Academic Handbook
2018-2019

Revised 7/25/18

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ACADEMIC POLICIES

Pathways High offers a unique, project-based academic program. The mission of Pathways High is to provide students with rigorous and relevant academic and workplace skills, preparing its graduates for postsecondary success and productive citizenship. Pathways High school embodies the design principles of personalization, adult world connection, common intellectual mission, and teacher as designer.

Philosophy

Mastery of academic content and life skills (defined as EMPOWER skills) are at the foundation of Pathways High's learning philosophy. We believe mastery is best measured by student projects, not standardized tests. Furthermore, we believe traditional school's approach of assigning standards to specific grade levels (eg. 9, 10, 11, 12th grades) is arbitrary.

At Pathways High all academic standards and EMPOWER skill standards are mapped to student work and credit is given to students whenever credit is due. In other words, only demonstration of student's mastery of a specific target either inside or outside the classroom, not a student's grade level, determines when credit is given. Therefore, 9th grade students can demonstrate mastery and receive credit for 11th grade standards and vice versa. Everyone learns at different rates and standard mastery and credit attainment is a fluid continuum over a student's time at Pathways High.

Lastly, at Pathways High we know that supporting our students' pursuit of individual's passions can lead students to achieve mastery beyond the typical high school level for specific disciplines. Our personalized approach to learning enables all students to pursue unique pathways to success in postsecondary education, career and life.

Code of Academic Integrity

Pathways High students, united in a spirit of mutual trust and fellowship, mindful of the values of a true education and the challenges posed by the world, agree to accept the responsibilities for honorable behavior in all academic activities, to assist one another in maintaining and promoting personal integrity, and to follow the principles and procedures in this Code of Academic Integrity.[1]

Violations of the Code of Academic Integrity may take several forms. Plagiarism and cheating are two examples of violations of the Code of Academic Integrity. Plagiarism is typically described as duplication of another's work without full acknowledgement of the debt to the original source, however, it also includes any of the following:[2]

- Direct duplication by copying (or allowing to be copied) another's work, whether from a book, article, Web site, another student's assignment, etc.;
- Duplication in any manner of another's work during an exam;
- Paraphrasing of another's work closely, with minor changes but with the essential meaning, form and/or progression of ideas maintained;

[1] https://honorcode.nd.edu/the-honor-code/

[2] https://ori.hhs.gov/plagiarism-0

- Piecing together sections of the work of others into a new whole;
- Submitting one's own work which has already been submitted for assessment purposes in another subject; and/or,
- Producing assignments in conjunction with other people (e.g. another student, tutor), which should be your own independent work.

Cheating results in a loss of integrity on the part of the individual committing the act and on the educational process that is undermined by the act of cheating. It is a violation of the Code of Academic Integrity for any student to attempt to gain or gain an unfair advantage over another student by unfair or dishonest means. If a student is unclear about an assignment, the methodology for the same or the permissible bounds of assistance for completing your work please speak to your teacher(s) and ask for clarification.

Consequences for not following the academic code of conduct may result in restoring one's integrity by appearing before a body of peers to determine consequences, developing a plan of action to ensure future success with the Code of Academic Integrity, submitting work again to ensure compliance with the Code of Academic Integrity and/or other restorative justice practices determined by the administration of the school.

Homework Policy

As a project based learning model it would be unusual for students to have significant homework beyond reading. However, if students do not manage their time effectively they may have work that needs to be done outside of school hours in order to meet project deadlines.

Testing Policy

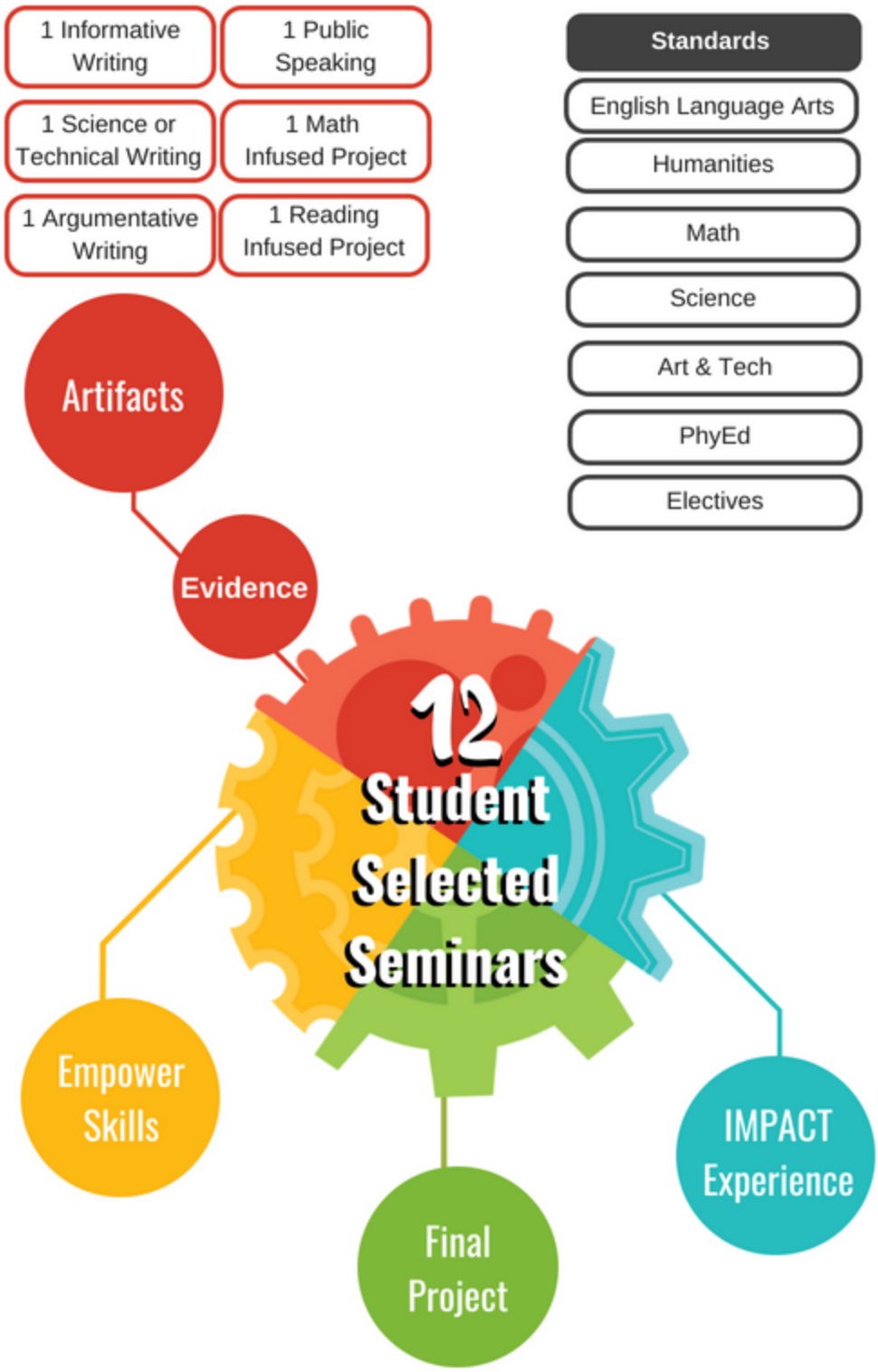
Students will be taking MAP testing twice a year to measure growth throughout the academic year as required by UW-Milwaukee, our chartering authority. The department of instruction requires Sophomores participate in the state standardized test. Sophomores will take the ACT Aspire test. Juniors will take the ACT test. For students who wish to prepare for the ACT test online courses will be available.

SEMINARS: DELIVERY OF INSTRUCTION

The Pathways High curriculum is a standard liberal arts curriculum suitable for any competitive, college bound student. Our curriculum does not teach courses in a traditional, year-long, single discipline format. Instead, courses are delivered in real-world context with interdisciplinary units of study called seminars.

All courses have a predetermined set of standards and are shown as courses on the final school transcript. The student schedule will show seminars selected and although the times of the schedule won't change the seminars selected will change every 9 weeks. Students will work with their advisors to determine which seminars fit the standards needed for course completion.

Seminars include 5 key components; Academic Standards, EMPOWER Skill, IMPACT Experience, Final Project and Digital Portfolio Artifacts. Students will also write a seminar reflection at the end of each seminar.


1 Informative Writing
1 Public Speaking
1 Science or Technical Writing
1 Math Infused Project
1 Argumentative Writing
1 Reading Infused Project
Standards
English Language Arts
Humanities
Math
Science
Art & Tech
PhyEd
Electives
Artifacts
Evidence
12 Student Selected Seminars
Empower Skills
Final Project
IMPACT Experience

Academic Standards

Pathways High uses a mastery of standards-based model to award credit for all courses offered at our facility; ***not*** seat time. This is different from the traditional time-based systems of awarding credit where students get credit for being in the class for a certain amount of days (regardless of the work performed). This system is known as Carnegie Units and was established at the turn of the 20th Century.

Our model requires that students complete a series of predetermined standards for each course credit earned. Standards can be completed in any order. In order to receive full credit students must have at minimum proficiency or mastery for 76% of the standards, unless otherwise stated. Student who remain at Pathways High through completion will have until the end of their Junior year to reach Proficiency or Mastery in core and secondary required courses. Students will receive credit for required seminars upon completion of the seminar at a Proficient or Mastery level.

Coming to Pathways High is a commitment and leaving early may result in failure to complete courses at even partial credit.

Standards - Measures of "Key Learnings"

Standards represent the "key learnings" that will prepare students for postsecondary success. Teachers design seminars to enable students to develop the skills and knowledge necessary to master the standards. Students are assessed based on their demonstration of learning by submitting evidence of knowledge for each standard. .

The following criteria was used to identify our standards:

- Endurance: Standards that provide students with knowledge and skills for application in the real world
- Leverage: Standards that provide knowledge and skills that will be valuable in multiple disciplines or content areas. For example, technical writing prepares a student not only for writing but science, social studies, and more
- Readiness: Standards that provide knowledge and skills for success for the next level of instruction

Standards are reviewed and adjusted as needed on a yearly basis or when the Department of Instruction releases updated course standards. Standards for each course are tracked in myLC and an at home checklist is also included in our Course Details & Standards below.

Standard Mastery and Student Accountability

At Pathways High, all student work is held to high standards. Public evidence of student learning is presented in live public exhibitions of students' work held twice a year. There is tremendous incentive to do one's best work when one must publicly stand by the work and be held accountable by many as opposed to a single teacher.

Similarly, research abounds that the retention of learning is far greater when one actively wrestles with solving problems as opposed to being shown how to solve the problem, memorizing and then

regurgitating the solution. Therefore, traditional written “tests” of learning are not common at Pathways High. As a public high school, we are required by the Wisconsin Department of Public Instruction (DPI) and UW-Milwaukee, our charter authorizer, to administer certain standardized tests, including MAP (Measures of Academic Progress) and ACT/Aspire.

During Seminars students must produce evidence that shows understanding and application for each academic standard. Most courses at Pathways High will include between 8-12 standards. The quantity of evidence required will vary based on when a student reaches mastery or proficient on each standard. If a student needs to continue working on a standard, because they are in progress, teachers will work with students on a path to proficient or mastery. Evidence will be submitted in our Learning Management Software, myLC. Parents can login to myLC, using their students login, account at any time to see progress.

EMPOWER Skills

At Pathways High, we believe that EMPOWER skill mastery leads to the development of exceptional adults. We define exceptional adults as collaborative problem solvers, innovative thinkers, stewards of natural resources, thoughtful risk-takers and engaged citizens who give back to their communities.

- **Evidence:** Student selects relevant data or documentation to prove mastery of personal or group goals.
- **Mindfulness:** Student develops an awareness of personal strengths and motivations to understand their effects.
- **Problem Solving:** Student demonstrates the ability to use critical thinking to form, evaluate, and implement solutions.
- **Ownership:** Student accepts full or shared responsibility for the success or failure of work.
- **Working Together:** Student uses written and verbal communication to create consensus in high risk situations.
- **Exploring Perspective:** Student incorporates multiple points of view to support and develop work.
- **Refinement:** Student integrates critiques and peer reviews as part of improvement process.

IMPACT Experiences

IMPACT experiences are an extension of each seminar. At Pathways High, we consider IMPACT experiences, real world connections, to be a necessary component of the education program. In order for students to participate in experiences outside of the building, we expect them to follow classroom and school rules regularly as well as maintain a positive attitude. We expect students to recognize the importance of building and maintaining a sterling reputation for themselves, the school, and the greater community of Milwaukee.

Final Project

Every seminar will have a final project due. A project is the tangible result of the creative process in the seminar. It’s a way of making learning visible.

Digital Portfolio Artifacts

Artifacts are pieces of evidence that publicly demonstrate student's mastery of essential skills in a digital portfolio. A final portfolio of the best artifacts will be used in college admissions or as part of a resume for the workforce. The following artifacts will be collected on a yearly basis and stored in an electronic portfolio to show student growth.

Artifacts include:

- 1 Informative Writing
- 1 Argumentative Writing
- 1 Narrative Writing
- 1 Science/Technical Writing
- 1 Public Speaking (Podcast, Theatre, Speech, Video)
- 1 Math Infused Project
- 1 Reading Infused Project

ADVISORY

The Advisory program provides students an opportunity to form connections at Pathways High through a small, supportive community of students that is guided by an academic advisor. Advisory meets every day. The same advisor will guide them through their four or five-year experience and serves in a “learning-coach” role, with the primary emphasis on helping students navigate our academic program. The advisor has the greatest influence over schedule and will help the student with course goals and seminar selection. Students are expected to eventually monitor their own transcripts and course progress, however advisors will assist students with the process.

In addition, the advisory time focuses on EMPOWER standards and skills building and includes topics and themes such as academic and career planning, respect, leadership and citizenship. Parents are strongly encouraged to connect with their child’s advisor early and often.

- **Student Support:** Advisors know all students well and support them on their career and academic goals. Examples of this type of support includes conducting weekly grade checks, creating vision boards, and helping students update MyLC. In addition, student to student support will be structured within the multi-age advisory.

- **College Awareness:** Advisors help facilitate college awareness through research, college trips, supporting the personal statement process, familiarizing the college, financial aid, and scholarship applications, and connecting students to extracurricular activities.

- **Community Building:** Advisors create a safe space for students to share and support one another through team building activities, challenges, and lessons. With the help of students, they design fun games, traditions, and rhythms for community building.

GRADUATION REQUIREMENTS

Pathways High offers a curriculum that allows each student to work on a continuum, at a pace that matches his/her own learning style and ability.

Basic Diploma

A Basic diploma will prepare students for multiple postsecondary pathways including, but not limited to 2-year and 4-year college degree programs. Students pursuing the Basic diploma will be well equipped with the academic and EMPOWER skills necessary for success in college and beyond. Basic diploma students will also be exposed to additional elective courses and students in good standing are eligible to take 1 dual enrollment college courses per a semester beginning in their senior year at Pathways High.

IMPACT Year & Diploma

Pathways High believes strongly that an additional year will provide the time and transition support needed by many students to bridge their entrance into postsecondary education and careers. IMPACT diploma students have the opportunity to design a fifth/IMPACT year. Various opportunities will be available for our IMPACT year students including, but not limited to, additional apprenticeships or internships, certification programs and up to 2 dual enrollment courses per a semester. During the IMPACT year students spend the majority of their time outside of Pathways High both working in an industry/career of interest as well as pursuing coursework required for careers in the industry of interest.

In the 4th year of study, students and advisors work collaboratively to design the optional IMPACT year as a supported launch to adulthood. Students identify how they plan to make an impact on the world, and with the aid of staff, create goals for growth and change, processes necessary to be successful, and how to reflect on experiences. Students will work with Pathways High to come up with a clear course of action for students to take ownership of their transition into adulthood and experiences after their Pathways High education. The IMPACT Year is intended to be highly personalized. Students are required to design a Capstone project for this year which includes a give back to the local, national or global community. Students will also showcase critical thinking skills, ability to identify, plan for and explore challenging problems, EMPOWER Skills outside of the school and connections to the community.

Dual Enrollment

Pathways High eligibility requirements: (Subject to change)

- Good academic standing
- Consistent attendance
- Good behavioral standing
- Signed Dual Enrollment Contract (Outline of Pathways High expectations)
- Completion of one semester at Pathways High

Dual enrollment classes are available at UW-Milwaukee, MSOE, and MATC and each have their own set of specific eligibility requirements. Students should discuss this with their advisors

Pathways High will pay for 1 college courses each semester for Seniors and 2 each semester for IMPACT year. Students can't "bank" unused classes.

Students are responsible for providing their own transportation to and from the college or university.

Pathways High will cover the costs of book rental or purchase (used if available.) All purchased class materials remain the property of Pathways High after course completion.

Students must receive a grade of "C" or better in their college course or will be required to re-pay the cost of tuition and supplies back to Pathways High.

We support students learning at different rates and with different interests, so the ability to personalize access to college courses is available prior to a student's senior year, but on a case by case basis.

Parents have the option to pay for additional courses during the summer or school year. For additional courses taken during the school year please discuss with your student's advisor prior to scheduling.

Course Credit Requirements for Graduation	Basic Diploma	IMPACT Diploma (5th year)
Science Life Science, Physical Science, 1 Credit Student Choice	3	3
Math Algebra I, Geometry, Algebra II	3	3
Humanities Civics, Personal Finance, US History,World History	3	3
English & Language Arts Grammar, Communication, Composition, Non Fiction Literature, Fiction Literature	4	4
Technology & Design Student selected from Art History, Design, Community Interdisciplinary Arts, 2D Arts Foundations, 3D Art Foundations, Drawing & Painting, Advanced Portfolio Design	2	2
PhyEd Student selected from Lifetime Fitness, Recreation Sports, Fitness Conditioning, Physical Education	1	1
Required Seminars A Healthy You, Entrepreneurship, Global Citizenship, Internship and Innovation Project	5	5
Student Selected Electives • See Course Portfolio for options	5	5
IMPACT Year		4
TOTAL	26	30

GRADING AND COURSE COMPLETION POLICIES

Students at Pathways High do not receive traditional grades. Instead each standard, as part of a course or required/elective seminar, will receive a level of mastery. Each standard has an individual rubric that indicates what students must meet to receive Proficiency or Mastery. See the detailed course standards.

Grades

Level of Mastery	Description
Opportunity Not Taken (**ONT**)	Students have been exposed to the standard, but didn't complete any work to show their level of understanding. No course credit is earned.
In Progress (**IP**)	Students have shown evidence but are still working towards proficiency. No course credit is earned for IP standards. Students will receive an evidence score but a final score will not be entered until they reach M or P.
Proficient (**P**)	Students have consistently shown they have a proficient knowledge of the standard.
Mastered (**M**)	Students have a deeper understanding of the standard. Students are encouraged to continue working toward mastery before submitting the course for credit with the Wisconsin Department of Instruction. Students have until the end of their Junior Year to gain mastery on courses complete at the end of Junior year. Transcripting will happen again at the end of senior year.

Course Completion Policy

Course completion doesn't begin to calculate until a student has at least 1 standard within a course marked with a final grade of proficient or mastered.

Pathways High will transcript all students at the end of their Junior year and at the end of senior year. This gives students time to continue to work towards mastery.

Should a student need to leave Pathways High prior to completion of a course, credit will be provided based on the amount of credit completed as well as the culminating level of mastery. For courses that are still in progress students will receive a Basic level of mastery. The teacher of record for the course will determine if the student has met enough standards to receive credit. If the amount of standards completed falls below the minimum the range below then no credit will be awarded.

1 Credit Course

Min. Standard Completion	Max Standard Completion	Credit Awarded	Accumulated Mastery Level
.4 in myLC	.75 in myLC	.5	Proficient or Mastery
.76 in myLC	1.0 in myLC	1	

.5 Credit Course

Min. Standard Completion	Max Standard Completion	Credit Awarded	Accumulated Mastery Level
.375 in myLC	.5 in myLC	.5	Proficient or Mastery

GOOD ACADEMIC STANDING

The following indicates the number of Proficient or Mastered standards/credits needed yearly

Subject	Yearly Minimum Needed				Total	Required Credits
	F	S	J	Sr		
Science	6	6	6	6	23 Standards	3
Math	9	9	9	9	34-38 Standards	3
• **ALEKS Math**	90%	90%	90%		Mastery of Course	
Humanities	7	7	7	7	28 Standards	3
ELA	9	9	9	9	37 Standards	4
Technology and Design	4	4	4	4	16 Standards	2
PhyEd	3	3	3	3	10 Standards	1
Required Seminars • Innovation Project, A Healthy You, Global Citizenship, Internship and Entrepreneurship	2 cr	1 cr	1 cr	1 cr	5 Credits	5
Student Selected Electives	1 cr	1 cr	2 cr	1 cr	5 Credits	5

LEARNING MANAGEMENT SOFTWARE, myLC

All students are expected to use myLC daily to access seminar resources, syllabi, add evidence of learning and to monitor their progress. Parents have access to myLC at mylcsolution.com, student login page. Parents can access myLC by logging into their students school gmail account and click sign in with google.

The student dashboard will show progress and data for individual goals, overall credit for the year, EMPOWER standard growth and attendance. The dashboard is set up with a green, yellow, red badge system. Starting in mid October student's goals should be yellow or green and continue to be so throughout the year. This indicates they are on track or close to on track in each course. We would like to see all students green on their dashboard but students may sometimes be yellow and still doing well. Yellow indicates they are still growing and should be aware of their status and reach out for help. If a student is yellow or red their advisor will be working with them to gain strategies to move to

green. Red should be a warning sign that a student needs help. They may need to complete assigned work, miss less class or be more organized. Parents can monitor students progress more closely by clicking on student goals and overall credit badges. This will take you to a more detailed screen showing specific credit growth in each course they are working on. This screen also uses a green, yellow, red system to see if they are on track.

Another screen to monitor is the graduation progress screen listed under progress on the toolbar at the top of the student screen. The graduation progress screen will help students and parents see if they are on track for graduation. It's important to keep in mind students are acquiring credit throughout multiple seminars so there will be some courses finished throughout 4 years instead of at the end of the school year. This will be reflected in their individualized goals. This also means students might move ahead on one goal and be behind on another goal but should balance out by the end of the school year and/or by graduation. Students will work with their advisors during advisory to make sure they are on track for the end of the year. If a student is not on track, teachers, advisors and administration will reach out to you.

Students will use myLC to upload digital evidence and artifacts of their learning for seminars and required courses. Students will use myLC to create portfolios of work toward each standard throughout the time working on any course. Once a student reaches proficient (P) or mastery (M), the standard will get a final marking and that standard will be complete. If a student has not reached proficient or mastery they will be marked in progress (IP) on their evidence in myLC and will be expected to continue submitting evidence toward that standard. All evidence turned in to myLC will be scored but a final score will not be put in unless the student achieved proficient or mastery level. Final scores will create positive progress on goals and graduations progress. If a student did not turn in assigned work for any standard it will be marked opportunity not taken (ONT) on the standard. You can see individual scores by clicking on a course from the goal page or overall progress page on the dashboard. You can also see these scores by clicking on courses through the graduation progress page. Please email student advisors if you need assistance understanding what you are seeing on myLC.

COURSE DETAILS & STANDARDS

Required Academic Courses, 13 Required Credits

Science **3 Credits** **(23 Standards)**	**Math** **3 Credits** **(ALEKS Completion)** Placement determined on ALEKS Pre-test	**Humanities** **3 Credits** **(28 Standards)**	**ELA** **4 Credits** **(37 Standards)**
Physical Science 7 Standards, 1 Credit **Life Science** 8 Standards, 1 Credit **Student Selected from Elective Options**	**Algebra**[3] 10 Standards, 1 Credit **Geometry** 12 Standards, 1 Credit **Algebra II** 12 Standards, 1 Credit	**Civics** 5 Standards, .5 Credit **Personal Finance** 5 Standards, .5 Credit **US History** 9 Standards, 1 Credit	**Fiction Literature** 8 standards, 1 Credit **Non Fiction Literature** 9 standards, 1 Credit **Composition** 10 standards, 1 Credit

[3] Students who pass the ALEKS pretest for Algebra I at 90% or more and haven't previously received Algebra I credit will receive 1 Credit.

8 Standards, 1 Credit	**Honors Algebra** 12 Standards, 1 Credit **Honors Geometry** 14 Standards, 1 Credit **Honors Algebra II/Trig** 12 Standards, 1 Credit	**World History** 9 Standards, 1 Credit	**Communications** 5 standards, .5 Credit **English Grammar** 5 standards, .5 Credit

Secondary Courses, 3 Credits

(Minimum credit for each is listed below and based on student choice. Additional credit counts as student selected electives.)

Student Selected Phy-Ed At least 1 Credit	**Student Selected Technology and Design** At least 2 Credit	
Lifetime Fitness 5 Standards, .5 Credit **Recreation Sports** 5 Standards, .5 Credit **Fitness & Conditioning** 5 Standards, .5 Credit **Physical Education** 5 Standards, .5 Credit	**Art History** 4 out of 6 Standards,.5 Credit **Design** 4 Standards, .5 Credit 8 Standards, 1 Credit **Community Interdisciplinary Arts** 4 out of 6 Standards,.5 Credit **2D Art Foundations** 4 Standards, .5 Credit 8 Standards, 1 Credit	**3D Art Foundations** 4 Standards, .5 Credit 8 Standards, 1 Credit **Drawing & Painting** 4 Standards, .5 Credit 8 Standards, 1 Credit **Advanced Portfolio in Art and Design** 7 Standards, 1 Credit (All Standards Required)

Impact Courses 5 Credits

All electives are 1 credit each and can be taken during the noted grades below. Note: The Innovation Project will be required starting with the class of 2021.

Global Citizenship, Social Justice & Equity (9th/10th)	**Entrepreneurship & Marketing** (9th/10th)	**Internship or Apprenticeship** (11th/12th Only)	**A Healthy You: Nutrition, Relationships & Your Digital Self** (11th/12th Only)	**The Innovation Project** (11th/12th Only)

Student Selected Electives, 5 Credits

- Dual Enrollment Courses
- Internships/Apprenticeships
- Additional Technology & Design or PhyEd courses
- Academic Elective Options

Academic Elective Course Options

Science	Math	Humanities	ELA
Engineering 4 Standards, .5 Credit **Anatomy & Physiology** 4 out of 5 Standards, .5 Credit **Advanced Physical Science** 4 out of 6 Standards, .5 Credit **Ecology** 4 out of 7 Standards, .5 Credit **Chemistry** MATC HS Course, 1 Credit	**Statistics 1** 5 Standards, .5 Credit **Statistics 2** 4 Standards, .5 Credit **Precalculus 1** 6 Standards, .5 Credit **Trigonometry** 5 Standards, .5 Credit	**Geography** 4 out of 6 Standards, .5 Credit **Behavior Studies** 4 out of 6 Standards, .5 Credit **Criminal Justice** 4 Standards, .5 credit **Economics** 4 out of 7 Standards, .5 Credit	**English Language and Literature Independent Study** 4 out of 6 Standards, .5 Credit **Literature of Theme** 4 out of 6 Standards, .5 Credit **Research & Technical Writing** 4 out of 6 Standards, .5 Credit **Creative Writing** 4 out of 6 Standards, .5 Credit

COURSE STANDARDS

Science

Students are required to complete 3 credits. Courses include Life Science, Physical Science and students can choose 1 credit from Student Selected Science Electives below. Students who plan to enter the fields of Engineering, Medical or Science will need to take Chemistry. Chemistry will be offered at the MATC High School. Science standards include both WI Science Standards and Next Generation Science Standards.

Life Science

Last Update: 7/2/18

1 Credit, 8 Standards

Life Science covers the basic principles of life and life processes. These topics may include cells, species, ecosystems, reproduction, genetics, or other topics consistent with state academic standards for life science.

Standard	IP	P	M
Photosynthesis Describe the process of photosynthesis			
The Carbon Cycle Outline how cellular respiration and photosynthesis uses carbon			
Cellular Respiration Describe the process of cellular respiration			
Evolution			

Outline how and why evolution occurs			
DNA Describe and outline the function DNA			
Natural Selection Describe natural selection			
Ecosystems Describe how ecosystems function			
Human Impact on the Environment Describe how humans impact the environment			

Physical Science

Last Update: 6/7/18

1 Credit, 8 Standards

Physical Science involves study of the structures and states of matter. Typically (but not always) offered as introductory survey courses, they may include such topics as forms of energy, wave phenomenon, electromagnetism, and physical and chemical interactions.

Standard	IP	P	M
The Periodic Table Describe the periodic table and the trends which are present			
Designing Molecules Outline how molecules are combined			
Properties of Atoms Describe how atoms are arranged and their chemical properties			
Transfer of Energy Outline how energy is transferred			
Heating up Reactions Describe how temperature can alter chemical reactions			
Chemical Equilibrium Describe how equilibrium is created			
Chemical Reactions Describe how chemical reactions work			
Newton's Second Law Justify Newton's second law of motion: F=ma			

Math

The purpose of the independent mathematics courses through ALEKS is to provide all students with the knowledge and skills necessary to become independent, mathematically minded thinkers in a world that is increasingly more dependent on the usage of mathematics. Students are required to complete 3 years of mathematics study, which will provide a minimum of 3 course credits. However, we strongly encourage students to continue their studies in mathematics after the 3 credits are completed. Math standards include both the ACT Math standards and Wisconsin Common Core Math Standards.

Algebra I

Last Update: 7/2/18
1 Credit, 10 Standards

Algebra I is an introductory mathematics course, unless the student places into a higher-level math course based on ALEKS Initial Knowledge Check. The following topics are included: the language of algebra, properties of the real number system, solving and graphing of linear equations and inequalities in one and two variables, addition, subtraction, multiplication, and division of polynomials, factoring of polynomials, functions and the solution of quadratic equations.

Standard	IP	P	M
Interpret the structure of expressions			
Write expressions in equivalent forms to solve problems			
Create equations that describe numbers or relationships			
Understand solving equations as a process of reasoning and explain the reasoning			
Solve equations and inequalities in one variable			
Solve systems of equations			
Understand the concept of a function and use function notation			
Interpret functions that arise in applications in terms of the context			
Extend the properties of exponents to rational exponents			
Reason quantitatively and use units to solve problems			

Advanced Algebra I

Last Update: 7/2/18
1 Credit, 12 Standards

Algebra I is an introductory mathematics course, placement into the honors section is based on ALEKS Initial Knowledge Check. A special emphasis is placed on word problems, graphing, factoring, solutions of quadratic equations, radicals, and determinants. The following topics are included: the language of algebra, properties of the real number system, solutions of linear equations and inequalities in one and two variables, addition, subtraction, multiplication, and division of polynomials, factoring of polynomials, functions, roots, radical expressions, and the solution of quadratic equations.

Standard	IP	P	M
Write expressions in equivalent forms to solve problems			
Rewrite rational expressions			
Create equations that describe numbers or relationships			
Understand solving equations as a process of reasoning and explain the reasoning			
Solve equations and inequalities in one variable			
Solve systems of equations			
Understand the concept of a function and use function notation			
Interpret functions that arise in applications in terms of the context			
Experiment with transformations in the plane			
Extend the properties of exponents to rational exponents			
Use properties of rational and irrational numbers			
Reason quantitatively and use units to solve problems			

Algebra II

Prerequisite: Algebra I
Last Update: 7/2/18
1 Credit, 12 Standards

Algebra II is a continuation of the Algebra I course, with more development in the study of linear equations and inequalities, graphing of constant, linear, and quadratic equations; solving linear and quadratic equations and inequalities. Course topics include operations with rational and irrational expressions; factoring of rational expressions; synthetic division and solutions of higher degree equations, matrices, relations, functions and their graphs, systems of equations in two or more variables, complex numbers, and operations with polynomials.

Standard	IP	P	M
Perform arithmetic operations on polynomials			
Understand the relationship between zeros and factors of polynomials			
Understand solving equations as a process of reasoning and explain the reasoning*			
Solve equations and inequalities in one variable			
Solve systems of equations			
Represent and solve equations and inequalities graphically			
Interpret functions that arise in applications in terms of the context			
Experiment with transformations in the plane			
Perform arithmetic operations with complex numbers			
Represent complex numbers and their operations on the complex plane			
Use complex numbers in polynomial identities and equations			
Perform operations on matrices and use matrices in applications			

Advanced Algebra II

Prerequisite: Honors Algebra I
Last Update: 7/2/18
1 Credit, 12 Standards

Honors Algebra II is a continuation of the Honors Algebra I course and an introduction to trigonometry. Course topics include operations with rational and irrational expressions; factoring of rational expressions; synthetic division and solutions of higher degree equations, matrices, relations, functions and their graphs, systems of equations in two or more variables, complex numbers, and operations with polynomials. This course places emphasis on the real number system and coordinate geometry and functions as a foundation for trigonometric ratios, linear and quadratic functions, circle relations, right triangles, inequalities, graphs of the trigonometric functions, exponential and logarithmic functions, properties of the trigonometric functions (a strong emphasis is placed on trigonometric identities).

Standard	IP	P	M
Understand the relationship between zeros and factors of polynomials			

Build a function that models a relationship between two quantities			
Extend the domain of trigonometric functions using the unit circle			
Model periodic phenomena with trigonometric functions			
Prove and apply trigonometric identities			
Define trigonometric ratios and solve problems involving right triangles			
Apply trigonometry to general triangles			
Use coordinates to prove simple geometric theorems algebraically			
Perform arithmetic operations with complex numbers			
Represent complex numbers and their operations on the complex plane			
Use complex numbers in polynomial identities and equations			
Perform operations on matrices and use matrices in applications			

Geometry

Prerequisite: Algebra I
Last Update: 7/2/18
1 Credit, 12 Standards

Geometry is a required one-year course, this course may be taken following Algebra I or Algebra II. The topics included are: methods of direct and indirect proof, postulates and theorems on lines, planes, or space, parallel and perpendicular lines and planes, angles, congruences, similarities of triangles, polygonal regions, areas, circles, spheres, sectors, and volumes of solids.

Standard	IP	P	M
Extend the domain of trigonometric functions using the unit circle			
Experiment with transformations in the plane			
Prove geometric theorems.			
Make geometric constructions			
Understand similarity in terms of similarity transformations			
Prove theorems involving similarity			

Define trigonometric ratios and solve problems involving right triangles			
Understand and apply theorems about circles			
Find arc lengths and areas of sectors of circles			
Use coordinates to prove simple geometric theorems algebraically			
Explain volume formulas and use them to solve problems.			
Apply geometric concepts in modeling situations			

Advanced Geometry

Prerequisite: Honors Algebra I or completion of Algebra I with mastery across all standards at 90% or above

Last Update: 7/2/18

1 Credit, 14 Standards

The course content includes the material covered in *Geometry* with a special emphasis on the geometry of three dimensions. This course is designed to teach students to reason logically through the use of rigorous formal proofs of theorems. The proofs are based on the Laws of Algebra, defined terms, a reasonable set of postulates, and any previously proved theorems. Proofs are accomplished without making any unnecessary assumptions, accompanied by a constructed figure, and required to be as short as possible without being incomplete.

This course endeavors to tie together the elements of geometric figures and objects with the facile use of algebra, and at the same time to bridge the gap that exists between students' current knowledge and their future needs. The intent of the course is to develop the discipline and confidence necessary to solve difficult problems.

Standard	IP	P	M
Use polynomial identities to solve problems.			
Extend the domain of trigonometric functions using the unit circle			
Prove and apply trigonometric identities			
Understand congruence in terms of rigid motions			
Prove geometric theorems.			
Prove theorems involving similarity			
Define trigonometric ratios and solve problems involving right triangles			

Apply trigonometry to general triangles			
Understand and apply theorems about circles			
Find arc lengths and areas of sectors of circles			
Translate between the geometric description and the equation for a conic section.			
Explain volume formulas and use them to solve problems.			
Visualize relationships between two-dimensional and three-dimensional objects			
Apply geometric concepts in modeling situations			

Humanities

Students are required to complete 3 credits. Humanities standards are from the newly released WI Social Studies Standards and WI Personal Finance Standards. Students are required to take the Citizenship Test prior to graduation as required by the WI DPI.

Personal Financial Literacy

Last Update: 7/2/18

.5 Credit, 5 Standards

Students will be provided with an understanding of the concepts and principles involved in managing one's personal finances. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection.

Standard	IP	P	M
Financial Planning Understand the relationship between education, income, career, and desired lifestyle and will develop the planning skills needed to achieve desired financial goals.			
Personal Budgeting Manage money effectively by understanding and developing financial goals and budgets.			
Debt Make informed decisions about incurring debt and will manage indebtedness to remain both creditworthy and financially secure.			
Saving and Investing Understand the value, features, and planning processes associated with saving and investing, and be able to apply this knowledge to long term			

financial security and wealth.			
Using Economics in Life Know and use available consumer resources and make responsible choices by applying economic principles in their consumer decisions.			

Civics

Last Update: 7/2/18
.5 Credit, 5 of 8 Standards

Civics will examine the general structure and functions of American systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system. Students will be required to take the citizenship test upon course completion.

Standard	IP	P	M
Values & Principles of American Constitutional Democracy Analyze how constitutionalism attempts to preserve fundamental societal values, protects individual freedoms and rights, promotes the general welfare, and responds to changing circumstances and beliefs by defining and limiting the powers of government.			
Origins & Foundation of the Government of the United States Evaluate the work and actions of historically significant people and their contributions to the founding principles of the United States.			
Civil Rights and Civil Liberties Analyze the constitutional tension between protecting individual rights and promoting the general welfare and security of the country, as well as between majority rule and minority rights.			
Fundamentals of Citizenship Assess the difference in constitutional and legal protections for citizens vs. noncitizens.			
Linkage Institutions Evaluate civic institutions and explain how competing interests impact societal change (e.g., lobbying, citizens groups, special interest groups).			

US History

Last Update: 7/2/18
1 Credit, 9 Standards
Study 6 of 9 Eras

Students will be provided with an overview of the history of the United States, examining time periods from discovery or colonialism through World War II or after. These courses typically include a historical overview of political, military, scientific, and social developments. Course content may include a history of the North American peoples before European settlement.

US History Eras, Must study 6 of 9 era's.

Before 1607	First People and Nations
1607 - 1754	Meeting of Peoples and Cultures
1754 - 1800	American Revolution and Early National Period

1800 - 1861	Nationalism, and the Growth & Expansion of Slavery in an Expanding Country
1870 - 1930	Industrialization, Urbanization, Labor, and Immigration
1861 - 1877	Civil War and Reconstruction

1890 - 1945	The Progressive Era , Prosperity and Depression, and World Wars
1945 - 1980	Post-War Economic & Population Growth, Suburbanization, the Cold War, and Civil Rights
1980 - Present	Present The Modern Era

Standard	IP	P	M
Perspectives Through Documents Evaluate multiple events from different perspectives using primary and secondary sources, and analyze intended and unintended causes from both long- and short-term perspectives.			
Historical Cause & Effect Evaluate multiple intended and unintended long- and short-term effects, and evaluate how different groups were affected in different ways.			
Themes in History Evaluate a variety of sources to apply knowledge of major eras, enduring themes, turning points, and historical influences			
Context of Historical Change Evaluate how the historical context influenced the process or nature of the continuity or change that took place.			
Connections to the Present Analyze significant historical periods and their relationship to present issues and events.			
Historical Perspectives on Today Evaluate different historical perspectives to draw conclusions about the present			

Predicting the Future Through History Evaluate and justify predictions of potential outcomes of current events based on the past.			
Understanding Historical Sources: Context & Audience Analyze how the historical context (situation) and intended audience influences a primary or secondary source.			
Understanding Historical Sources: Purpose and Point of View Analyze the intended purpose of a specific primary or secondary source and how the POV of the author can influence the content and intent.			

World History

Last Update: 7/2/18
1 Credit, 9 Standards

Study 4 of 6 Eras
Students will be provided with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments.

World History Eras, Must study 4 of 6 era's.

To 600 BC	Technological and Environmental Transformations
600 BC - 600 AD	Organization and Reorganization of Human Societies
600 AD - 1450	Regional and Interregional Interactions

1450 - 1750	Global Interactions
1750 - 1900	Industrialization and Global Integration
1900 - Present	Accelerating Global Change and Realignments

Standard	IP	P	M
Perspectives Through Documents Evaluate multiple events from different perspectives using primary and secondary sources, and analyze intended and unintended causes from both long- and short-term perspectives.			
Historical Cause & Effect Evaluate multiple intended and unintended long- and short-term effects, and evaluate how different groups were affected in different ways.			
Themes in History			

Evaluate a variety of sources to apply knowledge of major eras, enduring themes, turning points, and historical influences			
Context of Historical Change Evaluate how the historical context influenced the process or nature of the continuity or change that took place.			
Connections to the Present Analyze significant historical periods and their relationship to present issues and events.			
Historical Perspectives on Today Evaluate different historical perspectives to draw conclusions about the present			
Predicting the Future Through History Evaluate and justify predictions of potential outcomes of current events based on the past.			
Understanding Historical Sources: Context & Audience Analyze how the historical context (situation) and intended audience influences a primary or secondary source.			
Understanding Historical Sources: Purpose and Point of View Analyze the intended purpose of a specific primary or secondary source and how the POV of the author can influence the content and intent.			

English Language Arts (ELA)

ELA standards are the 11th-12th grade standards from the National Common Core Standards.

Fiction Literature

Last Update: 6/4/18

1 Credit, 8 Standards

Students will read and respond to a variety of fiction texts across subject areas.

Standard	IP	P	M
Cite Sources Students cite sources explicitly and through inferences.			
Textural Evidence Students cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.			

Analyze Author's Choice Student analyzes the author's choices and its impact on all elements of a story.			
Language Analysis Student determines the meaning of figurative language, tone, connotative meanings, etc.			
Story Structure Analysis Student analyzes the author's structure and its impact on the story.			
Point of View Analysis Student analyzes the literal meaning vs the implied meaning of the point of view.			
Literature Comparison Student analyzes and evaluate versions and interpretations of a story.			
19-20 C. Literature Student analyzes themes and topics of 19-20th century literature.			

Non Fiction Literature

Last Update: 6/4/18

1 Credit, 9 Standards

Students will read and respond to a variety of non-fiction literature and expository texts across subject areas.

Standard	IP	P	M
Cite sources Student cites sources explicitly and through inferences.			
Determine Themes Student determines multiple themes developed throughout the text with summary.			
Text Analysis Student Analyzes complex ideas and explain the interaction developed throughout the text.			
Word Meaning Student determines the meaning of words both technical and connotative to analyze the author's choices.			
Text Analysis Student analyzes complex ideas and can explain the interactions developed throughout the text.			

Point of View Student analyzes the point of view through rhetoric and style for persuasiveness.			
Information Integration Student Integrates and evaluates multiple sources to solve a problem.			
US Texts Student Evaluates and describes US texts through legal reasoning.			
Historical Analysis Analyze the historical significance of 17th-19th century US documents.			

Composition

Last Update: 6/4/18

1 Credit, 10 Standards

Student's will focus on their writing skills and develop their ability to compose different types of artifacts for a range of purposes and audiences.

Standard	IP	P	M
Supporting Claims Student writes arguments using valid reasoning and sufficient evidence.			
Informative Writing Students inform and explain complex ideas clearly through writing.			
Narrative Writing Student writes detailed events and experiences through narratives.			
Clear and Coherent Writing Student writes clearly through organization and style.			
Revision Student strengthens writing through planning, revision, and editing.			
Technology Integration Student uses technology to share and produce arguments.			
Inquiry Research Student conducts short and intense inquiry research with multiple sources.			
Cite Multiple Sources			

Gather multiple sources with correct citation, avoiding plagiarism.			
Quality Supporting Evidence Use literary and informative texts for evidence.			
Reflective Writing Write over a period of time with reflection and research.			

Grammar

Last Update: 6/4/18

.5 Credit, 5 Standards

Students will study the English language-its roots and derivations, structure and sentence patterns, dialects, writing and spelling systems, and uses as a communication tool.

Standard	IP	P	M
Proper Grammar Use and demonstrate correct grammar in writing or speaking.			
Understanding Word Choice Use understanding of words and language when reading.			
Word Meaning Clarify meaning of unknown words with reading strategies.			
Figurative Language Show understanding of figurative language.			
Vocabulary Learn and use new academic vocabulary in writing, reading, and speaking.			

Communication

Last Update: 6/4/18

.5 Credit, 5 Standards

Students will analyze and employ different oral and written strategies to communicate effectively.

Standard	IP	P	M
Class Discussion Participate in classroom discussions and engage in group discussion while building on others ideas.			
Multiple Sources			

Use and evaluate multiple sources and formats to make decisions.			
Speaker Evaluation Evaluate a speaker through tone, ideas, and word choice.			
Formal Presentation Present ideas with evidence that is clear and distinct.			
Digital Media Integration Make use of digital media in presentations.			

Secondary Courses

Students are required to complete at least 2 credits in Technology and Design and 1 credit in Physical Education.

Technology and Design

Students are required to complete 2 credit of Technology and Design. Art and Design will be infused with digital tools, technology, analog tools and traditional art techniques. The design component will heavily use design thinking and be integrated with the Empower standards. Students who wish to further develop their skills can take additional courses to meet their 5 credits of student selected electives.

Art History

Last Update: 6/19/18

.5 Credit, 4 out of 6 Standard

Art History will introduce students to significant works of art, artists, and artistic movements that have shaped the art world and the world we live in today. This course will use a thematic approach to apply these major components of art and focus more in depth on topics such as society, culture, nature, the human body, war, power and how they influenced or reflected periods of history.

Standard	IP	P	M
The Natural World and The Human Body Students will understand how the natural world and the human body influences and impacts art and design throughout time.			
Individual and Society Students will understand how the individual and society influences and impacts art and design throughout time.			

Knowledge and Beliefs Students will understand how knowledge and beliefs influences and impacts art and design throughout time.			
Conflict and Harmony Students will understand how conflict and harmony influences and impacts art and design throughout time.			
Ideas and Technology Students will understand how ideas and technology influences and impacts art and design throughout time			
Form and Function Students will understand how form and function influences and impacts art and design throughout time.			

Design

Last Update: 6/19/18
.5 Credit, 4 Standards
1 Credit, 8 Standards

Design is a course that will give students a variety of skills related to both fine art and design. The course will cover the basics of the elements of art and principles of design as they apply to good design and interesting compositions. Students will also focus on using design thinkinging and apply this to creating new products, integrate technology, explore how art and design function with careers in and outside of the arts. The main focus on this course is visual communication as an essential part of all art and design.

Standard	IP	P	M
Design Concepts Students will learn to use the elements of art and principles of design to make choices in their visual design models, sketches and final products.			
Ideation /Design Thinking Process Students will understand and execute the use of the ideation/design thinking process when creating new design and planning final products.			
Technology in Design Students will use technology appropriate to their designs and final products to enhance the communication, aesthetics and overall design			
3D Rendering: Students will learn to render design sketches and/or technology produced models.			

Prototyping Students will create maquettes, 3D models, experimental 3D designs and final prototypes for new products, technologies and intellectual property.			
Designing with Empathy Students will design with empathy in mind.			
Designing for a Client Students will design a product for a client.			
Green/Sustainable Design Students will redesign existing products/technologies as well as design new products and technologies			

Drawing & Painting

Last Update: 6/19/18
.5 Credit, 4 Standards
1 Credit, 8 Standards

Drawing and Painting focuses on more advanced drawing and painting skills for students to create two-dimensional compositions. Students will build on skills learned in 2D Art Foundations to create more advanced compositions. Students will work with several mediums such as pen-and-ink, pencil, watercolor, multimedia and acrylic paint. Students will focus on both realism and abstraction through the study of color theory and space as a focus intentional composition choices.

Standard	IP	P	M
Wet Technique Students will learn watercolor techniques including wet, dry, opaque, transparent, glazing, and layering.			
Dry Technique Students will learn advanced techniques in dry mediums.			
Collage/Assemblage Students will create and use prepared paper, to explore positive and negative shape relationships in their compositions.			
Landscape Students will practice variations of spatial organization (background, middle, foreground), apply the rules of atmospheric perspective, and learn to prime and stretch canvas supports.			
Color Mixing and Theory			

Students will investigate general color theory and learn specifics, including skin tones, glass, metal, clouds, and shadows.			
Realism Students will focus on creating images of realism.			
Abstraction Students will focus on creating artwork through the use of abstraction.			
Advanced 2D Techniques Students will work through a new 2D technique that is an advanced technique that goes beyond previous learning in a specific medium or a new process in 2D that a student is interested in learning or experimenting with.			

2D Art Foundations

Last Update: 6/19/18
.5 Credit, 4 Standards
1 Credit, 8 Standards

2D Art Foundations course focuses on the basic techniques of drawing. Students will focus on the use of field journal and sketchbook work as a catalyst for their artwork. This will be paired with foundational techniques tied to specific mediums such as pencil, colored pencil and mixed medium. The focus of this course is more realistic in nature to get a good foundation in 2D art creation based in realism.

Standard	IP	P	M
Graphite Drawing Students will learn how to build up layers, blending techniques, create realistic surfaces through drawing with graphite media.			
Colored Media Drawing Students will learn to layer, mix, blend and burnish colored medias to create new colors and values in realistic and non realistic outcomes.			
2D Mixed Media Students will learn how to work with mixed media techniques to enhance working grounds, overall visual communication and aesthetic interest in art and design.			
Accuracy in Drafting Students will learn to draft images and composition layout to create accurate final sketches before adding value, color, or layers of media.			
Field Journaling			

Students will use the process of field journaling to enhance observational learning, planning, designing and visual researching.			
Portrait Drawing Students will learn to accurately draw facial features, straight on proportion, 3 quarter proportion, and finished portraiture skills.			
Figure Drawing Students will learn head-to-toe proportion of the human figure, hands, feet using gesture, contour, and line of action for basic plotting techniques.			
Still Life/Interior Drawing Students will study objects and create accurate drawings while learning plotting techniques, including organizational line, linear perspective, and accurate shape.			

3D Art Foundations

Last Update: 6/19/18
.5 Credit, 4 Standards
1 Credit, 8 Standards

3D Art Foundations course focuses on creating three-dimensional works. This course will infuse 3D design concepts into innovative 3D creation of both traditional fine art sculpture and 3D design. Students will learn to be flexible with materials and concepts and pushed to be innovative problem solvers through creating 3D works while integrating 3D concepts. Students will learn a variety of new mediums and techniques.

Standard	IP	P	M
Wearable Sculpture Students will use foundational 3D techniques to create wearable sculpture with a variety of materials including but not limited to paper, found objects, plastic, string, metal and more.			
Mixed Media and Found Object Sculpture Students will focus on the use of balance, scale, proportion and form to create sculptures with meaning.			
Functional Sculpture Students will create sculptures with a functional purpose.			
Industrial Design Model Students will create a model of a new innovative design.			
Collaborative Installation Students will create a collaborative installation art piece with a team of students.			

Mass/volume/form Students will explore concepts of form through the use of mass and volume in sculpture.			
Occupied/Unoccupied Space/Scale Students will study the use of space in free standing sculpture, sculptural elements in mixed media art, installation art and functional sculpture.			
Execution of Technical Skill Students will learn to use specific tools and processes to create well crafted artwork. Students will learn different techniques for specific medias.			

Community Interdisciplinary Arts

Last Update: 6/19/18

.5 Credit, 4 out of 6 Standards

Community Integrated Art course focuses on integrating art into community projects, collaborative pieces, design thinking, focused research to inform projects and taking on leadership opportunities with the arts. A majority of the time students will integrate art for these larger scale projects with other academic areas and empower standards. Students will also focus on the use of the elements of art and principles of design with unique materials specific to the project at hand.

Standard	IP	P	M
Collaborative Design Process Students will work as a collaborative team to work through the ideation/design thinking process.			
Collaborative Art Making Students will work as a team to create large scale arts/design projects including collaborative art endeavours such as theatrical productions.			
Leadership in the Arts Students will take on a leadership role in a collaborative arts/design project.			
Community Outreach in the Arts Students will work on a large scale community arts integrated project.			
Art Research Process Students will use extensive art research that relates to a interdisciplinary arts project.			
Project Management of Collaborative Project Student will be in a project manager role that was placed by a teacher or team.			

Portfolio in Art & Design

Last Update: 6/19/18

1 Credit, 7 Standards

Advanced Portfolio in Art and Design provides students the knowledge and opportunity to deeply use 2D and 3D design concepts to support their ideas, personal narrative, design and/or innovations. Students will create a sustained inquiry into an idea or concept and then create a large scale project of themed body of work around this idea. This course weighs heavily on research, sketchbook work, critique, multiple iterations during the process of making and a growth focus while creating the sustained investigation and final products.

Standard	IP	P	M
Visual Narrative Students will focus on creating art with cultural, societal, personal and/or empathetic reference.			
Portfolio Proposal Students will write a portfolio proposal that will be agreed upon between the teacher and student.			
Research and Design Students will thoroughly research a concept before writing a formal proposal.			
Quality Art/Design and Exhibition/Presentation of Portfolio Students will present their finished portfolio to teacher and peers.			
Body of Work A body of work consists of 8-12 pieces that are cohesive in aesthetic quality, medium and concept.			
Final Defense and Artist Statement Students will write a final artist statement that will be on display with the body of work and present for a final defense.			
In Progress Critiques Students will set up at least 4 student led critiques including teachers and peers.			

Physical Education

Lifetime Fitness

Last Update: 7/2/18

.5 Credit, 5 Standards

Lifetime Fitness emphasizes acquiring knowledge and skills regarding lifetime physical fitness; content may include related topics such as nutrition, stress management, and consumer issues. Students may develop and implement a personal fitness plan.

Standard	IP	P	M
Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities.			
Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.			
Participates regularly in physical activity.			
Achieves and maintains a health-enhancing level of physical fitness.			
Exhibits responsible personal and social behavior that respects self and others in physical activity settings.			

Recreational Sports

Last Update: 7/2/18

.5 Credit, 5 Standards

Recreation sports provide students the knowledge, experience, and opportunity to develop skills in more than one recreational sport or outdoor pursuit (such as adventure activities, croquet, Frisbee, wall climbing, bocce ball, fishing, hiking, cycling, and so on).

Standard	IP	P	M
Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities.			
Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.			
Participates regularly in physical activity.			
Achieves and maintains a health-enhancing level of physical fitness.			
Exhibits responsible personal and social behavior that respects self and others in physical activity settings.			

Fitness & Conditioning

Last Update: 7/2/18

.5 Credit, 5 Standards

Fitness/Conditioning Activities emphasize conditioning activities that help develop muscular strength, flexibility, and cardiovascular fitness.

Standard	IP	P	M
Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities.			
Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.			
Participates regularly in physical activity.			
Achieves and maintains a health-enhancing level of physical fitness.			
Exhibits responsible personal and social behavior that respects self and others in physical activity settings.			

Physical Education

Last Update: 7/2/18

.5 Credit, 5 Standards

Physical Education provide students the knowledge, experience, and opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities.

Standard	IP	P	M
Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities.			
Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.			
Participates regularly in physical activity.			
Achieves and maintains a health-enhancing level of physical fitness.			
Exhibits responsible personal and social behavior that respects self and others in physical activity settings.			

Required Electives

The Innovation Project

1 Credit

Facilitated by teachers who give guided support in project planning, students are free to explore their own passions and interests and develop a project around them. This elective is required for the class of 2021 and later and available to 11th and 12th graders.

Entrepreneurship, Marketing & Advertising

Last Update: 7/22/18

1 Credit, 5 Standards

Entrepreneurship students will learn how to develop new ideas to bring new products and services to the marketplace. Students will begin learning design thinking and practice innovative problem solving to help them be competitive in today's start up business environment. Students will work through the "lean launch" protocol and work with local community leaders to move through the idea stage to a pitch of a real product tor service they feel the world needs. This course is to be taken during the students 9th or 10th grade years.

Standard	IP	P	M
Business Model Canvas Students will develop a holistic understanding of business that includes the customer, the core value that the business offers to the customers, and the financial driver.			
Customer Discovery Students will use a hypothesis approach to formulate customers needs and focus in on a customer segment to plan a profitable business.			
Minimum Viable Product Students will understand value propositions and how the product or service they are working on creates value for a specific customer segment.			
Pitch Students will prepare written materials, information, visuals, prototypes and a well thought out pitch for their new service or product. Students will pitch to the local community.			
Market Research Students will use the customer discovery to do market research on the customer segment. Students will find information to identify and analyze the market need, market			

size and competition using focus groups, interviews, ethnography, quantitative techniques such as customer surveys, and analysis of secondary data.			

A Healthy You: Nutrition, Relationships & Your Digital Self

Last Update: 7/23/18

1 Credit, 5 Standards

Health education includes personal, family, community, and environmental health. Topics covered may include nutrition, mental health, your digital presence online, relationships and other topics related to living as your best self. This course is taken during students 11th or 12th grade years.

Standard	IP	P	M
Students will comprehend concepts related to health promotion and disease prevention to enhance health.			
Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.			
Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.			
Students will demonstrate the ability to advocate for personal, family, and community health.			
Students will demonstrate the ability to use goal-setting skills to enhance health.			

Global Citizenship, Social Justice & Equity

Last Update: 7/19/18

1 Credit, 9 Standards

In a time of political divides and violent border clashes, what does it mean to “belong” somewhere? In Global Citizenship, students will grapple with the foundational ideas of community building, citizenship, and justice. Focusing on our school, city, and our nation, students will investigate how to build the world they would like to be a part of, then act on their conclusions. This course is taken during students Freshman or Sophomore year.

Standard	IP	P	M
Fundamentals of Citizenship (Civics Standard) Assess the difference in constitutional and legal protections for citizens vs. noncitizens. Demonstrate the skills necessary to participate in the election process (i.e., registering to vote, identifying and evaluating candidates and issues, and casting a ballot).			
Using Maps to Understand Change (Geography Standard)			

Analyze the intentional and unintentional spatial consequences of human activities at the local, state, tribal, regional, country, and world levels.			
US Texts (Non-Fiction Literature Standard) Student Evaluates and describes US texts through legal reasoning.			
Understanding Historical Sources: Purpose & Point of View (US History Standard) Analyze the intended purpose of a specific primary or secondary source and how the POV of the author can influence the content and intent. Identify whose voices may be left out.			
Intersectional Identities Students will recognize that people's multiple identities interact and create unique and complex individuals			
Understanding Dominant Culture Students will recognize traits of the dominant culture, their home culture and other cultures and understand how they negotiate their own identity in multiple spaces.			
Exploring Other's Identities Students will develop language and knowledge to accurately and respectfully describe how people (including themselves) are both similar to and different from each other and others in their identity groups.			
Diversity in Historical Context Students will examine diversity in social, cultural, political and historical contexts rather than in ways that are superficial or oversimplified.			
Power and Privilege Students will recognize that power and privilege influence relationships on interpersonal, intergroup and institutional levels and consider how they have been affected by those dynamics.			

Internship/Apprenticeship

1 Credit

Real World Experience is a cornerstone of the Pathways High philosophy, and all students will be required to participate in an internship or apprenticeship. Students will work with their advisor and other Pathways High staff to find an experience in a field related to their interests during their junior or senior year. Goals are typically set cooperatively by the student, advisor and employer (although students are not necessarily paid).

Academic Elective Options

Science

Students are required to select 1 credit of Science electives to count as their third required credit in the core courses needed for graduation. Students who choose to do additional Science courses are welcome to do so. Additional credits will count towards the student selected elective requirement of 5 credits.

Engineering

Last Update: 6/7/18
.5 Credit, 4 Standards

Modeling and Simulation Technology will allow students to explore the use of modeling, simulation, and game development software to solve real-world problems in science, technology, engineering, and mathematics (STEM). This may address the systems, processes, tools, and implications of the field of modeling and simulation technology. Topics may also include evaluating and testing engineering designs, modeling geospatial data, observing and analyzing physics simulations, programming games for educational purposes, and creating visualization systems with 3D models.

Standard	IP	P	M
Evaluate a Global Issue with Data Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.			
Design a Solution to a Global Issue Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.			
Evaluate a Solution to a Complex Real World Problem Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts.			
Complete a Simulation to Model a Real World Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.			

Anatomy & Physiology

Last Update: 6/7/18
.5 Credit, 4 out of 5 Standards

This Health Science course will integrate chemistry, microbiology, chemical reactions, disease processes, growth and development, and genetics with anatomy and physiology of the body systems.

Typically, these courses reinforce science, mathematics, communications, health, and social studies principles and relate them to health care.

Standard	IP	P	M
Protein Production Describe the production of proteins in organisms			
Body Systems Outline how multicellular organisms functions with different systems			
Homeostasis Describe how the body maintains homeostasis			
Organic Chemistry Outline how organic molecules make proteins and other macromolecules			
Genetics Describe how genetics can result in different results			

Advanced Physical Science

Last Update: 6/7/18

.5 Credit, 4 out of 6 Standards

Physical Science involves the study of the structures and states of matter. Typically (but not always) offered as introductory survey courses, they may include such topics as forms of energy, wave phenomenon, electromagnetism, and physical and chemical interactions. This is Honors Course.

Standard	IP	P	M
Outline Newton's and Coulomb's laws Use mathematical representations of Newton's Law of Gravitation and Coulomb's Law to describe and predict the gravitational and electrostatic forces between objects.			
Electromagnetism Plan and conduct an investigation to provide evidence that an electric current			
Kinetic & Potential Energy Develop and use models to illustrate that energy			
Converting & Using Energy Design and build a device that convert one form of energy into another form of energy.			
Transferring Heat Energy Plan and conduct an investigation to provide evidence of the transfer of energy			
Wave Dynamics Discuss how math can be used to describe waves			

Ecology

Last Update: 6/7/18

.5 Credit, 4 out of 7 Standards

These courses provide students with a basic understanding of living things. Topics covered may include ecology and environmental problems such as overpopulation and pollution as well as cells, types of organisms, evolutionary behavior, and inheritance.

Standard	IP	P	M
Energy Flow Describe how energy flows in an ecosystem			
Oxygen and Energy Outline how energy flows in an ecosystem in regards to oxygen			
Carrying Capacity Describe how carrying capacity occurs			
Diversity in Ecosystems Describe how ecosystems become more or less diverse			
Human Impact Outline how human impact the environment			
Flow of Energy Describe how energy enters and leaves the earth			
Changing Environment/Resources Discuss how the ecosystem has influenced human activity			

Chemistry

Traditional Course, taken at MATC High School.

Recommended for Engineering and Health Careers

1 Credit

Math

Statistics I

Prerequisite: Completion of Algebra I, Algebra II and Geometry

Last Update: 7/2/18

.5 Credit, 5 Standards

This course provides students with knowledge and use of basic statistical methods. It is designed to give students a broad overview of statistics in the hopes that at least part of what is covered will carry over to their study of statistics in college, regardless of their choice of major. Topics covered include: exploration of data through tables, graphs, measures of center, variation and position; the normal

probability distribution; correlation and regression; design of experiments; exploratory data analysis; estimation and hypothesis testing, including confidence intervals and margin of error.

Standard	IP	P	M
Summarize, represent, and interpret data on a single count or measurement variable			
Summarize, represent, and interpret data on two categorical and quantitative variables.			
Interpret linear models			
Understand and evaluate random processes underlying statistical experiments			
Make inferences and justify conclusions from sample surveys,experiments, and observational studies			

Statistics II

Prerequisite: Statistics I
Last Update: 7/2/18
.5 Credit, 4 Standards

This course is the continuation of Statistics I. This course includes continuation of the study of likely events and the analysis, interpretation, and presentation of quantitative data. Topics include: basic probability and statistics: discrete probability theory, odds and probabilities, probability trees, populations and samples, frequency tables, measures of central tendency, and presentation of data (including graphs).

Standard	IP	P	M
Understand independence and conditional probability and use them to interpret data			
Use the rules of probabilities to compute probabilities of compound events in a uniform probability model.			
Calculate expected values and use them to solve problems			
Use probability to evaluate outcomes of decisions			

Trigonometry

Prerequisite: Algebra II
Last Update: 7/2/18
.5 Credit, 5 Standards

Trigonometry courses prepare students for eventual work in calculus and typically include the following topics: definitions of the trigonometric functions of the general angles, radian measure,

directed line segments, solutions of right and oblique triangles, properties of the trigonometric ratios (a special emphasis on identities), and solutions of trigonometric equations.

Standard	IP	P	M
Extend the domain of trigonometric functions using the unit circle			
Model periodic phenomena with trigonometric functions			
Prove and apply trigonometric identities			
Define trigonometric ratios and solve problems involving right triangles			
Apply trigonometry to general triangles			

Pre-Calculus

Prerequisite: Trigonometry
Last Update: 7/2/18
.5 Credit, 6 Standards

This course is designed to provide the student with an introduction to many of the topics encountered in a full-year calculus course. These topics include a discussion of limits, continuity, the derivative, the integral, and applications of the integral. The purpose of the course is to give the student an exposure to the topics and techniques used in calculus. Pre-Calculus combines the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis. Topics typically include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; mathematical induction; matrix algebra; sequences and series; and limits and continuity.

The derivative and the relationship to slope will be highlighted, as well as applications to rates of change and max/min. Integration will be explored from the standpoint of the anti-derivative. Rules for evaluating the integral as well as some basic techniques of integration will be covered. The Fundamental Theorem of Calculus will be discussed. Students will learn how to find the area under the curve and how this can be interpreted in applied problems. Derivatives and integrals of exponential and logarithmic functions, as well as trigonometric functions, will be covered.

Standard	IP	P	M
Build new functions from existing functions			
Model periodic phenomena with trigonometric functions			
Prove and apply trigonometric identities			
Explain volume formulas and use them to solve problems			

Represent and model with vector quantities			
Perform operations on vectors			

Humanities

Behavior Studies

Last Update: 7/2/18
.5 Credit, 4 out of 6 Standards

Students will gain an introduction to the various disciplines in the social sciences, including anthropology, psychology, and sociology. Emphasis will be placed on the methodologies of the social sciences and the differences among the various disciplines.

Standard	IP	P	M
Psychology: Influencing Behavior Analyze biological, psychological, and sociocultural factors that influence a person's cognition, perception, and behavior.			
Psychology: Identity Development Examine the development of ethnic and/or gender identity in a person.			
Sociology: Cultures, Cooperation and Conflict Investigate how language and culture can unify a group of people. Evaluate the factors that contribute to cooperation and conflict among peoples of a country and the world.			
Sociology: Environment & Culture Critique interpretations of how different cultures interact with their environment.			
Anthropology: Culture & History Analyze the means by and extent to which groups and institutions can influence people, events, and cultures in both historical and contemporary settings.			
Anthropology: Technology & Culture Evaluate the purpose for which a technology is created, and analyze the consequences (intended and unintended) to different cultures.			

Geography

Last Update: 7/2/18
.5 Credit, 4 out of 6 Standards

Students will examine topics in geography, such as physical or cultural geography, or the geography of a particular area or region. Students will also study the significance of maps including GIS, GPS and satellite imagery.

Standard	IP	P	M

Using Geographic Tools Use geographic tools and ways of thinking to analyze the world and define how Maps, GIS, GPS, and satellite images shape our understanding of the world.			
Using Maps to Understand Change Interpret maps and images (e.g., political, physical, relief, thematic, virtual/electronic) to analyze geographic problems and changes over time.			
Changing Populations Evaluate population policies by analyzing how governments affect population change.			
Competition for Resources Evaluate how the prospect of gaining access to resources in contested zones creates competition among countries.			
The Importance of Place Analyze how physical and human characteristics interact to give a place meaning and significance.			
Human Impact on Space Analyze the intentional and unintentional spatial consequences of human activities at the local, state, tribal, regional, country, and world levels.			

Criminal Justice

Last Update: 7/2/18
.5 Credit, 4 Standards

Students will understand and apply the principles and procedures essential to the overall U.S. criminal justice system. Course topics vary and may include, but are not limited to, structure, history and philosophy of the federal, state, county, and municipal court systems; judicial appointment processes; arrest-to-sentencing sequences; laboratory, forensic, and trial procedure; probation and parole; state and federal correctional facilities; and system interrelationships with law enforcement agencies.

Standard	IP	P	M
Foundations of Justice Examine the historical roots of the justice system to understand modern procedures in the administration of criminal justice.			
Roots of Crime Analyze the root causes of crime to recognize its role in law enforcement procedures and practices			
Building a Criminal Case Examine evidence procedures to build sound criminal cases			

Law Enforcement Examine the various components of law enforcement to perform common procedures in the field.			

Economics

Last Update: 7/2/18
.5 Credit, 4 out of 7 Standards

Students will be provided an overview of economics with primary emphasis on the principles of microeconomics and the U.S. economic system. This may also cover topics such as principles of macroeconomics, international economics, and comparative economics. Economic principles may be presented in formal theoretical contexts, applied contexts, or both.

Standard	IP	P	M
Cost-Benefit Analysis Perform a cost-benefit analysis on a real-world situation, using economic thinking to describe the marginal costs and benefits of a particular decision.			
Consumers, Producers and Materials Connect the roles of consumers and producers in the product, labor, and financial markets, and the economy as a whole.			
Supply, Demand and Markets Differentiate between supply and demand and the resulting impact on equilibrium prices and quantities produced.outcomes.			
Microeconomics: Economic Indicators Assess how decisions about spending and production made by households, businesses, and governments determine the nation's levels of income, employment, and prices.			
Microeconomics: Values and Consumption Evaluate how values and beliefs help to form different types of economic systems, and analyze how they have been affected by specific political and social systems and important events.			
Macroeconomics: Institutional Impact Analyze the impact economic institutions (such as the Federal Reserve, property rights, legal systems/rule of law, corporations, minimum wage, regulations) have on our nation.			
Macroeconomics: Trade & Specialization Draw conclusions of the effect of specialization and trade on production and consumption.			

English Language Arts (ELA)

Students must complete the required 4 credits of ELA. Students who wish to dig deeper into ELA topics may want to consider taking the following courses to meet the student selected electives requirement of 5 total credits. The standards are similar to the the required standards, but the level of mastery is higher.

Honors Literature of a Theme

Last Update: 6/14/18
.5 Credit, 4 out of 6 Standards

This course has the same aim as our literature courses (to improve students' language arts and critical-thinking skills), but use selected literature to explore a particular theme as expressed from several points of view. Such themes might include The American Dream, Society and Self, Exploration, War and Peace, and the like. Topics will change depending on the seminar. This is an Honors Course.

Standard	IP	P	M
Citing Sources Cite sources explicitly and through inferences.			
Determine Themes Determine multiple themes developed throughout the text with summary.			
Author's Choice Analysis Analyze the author's choices and its impact on all elements of a story.			
Structure Analysis Analyze the author's structure and its impact on the story.			
Literal Text Interpretation Analyze the literal meaning vs the implied meaning of the point of view.			
Multiple Text Interpretations Analyze and evaluate versions and interpretations of a story.			

Research/Technical Writing

Last Update: 6/14/18
.5 Credit, 4 out of 6 Standards

Students will be prepared to write research papers and/or technical reports. This will emphasize researching (primary and secondary sources), organizing (material, thoughts, and arguments), and writing in a persuasive or technical style. This is an Honors Course.

Standard	IP	P	M
Clear and Coherent Writing Write clearly through organization and style.			
Revision and Editing Strengthen writing through planning, revision, and editing.			
Technology Integration in Writing Use technology to share and produce arguments.			
Multiple Sources Gather multiple sources with correct citation, avoiding plagiarism.			
Reflective Writing Write over a period of time with reflection and research.			
Relevant Vocabulary Learn and use new academic vocabulary in writing, reading, and speaking.			

Creative Writing

Last Update: 6/14/18
.5 Credit, 4 out of 6 Standards

Students will have the opportunity to develop and improve their technique and individual style in poetry, short story, drama, essays, and other forms of prose. The emphasis is on writing; however, students may study exemplary representations and authors to obtain a fuller appreciation of the form and craft. Creative writing will cover several expressive forms. This is an Honors Course.

Standard	IP	P	M
Narrative Story Structure Write detailed events and experiences through narratives.			
Organization and Style Write clearly through organization and style.			
Revision and Editing Strengthen writing through planning, revision, and editing.			
Technology Integration in Writing Use technology to share and produce arguments.			
Proper Grammar Use and demonstrate correct grammar in writing or speaking.			

Figurative Language Show understanding of figurative language.			

Literature Independent Study

Last Update: 6/14/18
.5 Credit, 4 out of 6 Standards

Students will explore particular topics within the field of language arts. This serves as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills. Instructors will be mentors. This is an Honors Course.

Standard	IP	P	M
Textural Evidence Cite textual evidence explicitly and through inferences.			
Understanding Language Use Analyze the literal meaning vs the implied meaning of the point of view.			
Complex Understanding of a Text Analyze complex ideas and explain the interaction developed throughout the text.			
Word Meaning Analysis Determine the meaning of words both technical and connotative to analyze the author's choices.			
Supporting Claims Write arguments using valid reasoning and sufficient evidence.			
Informative Writing Inform and explain complex ideas clearly through writing.			