MA283O- Math 7

| Course Basics | | | |
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| **District Course Code:** | **Grade Level:** | **Credit Value:** | **NCAA Approved:** |
| MA283O | 7 | N/A | YES |
| **State Course Code:** | **Course Length:** | **Course Time:** | **FWPS Standards (link)** |
| O2037N | 36 Academic Weeks (Yearlong Course) | 67 Minutes per day OR 5 hours 33 minutes each week | https://www.fwps.org/cms/lib/WA01919399/Centricity/domain/796/6th-12th-grades/math/7th-Grade-Math-Priority-Standards-PS2.pdf |
| **Prerequisites:** | | | |
| **Required Materials**: Internet access, computer, printer, printer paper and ink, modern OS/software/web browser, headphones with microphone- *if not built into computer* | | | |
| **Course Description:**<br>This is a year-long seventh grade math course. Students' progress in their exploration of the world of mathematics, using the Learning Odyssey program. They will develop their comfort with mathematical concepts and procedures, introducing them to new concepts while reinforcing old ones. Concepts covered in this first semester course include: rational operations, number theory, ratio, proportion, percent, rational numbers, expressions and equations, as well as triangles. Concepts covered in this second semester course include: plane geometry, three-dimensional geometry, measurement, graphing, linear relationships, probability, as well as data and statistics.<br>Odyssey Mathematics furthers students' expertise in geometry and algebra. The skills students learn in these activities build on the spiraled curriculum established in the K–6 lessons and prepare them for future success in algebra and higher math. A series of comprehension checks ensures that students are on the right learning path. | | | |

| Instructor Information | |
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| **Name: Roberta Noorda** | **Email: rnoorda@fwps.org** |
| | **Virtual Sessions: To be announced** |

| Expected Learning Outcomes | |
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| **In this course, students will** | The student will develop computational fluency, deepen conceptual understanding, and apply Common Core's eight mathematical practice skills. |
| | **Unit 1** Compute unit rates including length/area/other quantities measured in like or different units.<br>**Unit 2** Decide whether two quantities are in a proportional relationship<br>**Unit 3** Identify constant of proportionality in tables, graphs, equations, |

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| | diagrams, and verbal descriptions of proportional relationships.<br>**Unit 4** Recognize and represent proportional relationships between quantities: Represent proportional relationships by equations.<br>**Unit 5** Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, r) where r is the unit rate.<br>**Unit 6** Use proportional relationships to solve multistep ratio and percent problems.<br>**Unit 7** Describe situations in which opposite quantities combine to make 0.<br>**Unit 8** Understand p + q as the number located a distance of the absolute value of q from p, in the positive or negative direction depending on whether q is positive or negative.<br>**Unit 9** Understand subtraction of rational numbers as adding the additive inverse, p - q = p + (-q).<br>**Unit 10** Apply properties of operations as strategies to add and subtract rational numbers.<br>**Unit 11** Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations.<br>**Unit 12** Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number.<br>**Unit 13** Apply properties of operations as strategies to multiply and divide rational numbers.<br>**Unit 14** Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.<br>**Unit 15** Solve real-world and mathematical problems involving the four operations with rational numbers.<br>**Unit 16** Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.<br>**Unit 17** Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related.<br>**Unit 18** Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically.<br>**Semester 2** Expected Learning Outcomes: The student will develop computational fluency, deepen conceptual understanding, and apply Common Core's eight mathematical practice skills.<br>**Unit 1** Solve word problems leading to equations of the form px + q = r and p(x + q) = r, where p, q, and r are specific rational numbers.<br>**Unit 2** Solve word problems leading to inequalities of the form px + q > r or px + q < r, where p, q, and r are specific rational numbers.<br>**Unit 3** Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale<br>**Unit 4** Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.<br>**Unit 5** Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.<br>**Unit 6** Know the formulas for the area and circumference of a circle and use |

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| | them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.<br>**Unit 7** Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.<br>**Unit 8** Solve real-world and mathematical problems involving area, volume and surface area of two and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.<br>**Unit 9** Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population.<br>**Unit 10** Draw informal comparative inferences about two populations. Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability.<br>**Unit 11** Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood.<br>**Unit 12** Develop a probability model and use it to find probabilities of events.<br>**Unit 13** Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process.<br>**Unit 14** Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.<br>**Unit 15** Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation: Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams.<br>**Unit 16** Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation: Design and use a simulation to generate frequencies for compound events. |
| **Standards Alignment** | See Course Learning Plan Contract (LPC) |
| **Assessment Methods** | Formative Assessments: The student will complete formative assessments via quizzes within the online Odyssey textbook. Students will have up to three attempts to successfully meet the 70% or better score needed to advance to the next activity. Should the student not meet the requirement within the three attempts, the student will notify the teacher and together they will work on assisting the student to meet the requirement and move forward.<br>Summative Assessments: The student will complete summative assessments to demonstrate their understanding of the standards presented to them. These checkpoints will be found within the student's math course within the iA Campus. The student will finish the semester with the end of semester exam. |
| **Grading Methods** | All summative assessments will be graded according to the corresponding rubric. Only summative assessment scores will calculate towards a student's final grade. Each summative assessment is linked to a FWPS Priority Standard (PS), and each PS is a part of a grading/reporting "bucket". All buckets are equally weighted, and the student's final grade is the average score of all buckets. Students will also receive an informational grade in non-academic areas of student success. |
| **Grading Scale** | Excelling – EX - 100%-90%<br>Meeting – ME - 89%-70% |

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| | Approaching - AP- 69%-60%<br>Beginning – BE - 0%-59% |

| **Student Expectations** | |
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| **Weekly Work Completion** | Students will submit original work in all classes each week. |
| **Original Work Submissions** | Students will only submit their original work. If a student uses outside sources in the creation of their original work, citations *must* be present in the format requested by their teacher. |
| **Weekly Communication** | Students will communicate weekly with their teachers regarding their academic progress. |
| **Functioning Technology/ Required Materials** | Students will always have constant and consistent access the functioning hardware, software, technology, and required materials necessary to complete their coursework in all classes. |

| **iA Policies Required for Enrollment** | |
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| **Academic Integrity** | Academic integrity is essential to learning. Students are expected to complete their own work. Copying, plagiarizing, cheating, or other methods of intentional deception are prohibited and could result in the student's removal from the class or iA entirely.<br><br>IA Policy-<br>1st Offense: The student will be contacted by the teacher via phone call, the student will be made aware of the plagiarism and examples of how this can be avoided will be discussed. Direct instruction on plagiarism will be delivered by the teacher. iA Administration and other teachers will be made aware of the plagiarism. The work must be redone without plagiarism.<br>2nd Offense: The student and parents will be contacted by the teacher directly and the student will have to complete the plagiarized assignment without plagiarism before moving on in the course. iA Administration will be made aware.<br>3rd Offense: The student will be withdrawn from the course or iA depending on the severity and/or frequency of the plagiarism. |
| **WAC**<br>***(Weekly Academic Contact)*** | WWashington State law requires students make Weekly Academic Contact (WAC). WAC is any type of contact or communication students have with teachers that is academic in nature. Students have a variety of ways to meet this requirement. They include: replying to iA Connect teacher's contact request (email/quiz); submitting an assignment; emailing teachers about class in iA Campus or Synergy; attending a virtual session or teacher's online office hours; sending your teacher a school related text message (if available); meeting a teacher or administrator on campus, in person. Students must contact iA connect teachers each week with an attendance check-in. Additionally, class teachers expect weekly assessment submissions.<br><br>Withdrawal for lack of Weekly Academic Contact (WAC) for 20 consecutive school days: |

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| | After 10-15 days without WAC, iA Connect teacher checks with class teachers to see whether WAC has been made in at least one class. If WAC has been made, 'clock' resets. If no WAC has been made, iA Connect teacher will send student and family a warning email and will call home. If no WAC by 20 days, iA Connect teacher checks to see one last time with class teachers. If there's been nothing, Admin will withdraw student; student may not re-enroll until the following school year. |
| **MAP** ***(Monthly Academic Progress)*** | State law also requires enrolled students to maintain monthly forward progress toward completing classes with success. Students are expected to complete one monthly module of at-standard work or have completed the teacher-prescribed plan as assigned by the certificated teacher of that course. If the assigned at-standard work is submitted, the student will be considered on pace (OP). If the assigned work is not submitted and/or is not at standard, the student will be considered behind pace (BP).<br><br>An overall Monthly Academic Progress (MAP) score will be emailed to every student and family once a month by the iA Connect teacher to communicate overall progress towards mastery and passing of the courses; law requires BP students to reply with confirmation of the MAP report and iA teachers to document that reply. If students don't immediately reply, teachers are obligated to keep trying for a reply through additional emails or phone calls. Replies must be from the student; parent replies are not sufficient.<br><br>Students are either On Pace (OP) or Behind Pace (BP). If a student is considered OP (by the individual teachers in individual courses) in 50% or more of their courses, they will be considered OP overall. If a student is considered behind pace (by the individual teachers in individual courses) in more than 50% of their courses they will be considered BP overall. If a student is determined to be BP for consecutive months, the iA Connect teacher will send escalating intervention plans each month by email.<br><br>BP1 means one month behind pace; intervention typically is new work pace plan.<br>BP2 means two months behind pace; intervention is typically a new work pace plan and directed teacher contact.<br>BP3 means three months behind pace; course reduction or withdrawal from iA (see below for greater detail).<br>BP4 means complete withdrawal from iA (see below for greater detail). Students withdrawn from iA at BP4 may not re-enroll until the following school year. |
| **Email/Software Agreements** | Students agree to maintain constant and consistent access to the technology and software needed to complete their iA courses. If the student cannot maintain constant and consistent access to needed technology, they will be withdrawn from iA. |
| **Professional Discretion** | Teachers reserve the right to make adjustments to the course, content, pacing, and expectations at any time. Students and parents will be notified via email of any changes made after the course has started. |