## EDUX 9902 <br> Amplify Your Impact

## Sample High School Log of Hours

Detail how you have completed at least $\mathbf{5 0}$ hours ( 2 credits/units), $\mathbf{7 5}$ hours ( 3 credits/units), 100 hours ( 4 credits/units), $\mathbf{1 2 5}$ hours ( 5 credit/units) or $\mathbf{1 5 0}$ hours ( 6 credits/units) of activities toward your goal(s).

Date: Enter a single date for each line. Dates must not be combined or provided in ranges
Goal/Category: Label each entry by a goal or category that is aligned with the goals listed on your Professional Learning Plan-- i.e. Curriculum Development, Collaboration, Lesson Modifications, Technology...

Activity: Describe the activity for each date in specific detail.
Note: On any given date, if you work longer than a half day, you must provide a detailed description of each activity completed.

Hours: Record the amount of time spent working on each activity. Round up to $1 / 4 \mathrm{hr}$. Hours that CANNOT be logged - any hours you are receiving compensation or other credits for, and/or any activity that can be completed by a non-professional volunteer and/or does not demonstrate graduate-level work.

If you listed either of the following activities on your Professional Learning Plan, please assign them the category labels:


#### Abstract

Aligning Classroom Environment to the Curriculum (max 10\%) encompasses activities where you are creating a learning environment to support the needs of your students. Professional Reading/Media (max 25\%) encompasses any reading, listening, or viewing of media sources to better your practice and/or learn evidence based strategies. Evidence to demonstrate MUST include detailed, synthesized notes of how you plan to implement your knowledge. Annotated texts alone are not sufficient evidence.


If you have any questions, please contact your coordinator.

I attest that this log is a true reflection of hours spent engaged in activities to reach my goal for this class and that I was not compensated in any manner for any of these hours.

I attest that all work is my own and was created for the purpose of this course.
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Use this chart to total your hours upon completion. Expand this chart as needed to include all your goals.

| Goal(s)/Categories | Hours |
| :--- | :--- |
| Goal \# 1: Familiarized with the IB and Precalculus curriculum, <br> develop complete lessons according to their standards. | 90 hours |
| Goal \# 2: Create and develop assessments based on BPS and <br> IB standards. | 61 hours |
| Please calculate Total Hours: | 151 hours |

* Folder containing General Course Documents.
* Folder containing IB materials.
* Folder containing Precalculus materials.

Please expand the table as needed.

| Date | Goal/ <br> Category | Activity (please cite specific examples) | Hours |
| :--- | :--- | :--- | :--- |
| $06 / 19$ | Goal \# 1 | Analyzing and familiarizing with precalculus curriculum | 2.5 |
| $06 / 21$ | Goal \# 1 | Develop 458-Precalculus Syllabus 23/24, including a book link for <br> students and calculator app for students without a graphing calculator at <br> home. | 2.3 |
| $06 / 26$ | Goal \# 1 | Developing precalculus lessons: first lesson about real numbers, <br> relations and functions, students will define key terms like: sets of <br> numbers, the coordinate plane, relation, input and output, domain and <br> range, and define function. | 2.5 |
| $06 / 29$ | Goal \# 2 | Develop lesson 1.1 assessment | 2 |
| $07 / 10$ | Goal \# 1 | Lesson 1.2 Mathematical Patterns where students will define a <br> sequence, sequence notation, recursive functions, create a graph of a <br> sequence. Apply sequences to real-world situations. | 2.5 |
| $07 / 12$ | Goal \# 2 | Lesson 1.2 assessment about Mathematical Patterns. |  |
| $07 / 13$ | Goal \#1 | Lesson 1.3 Arithmetic Sequence: students will identify and graph an <br> arithmetic sequence, find common difference, write an arithmetic <br> sequence recursively and explicitly, use summation notation, find the <br> nth term and the partial sum of an arithmetic sequence. | 3 |


| 07/13 | Goal \# 2 | 1.3 assessment about Arithmetic Sequence. | 2 |
| :---: | :---: | :---: | :---: |
| 07/14 | Goal \# 1 | Lesson 1.6 Geometric Sequences: students will recognize a geometric sequence, find a common ratio, graph a geometric sequence, write a geometric sequence recursively and explicitly, find partial sums of a geometric sequence. | 2.5 |
| 7/14 | Goal \# 2 | End of unit 1 with a project focus on geometric sequence | 2.5 |
| 07/17 | Goal \# 1 | New unit: Lesson 3.1 functions: students will determine whether a relation is a function, find the domain of functions, evaluate piecewise defined and greater integer functions. | 2.3 |
| 07/17 | Goal \# 2 | Assessment 3.1-Functions | 2 |
| 07/18 | Goal \# 1 | Lesson 3.2 - Graphs of Functions: students will determine whether a graph represents a function. Analyze graphs to determine domain and range, local maxima and minima, inflection points, and intervals where they are increasing, decreasing, concave up, concave down, graph parametric equations | 2.5 |
| 07/18 | Goal \# 2 | Assessment 3.2 Graphs of Functions | 2 |
| 07/19 | Goal \# 1 | Lesson 3.4-Graphs and Transformations: students will define parent functions, transform graphs of parent functions | 2.5 |
| 07/19 | Goal \# 2 | Assessment Project 3.4 Graphs and Transformations: students will work in groups to solve questions and create a poster to illustrate their math skills. | 2 |
| 07/20 | Goal \# 1 | Lesson 3.4 A - Excursion: Symmetry - students will determine whether a graph has $y$-axis, x -axis, or origin symmetry, determine whether a function is even, odd, or neither. | 2.3 |
| 07/20 | Goal \# 2 | Assessment 3.4-A - Excursion: Symmetry | 2 |
| 07/21 | Goal \# 1 | Lesson 3.5 Operations on Functions: students will form sum, difference, product, and quotient function and find their domains, form composite functions and fine their domains. | 3 |
| 07/21 | Goal \# 2 | Assessment 3.5 Operations on Functions. | 2 |
| 07/22 | Goal \# 1 | Lesson 3.6 Inverse Functions: students will define inverse relations and functions, find the inverse relations from tables, graphs, and equations, determine whether an inverse relation is a function, verify inverses using composition. | 2.5 |
| 07/22 | Goal \# 2 | Assessment 3.6 Inverse Functions | 2 |
| 07/22 | Goal \# 1 | Develop IB 12 - SL Syllabus including a link with the IB 12 curriculum | 2.3 |
| 07/24 | Goal \# 1 | The first topic is a review of the Pythagorean Theorem | 3 |


| $07 / 24$ | Goal \# 1 | Lesson 6.1 Right Triangle Trigonometry: define the six trigonometric <br> ratios of an acute angle in terms of a right triangle, evaluate <br> trigonometric ratios, using triangles and on a calculator. | 3 |
| :--- | :--- | :--- | :--- |
| $07 / 24$ | Goal \# 2 | Assessment 6.1 Right Triangle Trigonometry | 2 |
| $07 / 25$ | Goal \# 1 | Lesson 6.2 Trigonometric Applications: students will solve triangles <br> using trigonometric ratios, solve applications using triangles. | 2.3 |
| $07 / 25$ | Goal \# 2 | Assessment 6.2 Trigonometric Applications | 2.3 |


| $07 / 26$ | Goal \# 1 | Lesson 6.3 Angles and Radian Measure: students will use a rotating ray <br> to extend the definition of angle measure to negative angles and angles <br> greater than 180 degrees, define radian measure and convert angle <br> measures between degrees and radians. | 2.5 |
| :--- | :--- | :--- | :--- |
| $07 / 26$ | Goal \# 2 | Assessment 6.3 Angles and Radian Measure | 2.5 |
| $07 / 26$ | Goal \# 1 | Lesson 6.4 Trigonometric Functions: students will define the <br> trigonometric ratios in the coordinate plane. Define the trigonometric <br> function in terms of the unit circle. | 2.3 |
| $07 / 27$ | Goal \# 2 | Assessment 6.4 Trigonometric Functions | 2.5 |
| $07 / 27$ | Goal \# 1 | Review about the Unit Circle: students will write all angles in degrees <br> and radians on a 360 degrees diagram, and find the coordinate points of <br> sine, cosine, and tangent. | 2.3 |
| $07 / 28$ | Goal \# 1 | Lesson 6.5 Basic Trigonometric Identities: students will develop basic <br> trigonometric identities, simplify trigonometric expression using <br> reciprocal identities, Pythagorean identities, periodicity identities, and <br> negative identities. | 2.3 |
| $07 / 28$ | Goal \# 2 | Goal \# 1 | Assessment 6.5 Basic Trigonometric Identities. End of the Unit. |


| $08 / 01$ | Goal \# 2 | Assessment 7.3 Periodic Graphs and Amplitudes | 2 |
| :--- | :--- | :--- | :--- |
| $08 / 01$ | Goal \# 1 | Lesson 7.4 Periodic Graphs and Phase Shifts: students will state the <br> period, amplitude, vertical shift, and phase shift given the function rule <br> or graph of a sine or cosine function, use graphs to determine whether <br> and equation could possibly be an identity. | 3 |
| $08 / 01$ | Goal \# 2 | Assessment 7.4 Periodic Graphs and Phase Shifts. End of Unit | 2 |
| $08 / 02$ | Goal \# 1 | Lesson 10.1 Law of Cosines: Students will solve oblique triangles by <br> using the Law of Cosine. | 2.5 |
| $08 / 02$ | Goal \# 2 | Assessment: Project about the Law of Cosines: students will work in <br> group to solve problems using the Law of Cosines. | 2 |
| $08 / 03$ | Goal \# 1 | Lesson 10.2 Law of Sines: students will solve oblique triangles by <br> using the Law of Sines, use area formulas to find the area of triangles. | 2.5 |
| $08 / 03$ | Goal \# 2 | Assessment 10.2 Law of Sines | 2 |


| $08 / 04$ | Goal \# 1 | Lesson 4.5 Complex Numbers: Students will write complex numbers in <br> standard form. Perform arithmetic operations on complex numbers, <br> find the conjugate of a complex number. Simplify square roots of <br> negative numbers, find all solutions of polynomial equations. | 3 |
| :--- | :--- | :--- | :--- |
| $08 / 04$ | Goal \# 2 | Assessment 4.5 Complex Numbers. | 2 |
| $08 / 05$ | Goal \# 1 | Lesson 10.3 The Complex Plane and Polar Form for Complex <br> Numbers: students will graph a complex number in the complex plane, <br> find the absolute value of a complex number, express a complex <br> number in polar form, perform polar multiplication and division. | 3 |
| $08 / 06$ | Goal \#2 | End of unit assessment 10.3 The Complex Plane and the Polar form for <br> Complex Numbers. | 2 |
| $08 / 07$ | Goal \# 1 | Lesson 4.6 The Fundamental Theorem of Algebra: students will use the <br> Fundamental Theorem of Algebra, find complex conjugate zeros, find <br> the number of zeros of a polynomial, give the complete factorization of <br> polynomial expressions. | 2.5 |
| $08 / 07$ | Goal \# 1 | Lesson 5.1 Radicals and Rational Exponents: students will define and <br> apply rational and irrational exponents, simplify expressions containing <br> rational or radical exponents. | 2 |
| $08 / 08$ | Goal \#2 | Assessment 5.1 Radicals and Rational Exponents | 2 |
| $08 / 08$ | Goal \# 1 | Lesson 5.2: Exponential Functions: students will graph and identify <br> transformations of exponential functions, use exponential functions to <br> solve application problems. | 2.5 |


| 08/09 | Goal \# 1 | Lesson 5.3 Applications of Exponential Functions: students will create and use exponential models for a variety of exponential growth or decay applications problems, read, understand, and write solutions for word problems, | 2.3 |
| :---: | :---: | :---: | :---: |
| 08/10 | Goal \# 2 | Assessment 5.3 Applications of Exponential Functions. | 2 |
| 08/10 | Goal \# 1 | Lesson 5.4 Common and Natural Logarithmic Functions: students will evaluate common and natural logarithms with and without a calculator, solve common and natural exponential and logarithmic equations by using and equivalent equation, graph and identify transformations of common and natural logarithmic functions. | 2.5 |
| 08/11 | Goal \# 2 | Assessment 5.4 Common and Natural Logarithmic Functions | 2 |
| 08/11 | Goal \# 1 | Lesson 5.5 Properties and Laws of Logarithms: students will use properties and laws of logarithms to simplify and evaluate expressions. | 2.3 |
| 08/14 | Goal \# 2 | Assessment 5.5 Properties and Laws of Logarithms | 1.5 |
| 08/14 | Goal \# 1 | Lesson 5.5 A - Excursion: Logarithmic Functions to Other Bases: students will evaluate logarithms to any base with and without a calculator, solve exponential and logarithmic equations to any base by using an equivalent equation, identify transformations of logarithmic functions to any base, use properties and laws of logarithmic expression to any base. | 2.3 |
| 08/15 | Goal \# 2 | Assessment 5.5 A - Excursion: Logarithmic Functions to Other Bases. | 1.5 |
| 08/15 | Goal \# 1 | Lesson 5.6 Solving Exponential and Logarithmic Equations: students will solve exponential and logarithmic equations, solve a variety of application problems by using exponential and logarithmic equations | 2.3 |
| 08/16 | Goal \# 2 | End of unit assessment 5.6 Solving Exponential and Logarithmic Equations. | 2 |

