exist, alignments follow national professional standards.)**

The MTH308A class aligns with the elements of the Minnesota Academic Standards of Mathematics.

A complete list of alignments can be found at <http://minnesotava.new.rschooltoday.com/page/2690>.

**Appendix A:**

## MTH308A Algebra 2

It is important for you to understand how this course is designed and how points will be awarded as you progress through the course or material. Your participation in all the different assignments is crucial to your success. Review the information below and be sure to ask your teacher any questions you may have regarding how your grade will be calculated.

### Grading Summary for Algebra 2

| **Activity** | **# of Tasks** | **Points** | **% of Total** |
| --- | --- | --- | --- |
| Quizzes | 35 | 175 | 23% |
| Teacher-Graded Assignments | 1 | 20 | 2% |
| Computer-Scored Unit Tests | 7 | 252 | 27% |
| Teacher-Graded Unit Tests | 7 | 105 | 11% |
| Computer-Scored Interim Checkpoints | 2 | 70 | 8% |
| Teacher-Graded Interim Checkpoints | 2 | 18 | 2% |
| Computer-Scored Semester Tests | 1 | 220 | 24% |
| Teacher-Graded Semester Tests | 1 | 30 | 3% |
| Totals | 56 | 890 | 100% |

### Detailed Grading Checklist for Algebra 2

Use this checklist to navigate your way through the graded assignments in this course. All assignments are important to your learning and success in this course. Be sure to use the gradebook to keep track of your scores.

#### Unit 1

1. 1.03 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
2. 1.06 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
3. 1.07 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
4. 1.08 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
5. 1.10 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
6. 1.12 Unit Test: Part 1 (36 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
7. 1.12 Unit Test: Part 2 (15 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
8. **Unit 2**
9. 2.04 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
10. 2.06 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
11. 2.07 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
12. 2.10 Unit Test: Part 1 (36 points) | Date completed: \_\_\_\_\_\_\_\_\_
13. 2.10 Unit Test: Part 2 (15 points) | Date completed: \_\_\_\_\_\_\_\_\_
14. **Unit 3**
15. 3.02 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
16. 3.03 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
17. 3.06 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
18. 3.07 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
19. 3.09 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
20. 3.10 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
21. 3.12 Unit Test: Part 1 (36 points) | Date completed: \_\_\_\_\_\_\_\_\_
22. 3.12 Unit Test: Part 2 (15 points) | Date completed: \_\_\_\_\_\_\_\_\_
23. **Interim Checkpoint 1**
24. Algebra 2 Checkpoint 1, Part 1 | (40 points) Date completed: \_\_\_\_\_\_\_\_\_\_
25. Algebra 2 Checkpoint 1, Part 2 | (9 points) Date completed: \_\_\_\_\_\_\_\_\_\_
26. **Unit 4**
27. 4.02 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
28. 4.04 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
29. 4.07 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
30. 4.08 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
31. 4.09 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
32. 4.11 Unit Test: Part 1 (36 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
33. 4.11 Unit Test: Part 2 (15 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
34. **Unit 5**
35. 5.02 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
36. 5.03 Extended Problems (20 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
37. 5.04 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
38. 5.08 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
39. 5.09 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
40. 5.11 Unit Test: Part 1 (36 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
41. 5.11 Unit Test: Part 2 (15 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
42. **Interim Checkpoint 2**
43. Algebra 2 Checkpoint 2, Part 1 (30 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
44. Algebra 2 Checkpoint 2, Part 2 (9 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
45. **Unit 6**
46. 6.02 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
47. 6.03 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
48. 6.04 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
49. 6.06 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
50. 6.08 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
51. 6.10 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
52. 6.12 Unit Test: Part 1 (36 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
53. 6.12 Unit Test: Part 2 (15 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
54. **Unit 7**
55. 7.03 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
56. 7.05 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
57. 7.06 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
58. 7.07 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
59. 7.09 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
60. 7.11 Quiz (5 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
61. 7.13 Unit Test: Part 1 (36 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
62. 7.13 Unit Test: Part 2 (15 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
63. **Unit 8**
64. 8.02 Semester A Test: Part 1 (60 points) | Date completed: \_\_\_\_\_\_\_\_\_\_
65. 8.02 Semester A Test: Part 2 (30 points) | Date completed: \_\_\_\_\_\_\_\_\_\_