

School District of Green Lake

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AN ENVIRONMENT OF EXCELLENCE

February, 2013

Dear Students,

At Green Lake High School we have worked to create courses that prepare all students for life beyond high school. The courses you select will shape your high school experience and ultimately give you the education necessary for your post-high school career of choice. No matter what path you take, you will need to continue your learning beyond high school.

Students who plan to continue academically at a two or four year college can take classes during high school that will provide them with college credits. International Baccalaureate (IB), Advanced Placement (AP), Moraine Park Technical College transcribed courses, and other Youth Options opportunities are available for juniors and seniors. Please take advantage of this opportunity.

Take time to review all the information and plan the four-year program that will best prepare you for your future. Plan to take a rigorous course of study throughout your eight semesters at GLHS. Your teachers, Mrs. Hauer and I will be pleased to meet with you to assist in your planning.

We wish you much success at GLHS.

Mary Allen
Principal

<p>The School District of Green Lake does not discriminate against pupils on the basis of sex, race, national origin, ancestry, creed, pregnancy, marital or parental status, sexual orientation, or physical, mental, emotional, or learning disability or handicap in its education programs or activities. Federal law prohibits discrimination in employment on the basis of age, race, color, national origin, sex, religion, or</p>

DIRECTIONS FOR COMPLETING HIGH SCHOOL COURSE REGISTRATION ONLINE

1. Review the ***Course Description Booklet*** to check course availability and prerequisites. Some courses have prerequisites (courses you must pass before you may take the course), some courses are restricted by grade level, and some courses are offered every other year. First, make sure you are eligible to take the courses you select, and second, make sure the courses are available in the year you wish to take them.

2. Complete or revise your ***Four Year Plan***, so that you know in what order you wish to take coursework, and that you will be able to fit courses into your plan. Make sure you are meeting your requirements for graduation, that you are taking coursework that fits your post high school plans, and that you are taking coursework that relates to your career interests.

3. Complete your course registration online via the ***Family Access Program***. Make sure you have a total of 7 credits. Add alternate courses in case you do not receive every course you request. Make sure to include any courses that you must repeat due to a failure.

4. If you are taking college level courses, complete a ***Youth Options Form*** and turn it in to the Guidance Office. College level courses may be taken via Distance Learning or on site at Ripon College. Seniors taking Ripon College, U.W. Oshkosh, Marian College, or Moraine Park Technical College courses may take fewer credits because of the increased workload of college level courses. Follow *The Rule of Six*, e.g. 5 courses at GLHS and 1 course at RC, UWO, or MPTC.

***Complete your registration online
via Family Access
no later than Sunday, March 31, 2013.***

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GUIDELINES FOR REGISTRATION

I. GUIDELINES TO REGISTRATION

1. A school day consists of eight periods.
2. A student must take a minimum of seven courses each semester.
3. Each year there are required courses which must be taken.
4. An elective is a course that a student may choose to take because it is needed or wanted.
5. A one semester course earns .5 credit; a full year course earns 1 credit.
6. Students are allowed to add or drop classes during the first five days of each semester depending upon enrollment. A student may not drop a class if it causes the enrollment to drop under six students. After five days a course drop must be approved by the principal and a failing grade may be entered into the student's transcript.

II. REQUIRED COURSES AND SEQUENCE

Grade 9

English 9 (1)
Modern United States History (.5)
Ancient World History (.5)
Math Elective (1)
Intro to Physics (.5) / Biology 1A (.5)
World Language (1)
Physical Education (.5) / Health 9 (.5)
Elective

Grade 11

IB English: World Literature 1st Year OR
English 11
IB History of the Americas 1st Year OR
IB Geography 1st Year OR
IB Psychology OR
IB Economics OR
IB Cultural Anthropology

Grade 10

English 10
Modern World History (.5)
American Government (.5)
Math Elective (1)
Biology 1B / Chemistry 1
World Language (1)
Physical Education (1)
Elective

Grade 12

IB English: World Literature 2nd Year OR
IB English : World Literature 1st Year
IB History of the Americas 2nd Year (1) OR
IB Geography 2nd Year OR
IB Psychology OR
IB Economics OR
IB Social & Cultural Anthropology

III. Graduation Requirements:

Green Lake High School requires twenty-six (26) credits for graduation. Students are also required to complete certification in CPR/First Aid in order to graduate.

Students must earn the following in order to receive a Green Lake High School diploma:

4 credits of English
4 credits of Social Studies
2 credits of Math
2 credits of Science

1.5 credits of Physical Education
.5 credit of Health

IV. **FOUR-YEAR PLAN**

It is important that a student review his/her four-year plan during each year of high school. A student should plan to take courses that will lead the student to his/her education and career goals. The plan should provide a strong foundation for admission to a one, two, or four-year college program, or provide courses that will be helpful in obtaining an apprenticeship or a job following completion of high school.

The student planning to attend a **one or two year technical college program** to receive a certificate, diploma, associate degree, or a skilled trade apprenticeship should consider the area of interest when selecting courses. It is important that prerequisites for specific college programs are met as each program will have particular criteria for admission. It is important to include challenging math and science coursework in addition to other electives relating to the program of interest.

The **IB Diploma Programme** is the most effective **preparation for a four year college** as it is recognized worldwide as preparing students for success in a challenging college environment. Students who wish to be eligible for admission to a four year college and want to earn a *leg-up* in the admission process should take the most demanding program of coursework available.

Selective colleges may require as many as four years of the five academic areas (English, math, science, social studies, and foreign language), college entrance test scores, application essays, interviews, references, and extracurricular activities. **Less selective colleges** will require a minimum of four credits of English, three credits of social studies, three credits of math, three credits of science, plus electives in other academic and fine arts areas to equal 14 - 17 academic credits. Students should choose electives according to program interests.

The **University of Wisconsin four year campuses** currently require four years of English, three years of social studies, three years of math (algebra 1, geometry, and one upper level math course), three years of science, and academic electives to total 17 credits. U.W. Madison currently requires two years of a foreign language taken during high school. Admission requirements consider 'rank in class' based on cumulative GPA (grade point average), ACT or SAT scores, and college preparatory courses taken. Students who do not meet requirements may be admitted to the two-year UW-College campuses, the closest of which is in Fond du Lac.

Scholarship selection committees may consider courses taken, grade point average, rank-in-class, college entrance test scores, essays, interviews, references, extracurricular activities, community/volunteer activities, and personal interests.

Educational Opportunities

I. INTERNATIONAL BACCALAUREATE (IB) WORLD SCHOOL

Green Lake Public School is an International Baccalaureate World School offering the Primary Years Programme (PYP), Grades 4K-6, the Middle Years Programme (MYP), Grades 7-10, and the Diploma Programme (Grades 11-12).

The IB Middle Years Programme begins in grade 7 and continues into high school in grades 9 and 10. The Middle Years Programme is designed to help students find a sense of belonging in the ever-changing and increasingly interrelated world. It fosters a positive attitude to learning, providing a framework of academic challenge that encourages students to embrace and understand the connections between traditional subjects and the real world, and encourages students to become critical and reflective thinkers.

The IB Diploma Programme is the premier university preparation program in the world. It is a challenging two-year curriculum offered in grades 11 and 12 which provides motivated, college-bound students with the opportunity to pursue a comprehensive curriculum that is internationally recognized for its excellence. The goal of IB is to provide students with opportunities that will enable them to make wise choices and be successful in the global community. The program focuses on teaching students critical thinking and the importance of actively participating in their community. It leads to a qualification that is widely recognized by the world's leading colleges and universities.

All students considering attending a four year college are encouraged to complete the full IB Diploma Programme.

II. YOUTH OPTIONS PROGRAM: RIPON COLLEGE/MORAINE PARK TECHNICAL COLLEGE/MARIAN COLLEGE/UNIVERSITY OF WISCONSIN-OSHKOSH/UW COLLEGES ONLINE

The State of Wisconsin Youth Options program allows all public high school juniors and seniors who meet specific requirements to take post-secondary courses at a UW institution, a Wisconsin technical college, or one of the state's participating private colleges. Enrollment in the program is on a 'space available' basis.

The school district is required to pay for a Youth Options course if the student will receive high school credit and the course is not comparable to a course offered in the school district. The student will receive both high school and post-secondary credit for a successfully completed course.

In order to qualify for the program, a student must:

- Complete the 10th grade, be in good academic standing, and have no record of attendance or disciplinary problems.
- Pre-register for a Youth Options course during the annual registration process.
- Complete a Youth Options form and submit it to the school counselor by June 1st for first semester and October 1st for second semester courses.
- A student must purchase his/her own textbooks and will be reimbursed for the cost following successful completion of the class and resale of textbooks to the college.

If a student receives a failing grade or fails to complete a course for which the school board has made payment, the school board may request reimbursement from the student/family.

A student may take up to 18 credits during his/her high school years through the Youth Options program.

Transportation to and from the post-secondary school is the responsibility of the parent and the student. More information and the necessary forms may be obtained from the school counselor.

III. ADVANCED PLACEMENT

Advanced Placement courses are offered to students through the Wisconsin Virtual School program for students who wish to earn college credit through the College Board program. The curriculum and all tests are designed by College Board and are rigorous in nature. At the end of the WVS course, the student must pass the AP exam given in May of each year in order to gain college credit. A student may take an Advanced Placement course and choose not to take the AP exam. In either case the student will earn a Green Lake High School credit.

Available courses are listed in Appendix B of this document. Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, must meet prerequisite coursework, and must excel in the academic course area.

IV. DISTANCE LEARNING

The Distance Learning Lab allows Green Lake High School to provide an extended curriculum by participating in a distance learning network throughout the State of Wisconsin. The program brings courses to our students that would not otherwise be available. Courses are listed within the department and are identified as 'DL'. Students interact with students and teachers from other high schools 'live' via television monitors, and receive and send course materials via fax. Students participating in distance learning courses must possess strong academic motivation, good classroom behavior, and the ability to work independently.

V. WISCONSIN VIRTUAL SCHOOL

Wisconsin Virtual School (WVS) is a service provider that partners with school districts throughout the state to offer online education to middle and high school students. The WVS courses meet Wisconsin state and national standards. A student who would benefit from expanded curricula may request to take additional coursework through the Wisconsin Virtual School. A student may not take a WVS course in order to avoid coursework offered in the Green Lake High School curricula.

A student who wishes to take a WVS course must be self-motivated, self-disciplined, be a good time-manager, must not give up easily when confronted with obstacles, and must be willing to work in a loosely structured environment. He/she must also have good basic computer skills.

A student who does not pass a WVS course may take another course, however it will be at the student's expense.

VI. FOREIGN EXCHANGE

Green Lake High School participates with the Rotary International to provide an opportunity for high school juniors or seniors to spend a year abroad. The program is designed to promote international understanding and goodwill. Participating students live with several families during the school year and receive the equivalent of six general high school credits for a one-year experience.

An applicant must demonstrate above average academic achievement and must have an outgoing and pleasant personality to fit the role of ambassador. The student must be able to accept discipline, be capable of adjusting to new and strange conditions, and must be of good character and reputation.

An interested student must apply in September for participation in the program the following year. Applications are processed and interviews take place each fall. After candidates are selected by Rotary, the student participates in several weekend orientation retreats with other outbound students throughout the school year. The student receives his/her assigned country in the spring, and leaves for his/her country in late summer.

Host families are needed yearly for 'inbound' students from foreign countries. This is an excellent opportunity for families to acquaint themselves with other cultures. Contact Mr. Felix Schultz, 294-3798, for further information regarding both 'inbound' or 'outbound' foreign exchange, or see the School Counselor.

VII. SUMMER SCHOOL

Students who are credit deficient, need to complete course prerequisites, need to complete classes taken during the school year, and/or need academic tutoring may take courses during a six-week term in the summer via the Wisconsin Virtual School. Students who wish to complete enrichment courses via Wisconsin Virtual School may also enroll during the summer school program. Information is provided to targeted students in the spring regarding the dates and times of the program.

VIII. EARLY GRADUATION

A high school student interested in early graduation should begin planning as early as the freshman year. A student interested in this option must complete all graduation requirements. In order to do so a student will have to receive an accelerated program.

Any student considering early graduation must consider his/her reasons for wanting to do so. Examples of good reasons may include entering college early or attending a foreign exchange study program.

A conference with the School Counselor, parent, and student will determine desirability and options. If a student wishes to pursue early graduation, a written proposal outlining the plan, accompanied by a recommendation from the School Counselor, must be submitted to the Principal.

IX. CPR/BASIC LIFE SUPPORT/FIRST AID/AED TRAINING

CPR/Basic Life Support/First Aid/AED training is a Green Lake High School graduation requirement. All students receive instruction via an American Red Cross course. This 12-hour course teaches how to recognize warning signs of heart attack and stroke and what to do in case they occur. The student learns how to treat respiratory distress and choking (foreign body airway obstruction) through techniques such as the Heimlich maneuver. The student also receives instruction in the use of an AED. After lecture, demonstration, and practice, the student is evaluated through written and practical tests, and receives American Red Cross certification.

Special Services

I. GIFTED/TALENTED PROGRAM

All students deserve the opportunity to develop to their full potential. It is the responsibility of the School District of Green Lake to identify students with strong intellectual, academic, leadership, creative, and/or artistic abilities and to provide appropriate programming for them. These programs facilitate development of a student's abilities, thus enabling the student to realize his/her potential.

Green Lake has chosen the Wisconsin Comprehensive Integrated Gifted Programming Model as its program. The G/T program follows an 'easy-in/easy-out' format, allowing a student to participate for his/her entire school career. Parents interested in more information should contact the G/T coordinator. The majority of students will have their individual needs met within the classroom, or through special enrichment or acceleration programming beyond the regular classroom. Arrangements will be made for individual students who need acceleration or a differentiated education program.

II. CAREER EDUCATION/EDUCATION FOR EMPLOYMENT

Career education is an on-going part of the educational program. Since the major purpose of education is to produce responsible, productive citizens, career education activities are infused into all curriculum areas. Interest inventories, career research, job shadowing, career days, business and industry tours, college tours, and special speakers are provided for all students. As the student advances in high school, career education becomes more personalized as the student makes plans for post-graduation. The Guidance Office provides print and internet resources for career/college exploration. Students and parents are encouraged to utilize the Guidance website, *WisCareers*, and *WisconsinPathways* online.

III. TESTING AND EVALUATION SERVICES

Testing by a certified school psychologist to determine present academic functioning is available to all students. Referral to the school psychologist may be made in writing by a parent, faculty member, or an administrator. Students may be referred as a result of performance in class or on group administered standardized tests. The purpose of referral and evaluation is to determine strengths and weaknesses and to make recommendations regarding academic programming or support services. Evaluations may only take place with written permission from the parent or guardian. Assistance for a student with academic needs may include an individually prescribed program, tutoring, remedial coursework, or enrollment in an Exceptional Educational Needs (EEN) program.

IV. COUNSELING AND GUIDANCE

The counseling program is available to all students and parents. Its purpose is to help students maintain normal personal and social relationships, and to help students understand themselves and their emotions through confidential individual and small group counseling. Students, parents, teachers, and administrators may make referrals.

Individual student achievement is an important emphasis of the school counseling program. Students or parents concerned about improving academic achievement are encouraged to see the school counselor. Individual counseling regarding approaches to study, study skills, and referral to support programs may be considered.

The guidance program includes providing educational and vocational information to individual students. It provides educational opportunities to students and parents regarding personal, educational and vocational needs. Students and parents are encouraged to utilize the Guidance website on the school website (www.glsd.k12.wi.us).

V. GREEN LAKE PUBLIC SCHOOL FOUNDATION, INC.

The Green Lake Public Schools Foundation is a non-profit organization formed exclusively to facilitate the collection and disbursement of charitable donations to benefit the School District of Green Lake in the advancement of scientific, literary and educational purposes. The Foundation uses its resources to support facets of the educational program that would not normally be funded by the public funds of the District.

If a student has a financial need that he/she feels would restrict his or her participation in a class or an extra-curricular activity, the student may apply to the foundation for assistance. Application may be made through the School Counselor or District Administrator and will be considered on its individual merit. Confidentiality will be maintained.

VI. GED or HSED

Green Lake High School works with Moraine Park Technical College to provide the GED/HSED option to any student who is unlikely to graduate with his/her class. After a conference with the parent, the student, the counselor and the principal, a student may be enrolled in the GED/HSED program. If there is room in the program, the school district will provide transportation to the MPTC site in Berlin for a student under the age of 18. The School District of Green Lake encourages each student to complete his/her high school diploma via Green Lake High School rather than choosing the GED/HSED option.

COURSE OFFERINGS

2013 - 2014

Art Department

Art of Glass (.5)
Ceramics (.5)
Drawing (.5)
Fibers (.5)
Painting (.5)
IB Visual Art SL/HL (2)

Art Appreciation (WVS) (.5)
AP Art History (WVS) (1)

Business Department

Personal Finance (WVS) (.5)

AP Macroeconomics (WVS) (.5)
AP Microeconomics (WVS) (.5)

Computer Science Department

Computer Fundamentals (WVS) (1)
Digital Photography (WVS) (.5)
Game Design (WVS) (.5)
Web Design (WVS) (.5)

JAVA.NET Programming: (WVS) (.5)
VB.NET Programming: (WVS) (.5)
AP Computer Science A (WVS) (1)

English Department

English 9 (1)
English 10 (1)
English 11 (1)
IB English: World Literature SL/HL (2)
Corrective Reading (2)
Journalism (1)
MPTC Oral/Interpersonal Communication (.5)
MPTC Written Communication (.5)

Creative Writing (WVS) (1)
Grammar and Composition (WVS) (1)
AP English Language (WVS) (1)
AP English Literature & Composition (WVS) (1)

Family and Consumer Education Department

Career Planning (WVS) (.5)
Family & Consumer Science (WVS) (.5)
Life Skills (WVS) (.5)
Nutrition & Wellness (WVS) (.5)

MPTC Foundations of Early Childhood Education (DL) (.5)
MPTC Guiding Children's Behavior (DL) (.5)

Mathematics Department

Algebra/Geometry 1A (MYP 4A) (1)
Algebra/Geometry 1B (MYP 4B) (1)
Algebra/Geometry 1 (MYP 4) (1)
Algebra/Geometry/Statistics (MYP 5) (1)
Algebra/Geometry/Pre-Calculus (MYP 5+) (1)
IB Math Studies SL (2)
IB Math SL (2)
MPTC Technical Math (1)

Calculus (WVS) (1)
Consumer Math (WVS) (1)
AP Calculus AB (WVS) (1)
AP Calculus BC (WVS) (1)
AP Statistics (WVS) (1)

Performing Arts Department

Band (1)
Concert Choir (1)
IB Music SL (2)

Music Appreciation (WVS) (.5)

Physical Education Department

Physical Education 9 / Health 9 (1)
Lifetime Activities 1 (.5)
Lifetime Activities 2 (.5)

Science Department

Introduction to Physics (.5)
Biology 1 (1)
Chemistry 1 (.5)
IB Biology SL/HL (2)
IB Chemistry SL (2)
IB Environmental Systems & Society SL (1)
IB Physics SL (2)

MPTC Careers in Allied Health (DL) (.5)
MPTC Medical Terminology (DL) (.5)
Earth Science (WVS) (1)
AP Biology (WVS) (1)
AP Chemistry (WVS) (1)
AP Environmental Science (WVS) (1)
AP Physics B (WVS) (1)

Social Studies Department

Modern United States History (.5)
Ancient World History (.5)
Modern World History (.5)
American Government (.5)
Leadership Development (.5)
IB Economics SL (1)
IB Geography SL/HL (2)
IB History SL/HL (2)
IB Psychology SL (1)
IB Social & Cultural Anthropology SL (1)
IB Theory of Knowledge (.5)
IB Cas / IB Extended Essay (.5)

MPTC Introduction to Corrections (DL) (.5)
MPTC Introduction to Criminal Justice System (DL) (.5)
AP European History (WVS) (1)
AP Psychology (WVS) (.5)
AP U.S. Government & Politics (WVS) (.5)
AP U. S. History (WVS) (1)
AP World History (WVS) (1)

Technology & Engineering Department

Electronics 1 (1)
Research & Design Engineering 1 (1)
Woods (1)

MPTC Beginning Photoshop (.5)
MPTC Principles of Graphic Design (.5)
MPTC Introduction to Modern Manufacturing (DL) (.5)

World Languages Department

French 1 (1)
French 2 (1)
French 3 (1)
IB Language 2A: French SL/HL (2)
Spanish 1 (1)
Spanish 2 (1)
Spanish 3 (1)
IB Language 2A: Spanish SL/HL (2)
World Languages Survey (WVS) (.5)
Latin 1 (WVS) (1)
Latin 2 (WVS) (1)

Chinese 1 (WVS) (1)
Chinese 2 (WVS) (1)
German 1 (WVS) (1)
German 2 (WVS) (1)
German 3 (WVS) (1)
German 4 (WVS) (1)
Japanese 1 (WVS) (1)
Japanese 2 (WVS) (1)
AP French Language (WVS) (1)
AP Spanish Language (WVS) (1)

Course Descriptions

Art

ART OF GLASS

OPEN TO: Grades 9-12 ELECTIVE
PREREQUISITE: None .5 Credit

In this course students will study various projects and artwork that can be created with different types of glass. Projects will include making a glass mosaic on a glass panel or clear glass picture frame, learning the technique of glass fusing as a jewelry form, creating a stained glass panel, and experimenting with copper enameling. Students will take a field trip to a nearby glass-blowing studio.

CERAMICS

OPEN TO: Grades 9 - 12 ELECTIVE
PREREQUISITE: None .5 Credit

This course will focus on clay creations. The student will explore the history of clay through a variety of techniques. The art of wheel throwing, coil pottery, slab building, and free form clay will be explored.

DRAWING

OPEN TO: Grades 9-12 ELECTIVE
PREREQUISITE: None .5 Credit

This course will focus on technique and formal elements of drawing. Students will learn a variety of drawing methods including contour line, figure, grid-drawing, and 1-2-3 point perspective.

FIBERS

OPEN TO: Grades 9 - 12 ELECTIVE
PREREQUISITE: None .5 Credit

This course will focus on *fun with fibers*. The student will explore the history of fibers through a variety of techniques. Weaving, paper making, book making, basketry, and fabric art will be explored.

PAINTING

OPEN TO: Grades 9-12 ELECTIVE
PREREQUISITE: Two Dimensional Art .5 Credit

This course will give the student an opportunity to further develop individual style and improve overall technique in painting. The student will explore basic acrylic, watercolor, and oil painting materials, methods, and major artistic movements.

IB VISUAL ARTS SL, HL (IB DIPLOMA PROGRAM)

OPEN TO: Grades 11 & 12 ELECTIVE
PREREQUISITE: None 2 Credits

New ways of expressing ideas helps to make the visual arts one of the most interesting and challenging areas of learning and experience. The processes of designing and making art requires a high level of cognitive activity that is both intellectual and affective. Engagement in the arts promotes a sense of identity and makes a unique contribution to the lifelong learning of each student. The study of visual arts provides students with the opportunity to develop a critical and intensely personal view of themselves in relation to the world.

The Diploma Programme visual arts course enables students to engage in both practical exploration and artistic production, and in independent contextual, visual and critical investigation. The course is designed to enable students to study visual arts in higher education and also welcomes those students who seek life enrichment through the visual arts.

Because of the nature of the subject, quality work in the visual arts can be produced by students at both HL and SL. The aims and assessment objectives are the same at both HL and SL. Through a variety of teaching approaches, all students are encouraged to develop their creative and critical abilities and to enhance their knowledge, appreciation and enjoyment of visual arts. The course content for HL and SL may be the same. However, due to the different amount of time available for each, students at HL have the opportunity to develop ideas and skills, to produce a larger body of work and work of greater depth. In order to reflect this, the assessment criteria are differentiated according.

The aims of the visual arts course at HL and SL are to enable students to:

- investigate past, present and emerging forms of visual arts and produce, appreciate and evaluate them.
- develop an understanding of visual arts from a local, national and international perspective.
- build confidence in responding visually and creatively to personal and cultural experiences.
- develop skills in, and sensitivity to, the creation of works that reflect active and individual involvement.
- take responsibility for the direction of personal learning through the acquisition of effective working practices

ART APPRECIATION (WVS)

OPEN TO: Grades 9-12 ELECTIVE
PREREQUISITE: None .5 Credit

This one semester course introduces the major themes, influences and personalities that shaped most of western cultural heritage through art. The periods studied include Ancient, Classical, Renaissance, Baroque, Modern and Contemporary. After completing the course, students will be able to analyze art with the eyes of an art historian; compare and contrast the sculpture of ancient peoples, considering its purpose, size and degree of realism; recognize and describe the major characteristics of the various 'isms' of Europe and America; identify examples of the outstanding art of Asia, India, Africa and pre-Columbian American and discuss their purposes; and describe how the study of art has influenced personal perceptions of the world and its art.

AP ART HISTORY (WVS)

OPEN TO: Grades 11 – 12 ELECTIVE
PREREQUISITE: None .5 Credit

This course is designed to foster in students an understanding and knowledge of architecture, sculpture, painting, and other art forms within diverse historical and cultural contexts. Students examine and critically analyze major forms of artistic expression from the past and the present from a variety of cultures. In addition to visual analysis, this course emphasizes understanding works in context, considering such issues as patronage, gender and the functions and effects of works of art. Prior art training is not a prerequisite nor does the course cater exclusively to future Art History majors. This course was designed to meet the requirements of the Advanced Placement Art History requirements precisely.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

Business

PERSONAL FINANCE (WVS)

OPEN TO: Grades 11-12 ELECTIVE
PREREQUISITE: None .5 Credit

Understanding financial management concepts is an important life skill. From credit to insurance to taxes, it is imperative that students understand the consequences of their choices. Wisely managing their money, students become citizens that are more responsible. A thorough understanding of financial concepts, with practical application through activities and projects, will enable students to leave this course with applicable, useful skills for life. This course surveys the basic personal financial needs of most individuals and emphasizes the basics of budgeting, saving, checking, investments, credit, the wise use of insurance, and paying and preparing income tax returns. After high school, students face a world filled with possibilities, and the more knowledge they can acquire, the higher the probability that their financial future will be secure. Students taking this course will learn to better prepare for their financial futures.

AP MACROECONOMICS (WVS)

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: None .5 Credit

Macroeconomics is an emphasis on how the economic system works as a whole. Students study how the economy is measured by using concepts such as gross domestic product (GDP) and other indicators. They examine concepts such as inflation, unemployment, world trade patterns, and the role of the Federal Reserve Bank. Students engage in decision-making processes to create an environment where high employment and a higher standard of living are achievable by using the economic tools of fiscal and monetary policy. This course prepares students for the AP Exam in Macroeconomics. Textbook and workbook required.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

AP MICROECONOMICS (WVS)

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: None .5 Credit

Microeconomics emphasizes how individuals make choices with limited resources. Students will examine concepts such as supply and demand, factors of production, roles of labor and management, the relationship between the environment and the economy, and the impact of the government on individual decision making processes. Students study the stock market as an investment option and trace various stocks through the semester using the Wall Street Journal and the Internet as resources. This course prepares students for the AP Exam in Microeconomics. Textbook and student workbook required.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

Computer Science

COMPUTER FUNDAMENTALS (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None 1 Credit

In this introductory course, students will become familiar with the basic principles of a personal computer including the internal hardware, the operating system, and software applications. Students will gain practice in using key applications such as Microsoft Word, Excel, and PowerPoint as well as understand social and ethical issues around the Internet, information and security. This is a two semester course. In the first semester, the focus is on the fundamentals, learning and using the applications, and understanding the basic roles and responsibilities of the software, hardware and operating system. In the second semester, the focus is on gathering and analyzing data, and using the right tools and methods to collect and present data.

DIGITAL PHOTOGRAPHY (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None .5 Credit

In this course, students will learn the basics of photographic composition and lighting, the basics of using a digital camera and the basics of preparing a digital darkroom. Students will also learn basic color theory and the fundamentals of image processing. This course is designed for the student who has no background in photography.

GAME DESIGN (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None .5 Credit

This course will introduce students to the basic skills necessary for game design. They will study the various games in the industry and analyze their approach in terms design and development. The student will explore the processes and art of making game elements like story, levels, sound, user interfaces, and levels. This analysis will include an orientation to the gaming market and innovative techniques' impact on it. Finally, the student will merge all these elements into a functional prototype showing their understanding of the game design process.

WEB DESIGN (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None .5 Credit

In this one semester course you will be expected to master Web site creation essentials, learn different tools to create Web sites, and learn to make Web sites that follow copyright laws and American with Disabilities Act guidelines. Your progress will be monitored by an online instructor and you will communicate with your instructor via e-mail and Elluminate (web-conferencing tool).

PROGRAMMING: JAVA.NET (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: Computer Programming 1 .5 Credit
Basic Computer Fundamentals

This introductory-level course presents the understanding of JAVA and how to build a stand-alone application (such as a countdown clock or leap year indicator). This course is designed for first-time learners who have very little programming background except that introduced in Programming I: VB.NET. The student will also learn the techniques of JAVA, how JAVA can be used in cross-platform programming, and the robustness of the Java program. At the end of the course student will be able to write basic programs using Java and could pursue further instruction any programming language. Required tool: JDK 1.5 (or higher version)

PROGRAMMING: VB.NET (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None .5 Credit

This course presents basic programming and teaches the essential concepts of VisualBasic.net (VB.NET). As an introduction to VB.NET, students will see the basic uses of the programming language, its similarities to the English language (and others), and its flexibility as a programming language. The course helps participants understand the processes involved in software development and object-oriented programming. This is an introductory course that could lead to careers such as software engineer, developer, or game designer. The course participants will also complete a series of hands-on projects covering built in data types, operators, control structures, classes, and objects.

AP COMPUTER SCIENCE A (WVS)

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: None 1 Credit

This advanced course emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development and is meant to be the equivalent of a first semester college-level course in Computer Science. It also includes the study of data structures, design, and abstraction, but these topics are not covered to the extent that they are in Computer Science AB.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

English

ENGLISH 9

OPEN TO: Grade 9 REQUIRED
PREREQUISITE: None 1 Credit

The primary emphasis of in Ninth Grade English is skill development in writing, vocabulary, reading comprehension, and language usage. Reading comprehension is developed through the reading and structural analysis of the short story, poetry, drama, biography, essay, editorial and news article. Examples of major literary works that may be read in this course include Of Mice and Men (Steinbeck), The Adventures of Huckleberry Finn (Twain), Romeo and Juliet (Shakespeare), and The Odyssey (Homer). Numerous short stories by Sir Arthur Conan Doyle, Thurber, Saki, Poe and others will also be explored.

In addition to literary analysis, students will write descriptive, narrative and expository essays, and a research paper using outlines and revision techniques in MLA style. Emphasis is placed on the development of a thesis statement supported by details, reasons and facts. Students will also practice writing poems, short stories, news articles and editorials.

In language usage, parts of speech will be examined. Proper pronoun use and agreement is stressed. Subject/verb agreement and punctuation are reviewed. Students will be encouraged to practice sentence fluency, writing voice, word choice, presentation, and experiment with various forms of communication of ideas, including the use of technology and research databases.

ENGLISH 10

OPEN TO: Grade 10 REQUIRED
PREREQUISITE: English 9 1 Credit

The 1st semester expands the student's capability to use the English language correctly when writing. Emphasis is placed on the statement of a thesis when writing, as well as on defending ones opinion with support from outside sources. The student reviews the basic fundamentals of grammar and punctuation, writing sentences, essays, and research papers. Weekly vocabulary quizzes, reading assignments, and journal writing activities are required to further sharpen the students writing ability.

The 2nd semester will focus on literature by American authors. The student will learn to appreciate and interpret literature through discussion and writing assignments that apply the themes in the literature to the student's life. The literature presented includes Our Town by Thornton Wilder, short stories and poems by Benjamin Franklin, Nathaniel Hawthorne, Edgar Allan Poe, Henry David Thoreau, Robert Frost, Frederick Douglass, and Ambrose Bierce. Language skills such as grammar, spelling, punctuation, and sentence structure will be reviewed according to problems seen in student writing.

ENGLISH 11: INTERMEDIATE COMPOSITION/WORLD LITERATURE

OPEN TO: Grade 11 ELECTIVE
PREREQUISITE: Composition 1 1 Credit

This course focuses on the origin and evolution of the English language, as influenced by historical, cultural and religious movements. Students will study the development of British Literature from 450 A.D. through the twentieth century. In depth examinations of various poetry and prose selections from the time frame above will allow the student to understand the development and ever-changing nature of the English language. Required readings include Beowulf from the Anglo-Saxon period, The Canterbury Tales (Chaucer) from the medieval period, Macbeth and other plays and sonnets of Shakespeare from the Renaissance period, as well as works from authors from the Age of Reason, Romanticism (Coleridge, Wordsworth and Shelley) and Modern movements.

Through the analysis of British literature, students will practice effective reading, writing, research, critical thinking, vocabulary enrichment and public speaking skills. Students will refine their writing skills to master the following forms of composition: narration, description, definition, comparison/contrast, analysis, and argument. APA/MLA style is required for each paper, with emphasis on revision and adherence to proper form. Students will prepare and present literary analysis and research projects throughout the year.

IB ENGLISH: WORLD LITERATURE SL, HL (IB DIPLOMA PROGRAM)

OPEN TO: Grades 11 & 12 ELECTIVE
PREREQUISITE: English 9, English 10 2 Credits

English SL or HL is designed for students with a high level of competence and can be studied at either higher level or standard level. The course provides students with the opportunity to study language, texts and culture, and to develop their analytical skills.

Students become familiar with a wide range of vocabulary and complex grammatical structures. At the end of the course they are expected to understand and use the language accurately. Language development and refinement include the analysis and use of language appropriate in particular contexts.

Students are exposed to a wide range of texts that they encounter in their everyday lives (for example, short stories, speeches, cartoons, advertisements and news reports). They learn how to compare and contrast how the language is used in different texts, and how language and style affect the presentation of theme and topic. Once they have become familiar with the style used in different types of texts, students are required to write tasks that relate to the course content in an appropriate register and style.

Within the framework of the cultural options (language and culture, media and culture, future issues, global issues and social issues), students study particular topics such as bilingualism, advertisements and racism. The purpose of this study is to become more familiar with the language and its associated culture(s). Different types of texts, both literary and non-literary, can be read as part of this study.

In the literary options students consider how writers use language and style to present ideas, themes, feelings and attitudes. They also explore what aspects of a literary text are specific to the language and its associated culture(s) and what aspects cut across cultural and linguistic boundaries. It is this exploration of the specific and the universal, in the literary as well as the cultural options, that links the course to the broader aims of the IBO: to provide an education that enriches the international awareness of students and develops in them the attitudes of tolerance, empathy and a genuine respect for perspectives different from their own.

MPTC ORAL AND INTERPERSONAL COMMUNICATION

OPEN TO: Grade 12 ELECTIVE
PREREQUISITE: None .5 Credit and
Moraine Park Technical College Credit (3 Cr)

This course focuses upon developing speaking, verbal and nonverbal communication, and listening skills through individual presentations, group activities, and other projects. The student will gain an understanding of communication theory, including nonverbal and listening patterns in speech, and identify obstacles to organizational communications. The student will improve interpersonal relationships through the understanding of speech communication.

MPTC WRITTEN COMMUNICATION

OPEN TO: Grade 12 ELECTIVE
PREREQUISITE: None .5 Credit and
Moraine Park Technical College Credit (3 Cr)

This course develops writing skills that include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the student analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. This course also develops critical reading and thinking skills through the analysis of a variety of written documents.

CORRECTIVE READING

OPEN TO:	Grade 9 - 12	ELECTIVE
PREREQUISITE:	None	2 Credits (2 Period Block)

This course utilizes the READ 180 program. It is an intensive reading intervention program that helps confronts reading problems on multiple fronts using various technologies. READ 180 is proven to meet the needs of struggling readers whose reading achievement is below proficient level. The program directly addresses individual needs through differentiated instruction, adaptive and instructional software, high-interest literature, and direct instruction in reading, writing, and vocabulary skills. READ 180 is taught in a two-hour block.

JOURNALISM

OPEN TO:	Grades 10-12	ELECTIVE (This course may be repeated.)
PREREQUISITE:	None	1 Credit

Journalism is designed to give students practical experience in writing researching, formatting, and layout of the school newspaper and the Yearbook. Students will learn and practice basic news writing styles and forms, layout, design, proofreading, advertising business management, photography and learn to use desktop publishing software.

In designing and composing school publications, students will be able to write a news story, feature story, and editorial. Students will learn and study journalism issues, including bias, reliability, opinion, privacy and the First Amendment. Students will learn and practice different journalistic forms and styles, including editing, summarizing and interviewing, in addition to learning contemporary layout and design principles of dominance, balance, unity, variety, and eye appeal. Students will understand and effectively use desktop publishing for layout and design. Students will work as a team and develop the ability to understand ethics and decision making in journalism and publications.

CREATIVE WRITING (WVS)

OPEN TO:	Grades 9 - 12	Elective
PREREQUISITE:	None	1 Credit

In this course, students will explore a range of creative writing genres, including fiction, poetry, creative nonfiction, drama, and multimedia writing. Students will study examples of writing through classic and contemporary selections and will apply that knowledge and understanding to their writing. In addition, students will develop an intimate understanding of the writing process and its application to various projects. As students move through the course, they will understand and evaluate the writings of others, and be able to apply the evaluation criteria to their own writing. By the end of the course, students will have created a well-developed portfolio of finished written works. Learning activities include reading; listening; discussing; writing; multiple choice games; self-check activities; and reflective journals. The unit structure includes the broader idea of the unit as defined by the main heading. Units will include a combination of activities and will culminate in a submittal of the finished unit project. Unit projects will be developed in phases throughout each section of the unit. Unit lessons and performance tasks have been scaffolded carefully to help students achieve deeper levels of understanding.

GRAMMAR AND COMPOSITION (WVS)

OPEN TO:	Grades 9 - 12	Elective
PREREQUISITE:	None	1 Credit

This course is designed for the student who needs extra help in mastering communication skills and fundamental principles of grammar and usage. The course focuses on teaching the composition concepts in the 6 + 1 Traits of Writing pioneered by the Northwest Regional Education Laboratories. Grammar is taught as a tool for improving communication rather than as a pure focus of study. Oral Communication and research skills are included. Although there is some literature study in the course, it is not the focus. The course emphasizes diagnosis of student writing needs and targeting individualized needs for improvement. No required text.

AP ENGLISH LANGUAGE (WVS)

OPEN TO: Grade 11-12
PREREQUISITE: None

ELECTIVE
1 Credit

This advanced course focuses on reading and analyzing non-fiction prose, with an emphasis on philosophy. Written assignments focus on philosophical topics, which include ethics, knowledge and thought, the problem of truth, causality, metaphysics, political philosophy, and aesthetics.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

AP ENGLISH LITERATURE AND COMPOSITION (WVS)

OPEN TO: Grade 11-12
PREREQUISITE: None

ELECTIVE
1 Credit

In this advanced placement course, students learn to read and comprehend some of the finest poetry, plays, novels, short stories, and essays written at various times in various cultures, with an emphasis on literature originally written in English. Through reading and writing, students learn how to discover meaning in literature by being attentive to language, image, character, action, argument, and the various techniques and strategies authors use to evoke emotional response from readers. This course prepares students for the AP Literature and Composition exam.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

Family and Consumer Science

CAREER PLANNING (WVS)

OPEN TO: Grades 9-12 ELECTIVE
PREREQUISITE: None .5 Credit

In this one semester course, students will use an informative interactive process to explore career and life options that fit their individual interests, needs, and skills. Students begin with a thorough examination of their own interests, aptitudes, achievements, and personality styles. Then, they explore potential career matches, examining job market information, conducting informational interviews, and plotting training and educational paths. Along the way, students learn to craft effective resumes and letters, and to handle job interview situations.

FAMILY & CONSUMER SCIENCE (WVS)

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: None 1 Credit

This course focuses on the development of skills and knowledge that will help students transition into adult roles within the family. Students engage in activities to develop abilities to make wise consumer choices, to prepare nutritious meals, to contribute effectively as part of a team, to manage a household budget, and to balance roles of work and family. Students gain an appreciation for the responsibilities of family members throughout the life-span and how they contribute to the well-being of not only their family but also their larger community.

LIFE SKILLS (WVS)

OPEN TO: Grades 9-12 ELECTIVE
PREREQUISITE: None .5 Credit

This one semester course is designed to increase student knowledge and ability in skills necessary for everyday living. The course emphasizes defining personal values, goal-setting and planning, making decisions and solving problems, evaluating information and dealing with media and peer pressure, communication and relationships, decision making, wellness and personal safety, and contributing to your community.

NUTRITION AND WELLNESS (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None .5 Credit

This one semester course will introduce the student to an overview of good nutrition principles that are needed for human physical & mental wellness. Discussion of digestion, basic nutrients, weight management, sports & fitness, and life-span nutrition is included. Application to today's food and eating trends, plus learning to assess for reliable nutrition information is emphasized.

MPTC FOUNDATIONS OF EARLY CHILDHOOD EDUCATION (#307-148) (DL) Offered 1st Semester.

OPEN TO: Grades 11-12 ELECTIVE
PREREQUISITE: None .5 Credit

This course introduces learners to the early childhood education profession. Learners examine types of early childhood education settings; the history of early childhood education; legal and ethical responsibilities of early childhood education professionals; components of quality early childhood curriculum models including the Wisconsin Model Early Learning Standards; strategies that support diversity and anti-bias perspectives; and early childhood education professional organizations. Learners also assess their ability to work in this profession and initiate development of a professional plan.

MPTC GUIDING CHILDREN'S BEHAVIOR (#307-188) (DL) Offered 2nd Semester.

OPEN TO:	Grades 11-12	ELECTIVE
PREREQUISITE:	None	.5 Credit

This course focuses on applying positive strategies in early childhood education settings. Learners integrate strategies that support diversity and anti-bias perspectives, summarize early childhood guidance principles, analyze factors that affect the behavior of children, practice positive guidance strategies, and develop guidance strategies to meet individual needs.

Mathematics

Students should consult with math instructors for placement suggestions.

ALGEBRA/GEOMETRY 1A

ALGEBRA/GEOMETRY 1B

OPEN TO: Grade 9-12 ELECTIVE
PREREQUISITE: None 1 Credit

Same content as Algebra/Geometry 1 but taught over two years.

ALGEBRA/GEOMETRY 1

OPEN TO: Grade 9-12 ELECTIVE
PREREQUISITE: None 1 Credit

Math for the International Student 9 is a continuation of the junior high curriculum, and includes the following: the real number system (conceptual process of quantification, properties of rational and irrational numbers, powers, roots and rational exponents), algebra (structure of expressions, create and solve linear equations, inequalities and systems, maxima and minima, solve systems of equations, use coordinates to prove simple theorems), statistics (create and interpret linear, quadratic and exponential models).

ALGEBRA/GEOMETRY/STATISTICS

OPEN TO: Grades 9 -12 ELECTIVE
PREREQUISITE: None 1 Credit

Math for the International Student 10 is a continuation of the international math series, designed to build confidence and encourage an appreciation of mathematics in students who do not anticipate a need for mathematics in their future studies. The course includes the following: number and quantity (rational numbers, accuracy), geometry (parallel, perpendicular Decimals and percentage; Algebraic simplification and expansion; 10 Statistics; Equations; Ratios and rates; Algebraic factorization; Congruence and similarity; Volume and capacity; Trigonometry; Coordinates and lines; Simultaneous linear equations; Probability; Functions, graphs and notation; Geometry; Quadratic and other equations; Finance; Quadratic functions; Transformation geometry; Sine and cosine rules.

ALGEBRA/GEOMETRY/PRECALCULUS

OPEN TO: Grades 9 - 12 ELECTIVE
PREREQUISITE: None 1 Credit

Math for the International Student 10+ is a continuation of the international math series for students who anticipate a rigorous study of mathematics. The course includes the following: number and quantity (rational numbers, accuracy), geometry (parallel, perpendicular, triangles, quadrilaterals and regular polynomials, congruence, similarity, dilations, transformations in a plane, circle theorems), trigonometry (define and use trig ratios in right triangles, unit circle), model real-world solution (observation, descriptive models, analytic modeling), statistics (standard deviation, area under normal curve, correlation coefficient, linear, quadratic and exponential regression, independence and conditional probability, permutations and combinations, expected values, random variables, expected values and payoffs) and financial math.

IB MATH STUDIES SL (IB DIPLOMA PROGRAM)

OPEN TO:	Grades 11 & 12	ELECTIVE
PREREQUISITE:	Algebra/Geometry 1 OR Algebra/Geometry/Statistics OR Algebra/Geometry/Pre-Calculus	2 Credits

The nature of mathematics can be summarized in a number of ways: for example, it can be seen as a well-defined body of knowledge, as an abstract system of ideas, or as a useful tool. For many people it is probably a combination of these, but there is no doubt that mathematical knowledge provides an important key to understanding the world in which we live. Mathematics can enter our lives in a number of ways: we buy produce in the market, consult a timetable, read a newspaper, time a process or estimate a length. Mathematics also extends into our chosen profession: artists need to learn about perspective; musicians need to appreciate the mathematical relationships within and between different rhythms; economists need to recognize trends in financial dealings; and engineers need to take account of stress patterns in physical materials. Scientists view mathematics as a language that is central to our understanding of events that occur in the natural world. Some people enjoy the challenges offered by the logical methods of mathematics and the adventure in reason that mathematical proof has to offer. Others appreciate mathematics as an aesthetic experience or even as a cornerstone of philosophy. This prevalence of mathematics in our lives provides a clear and sufficient rationale for making the study of this subject compulsory within the DP. (This is an introduction for both DP math courses; moved to introduce the DP section of the math courses.)

This course caters to students with varied backgrounds and abilities. More specifically, it is designed to build confidence and encourage an appreciation of mathematics in students who do not anticipate a need for mathematics in their future studies. Students taking this course need to be equipped with fundamental skills and a rudimentary knowledge of basic processes.

The course consists of the study of eight topics:

- Topic 1—Introduction to the graphic display calculator
- Topic 2—Number and algebra
- Topic 3—Sets, logic and probability
- Topic 4—Functions
- Topic 5—Geometry and trigonometry
- Topic 6—Statistics
- Topic 7—Introductory differential calculus
- Topic 8—Financial mathematics

IB MATH SL (IB DIPLOMA PROGRAM)

OPEN TO:	Grades 11 & 12	ELECTIVE
PREREQUISITE:	Algebra/Geometry/Statistics OR Algebra/Geometry/Pre-Calculus	2 Credits

This course caters to students who already possess knowledge of basic mathematical concepts, and who are equipped with the skills needed to apply simple mathematical techniques correctly. The majority of these students will expect to need a sound mathematical background as they prepare for future studies in subjects such as chemistry, economics, psychology and business administration. The course focuses on introducing important mathematical concepts through the development of mathematical techniques. The intention is to introduce students to these concepts in a comprehensible and coherent way rather than insisting on mathematical rigor. Students should wherever possible apply the mathematical knowledge they have acquired to solve realistic problems set in an appropriate context.

The internally assessed component, the portfolio, offers students a framework for developing independence in their mathematical learning by engaging in mathematical investigation and mathematical modeling. Students are provided with opportunities to take a considered approach to these activities and to explore different ways of approaching a problem. The portfolio also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas.

MPTC TECHNICAL MATH 1A

OPEN TO: Grade 12
 PREREQUISITE: None

ELECTIVE
 .5 Credit and
 Moraine Park Technical College Credit (3 Cr)

This course examines linear, quadratic and rational equations, graphs functions, rearranges formulas, solves systems of equations, and solves percent and proportion problems.

MPTC TECHNICAL MATH 1B

OPEN TO: Grade 12
 PREREQUISITE: None

ELECTIVE
 .5 Credit and
 Moraine Park Technical College Credit (3 Cr)

This course is a continuation of College Technical Mathematics 1A. It includes measurement systems, computational geometry, right and oblique triangle trigonometry, and trigonometric functions on the unit circle.

CALCULUS (WVS)

OPEN TO: Grade 11-12
 PREREQUISITE: None

ELECTIVE
 1 Credit

The Calculus course is a comprehensive look at the study of differential and integral calculus concepts including limits, derivative and integral computation, linearization, Riemann sums, the Fundamental Theorem of Calculus, and differential equations. Applications include graph analysis, linear motion, average value, area, volume, and growth and decay models.

CONSUMER MATH (WVS)

OPEN TO: Grade 11-12
 PREREQUISITE: None

ELECTIVE
 1 Credit

This is comprehensive review and study of arithmetic skills that apply to both personal and vocational business opportunities. Topics include whole numbers, fractions, percentages, basic statistics, and graphs. Practical applications in finance, taxes, budgeting, banking and home ownership are provided.

AP CALCULUS AB (WVS)

OPEN TO: Grades 11-12
 PREREQUISITE: Trigonometry/Pre-Calculus

ELECTIVE
 1 Credit

This Advanced Placement course introduces limits, differentiation, and integration of functions. Students will find and evaluate finite and infinite limits graphically, numerically, and analytically. They will find derivatives using a variety of methods including The Chain Rule and Implicit Differentiation. They will use the First Derivative Test and The Second Derivative Test to analyze and sketch functions.

Subsequently, students will find antiderivatives using a variety of methods including substitution. They will evaluate integrals using a variety of methods including numerical integration. They will understand and apply Riemann sums, definite integrals, and The Fundamental Theorem of Calculus. In particular, they will differentiate and integrate logarithmic, exponential, and inverse trigonometric functions. They will solve simple differential equations that can be solved by separation of variables and use them to solve applied problems. They will use integration to determine the area between two curves and the volume of solids. TI 83 Plus Calculator required. Optional text

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

AP CALCULUS BC (WVS)

OPEN TO: Grades 11-12 ELECTIVE
PREREQUISITE: Advanced Algebra 1 Credit

This is a college level course covering derivatives, integrals, limits, approximation, applications and modeling, and sequences and series. Knowledge of algebra, geometry, trigonometry, analytic geometry, and elementary functions required. TI 83 Plus Calculator required. Optional text

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

AP STATISTICS (WVS)

OPEN TO: Grades 11-12 ELECTIVE
PREREQUISITE: Advanced Algebra 1 Credit

AP Statistics data analysis is dependent on the use of technology. Students should have access to computers that include software capable of doing data analysis. Students will be required to interpret output generated by statistical software programs. Students are not expected to learn how to use various statistical programs. In addition one of the following Texas Instruments calculators is required, TI-83, TI-83+, TI-84, TI-84+, or a TI 89. The TI-83+ is the most popular calculator for AP Statistics. In most cases the calculator is sufficient but the fundamental tool of data analysis is the computer. Textbook Required.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

Performing Arts

BAND

OPEN TO: Grades 9-12 ELECTIVE (This course may be repeated.)
PREREQUISITE: None 1 Credit

This course offers the instrumental student an opportunity to develop musical and performance skills, social responsibility, as well as providing incentive for active, creative participation in civic and school activities. The band performs as a marching unit, a pep band, and in a concert capacity playing classic band literature as well as contemporary pieces. Band students are required to participate in various performances as scheduled throughout the year. These performances include pep band at various after school sporting events, concert performances, weekend parades, and school assemblies. Students will be expected to attend rehearsals, lessons, and to work individually in the form of home practice. Proficient students will have the opportunity to audition for special regional and statewide music festivals and honor bands throughout the school year. Provisions for inexperienced music students to join the band can be made possible with individual accelerated lessons.

Jazz Band, which is voluntary, is available to band members who want to broaden their musical horizons and experiment with improvising. The Jazz Band rehearses outside regular school hours and performs the big band genre, swing, blues, Latin, and modern jazz compositions. Jazz Band performance opportunities are scheduled throughout the year. Students must be enrolled in Concert Band to enter or participate in the State Solo & Ensemble festival.

This course may be taken every-other-day, alternating with Choir, for 1 credit.

CONCERT CHOIR

OPEN TO: Grades 9-12 ELECTIVE (This course may be repeated.)
PREREQUISITE: None 1 Credit

This course covers the study and performance of choral literature representing the various periods and styles, including the development of the concepts of melody, rhythm, texture and form. Students are required to participate in conference, district and state music contests and other public performances as scheduled throughout the year. Individual lessons are also required to develop and encourage each student's talents.

This course may be taken every-other-day, alternating with Band, for 1 credit.

IB MUSIC SL (IB DIPLOMA PROGRAM)

OPEN TO: Grades 11 & 12 ELECTIVE
PREREQUISITE: Concurrent Enrollment in Choir or Band 2 Credits

Music functions as a means of personal and communal identity and expression, and embodies the social and cultural values of individuals and communities. This scenario invites exciting exploration and sensitive study. Music, and all of its associations, may vary considerably from one musical culture to another, yet music may have similarities. Such richness offers a variety of ways to encounter and engage with a constantly changing world.

A vibrant musical education fosters curiosity and openness to both familiar and unfamiliar musical worlds. Through such a study of music, students learn to hear relationships of pitch in sound, pattern in rhythm and unfolding sonic structures. Through participating in the study of music, students are able to explore the similarities, differences and links in music from within their own culture and that of others across time. Informed and active musical engagement allows students to explore and discover relationships between lived human experience and specific sound combinations and technologies, thus understanding the world around us and the nature of humanity.

The Diploma Programme music course provides an appropriate foundation for further study in music at university level or in music career pathways. It also provides an enriching and valuable course of study for students who may pursue other careers. This course also provides all students with the opportunity to engage in the world of music as lifelong participants.

SL students must choose one of three options:

- Creating (SLC)
- Solo performing (SLS)
- Group performing (SLG).

MUSIC APPRECIATION (WVS)

OPEN TO: Grades 9-12

PREREQUISITE: None

ELECTIVE

.5 Credit

This one-semester course introduces students to the elements, instrumentation, and historical periods of music. Students will learn the significance of surroundings and time periods and how they both influenced the music of the day. Students will listen to and evaluate several types of music, and will be assessed through projects, presentations, and exams on the knowledge and understanding of music.

Physical Education

PHYSICAL EDUCATION 9 / HEALTH 9

OPEN TO:	Grade 9	REQUIRED
PREREQUISITE:	None	1 Credit

Physical Education 9 and Health 9 meet every other day throughout the school year. The Physical Education course is designed to meet the physical fitness, health, recreational and social needs of the student. Activities include the fundamentals of sports, games, and fitness, as well as other instruction designed to aid the student's physical development. Cardiovascular activities are required according to the ability of the student. The student is evaluated quarterly on fitness, knowledge (written and oral), written assignments, participation and skills.

The Health 9 course presents relevant, up-to-date information about health issues. The student sets goals to direct action toward healthy decisions and behaviors. The student is challenged to have quality physical, emotional, mental, and social health. The ten major content areas included and recommended by the state are: accident prevention and safety, community health, consumer health, environmental health, family life education, mental and emotional health, nutrition, personal health, prevention and control of disease (including STDs and AIDS), and substance use and abuse..

LIFETIME ACTIVITIES 1

Offered 1st Semester

OPEN TO:	Grades 10-12	ELECTIVE
PREREQUISITE:	None	.5 Credit

Students will participate in a wide range of individual sports that can be pursued for a lifetime. This course will include tennis, walking, jogging, archery, biking, bowling, pickleball, and table tennis. Students may also be engaged in other activities that promote physical fitness.

LIFETIME ACTIVITIES 2

Offered 2nd Semester

OPEN TO:	Grades 10-12	ELECTIVE
PREREQUISITE:	None	.5 Credit

Students will participate in a wide range of individual sports that can be pursued for a lifetime. This course will include badminton, cross country skiing, golfing, fishing, weight lifting, self defense, yoga, meditation, inline skating, and aerobics. Students will also be engaged in other activities that promote physical fitness.

Science

INTRODUCTION TO PHYSICS

OPEN TO: Grades 9 ELECTIVE
PREREQUISITE: None .5 Credit

Physics principles are the foundation upon which further science knowledge can be built. The laws of physics, which govern mechanics, energy, electricity and magnetism are covered in this class through a combination of lectures, labs, and projects. Concepts covered in this course will be explored both experimentally and algebraically.

BIOLOGY 1ST SEMESTER

OPEN TO: Grades 9 ELECTIVE
PREREQUISITE: None .5 Credit

Students will explore biological concepts such as cells, food science, ecology, and genetics through projects, labs, and lectures. This course will feature an emphasis on current events in science and students will develop science inquiry skills as they build a repertoire of lab competencies.

BIOLOGY 2ND SEMESTER

OPEN TO: Grades 10 ELECTIVE
PREREQUISITE: Biology 1st Semester .5 Credit

Students in this course will study plants, animals, cell division, human biology, and classification. Laboratory exercises are designed to help students develop critical thinking and problem solving skills while reinforcing concepts covered during lectures.

CHEMISTRY

OPEN TO: Grades 10 ELECTIVE
PREREQUISITE: Introduction to Physics .5 Credit

This course investigates the nature and properties of matter as well as the relationship between matter and energy using lectures and laboratory experiences. Topics discussed include the atom, bonding, stoichiometry, oxidation-reduction reactions, acids and bases, and nuclear chemistry. Algebraic problem solving and critical thinking skills are heavily emphasized during this course.

IB BIOLOGY SL, HL (IB DIPLOMA PROGRAM)

OPEN TO:

Grades 11 & 12

ELECTIVE

PREREQUISITE:

Biology, Chemistry

2 Credits

Biologists have accumulated huge amounts of information about living organisms, and it would be easy to confuse students by teaching large numbers of seemingly unrelated facts. In the Diploma Programme biology course, students will acquire a limited body of facts and, at the same time, develop a broad, general understanding of the principles of the subject.

Although the Diploma Programme biology course at standard level (SL) and higher level (HL) has been written as a series of discrete statements (for assessment purposes), there are four basic biological concepts that run throughout:

- **Structure and Function:** This relationship is probably one of the most important in a study of biology and operates at all levels of complexity. Students should appreciate that structures permit some functions while, at the same time, limiting others.
- **Universality and Diversity:** At the factual level, it soon becomes obvious to students that some molecules (for example, enzymes, amino acids, nucleic acids and ATP) are ubiquitous, and so are processes and structures. However, these universal features exist in a biological world of enormous diversity. Species exist in a range of habitats and show adaptations that relate structure to function. At another level, students can grasp the idea of a living world in which universality means that a diverse range of organisms (including ourselves) are connected and interdependent.
- **Equilibrium within Systems:** Checks and balances exist both within living organisms and within ecosystems. The state of dynamic equilibrium is essential for the continuity of life.
- **Evolution:** The concept of evolution draws together the other themes. It can be regarded as change leading to diversity within constraints, and this leads to adaptations of structure and function. These four concepts serve as themes that unify the various topics that make up the three sections of the course: the core, the additional higher level (AHL) material and the options.

IB CHEMISTRY SL (IB DIPLOMA PROGRAM)

OPEN TO:

Grades 11 & 12

ELECTIVE

PREREQUISITE:

Biology, Chemistry

2 Credits

Chemistry is the study of materials, related processes and interactions. As a laboratory science, heavy emphasis is placed on experiments which validate theoretical concepts. This course will include discussion and experimentation centered around matter and energy, atomic theory, the periodic table, energetics, the gas laws, kinetic theory, acids and bases and oxidation-reduction. Students will also consider the environmental and social impact of chemistry as part of their study.

In year two, this course will provide more in-depth discussion and experimentation needed to prepare students for the IB higher level or standard level exam. Students will cover topics in organic drugs & medicine, human biochemistry, oxidation-reduction, electrochemistry and thermodynamics. In addition students will review and extend their knowledge of stoichiometry, atomic theory, the periodic table, energetics, kinetics, acids and bases, as well as descriptive chemistry and qualitative analysis.

IB ENVIRONMENTAL SYSTEMS AND SOCIETY SL (IB DIPLOMA PROGRAM)

OPEN TO: Grades 11 & 12 ELECTIVE
PREREQUISITE: Biology, Chemistry 1 Credit
US History, World History

As a transdisciplinary subject, Environmental Systems and Societies is designed to combine the techniques and knowledge associated with group 4 (the experimental sciences) with those associated with group 3 (individuals and societies). By choosing to study a transdisciplinary course such as this as part of the diploma, students are able to satisfy the requirements for both groups 3 and 4 of the hexagon, thus allowing them to choose another subject from any hexagon group (including another group 3 or 4 subject). Transdisciplinary subjects therefore introduce more flexibility into the IB Diploma Programme.

The prime intent of this course is to provide students with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face. Students' attention can be constantly drawn to their own relationship with their environment and the significance of choices and decisions that they make in their own lives. It is intended that students develop a sound understanding of the interrelationships between environmental systems and societies, rather than a purely journalistic appreciation of environmental issues. The approach is conducive to students evaluating the scientific, ethical and socio-political aspects of issues.

IB PHYSICS SL

OPEN TO: Grades 11 - 12 ELECTIVE
PREREQUISITE: None 2 Credits

Physics is the most fundamental of the experimental sciences as it seeks to explain the very universe itself, from the smallest particles to the vast distances between galaxies. The IB Physics course will explore classical physics in the first year by studying the motion and energy of objects. Specifically, students will investigate systems by analyzing the forces that drive the system. Both mechanical and electrical systems will be considered. These topics will be explored from both a theoretical and an experimental viewpoint.

In the second year, students extend their exploration of the topics covered in IB Physics 1st year by studying the applications of classical physics in investigating wave phenomena and thermodynamics. Students move into the realm of modern physics and its applications in the final semester.

In order to be successful in IB Physics, students need a high level of confidence in their mathematical reasoning abilities, as laws and definitions in physics are grounded in mathematics.

MPTC CAREERS IN ALLIED HEALTH (#530-120) (DL) Offered 1st Semester.

OPEN TO: Grades 11-12 ELECTIVE
PREREQUISITE: None .5 Credit and
Moraine Park Technical College Credit (3 Cr)

This course explores career possibilities within the health care industry. Learners examine the characteristics and skills needed for a wide range of careers in health care. Learners also gain perspective about what it takes to be an effective team member working in health care. The focus is on nursing, health management, laboratory technology, health information technology, therapy, diagnostic, dental, surgical and other health care related careers.

MPTC MEDICAL TERMINOLOGY (#501-101) (DL) Offered 2nd Semester

OPEN TO: Grade 11 and 12 ELECTIVE
PREREQUISITE: None .5 Credit and
Moraine Park Technical College Credit (3 Cr)

This course focuses on the component parts of medical terms: prefixes, suffixes and word roots. Students practice formation, analysis and reconstruction of terms. Emphasis is placed on spelling, definition and pronunciation. The course introduces operative, diagnostic, therapeutic and symptomatic terminology of all body systems as well as systemic and surgical terminology.

EARTH SCIENCE (WVS)

OPEN TO: Grade 11 and 12 ELECTIVE
PREREQUISITE: None 1 Credit

This introductory two semester Earth Science course incorporates the body of knowledge and facts accumulated from people's observations of the Earth around them and the skies above them. This observed information of the earth has evolved over centuries into the branch of science known as earth science. Earth science has several different branches of study: the solid earth (geology); the earth's waters (hydrology and oceanography); the earth's atmosphere (meteorology); and the universe beyond earth (astronomy). Using careful observation and experimentation, students will learn to effectively analyze and evaluate the earth's natural phenomena and their causes, as well as, its relationship in the universe by focusing on the four major areas of study.

AP BIOLOGY (WVS)

OPEN TO: Grade 12 ELECTIVE
PREREQUISITE: Biology, Chemistry 1 Credit

This course is a comprehensive analysis of general biology that includes biochemistry, molecular biology, genetics, mechanisms of evolution, evolutionary history of biological diversity, plant and animal form and function, and ecology. The AP Biology course is designed to be the equivalent of a college introductory biology course usually taken by biology majors or pre-medical students their first year. The textbook used, the range and depth of topics covered, discussion topics and kinds of labs done in this course are equivalent to those taking this course in college. College Board guidelines are followed in determining the course. Textbook Required. Lab kits are optional.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

AP CHEMISTRY (WVS)

OPEN TO: Grade 12 ELECTIVE
PREREQUISITE: Chemistry 1 Credit

Advanced Placement Chemistry is designed to duplicate an equivalent full-year introductory college course covering all aspects of general Chemistry. Students will learn fundamental analytical skills to logically assess chemical problems proficiently. Through fascinating and elaborative lessons, students will develop the skills necessary to arrive at conclusions based on informed judgment and present evidence in clear and persuasive essays. Textbook Required; Lab kits are optional.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

AP ENVIRONMENTAL SCIENCE (WVS)

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: Biology, Chemistry, Algebra .5 Credit

This course is designed to acquaint students with the physical, ecological, social, and political principles of environmental science. The scientific method is used to analyze and understand the interrelationships between humans and the natural environment. The course shows how ecological realities and the material desires of humans often clash, leading to environmental degradation and pollution. The course consists of six chapters covering the following topics: Earth's Systems, Human Population Dynamics, Natural Resources, Environmental Quality, Global Changes and Environment and Society. Chapters are divided into several subsections, each of which contains text, animations, laboratory simulations and video presentations by experts. Textbook Required.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area..

AP PHYSICS B (WVS)

OPEN TO:

Grade 11-12

ELECTIVE

PREREQUISITE:

Algebra 2

1 Credit

Physics Recommended

AP Physics is a yearlong introduction to the algebra-based major areas of physics – mechanics, fluids, waves, optics, electricity, magnetism and modern physics (atomic and nuclear). Students learn to think like scientists: making predictions based on observations, writing hypothesis, designing and completing experiments, and reaching conclusions based on the analysis of data derived from these experiments. Students apply the concepts of physics to their everyday experiences and current events and issues in science and engineering. The course provides opportunities for guided inquiry and student-centered learning to foster critical thinking skills. Textbook required Lab kits are optional.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

Social Studies

MODERN U.S. HISTORY

***Offered 1st Semester**

OPEN TO:

Grade 9

REQUIRED

PREREQUISITE:

None

.5 Credit

U.S. History traces the political, military, and social development of our country from Reconstruction (1877) to the present. Emphasis is on the cause and effect relationship between periods of history. Units include business growth, settlement of the West, immigration, overseas expansion, World War I, the Great Depression, World War II, the Korean and Cold Wars, the Civil Rights movement, Vietnam and the 1960's, and recent historical developments.

ANCIENT WORLD HISTORY

***Offered 2nd Semester**

OPEN TO:

Grade 9

REQUIRED

PREREQUISITE:

None

.5 Credit

Ancient World History will trace the development of early humans and early civilizations around the world. From the study of the Middle Ages, the Renaissance, and the Reformation, students are shown how modern nations evolved to their present form.

MODERN WORLD HISTORY

***Offered 1st Semester**

OPEN TO:

Grade 10

REQUIRED

PREREQUISITE:

None

.5 Credit

The study of the Industrial Revolution, social protest, and the rise of mass society will precede an in-depth look at both world wars. Major trends and developments in the world, from 1945 to the present are also examined. The objective is to show the relation of other nations and their histories to present day America.

Modern World History will also explore several areas of the world and includes the examination of international current events as an integral part of the course. Students are encouraged to understand the importance of cultural perspectives, historical background and geography in areas studied, as well as economic, political and social factors that impact history. Awareness of contemporary relationships in the global community, international interdependence and a global perspective allows students to appreciate the benefits of a multicultural world.

AMERICAN GOVERNMENT

***Offered 2nd Semester**

OPEN TO:

Grade 10

REQUIRED

PREREQUISITE:

None

.5 Credit

American Government is a semester course which concentrates on the varied political government processes in the United States at the national, state and local levels. The course examines the origins of government and comparative governments. The organization, structure, and functions of the executive, legislative, and judicial branches are studied.

Emphasis is placed on the importance of showing how the individual can work effectively within the system for change. Focus is also given to an evaluation of constitutional rights. The election process and voter behavior are also considered as is the historical development of the Constitution and civil rights. Building of political vocabulary is stressed.

LEADERSHIP DEVELOPMENT

OPEN TO:

Grades 9-12

ELECTIVE

PREREQUISITE:

None

.5 Credit

This course is designed to prepare the student for a variety of leadership roles in school, career and community. The student will participate in three kinds of leadership training activities: social skills training (sharing, cooperating, resolving conflicts, and setting priorities), technical skills training (creative problem solving, debating, parliamentary procedures, understanding group dynamics, building consensus, and giving feedback), and knowledge development (leadership styles, moral education, and organizational theory).

IB ECONOMICS SL

OPEN TO:	Grades 11 - 12	ELECTIVE
PREREQUISITE:	None	1 Credit

Economics is a dynamic social science, forming part of group 3—individuals and societies. The study of economics is essentially about dealing with scarcity, resource allocation and the methods and Processes by which choices are made in the satisfaction of human wants. As a social science, economics uses scientific methodologies that include quantitative and qualitative elements.

The IB Diploma Programme economics course emphasizes the economic theories of microeconomics, which deal with economic variables affecting individuals, firms and markets, and the economic theories of macroeconomics, which deal with economic variables affecting countries, governments and societies. These economic theories are not to be studied in a vacuum—rather, they are to be applied to real-world issues. Prominent among these issues are fluctuations in economic activity, international trade, economic development and environmental sustainability.

The ethical dimensions involved in the application of economic theories and policies permeate throughout the economics course as students are required to consider and reflect on human end-goals and values.

The economics course encourages students to develop international perspectives, fosters a concern for global issues, and raises students' awareness of their own responsibilities at a local, national and international level. The course also seeks to develop values and attitudes that will enable students to achieve a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interdependent world.

IB GEOGRAPHY SL, HL

OPEN TO:	Grades 11 - 12	ELECTIVE
PREREQUISITE:	None	2 Credits

Geography is a dynamic subject that is firmly grounded in the real world and focuses on the interactions between individuals, societies and the physical environment in both time and space. It seeks to identify trends and patterns in these interactions and examines the processes behind them. It also investigates the way that people adapt and respond to change and evaluates management strategies associated with such change. Geography describes and helps to explain the similarities and differences between spaces and places. These may be defined on a variety of scales and from a range of perspectives.

Within group 3 subjects, geography is distinctive in that it occupies the middle ground between social sciences and natural sciences. The Diploma Programme geography course integrates both physical and human geography, and ensures that students acquire elements of both scientific and socio-economic methodologies. Geography takes advantage of its position between both these groups of subjects to examine relevant concepts and ideas from a wide variety of disciplines. This helps students develop an appreciation of, and a respect for, alternative approaches, viewpoints and ideas.

IB HISTORY SL, HL (IB DIPLOMA PROGRAM)

OPEN TO: Grades 11 or 12 ELECTIVE
PREREQUISITE: US History, World History 2 Credits

History is more than the study of the past. It is the process of recording, reconstructing and interpreting the past through the investigation of a variety of sources. It is a discipline that gives people an understanding of themselves and others in relation to the world, both past and present.

Students of history learn how the discipline works. It is an exploratory subject that poses questions without providing definitive answers. In order to understand the past, students must engage with it both through exposure to primary historical sources and through the work of historians. Historical study involves both selection and interpretation of data and critical evaluation of it. Students of history should appreciate the relative nature of historical knowledge and understanding, as each generation reflects its own world and preoccupations and as more evidence emerges. A study of history both requires and develops an individual's understanding of, and empathy for, people living in other periods and contexts.

Diploma Programme history consists of a standard level (SL) and higher level (HL) core syllabus comprising an in-depth study of an individual prescribed subject and the selection of two topics from the main developments in 20th century world history. At HL students select from a range of optional syllabuses that cover a wider time span encouraging in-depth study.

The Diploma Programme history course provides both structure and flexibility, fostering an understanding of major historical events in a global context. It requires students to make comparisons between similar and dissimilar solutions to common human situations, whether political, economic or social. It invites comparisons between, but not judgments of, different cultures, political systems and national traditions. The content of the history course is intrinsically interesting and it is hoped that many students who follow it will become fascinated with the discipline, developing a lasting interest in it, whether or not they continue to study it formally.

IB PSYCHOLOGY SL

OPEN TO: Grades 11 - 12 ELECTIVE
PREREQUISITE: None 1 Credit

Psychology is the systematic study of behavior and mental processes. Psychology has its roots in both the natural and social sciences, leading to a variety of research designs and applications, and providing a unique approach to understanding modern society.

IB psychology examines the interaction of biological, cognitive and socio-cultural influences on human behavior, thereby adopting an integrative approach. Understanding how psychological knowledge is generated, developed and applied enables students to achieve a greater understanding of themselves and appreciate the diversity of human behavior. The ethical concerns raised by the methodology and application of psychological research are key considerations in IB psychology.

IB SOCIAL & CULTURAL ANTHROPOLOGY SL

OPEN TO: Grades 11 - 12 ELECTIVE
PREREQUISITE: None 2 Credits

Social and cultural anthropology is the comparative study of culture and human societies. Anthropologists seek an understanding of humankind in all its diversity. This understanding is reached through the study of societies and cultures and the exploration of the general principles of social and cultural life. Social and cultural anthropology place special emphasis on comparative perspectives that challenge cultural assumptions. Many anthropologists explore problems and issues associated with the complexity of modern societies in local, regional and global contexts.

The course offers an opportunity for students to become acquainted with anthropological perspectives and ways of thinking, and to develop critical, reflexive knowledge. Social and cultural anthropology contributes a distinctive approach to intercultural awareness and understanding, which embodies the essence of an IB education. Anthropology fosters the development of citizens who are globally aware and ethically sensitive.

Units include the definition of anthropology; social and cultural organization; societies and cultures in contact; kinship as an organizing principle; political organization; economic organization and the environment; systems of knowledge; belief systems and practices; moral systems.

IB TOK (THEORY OF KNOWLEDGE)***Offered 2nd Semester (Gr 11); Offered 1st Semester (Gr 12).**

OPEN TO:	Grades 11 - 12	REQUIRED FOR IB DIPLOMA
PREREQUISITE:	(IB DP Candidates Only)	1 Credit

The TOK course, a flagship element in the Diploma Programme, encourages critical thinking about knowledge itself to try to help young people make sense of what they encounter. Its core content utilizes questions such as these: *What counts as knowledge? How does it grow? What are its limits? Who owns knowledge? What is the value of knowledge? What are the implications of having, or not having, knowledge?*

What makes TOK unique, and distinctively different from standard academic disciplines, is its process. At the centre of the course is the student as knower. Students entering the Diploma Programme typically have 16 years of life experience and more than 10 years of formal education behind them. They have accumulated a vast amount of knowledge, beliefs and opinions from academic disciplines and their lives outside the classroom. In TOK they have the opportunity to step back from this relentless acquisition of new knowledge in order to consider knowledge issues. These include the questions already mentioned, viewed from the perspective of the student, but often begin from more basic ones: *What do I claim to know [about X]? Am I justified in doing so [how?]?* Such questions may initially seem abstract or theoretical, but TOK bring them into closer focus by taking into account students' interests, circumstances and outlooks.

TOK activities and discussions aim to help students discover and express their views on knowledge issues. The course encourages students to share ideas with others and to listen to and learn from what others think. In this process students' thinking and understanding of knowledge as a human construction are shaped, enriched and deepened. Connections may be made between knowledge encountered in different Diploma Programme subjects, in CAS experience or in extended essay research; distinctions between different kinds of knowledge may be clarified. Because the subject matter of the course is defined in terms of knowledge issues, there is no end to the valid questions that may arise in a TOK course. This guide consists mainly of questions that have been found to stimulate appropriate TOK inquiry.

IB CAS/EE (CREATIVITY/ACTION/SERVICE / EXTENDED ESSAY)

OPEN TO:	Grades 11 - 12	REQUIRED FOR IB DIPLOMA CANDIDATES
PREREQUISITE:	(IB DP Candidates Only)	.5 Credit

MPTC INTRODUCTION TO CRIMINAL JUSTICE SYSTEM (#504-110) (DL) Offered 1st Semester

OPEN TO:	Grade 11 -12	ELECTIVE
PREREQUISITE:	None	.5 Credit <u>and</u> Moraine Park Technical College Credit (3 Cr)

Criminal Justice explores the three main subsystems of the criminal justice system: law enforcement, courts, and corrections. The history, philosophy, structure, operations, procedures, and current issues and future trends of these three main subsystems are presented, discussed, and studied using a cooperative learning approach. This course also identifies the functions and jurisdiction of Wisconsin law enforcement and criminal justice system agencies and the sources and legal principles that form the foundation of Wisconsin criminal law in accordance with Wisconsin Training and Standards requirements 1.2 and 6.1.

MPTC INTRODUCTION TO CORRECTIONS (DL) Offered 2nd Semester

OPEN TO:	Grade 11-12	ELECTIVE
PREREQUISITE:	None	.5 Credit <u>and</u> Moraine Park Technical College Credit (3 Cr)

This course focuses on the exploration of corrections and law enforcement related careers. Students explore options available to them in the corrections and law fields and assess their skills and abilities, motivations, interests, values, temperament and experiences. Exploration of corrections and law enforcement related careers occur through tours of the facilities, presentations by working professionals, and individual and group activities.

AP EUROPEAN HISTORY (WVS)

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: None 1 Credit

This course is the study of the social, economic, cultural, intellectual, political and diplomatic history of Modern Europe and its place in the history of the world from the fall of Constantinople to the fall of the Berlin wall and the Soviet Union. The course will be taught at a level and rigor equivalent to that required of students in a college freshman or sophomore Modern European History course. Students will develop an understanding of the major periods, ideas, movements, trends, and themes that characterize European history from approximately 1450-the high Renaissance-to the present. Students develop the ability to analyze historical evidence and express understanding and analysis in writing. The course will prepare students for the College Board examination in European History. Textbook Required.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

AP PSYCHOLOGY (WVS)

OPEN TO: Grade 12 ELECTIVE
PREREQUISITE: None 1 Credit

This course is a survey of psychology that introduces students to the major topics of the field, the terminology and methodology of psychology, and the historical and current understanding of human behavior and thought-processes. Students learn to analyze human experiences like psychologists do and to apply what they have learned to the world around them. The focus of the course is to prepare students to take the Advanced Placement Psychology course administered by the College Board in the spring of each year. Textbook required

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

AP U. S. GOVERNMENT AND POLITICS (WVS)

OPEN TO: Grade 12 ELECTIVE
PREREQUISITE: US History (1700-Present) 1 Credit

This course will survey the complex subjects of U.S. Government and politics. We will analyze in some detail the processes and institutions (both formal and informal) through which the political system functions and policy decisions are made. This analysis will include the Constitutional structure of Government, participatory politics, the formal institutions of power, the extra constitutional influences on those institutions, and public polity and individual rights and liberties. Two Textbooks Required.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

AP U.S. HISTORY (WVS)

OPEN TO: Grades 11-12 ELECTIVE
PREREQUISITE: None 1 Credit

This college-level course explores the history of the United States from the first European explorations of the Americas to present day events and trends. Students examine political institutions and behavior, public policy, social and economic change, diplomacy and international relations, and cultural and intellectual developments. Textbook required.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

AP WORLD HISTORY (WVS)

OPEN TO: Grade 11-12

PREREQUISITE: None

ELECTIVE

1 Credit

AP World History covers the history of the world from 600 C.E. to the present with an introduction unit on the period before (covering around 8000 B.C.E to 600 C.E.). The course emphasizes “patterns of change” and the connections between the various world cultures throughout the time period being studied. Students will gain an understanding of the global experiences of humanity and be able to apply that knowledge to their growth and development as “world citizens”. The class has two major goals: 1) to prepare students to be successful on the AP World History exam and 2) to provide students with an understanding on why the world developed the way it did. Textbook required.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

Technology & Engineering

ELECTRONICS 1

OPEN TO: Grade 9 - 12 ELECTIVE
PREREQUISITE: None 1 Credit

In the first semester of electronics, students will learn about the electrical components used in everyday small electronics. Students will learn about series circuits, parallel circuits, and combination circuits through both a theoretical and hands-on approach. Students will also begin to investigate digital electronic circuits near the end of the semester.

In the second semester, students will investigate digital circuits and microcontrollers. Through exploration and many labs, students will learn simple logic and simple programming skills. Students will also come to realize that simple circuits may be combined to make more useful circuits. Students will also be required to purchase and build an electronic kit to build later on in the semester.

RESEARCH AND DESIGN ENGINEERING 1

OPEN TO: Grade 9 – 12 ELECTIVE
PREREQUISITE: None 1 Credit

Students will learn how to create parts and objects using one of the industry-leading computer aided drafting softwares on the market. Through the use of SolidWorks®, students will learn the basics necessary to enter into a drafting or engineering field. Through research, students will also learn about where products come from and some of the manufacturing processes involved in creating such products.

In the second semester, students will continue using SolidWorks® learning some of the more intricate functions. Students will learn about teamwork through designing, building, and testing a trebuchet. Students will also learn about reverse engineering in this course and how it relates to the 'real world'.

WOODS

OPEN TO: Grade 9 – 12 ELECTIVE
PREREQUISITE: None 1 Credit

This course provides an introduction to working with different types of wood using various types of machines. Students will learn about the safe operation of the machines in the lab and the proper practices around such machines. Students will learn to read blueprints, make material cost calculations, and develop proper joining and finishing techniques through hands-on projects. The students will be required to pay a small fee for the materials used in this course, and will be able to take home their project(s) at the end of the semester.

The second semester provides a more in-depth experience working with different types of wood using various types of machines. Students will review the safe operation of the machines and the proper practices around the machines they used in Wood Manufacturing 1. Students will learn about mass production practices used in industry and about the repeatability of parts. The students will be required to pay a small fee for the materials used in this course, and will be able to take home their project(s) at the end of the semester.

MPTC BEGINNING PHOTOSHOP

OPEN TO: Grades 11-12 ELECTIVE
PREREQUISITE: None .5 Credit and
Moraine Park Technical College Credit (3 Cr)

This course introduces basic electronic pixel-based image manipulation. The course uses software tutorial exercises that require Adobe Photoshop CS3 software. The course builds on the student's required skills of using a computer and its operating system to manage files and search the Internet.

MPTC PRINCIPLES OF GRAPHIC DESIGN

OPEN TO: Grades 11-12
PREREQUISITE: None

ELECTIVE
.5 Credit and
Moraine Park Technical College Credit (3 Cr)

This course introduces students to the basic formal elements and principles of two-dimensional graphic design. Visual exercises and practical projects are utilized to explore visual and creative thinking strategies to develop more effective visual communication. Basic computer skills are recommended.

MPTC INTRODUCTION TO MODERN MANUFACTURING (DL)

OPEN TO: Grade 11-12
PREREQUISITE: None

Offered 1ST OR 2ND Semester
ELECTIVE
.5 Credit and
Moraine Park Technical College Credit (3 Cr)

This course explores career possibilities and educational requirements for the competitive and global Manufacturing environment. Learners examine the critical core skills needed for a wide range of careers in Manufacturing. The course focuses on manufacturing production basics, materials, and processes, safety and workflow. Special emphasis is placed on manufacturing systems such as lean manufacturing and the role of advanced technologies such as automation, Computer-Aided Design (CAD), Computer-Aided Manufacturing (CAM), and Computer Numerical Control (CNC). Students will research one specific manufacturing-related career, and will participate in field trips to a successful area manufacturing business. The course features speakers with up-to-date expertise in topics such as lean manufacturing and just-in-time manufacturing.

World Languages

FRENCH 1

OPEN TO: Grades 9-12 ELECTIVE
PREREQUISITE: None 1 Credit

The student will be introduced to reading, writing, speaking and understanding French. Vocabulary covered includes greetings, simple conversational phrases, pastimes, likes/dislikes, food, and family. The student will also learn basic grammar rules and verbs in the present tense. Course materials used include CDs videotapes, and written text in each chapter. Students will also investigate the language and culture through individual and group projects. Text: Allez-Viens! Level I.

FRENCH 2

OPEN TO: Grades 9 -12 ELECTIVE
PREREQUISITE: French 1 1 Credit

The French 2 student will expand vocabulary, strengthen grammar base, and extend reading, listening, and speaking skills. Vocabulary includes describing people and places, food, shopping, expressing opinions, giving directions, and making plans.

Grammar and vocabulary study includes a review of French I. New grammar includes past tense of regular and irregular verbs, reflexive verbs, direct and indirect pronouns, and relative pronouns. Aural and oral proficiency is developed through the use of the video program, CDs, classroom listening, and exercises including skits, interviews, oral presentations, and culture projects.

Writing skills are expanded through workbook and textbook exercises. Text: Allez-Viens! Level II.

FRENCH 3

OPEN TO: Grades 10-12 ELECTIVE
PREREQUISITE: French 2 1 Credit

The purpose of French 3 is to expand on grammar and vocabulary presented in previous years in order to increase language proficiency. French 3 grammar reviews the present and past tense. Imperfect, future, conditional, and subjunctive are introduced. New vocabulary includes expressing enthusiasm and boredom, giving and asking directions, asking permission, household chores, clothing, and making arrangements. Writing ability is developed through workbook exercises and projects. Culture is included in each chapter. Text: Allez-Viens! Level III.

IB FRENCH SL, HL (IB DIPLOMA PROGRAM)

OPEN TO: Grades 11 & 12 ELECTIVE
PREREQUISITE: French 1, French 2 2 Credits

The French program is primarily a pre-university course in literature. It is aimed at students who intend to pursue literature, or related studies, at university, as well as at students whose formal study of literature will not continue beyond this level. The former would normally follow the Higher Level (HL) program and the latter the Standard Level (SL).

Literature is concerned with our conceptions, interpretations and experiences of the world. The study of literature, therefore, can be seen as a study of all the complex pursuits, anxieties, joys and fears that human beings are exposed to in the daily business of living. It enables an exploration of one of the more enduring fields of human creativity and artistic ingenuity, and provides immense opportunities for encouraging independent, original, critical and clear thinking. It also promotes a healthy respect for the imagination and a perceptive approach to the understanding and interpretation of literary works. The discussion of literature is itself an art which requires the clear expression of ideas both orally and in writing.

The French program encourages students to see literary works as products of art and their authors as craftsmen whose methods of production can be analyzed in a variety of ways and on a number of levels. This is achieved through the emphasis placed on exploring the means used by different authors to convey their subjects in the works studied. It is further reinforced by the comparative framework emphasized for the study of these works in all parts of the program. The flexibility of the program allows teachers to choose challenging works from their own sources to suit the particular needs and interests of their students. It also allows teachers to participate significantly, through the internally assessed oral component, in the overall assessment of their students.

SPANISH 1

OPEN TO: Grades 9-12 ELECTIVE
PREREQUISITE: None 1 Credit

This course is an introduction that involves understanding the spoken language, speaking, reading, and writing. The student will learn to understand and express ideas in telling and asking names, greeting people, referring to family members and other people, telling age and origin, describing people and objects, ordering food in a restaurant, having a telephone conversation, describing school life, and telling time.

Other vocabulary includes numbers to one hundred, colors, clothing, table setting, classroom and school words, weather, days of the week, months, seasons, and animals.

Students will explore cultural aspects of life in Spain, Mexico and other Spanish-speaking countries through the use of video tape, music, audio tapes, filmstrips, and written materials.

High school students who wish to begin Spanish will take Spanish 1 with the 8th grade class.

SPANISH 2

OPEN TO: Grades 9 -12 ELECTIVE
PREREQUISITE: Spanish 1 1 Credit

This course is a continuation of Spanish 1 with increased emphasis on speaking skills. Students will learn vocabulary involving personal relationships, household items, food, travel and tourism, health and hygiene, and nature.

Students will also learn to describe events in the past, work with prepositional phrases, and begin to use the future tense.

The study of Hispanic culture is continued through the use of videotapes, music, and written materials.

SPANISH 3

OPEN TO: Grades 10 -12 ELECTIVE
PREREQUISITE: Spanish 2 1 Credit

This course is a continuation of Spanish 2 with an increased emphasis on speaking. Vocabulary will include clothing, government, neighborhoods, and descriptive adjectives. After reviewing verb tenses from Spanish 1 and 2, students will continue working with the future, conditional, and subjunctive tenses. Content will be supplemented by short readings, writing activities, and conversation.

Cultural awareness is further developed through literature, videotapes, and music. Presentations and discussions are presented primarily in the Spanish language.

IB SPANISH SL, HL (IB DIPLOMA PROGRAM)

OPEN TO: Grades 11 & 12 ELECTIVE
PREREQUISITE: Spanish 1, Spanish 2 2 Credits

The French/Spanish program is primarily a pre-university course in literature. It is aimed at students who intend to pursue literature, or related studies, at university, as well as at students whose formal study of literature will not continue beyond this level. The former would normally follow the Higher Level (HL) program and the latter the Standard Level (SL).

Literature is concerned with our conceptions, interpretations and experiences of the world. The study of literature, therefore, can be seen as a study of all the complex pursuits, anxieties, joys and fears that human beings are exposed to in the daily business of living. It enables an exploration of one of the more enduring fields of human creativity and artistic ingenuity, and provides immense opportunities for encouraging independent, original, critical and clear thinking. It also promotes a healthy respect for the imagination and a perceptive approach to the understanding and interpretation of literary works. The discussion of literature is itself an art which requires the clear expression of ideas both orally and in writing.

The French/Spanish program encourages students to see literary works as products of art and their authors as craftsmen whose methods of production can be analyzed in a variety of ways and on a number of levels. This is achieved through the emphasis placed on exploring the means used by different authors to convey their subjects in the works studied. It is further reinforced by the comparative framework emphasized for the study of these works in all parts of the program. The flexibility of the program allows teachers to choose challenging works from their own sources to suit the particular needs and interests of their students. It also allows teachers to participate significantly, through the internally assessed oral component, in the overall assessment of their students.

WORLD LANGUAGE SURVEY (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None .5 Credit

In this world language course, students will be introduced to 6 different languages within 18 weeks. The languages include Spanish, French, German, Latin, Chinese and Japanese. Each language will be taught in a period of 3 weeks. This multilingual course is designed to give students an opportunity to gain understanding of a language that they might want to further study in the future. The course takes a multi-perspective approach for teaching the culture of the people that speak the language, along with fundamental communication skills in the target language. Activities that engage students and make language learning exciting and fun will be incorporated to build acquisition. The language will be taught using the communicative method which combines listening, speaking, reading and writing in the target language with the use of multimedia resources.

LATIN 1 (WVS)

OPEN TO: Grades 9-12 ELECTIVE
PREREQUISITE: None 1 Credit

This course introduces students to fundamental vocabulary and basic grammatical concepts of the Latin language. Grammar and vocabulary are taught with the latest advances in interactive multimedia technology.

In addition to grammar and translation assignments, this two-semester course includes seven (7) mini-projects on Roman Life, four (4) mini-projects on Greek and Roman mythology, and four (4) Word Studies. Students will also participate in class discussions and work in groups on projects related to archaeological excavations Roman towns, including Pompeii, Herculaneum, and Zeugma, and Roman inventions.

LATIN 2 (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: Latin 1 1 Credit

Latin 2 is the continuation of Latin grammar and a deeper study of Roman Mythology and history. The grammar in Latin 2 reviews topics from Latin 1 with expanding use of declensions, adjectives, adverbs, and cases. These skills will be used to translate longer Latin texts to English that require more knowledge of grammar rather than just vocabulary recall. The culture part of the course is an in-depth study of The Odyssey, the underworld, the rulers and kings of Rome, and entertainment.

CHINESE 1 (MANDARIN) (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None 1 Credit

This is a beginning level course that will introduce the student to a variety of areas of Mandarin Chinese (simplified). In this course, the student will learn listening, speaking, reading and writing skills through activities that are based on pedagogically proven methods of foreign language instruction. Grammar is introduced and practiced in innovative and interesting ways with a variety of learning styles in mind. Culture is sprinkled throughout the course in an attempt to help the learner focus on the Chinese speaking world and their culture, people, geographical locations and histories. This course is aligned to national Foreign Language standards. Students are introduced to the simplified Chinese writing system in this class. No text required.

CHINESE 2 (MANDARIN) (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: Chinese 1 1 Credit

This course is a continuation of a beginning level course that will introduce the student to a variety of areas of language learning. In this course, the student will learn listening, speaking, reading and writing skills through activities that are based on pedagogically proven methods of foreign language instruction. Throughout the five units of material (Daily Routine, Animals, Hobbies, The Body and Descriptions), students learn to express themselves using an ever increasing vocabulary, present-tense verbs, articles, and adjectives. Grammar is introduced and practiced in innovative and interesting ways with a variety of learning styles in mind. Culture is sprinkled throughout the course in an attempt to help the learner focus on the Chinese speaking world and their culture, people, geographical locations and histories. The course is aligned to the national Foreign Language standards. No text required.

GERMAN 1 (WVS)

OPEN TO:	Grades 9 - 12	Elective
PREREQUISITE:	None	1 Credit

First year German students start out by learning introductions, greetings, and the days of the week, words and phrases to find out information, vowel pronunciation, and how to use articles, plurals, and noun/adjective agreement with gender. From there, they begin to incorporate their new vocabulary through rhythm and cadence, recognize sentence patterns and build comprehension skills, increase their fluency, practice counting and simple math, learn to form plurals with greater accuracy, use infinite verbs, and form question statements.

GERMAN 2 (WVS)

OPEN TO:	Grades 9 - 12	Elective
PREREQUISITE:	German 1	1 Credit

The second year of German expands students' written and spoken fluency, placing a continued emphasis on reading, writing, listening, and speaking. Students learn to understand and use small talk, and they practice using new vocabulary in conversations and stories. They master object pronouns with finite and infinite verbs, learn geography vocabulary, study pronouns and past and present tenses, identify and describe objects, use genitive plural and singular forms, expand their cultural knowledge, and build fluency through repetition.

GERMAN 3 (WVS)

OPEN TO:	Grades 9 - 12	Elective
PREREQUISITE:	German 2	1 Credit

German III has been carefully designed to meet the standards of the American Council on the Teaching of Foreign Languages (ACTFL). These standards call for a method of teaching that focuses on successful communication through speaking, writing, reading, and listening, as well as a thorough grounding in aspects of culture. Each unit embodies all of these standards in accordance with the theories described in this document. Unit activities blend different forms of communication and culture to ensure that the student meets all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multi-media presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes, and exams. Learning activities in each unit are focused upon a specific theme.

GERMAN 4 (WVS)

OPEN TO:	Grades 9 - 12	Elective
PREREQUISITE:	German 3	1 Credit

This fourth year of German builds upon the first three levels. Students will continue to sharpen their reading, writing, and listening skills as well as learn skills to think critically and express themselves on topics relevant to German culture. This fourth level will include authentic texts, current culture, and literature from Germany, Austria, and Switzerland. Every two units will be a special focus on a particular region or city from these areas; these will include such things as culture, tourism, and current events. Students will learn vocabulary, grammar skills, and cultural competency to express themselves on a variety of topics in German. Cultural topics include: contemporary and classical music, expressing opinion, German history, transportation, family, weekend travel, free time activities, youth and technology, multiculturalism, holidays, education, career, and travel in a foreign country. This course is aligned to the national ACTFL Foreign Language standards and provides a way to focus on the five aspects of foreign language instruction: communication, culture, connections, comparisons, and community. These are the "Five C's of the Foreign Language Education" as outlined in *Standards for Foreign Language Learning: Preparing for the 21st Century*. No text required.

JAPANESE 1 (WVS)

OPEN TO:	Grades 9 - 12	Elective
PREREQUISITE:	None	1 Credit

Japanese I is a two semester course has been carefully designed to meet the standards of the American Council on the Teaching of Foreign Languages (ACTFL). These standards call for a method of teaching that focuses on successful communication through speaking, writing, reading, and listening, as well as a thorough grounding in aspects of culture. Each unit embodies all of these standards in accordance with the theories described in this document. Unit activities blend different forms of communication and culture to ensure that the student meets all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multi-media presentations, selfchecks, practice activities and games, oral and written assignments, projects, quizzes, and exams. Learning activities in each unit are focused upon a specific theme. No text required

JAPANESE 2 (WVS)

OPEN TO:	Grades 9 - 12	Elective
PREREQUISITE:	Japanese 1	1 Credit

Japanese II is a two semester course that has been carefully designed to meet the standards of the American Council on the Teaching of Foreign Languages (ACTFL). These standards call for a method of teaching that focuses on successful communication through speaking, writing, reading, and listening, as well as a thorough grounding in aspects of culture. Each unit embodies all of these standards in accordance with the theories described in this document. Unit activities blend different forms of communication and culture to ensure that the student meets all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multi-media presentations, selfchecks, practice activities and games, oral and written assignments, projects, quizzes, and exams. Learning activities in each unit are focused upon a specific theme. No text required.

AP FRENCH LANGUAGE (WVS)

OPEN TO:	Grades 12	ELECTIVE
PREREQUISITE:	French 4/5 with 3.5 grade average	1 Credit

AP French Language students apply their French grammar and vocabulary knowledge and their listening, reading, speaking, and writing skills to a wide variety of real-world contexts. Students learn to speak fluently and accurately, write complicated compositions, and comprehend native speakers. The equivalent of a college-level language course, AP French Language prepares students for the AP Exam and for further study of French language, culture, and literature. The course does not use a specific text. Rather, a variety of poems, short stories, essays, and plays are provided within the course. Students must have a microphone to submit speaking assignments.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

AP SPANISH LANGUAGE (WVS)

OPEN TO:	Grades 12	ELECTIVE
PREREQUISITE:	Spanish 4/5 with 3.5 grade average	1 Credit

AP Spanish Language students practice perfecting their Spanish speaking, listening, reading, and writing skills. They study vocabulary, grammar, and cultural aspects of the language, and then apply what they've learned in extensive written and spoken exercises. By the end of the course, students will have an expansive vocabulary and a solid, working knowledge of all verb forms and tenses. The equivalent of a college-level language course, the two-semester AP Spanish Language prepares students for the AP Exam and for further study of Spanish language, culture, or literature. The course does not use a specific text, however a variety of poems, short stories, essays and plays are provided within the course. Students must have a microphone to submit speaking assignments.

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

APPENDIX A

The International Baccalaureate Diploma Programme

The International Baccalaureate (IB) Diploma Programme is a challenging two-year program offered in grades 11 and 12 which provides highly motivated, college-bound students with the opportunity to pursue a comprehensive curriculum that is internationally recognized for its excellence. It leads to a qualification that is widely recognized by the world's leading colleges and universities.

IB is well known to us for excellent preparations. Success in an IB programme correlates well with success at Harvard. We are always pleased to see the credentials of the IB Diploma Programme on the transcript.

--Marilyn McGrath Lewis, Director of Undergraduate Admission Harvard University

Send us prepared students á la IB...It is the "best" high school prep curriculum an American school can offer.

-- Marilee Jones, Director of Undergraduate Admission, Massachusetts Institute of Technology

Students seeking the finest [high school] preparation available for an American college should consider the International Baccalaureate. The IB offers an integrated curriculum that provides students with the skill needed to be world-class scholars and an educational philosophy that prepares them to be first-class citizens. I do not know of a more comprehensive and appropriate learning model.

— Jim Crowder, Director of Admissions, Macalester College

The goal of IB is to provide students with opportunities that will enable them to make wise choices and be successful in the global community. The program focuses on teaching students critical thinking and the importance of actively participating in their community. Course requirements for the IB Programme are developed to meet entrance requirements of the most respected universities around the world and include advanced courses in literature, English, second languages, history, sciences, mathematics, and fine arts.

Students in grade 10 in the 2011-2012 school year, will be invited to apply for the IB program before and at the same time they register for their 2012-2013 classes.

Why Participate in the International Baccalaureate Diploma Programme?

- IB encourages students to set and achieve ambitious goals.
- IB enables students to compete effectively in an international arena.
- IB provides a challenging curriculum to prepare students for success at prestigious universities.
- IB presents a course of study that allows students to apply their knowledge to real-life situations.
- IB facilitates the acquisition of time management and organizational skills.
- IB fosters active participation in community service.

Profile of an IB Diploma Programme Graduate

- Highly motivated
- Actively enjoys learning
- Well-rounded
- Communicates effectively
- Committed to community service
- College-bound

The IB Diploma Candidate

To earn an IB diploma, a student must successfully complete:

- Six course-specific examinations
- Theory of Knowledge course (TOK)
IB teaches students how to learn, analyze, think critically and present rational arguments.
- Creativity, Action, Service (CAS)
IB students must complete approximately 150 hours of creativity, action and service in their community.
- Extended Essay
IB students must write a 4,000 word research-based essay on a subject of his/her choice.

The IB Student

Students who wish to take one or more IB courses but not attempt an IB Diploma may do so as long as the prerequisite courses have been completed.

Open Admission

Admission to the IB Diploma Programme is open to all students who successfully complete the following courses by the end of 10th grade:

- English: English 9, English 10
- Foreign Language: Spanish 2 or French 2
- History: US History, American Government, World History 1A
- Science: Biology and Chemistry
- Math: Algebra/Geom/Stat or Algebra/Geometry/Pre-Calculus

How are students assessed?

At the end of the two-year programme, students are assessed both internally and externally in ways that measure individual performance against stated objectives for each subject.

Internal Assessment

In nearly all subjects at least some of the assessment is carried out internally by teachers, who mark individual pieces of work produced as part of a course of study. Examples include oral exercises in language subjects, projects, student portfolios, class presentations, practical laboratory work, mathematical investigations and artistic performances.

External Assessment

Some assessment tasks are conducted and overseen by teachers without the restrictions of examination conditions, but are then marked externally by examiners. Examples include world literature assignments for language A1, written tasks for language A2, essays for theory of knowledge and extended essays.

Because of the greater degree of objectivity and reliability provided by the standard examination environment, externally marked examinations form the greatest share of the assessment for each subject.

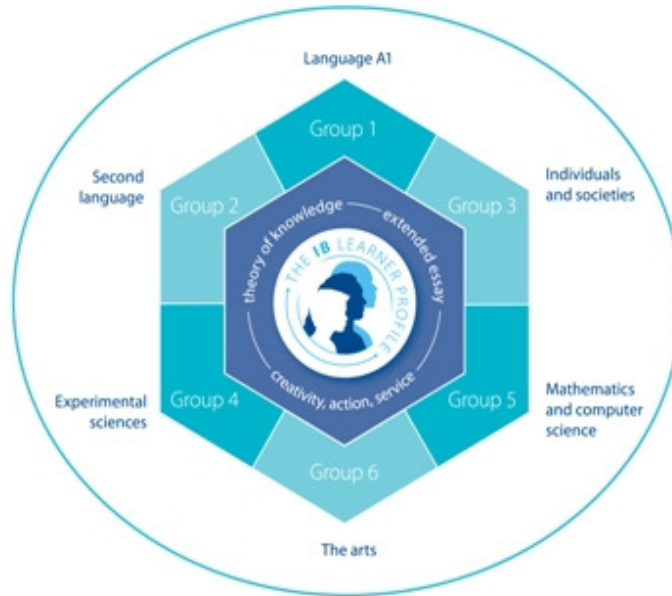
Grading System

The grading system is criterion based (results are determined by performance against set standards, not by each student's position in the overall rank order); validity, reliability and fairness are the watchwords of the Diploma Programme's assessment strategy.

DIPLOMA PROGRAM COURSES

Programme Model

The International Baccalaureate Diploma Programme is a rigorous pre-university course of studies that meets the needs of highly motivated secondary school students. The curriculum is displayed in the shape of a hexagon with six academic areas surrounding the core. Subjects are studied concurrently and students are exposed to the two great traditions of learning: the humanities and the sciences.



INTERNATIONAL BACCALAUREATE COURSES

Group 1 Language A1

English: World Literature SL, HL

Group 2 Second Language

French SL, HL

Spanish SL, HL

Group 3 Individuals and Societies

Economics SL

Geography SL, HL

History of the Americas SL, HL

Psychology SL

Social & Cultural Anthropology SL

Group 4 Experimental Sciences

Biology SL, HL

Chemistry SL, HL

Physics SL

Environmental Systems & Society, SL

Group 5 Mathematics/Computer Science

Math Studies SL

Math SL

Group 6 The Arts

Music SL

Visual Arts SL/HL

Core Elements

CAS (Creativity, Action, Service)

TOK (Theory of Knowledge)

EE (Extended Essay)

GROUP 1: LANGUAGE A1

ENGLISH: WORLD LITERATURE SL, HL

OPEN TO:	Grades 11 - 12	ELECTIVE
PREREQUISITE:	English 9, English 10	2 Credits

English SL or HL is designed for students with a high level of competence and can be studied at either higher level or standard level. The course provides students with the opportunity to study language, texts and culture, and to develop their analytical skills.

Students become familiar with a wide range of vocabulary and complex grammatical structures. At the end of the course they are expected to understand and use the language accurately. Language development and refinement include the analysis and use of language appropriate in particular contexts.

Students are exposed to a wide range of texts that they encounter in their everyday lives (for example, short stories, speeches, cartoons, advertisements and news reports). They learn how to compare and contrast how the language is used in different texts, and how language and style affect the presentation of theme and topic. Once they have become familiar with the style used in different types of texts, students are required to write tasks that relate to the course content in an appropriate register and style.

Within the framework of the cultural options (language and culture, media and culture, future issues, global issues and social issues), students study particular topics such as bilingualism, advertisements and racism. The purpose of this study is to become more familiar with the language and its associated culture(s). Different types of texts, both literary and non-literary, can be read as part of this study.

In the literary options students consider how writers use language and style to present ideas, themes, feelings and attitudes. They also explore what aspects of a literary text are specific to the language and its associated culture(s) and what aspects cut across cultural and linguistic boundaries. It is this exploration of the specific and the universal, in the literary as well as the cultural options, that links the course to the broader aims of the IBO: to provide an education that enriches the international awareness of students and develops in them the attitudes of tolerance, empathy and a genuine respect for perspectives different from their own.

GROUP 2: SECOND LANGUAGE

FRENCH SL, HL

SPANISH SL, HL

OPEN TO:	Grades 11 - 12	ELECTIVE
PREREQUISITE:	French 1, French 2 Spanish 1, Spanish 2	2 Credits

The French/Spanish program is primarily a pre-university course in literature. It is aimed at students who intend to pursue literature, or related studies, at university, as well as at students whose formal study of literature will not continue beyond this level. The former would normally follow the Higher Level (HL) program and the latter the Standard Level (SL).

Literature is concerned with our conceptions, interpretations and experiences of the world. The study of literature, therefore, can be seen as a study of all the complex pursuits, anxieties, joys and fears that human beings are exposed to in the daily business of living. It enables an exploration of one of the more enduring fields of human creativity and artistic ingenuity, and provides immense opportunities for encouraging independent, original, critical and clear thinking. It also promotes a healthy respect for the imagination and a perceptive approach to the understanding and interpretation of literary works. The discussion of literature is itself an art which requires the clear expression of ideas both orally and in writing.

The French/Spanish program encourages students to see literary works as products of art and their authors as craftsmen whose methods of production can be analyzed in a variety of ways and on a number of levels. This is achieved through the emphasis placed on exploring the means used by different authors to convey their subjects in the works studied. It is further reinforced by the comparative framework emphasized for the study of these works in all parts of the program. The flexibility of the program allows teachers to choose challenging works from their own sources to suit the particular needs and interests of their students. It also allows teachers to participate significantly, through the internally assessed oral component, in the overall assessment of their students.

GROUP 3: INDIVIDUALS AND SOCIETIES

IB ECONOMICS SL

OPEN TO:	Grades 11 - 12	ELECTIVE
PREREQUISITE:	None	1 Credit

Economics is a dynamic social science, forming part of group 3—individuals and societies. The study of economics is essentially about dealing with scarcity, resource allocation and the methods and Processes by which choices are made in the satisfaction of human wants. As a social science, economics uses scientific methodologies that include quantitative and qualitative elements.

The IB Diploma Programme economics course emphasizes the economic theories of microeconomics, which deal with economic variables affecting individuals, firms and markets, and the economic theories of macroeconomics, which deal with economic variables affecting countries, governments and societies. These economic theories are not to be studied in a vacuum—rather, they are to be applied to real-world issues. Prominent among these issues are fluctuations in economic activity, international trade, economic development and environmental sustainability.

The ethical dimensions involved in the application of economic theories and policies permeate throughout the economics course as students are required to consider and reflect on human end-goals and values.

The economics course encourages students to develop international perspectives, fosters a concern for global issues, and raises students' awareness of their own responsibilities at a local, national and international level. The course also seeks to develop values and attitudes that will enable students to achieve a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interdependent world.

IB GEOGRAPHY SL, HL

OPEN TO:	Grades 11 - 12	ELECTIVE
PREREQUISITE:	None	2 Credits

Geography is a dynamic subject that is firmly grounded in the real world and focuses on the interactions between individuals, societies and the physical environment in both time and space. It seeks to identify trends and patterns in these interactions and examines the processes behind them. It also investigates the way that people adapt and respond to change and evaluates management strategies associated with such change. Geography describes and helps to explain the similarities and differences between spaces and places. These may be defined on a variety of scales and from a range of perspectives.

Within group 3 subjects, geography is distinctive in that it occupies the middle ground between social sciences and natural sciences. The Diploma Programme geography course integrates both physical and human geography, and ensures that students acquire elements of both scientific and socio-economic methodologies. Geography takes advantage of its position between both these groups of subjects to examine relevant concepts and ideas from a wide variety of disciplines. This helps students develop an appreciation of, and a respect for, alternative approaches, viewpoints and ideas.

IB HISTORY OF THE AMERICAS SL, HL

OPEN TO:	Grades 11 - 12	ELECTIVE
PREREQUISITE:	US History, World History	2 Credits

History is more than the study of the past. It is the process of recording, reconstructing and interpreting the past through the investigation of a variety of sources. It is a discipline that gives people an understanding of themselves and others in relation to the world, both past and present.

Students of history learn how the discipline works. It is an exploratory subject that poses questions without providing definitive answers. In order to understand the past, students must engage with it both through exposure to primary historical sources and through the work of historians. Historical study involves both selection and interpretation of data and critical evaluation of it. Students of history should appreciate the relative nature of historical knowledge and understanding, as each generation reflects its own world and preoccupations and as more evidence emerges. A study of history both requires and develops an individual's understanding of, and empathy for, people living in other periods and contexts.

Diploma Programme history consists of a standard level (SL) and higher level (HL) core syllabus comprising an in-depth study of an individual prescribed subject and the selection of two topics from the main developments in 20th

century world history. At HL students select from a range of optional syllabuses that cover a wider time span encouraging in-depth study.

The Diploma Programme history course provides both structure and flexibility, fostering an understanding of major historical events in a global context. It requires students to make comparisons between similar and dissimilar solutions to common human situations, whether political, economic or social. It invites comparisons between, but not judgments of, different cultures, political systems and national traditions. The content of the history course is intrinsically interesting and it is hoped that many students who follow it will become fascinated with the discipline, developing a lasting interest in it, whether or not they continue to study it formally.

IB PSYCHOLOGY SL

OPEN TO:	Grades 11 - 12	ELECTIVE
PREREQUISITE:	None	1 Credit

Psychology is the systematic study of behaviour and mental processes. Psychology has its roots in both the natural and social sciences, leading to a variety of research designs and applications, and providing a unique approach to understanding modern society.

IB psychology examines the interaction of biological, cognitive and socio-cultural influences on human behaviour, thereby adopting an integrative approach. Understanding how psychological knowledge is generated, developed and applied enables students to achieve a greater understanding of themselves and appreciate the diversity of human behaviour. The ethical concerns raised by the methodology and application of psychological research are key considerations in IB psychology.

IB SOCIAL & CULTURAL ANTHROPOLOGY SL

OPEN TO:	Grades 11 - 12	ELECTIVE
PREREQUISITE:	None	2 Credits

Social and cultural anthropology is the comparative study of culture and human societies. Anthropologists seek an understanding of humankind in all its diversity. This understanding is reached through the study of societies and cultures and the exploration of the general principles of social and cultural life. Social and cultural anthropology place special emphasis on comparative perspectives that challenge cultural assumptions. Many anthropologists explore problems and issues associated with the complexity of modern societies in local, regional and global contexts.

The course offers an opportunity for students to become acquainted with anthropological perspectives and ways of thinking, and to develop critical, reflexive knowledge. Social and cultural anthropology contributes a distinctive approach to intercultural awareness and understanding, which embodies the essence of an IB education. Anthropology fosters the development of citizens who are globally aware and ethically sensitive.

Units include the definition of anthropology; social and cultural organization; societies and cultures in contact; kinship as an organizing principle; political organization; economic organization and the environment; systems of knowledge; belief systems and practices; moral systems.

GROUP 4: EXPERIMENTAL SCIENCES

IB BIOLOGY SL, HL (IB DIPLOMA PROGRAM)

OPEN TO:	Grades 11 - 12	ELECTIVE
PREREQUISITE:	Biology, Chemistry	2 Credits

Biologists have accumulated huge amounts of information about living organisms, and it would be easy to confuse students by teaching large numbers of seemingly unrelated facts. In the Diploma Programme biology course, students will acquire a limited body of facts and, at the same time, develop a broad, general understanding of the principles of the subject.

Although the Diploma Programme biology course at standard level (SL) and higher level (HL) has been written as a series of discrete statements (for assessment purposes), there are four basic biological concepts that run throughout:

- **Structure and Function:** This relationship is probably one of the most important in a study of biology and operates at all levels of complexity. Students should appreciate that structures permit some functions while, at the same time, limiting others.
- **Universality and Diversity:** At the factual level, it soon becomes obvious to students that some molecules (for example, enzymes, amino acids, nucleic acids and ATP) are ubiquitous, and so are processes and structures. However, these universal features exist in a biological world of enormous diversity. Species exist in a range of habitats and show adaptations that relate structure to function. At another level, students can grasp the idea of a living world in which universality means that a diverse range of organisms (including ourselves) are connected and interdependent.
- **Equilibrium within Systems:** Checks and balances exist both within living organisms and within ecosystems. The state of dynamic equilibrium is essential for the continuity of life.
- **Evolution:** The concept of evolution draws together the other themes. It can be regarded as change leading to diversity within constraints, and this leads to adaptations of structure and function. These four concepts serve as themes that unify the various topics that make up the three sections of the course: the core, the additional higher level (AHL) material and the options.

IB CHEMISTRY SL (IB DIPLOMA PROGRAM)

OPEN TO:	Grades 11 - 12	ELECTIVE
PREREQUISITE:	Biology, Chemistry	2 Credits

Chemistry is the study of materials, related processes and interactions. As a laboratory science, heavy emphasis is placed on experiments which validate theoretical concepts. This course will include discussion and experimentation centered around matter and energy, atomic theory, the periodic table, energetics, the gas laws, kinetic theory, acids and bases and oxidation-reduction. Students will also consider the environmental and social impact of chemistry as part of their study.

In year two, this course will provide more in-depth discussion and experimentation needed to prepare students for the IB higher level or standard level exam. Students will cover topics in organic drugs & medicine, human biochemistry, oxidation-reduction, electrochemistry and thermodynamics. In addition students will review and extend their knowledge of stoichiometry, atomic theory, the periodic table, energetics, kinetics, acids and bases, as well as descriptive chemistry and qualitative analysis.

IB ENVIRONMENTAL SYSTEMS AND SOCIETY SL (IB DIPLOMA PROGRAM)

OPEN TO:	Grades 11 - 12	ELECTIVE
PREREQUISITE:	Biology, Chemistry US History, World History	1 Credit

As a transdisciplinary subject, Environmental Systems and Societies is designed to combine the techniques and knowledge associated with group 4 (the experimental sciences) with those associated with group 3 (individuals and societies). By choosing to study a transdisciplinary course such as this as part of the diploma, students are able to satisfy the requirements for both groups 3 and 4 of the hexagon, thus allowing them to choose another subject from any hexagon group (including another group 3 or 4 subject). Transdisciplinary subjects therefore introduce more flexibility into the IB Diploma Programme.

The prime intent of this course is to provide students with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face. Students' attention can be constantly drawn to their own relationship with their environment and the significance of choices and decisions that they make in their own lives. It is intended that students develop a sound understanding of the interrelationships between environmental systems and societies, rather than a purely journalistic appreciation of environmental issues. The approach is conducive to students evaluating the scientific, ethical and socio-political aspects of issues.

IB PHYSICS SL

OPEN TO:

Grades 11 - 12

ELECTIVE

PREREQUISITE:

None

2 Credits

Physics is the most fundamental of the experimental sciences as it seeks to explain the very universe itself, from the smallest particles to the vast distances between galaxies. The IB Physics course will explore classical physics in the first year by studying the motion and energy of objects. Specifically, students will investigate systems by analyzing the forces that drive the system. Both mechanical and electrical systems will be considered. These topics will be explored from both a theoretical and an experimental viewpoint.

In the second year, students extend their exploration of the topics covered in IB Physics 1st year by studying the applications of classical physics in investigating wave phenomena and thermodynamics. Students move into the realm of modern physics and its applications in the final semester.

In order to be successful in IB Physics, students need a high level of confidence in their mathematical reasoning abilities, as laws and definitions in physics are grounded in mathematics.

GROUP 5: MATHEMATICS/COMPUTER SCIENCES

MATH STUDIES SL

OPEN TO:

Grades 11 - 12

ELECTIVE

PREREQUISITE:

Algebra/Geometry 1 OR
Algebra/Geometry/Statistics OR
Algebra/Geometry/Pre-Calculus

2 Credits

The nature of mathematics can be summarized in a number of ways: for example, it can be seen as a well-defined body of knowledge, as an abstract system of ideas, or as a useful tool. For many people it is probably a combination of these, but there is no doubt that mathematical knowledge provides an important key to understanding the world in which we live. Mathematics can enter our lives in a number of ways: we buy produce in the market, consult a timetable, read a newspaper, time a process or estimate a length. Mathematics also extends into our chosen profession: artists need to learn about perspective; musicians need to appreciate the mathematical relationships within and between different rhythms; economists need to recognize trends in financial dealings; and engineers need to take account of stress patterns in physical materials. Scientists view mathematics as a language that is central to our understanding of events that occur in the natural world. Some people enjoy the challenges offered by the logical methods of mathematics and the adventure in reason that mathematical proof has to offer. Others appreciate mathematics as an aesthetic experience or even as a cornerstone of philosophy. This prevalence of mathematics in our lives provides a clear and sufficient rationale for making the study of this subject compulsory within the DP.

This course caters to students with varied backgrounds and abilities. More specifically, it is designed to build confidence and encourage an appreciation of mathematics in students who do not anticipate a need for mathematics in their future studies. Students taking this course need to be equipped with fundamental skills and a rudimentary knowledge of basic processes.

The course consists of the study of eight topics:

- Topic 1—Introduction to the graphic display calculator
- Topic 2—Number and algebra
- Topic 3—Sets, logic and probability
- Topic 4—Functions
- Topic 5—Geometry and trigonometry
- Topic 6—Statistics
- Topic 7—Introductory differential calculus
- Topic 8—Financial mathematics

MATH SL

OPEN TO:

Grades 11 - 12

ELECTIVE

PREREQUISITE:

Algebra/Geometry/Statistics OR
Algebra/Geometry/Pre-Calculus

2 Credits

This course caters to students who already possess knowledge of basic mathematical concepts, and who are equipped with the skills needed to apply simple mathematical techniques correctly. The majority of these students will expect to need a sound mathematical background as they prepare for future studies in subjects such as chemistry, economics, psychology and business administration. The course focuses on introducing important mathematical concepts through the development of mathematical techniques. The intention is to introduce students to these concepts in a comprehensible and coherent way rather than insisting on mathematical rigor. Students should wherever possible apply the mathematical knowledge they have acquired to solve realistic problems set in an appropriate context.

The internally assessed component, the portfolio, offers students a framework for developing independence in their mathematical learning by engaging in mathematical investigation and mathematical modeling. Students are provided with opportunities to take a considered approach to these activities and to explore different ways of approaching a problem. The portfolio also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas.

GROUP 6: THE ARTS**MUSIC, SL**

OPEN TO:

Grades 11 - 12

ELECTIVE

PREREQUISITE:

Concurrent Enrollment in Choir or Band 2 Credits

Music functions as a means of personal and communal identity and expression, and embodies the social and cultural values of individuals and communities. This scenario invites exciting exploration and sensitive study. Music, and all of its associations, may vary considerably from one musical culture to another, yet music may have similarities. Such richness offers a variety of ways to encounter and engage with a constantly changing world.

A vibrant musical education fosters curiosity and openness to both familiar and unfamiliar musical worlds. Through such a study of music, students learn to hear relationships of pitch in sound, pattern in rhythm and unfolding sonic structures. Through participating in the study of music, students are able to explore the similarities, differences and links in music from within their own culture and that of others across time. Informed and active musical engagement allows students to explore and discover relationships between lived human experience and specific sound combinations and technologies, thus understanding the world around us and the nature of humanity.

The Diploma Programme music course provides an appropriate foundation for further study in music at university level or in music career pathways. It also provides an enriching and valuable course of study for students who may pursue other careers. This course also provides all students with the opportunity to engage in the world of music as lifelong participants.

SL students must choose one of three options:

- Creating (SLC)
- Solo performing (SLS)
- Group performing (SLG).

VISUAL ARTS SL

OPEN TO:	Grades 11 - 12	ELECTIVE
PREREQUISITE:	None	2 Credits

New ways of expressing ideas helps to make the visual arts one of the most interesting and challenging areas of learning and experience. The processes of designing and making art requires a high level of cognitive activity that is both intellectual and affective. Engagement in the arts promotes a sense of identity and makes a unique contribution to the lifelong learning of each student. The study of visual arts provides students with the opportunity to develop a critical and intensely personal view of themselves in relation to the world.

The Diploma Programme visual arts course enables students to engage in both practical exploration and artistic production, and in independent contextual, visual and critical investigation. The course is designed to enable students to study visual arts in higher education and also welcomes those students who seek life enrichment through the visual arts.

Because of the nature of the subject, quality work in the visual arts can be produced by students at both HL and SL. The aims and assessment objectives are the same at both HL and SL. Through a variety of teaching approaches, all students are encouraged to develop their creative and critical abilities and to enhance their knowledge, appreciation and enjoyment of visual arts. The course content for HL and SL may be the same. However, due to the different amount of time available for each, students at HL have the opportunity to develop ideas and skills, to produce a larger body of work and work of greater depth. In order to reflect this, the assessment criteria are differentiated according.

The aims of the visual arts course at HL and SL are to enable students to:

- investigate past, present and emerging forms of visual arts and produce, appreciate and evaluate them.
- develop an understanding of visual arts from a local, national and international perspective.
- build confidence in responding visually and creatively to personal and cultural experiences.
- develop skills in, and sensitivity to, the creation of works that reflect active and individual involvement.
- take responsibility for the direction of personal learning through the acquisition of effective working practices.

CORE ELEMENTS

TOK (THEORY OF KNOWLEDGE) (Scheduled Spring Junior Year and Fall Senior Year)

OPEN TO:	Grades 11 - 12	REQUIRED FOR IB DIPLOMA
PREREQUISITE:	None	1 Credit

The TOK course, a flagship element in the Diploma Programme, encourages critical thinking about knowledge itself to try to help young people make sense of what they encounter. Its core content utilizes questions such as these: *What counts as knowledge? How does it grow? What are its limits? Who owns knowledge? What is the value of knowledge? What are the implications of having, or not having, knowledge?*

What makes TOK unique, and distinctively different from standard academic disciplines, is its process. At the centre of the course is the student as knower. Students entering the Diploma Programme typically have 16 years of life experience and more than 10 years of formal education behind them. They have accumulated a vast amount of knowledge, beliefs and opinions from academic disciplines and their lives outside the classroom. In TOK they have the opportunity to step back from this relentless acquisition of new knowledge in order to consider knowledge issues. These include the questions already mentioned, viewed from the perspective of the student, but often begin from more basic ones: *What do I claim to know [about X]? Am I justified in doing so [how?]?* Such questions may initially seem abstract or theoretical, but TOK bring them into closer focus by taking into account students' interests, circumstances and outlooks.

TOK activities and discussions aim to help students discover and express their views on knowledge issues. The course encourages students to share ideas with others and to listen to and learn from what others think. In this process students' thinking and understanding of knowledge as a human construction are shaped, enriched and deepened. Connections may be made between knowledge encountered in different Diploma Programme subjects, in CAS experience or in extended essay research; distinctions between different kinds of knowledge may be clarified. Because the subject matter of the course is defined in terms of knowledge issues, there is no end to the valid questions that may arise in a TOK course. This guide consists mainly of questions that have been found to stimulate appropriate TOK inquiry.

CAS (CREATIVITY, ACTION, SERVICE)

OPEN TO: Grades 11 - 12
PREREQUISITE: None

REQUIRED FOR IB DIPLOMA
.5 Credit

Creativity, Action, Service (CAS) is at the heart of the Diploma Programme. It is one of the three essential elements in every student's Diploma Programme experience. It involves students in a range of activities alongside their academic studies throughout the Diploma Programme. The three strands of CAS, which are often interwoven with particular activities, are characterized as follows:

- *Creativity:* Arts, and other experiences that involve creative thinking.
- *Action:* Physical exertion contributing to a healthy lifestyle, complementing academic work elsewhere in the Diploma Programme.
- *Service:* An unpaid and voluntary exchange that has a learning benefit for the student.

CAS enables students to enhance their personal and interpersonal development through experiential learning. At the same time, it provides an important counterbalance to the academic pressures of the rest of the Diploma Programme. The CAS program is both challenging and enjoyable, a personal journey of self-discovery. Each individual student has a different starting point, and therefore different goals and needs. For many, their CAS activities include experiences that are profound and life-changing. For student development to occur, CAS will involve:

- real, purposeful activities, with significant outcomes
- personal challenge—tasks must extend the student and be achievable in scope
- thoughtful consideration, such as planning, reviewing progress, reporting
- reflection on outcomes and personal learning.

Concurrency of learning is important in the Diploma Programme. Therefore, CAS activities should continue on a regular basis for as long as possible throughout the program, and certainly for at least 18 months. Successful completion of CAS is a requirement for the award of the IB diploma.

CAS activities begin in September of Junior year and continue through spring Senior year.

EE (EXTENDED ESSAY)

OPEN TO: Grades 11 - 12
PREREQUISITE: None

REQUIRED FOR IB DIPLOMA
0 Credit

In the Diploma Programme, the extended essay is the prime example of a piece of work where the student has the opportunity to show knowledge, understanding and enthusiasm about a topic of his or her choice.

The extended essay, with a prescribed limit of 4,000 words, offers students the opportunity to investigate a topic of individual interest and acquaints them with the independent research and writing skills expected at tertiary level.

The aims of the extended essay are to provide students with the opportunity to:

- pursue independent research on a focused topic
- develop research and communication skills
- develop the skills of creative and critical thinking
- engage in a systematic process of research appropriate to the subject
- experience the excitement of intellectual discovery.

APPENDIX B

Wisconsin Virtual School

Course Offerings

(Go to www.wisconsinvirtualschool.org for course syllabus information.)

Art

ART APPRECIATION (WVS)

OPEN TO: Grades 9-12
PREREQUISITE: None

ELECTIVE
.5 Credit

This one semester course introduces the major themes, influences and personalities that shaped most of western cultural heritage through art. The periods studied include Ancient, Classical, Renaissance, Baroque, Modern and Contemporary. After completing the course, students will be able to analyze art with the eyes of an art historian; compare and contrast the sculpture of ancient peoples, considering its purpose, size and degree of realism; recognize and describe the major characteristics of the various 'isms' of Europe and America; identify examples of the outstanding art of Asia, India, Africa and pre-Columbian American and discuss their purposes; and describe how the study of art has influenced personal perceptions of the world and its art.

Computer

COMPUTER FUNDAMENTALS: MICROSOFT OFFICE (WVS)

OPEN TO: Grades 9 - 12
PREREQUISITE: None

Elective
1 Credit

In this introductory course, students will become familiar with the basic principles of a personal computer including the internal hardware, the operating system, and software applications. Students will gain practice in using key applications such as Microsoft Word, Excel, and PowerPoint as well as understand social and ethical issues around the Internet, information and security. This is a two semester course. In the first semester, the focus is on the fundamentals, learning and using the applications, and understanding the basic roles and responsibilities of the software, hardware and operating system. In the second semester, the focus is on gathering and analyzing data, and using the right tools and methods to collect and present data.

DIGITAL PHOTOGRAPHY (WVS)

OPEN TO: Grades 9 - 12
PREREQUISITE: None

Elective
.5 Credit

In this course, students will learn the basics of photographic composition and lighting, the basics of using a digital camera and the basics of preparing a digital darkroom. Students will also learn basic color theory and the fundamentals of image processing. This course is designed for the student who has no background in photography.

GAME DESIGN (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None .5 Credit

This course will introduce students to the basic skills necessary for game design. They will study the various games in the industry and analyze their approach in terms design and development. The student will explore the processes and art of making game elements like story, levels, sound, user interfaces, and levels. This analysis will include an orientation to the gaming market and innovative techniques' impact on it. Finally, the student will merge all these elements into a functional prototype showing their understanding of the game design process. to a computer (either through USB or Firewire).

WEB DESIGN (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None .5 Credit

In this one semester course you will be expected to master Web site creation essentials, learn different tools to create Web sites, and learn to make Web sites that follow copyright laws and American with Disabilities Act guidelines. Your progress will be monitored by an online instructor and you will communicate with your instructor via e-mail and Elluminate (web-conferencing tool).

PROGRAMMING: JAVA.NET (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: Computer Programming 1 .5 Credit
Basic Computer Fundamentals

This introductory-level course presents the understanding of JAVA and how to build a stand-alone application (such as a countdown clock or leap year indicator). This course is designed for first-time learners who have very little programming background except that introduced in Programming I: VB.NET. The student will also learn the techniques of JAVA, how JAVA can be used in cross-platform programming, and the robustness of the Java program. At the end of the course student will be able to write basic programs using Java and could pursue further instruction any programming language. Required tool: JDK 1.5 (or higher version)

PROGRAMMING: VB.NET (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None .5 Credit

This course presents basic programming and teaches the essential concepts of VisualBasic.net (VB.NET). As an introduction to VB.NET, students will see the basic uses of the programming language, its similarities to the English language (and others), and its flexibility as a programming language. The course helps participants understand the processes involved in software development and object-oriented programming. This is an introductory course that could lead to careers such as software engineer, developer, or game designer. The course participants will also complete a series of hands-on projects covering built in data types, operators, control structures, classes, and objects.

English

CREATIVE WRITING (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None 1 Credit

In this course, students will explore a range of creative writing genres, including fiction, poetry, creative nonfiction, drama, and multimedia writing. Students will study examples of writing through classic and contemporary selections and will apply that knowledge and understanding to their writing. In addition, students will develop an intimate understanding of the writing process and its application to various projects. As students move through the course, they will understand and evaluate the writings of others, and be able to apply the evaluation criteria to their own writing. By the end of the course, students will have created a well-developed portfolio of finished written works. Learning activities include reading; listening; discussing; writing; multiple choice games; self-check activities; and reflective journals. The unit structure includes the broader idea of the unit as defined by the main heading. Units will include a combination of activities and will culminate in a submittal of the finished unit project. Unit projects will be developed in phases throughout each section of the unit. Unit lessons and performance tasks have been scaffolded carefully to help students achieve deeper levels of understanding.

GRAMMAR AND COMPOSITION (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None 1 Credit

This course is designed for the student who needs extra help in mastering communication skills and fundamental principles of grammar and usage. The course focuses on teaching the composition concepts in the 6 + 1 Traits of Writing pioneered by the Northwest Regional Education Laboratories. Grammar is taught as a tool for improving communication rather than as a pure focus of study. Oral Communication and research skills are included. Although there is some literature study in the course, it is not the focus. The course emphasizes diagnosis of student writing needs and targeting individualized needs for improvement. No required text.

Family & Consumer Science

CAREER PLANNING (WVS)

OPEN TO: Grades 9-12 ELECTIVE
PREREQUISITE: None .5 Credit

In this one semester course, students will use an informative interactive process to explore career and life options that fit their individual interests, needs, and skills. Students begin with a thorough examination of their own interests, aptitudes, achievements, and personality styles. Then, they explore potential career matches, examining job market information, conducting informational interviews, and plotting training and educational paths. Along the way, students learn to craft effective resumes and letters, and to handle job interview situations.

FAMILY & CONSUMER SCIENCE (WVS)

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: None 1 Credit

This course focuses on the development of skills and knowledge that will help students transition into adult roles within the family. Students engage in activities to develop abilities to make wise consumer choices, to prepare nutritious meals, to contribute effectively as part of a team, to manage a household budget, and to balance roles of work and family. Students gain an appreciation for the responsibilities of family members throughout the life-span and how they contribute to the well-being of not only their family but also their larger community.

LIFE SKILLS (WVS)

OPEN TO: Grades 9-12 ELECTIVE
PREREQUISITE: None .5 Credit

This one semester course is designed to increase student knowledge and ability in skills necessary for everyday living. The course emphasizes defining personal values, goal-setting and planning, making decisions and solving problems, evaluating information and dealing with media and peer pressure, communication and relationships, decision making, wellness and personal safety, and contributing to your community.

NUTRITION AND WELLNESS WVS

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None .5 Credit

This one semester course will introduce the student to an overview of good nutrition principles that are needed for human physical & mental wellness. Discussion of digestion, basic nutrients, weight management, sports & fitness, and life-span nutrition is included. Application to today's food and eating trends, plus learning to assess for reliable nutrition information is emphasized.

Mathematics

CALCULUS (WVS) (1)

OPEN TO: Grade 12 ELECTIVE
PREREQUISITE: Trigonometry/Pre-Calculus 1 Credit

The Calculus course is a comprehensive look at the study of differential and integral calculus concepts including limits, derivative and integral computation, linearization, Riemann sums, the Fundamental Theorem of Calculus, and differential equations. Applications include graph analysis, linear motion, average value, area, volume, and growth and decay models.

CONSUMER MATH (WVS) (1)

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: None 1 Credit

This is comprehensive review and study of arithmetic skills that apply to both personal and vocational business opportunities. Topics include whole numbers, fractions, percentages, basic statistics, and graphs. Practical applications in finance, taxes, budgeting, banking and home ownership are provided.

Performing Arts

MUSIC APPRECIATION (WVS)

OPEN TO: Grades 9-12 ELECTIVE
PREREQUISITE: None .5 Credit

This one-semester course introduces students to the elements, instrumentation, and historical periods of music. Students will learn the significance of surroundings and time periods and how they both influenced the music of the day. Students will listen to and evaluate several types of music, and will be assessed through projects, presentations, and exams on the knowledge and understanding of music.

Science

EARTH SCIENCE (WVS)

OPEN TO: Grade 11 and 12 ELECTIVE
PREREQUISITE: None 1 Credit

This introductory two semester Earth Science course incorporates the body of knowledge and facts accumulated from people's observations of the Earth around them and the skies above them. This observed information of the earth has evolved over centuries into the branch of science known as earth science. Earth science has several different branches of study: the solid earth (geology); the earth's waters (hydrology and oceanography); the earth's atmosphere (meteorology); and the universe beyond earth (astronomy). Using careful observation and experimentation, students will learn to effectively analyze and evaluate the earth's natural phenomena and their causes, as well as, its relationship in the universe by focusing on the four major areas of study.

World Languages

CHINESE 1 (MANDARIN) (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None 1 Credit

This is a beginning level course that will introduce the student to a variety of areas of Mandarin Chinese (simplified). In this course, the student will learn listening, speaking, reading and writing skills through activities that are based on pedagogically proven methods of foreign language instruction. Grammar is introduced and practiced in innovative and interesting ways with a variety of learning styles in mind. Culture is sprinkled throughout the course in an attempt to help the learner focus on the Chinese speaking world and their culture, people, geographical locations and histories. This course is aligned to national Foreign Language standards. Students are introduced to the simplified Chinese writing system in this class. No text required.

CHINESE 2 (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: Chinese 1 1 Credit

This course is a continuation of a beginning level course that will introduce the student to a variety of areas of language learning. In this course, the student will learn listening, speaking, reading and writing skills through activities that are based on pedagogically proven methods of foreign language instruction. Throughout the five units of material (Daily Routine, Animals, Hobbies, The Body and Descriptions), students learn to express themselves using an ever increasing vocabulary, present-tense verbs, articles, and adjectives. Grammar is introduced and practiced in innovative and interesting ways with a variety of learning styles in mind. Culture is sprinkled throughout the course in an attempt to help the learner focus on the Chinese speaking world and their culture, people, geographical locations and histories. The course is aligned to the national Foreign Language standards. No text required.

GERMAN 1 (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None 1 Credit

First year German students start out by learning introductions, greetings, and the days of the week, words and phrases to find out information, vowel pronunciation, and how to use articles, plurals, and noun/adjective agreement with gender. From there, they begin to incorporate their new vocabulary through rhythm and cadence, recognize sentence patterns and build comprehension skills, increase their fluency, practice counting and simple math, learn to form plurals with greater accuracy, use infinite verbs, and form question statements.

GERMAN 2 (WVS)

OPEN TO:	Grades 9 - 12	Elective
PREREQUISITE:	German 1	1 Credit

The second year of German expands students' written and spoken fluency, placing a continued emphasis on reading, writing, listening, and speaking. Students learn to understand and use small talk, and they practice using new vocabulary in conversations and stories. They master object pronouns with finite and infinite verbs, learn geography vocabulary, study pronouns and past and present tenses, identify and describe objects, use genitive plural and singular forms, expand their cultural knowledge, and build fluency through repetition.

GERMAN 3 (WVS)

OPEN TO:	Grades 9 - 12	Elective
PREREQUISITE:	German 2	1 Credit

German III has been carefully designed to meet the standards of the American Council on the Teaching of Foreign Languages (ACTFL). These standards call for a method of teaching that focuses on successful communication through speaking, writing, reading, and listening, as well as a thorough grounding in aspects of culture. Each unit embodies all of these standards in accordance with the theories described in this document. Unit activities blend different forms of communication and culture to ensure that the student meets all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multi-media presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes, and exams. Learning activities in each unit are focused upon a specific theme.

GERMAN 4 (WVS)

OPEN TO:	Grades 9 - 12	Elective
PREREQUISITE:	German 3	1 Credit

This fourth year of German builds upon the first three levels. Students will continue to sharpen their reading, writing, and listening skills as well as learn skills to think critically and express themselves on topics relevant to German culture. This fourth level will include authentic texts, current culture, and literature from Germany, Austria, and Switzerland. Every two units will be a special focus on a particular region or city from these areas; these will include such things as culture, tourism, and current events. Students will learn vocabulary, grammar skills, and cultural competency to express themselves on a variety of topics in German. Cultural topics include: contemporary and classical music, expressing opinion, German history, transportation, family, weekend travel, free time activities, youth and technology, multiculturalism, holidays, education, career, and travel in a foreign country. This course is aligned to the national ACTFL Foreign Language standards and provides a way to focus on the five aspects of foreign language instruction: communication, culture, connections, comparisons, and community. These are the "Five C's of the Foreign Language Education" as outlined in *Standards for Foreign Language Learning: Preparing for the 21st Century*. No text required.

JAPANESE 1 (WVS)

OPEN TO:	Grades 9 - 12	Elective
PREREQUISITE:	None	1 Credit

Japanese I is a two semester course has been carefully designed to meet the standards of the American Council on the Teaching of Foreign Languages (ACTFL). These standards call for a method of teaching that focuses on successful communication through speaking, writing, reading, and listening, as well as a thorough grounding in aspects of culture. Each unit embodies all of these standards in accordance with the theories described in this document. Unit activities blend different forms of communication and culture to ensure that the student meets all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multi-media presentations, selfchecks, practice activities and games, oral and written assignments, projects, quizzes, and exams. Learning activities in each unit are focused upon a specific theme. No text required

JAPANESE 2 (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: Japanese 1 1 Credit

Japanese II is a two semester course that has been carefully designed to meet the standards of the American Council on the Teaching of Foreign Languages (ACTFL). These standards call for a method of teaching that focuses on successful communication through speaking, writing, reading, and listening, as well as a thorough grounding in aspects of culture. Each unit embodies all of these standards in accordance with the theories described in this document. Unit activities blend different forms of communication and culture to ensure that the student meets all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multi-media presentations, selfchecks, practice activities and games, oral and written assignments, projects, quizzes, and exams. Learning activities in each unit are focused upon a specific theme. No text required.

LATIN 1 (WVS)

OPEN TO: Grades 9-12 ELECTIVE
PREREQUISITE: None 1 Credit

This course introduces students to fundamental vocabulary and basic grammatical concepts of the Latin language. Grammar and vocabulary are taught with the latest advances in interactive multimedia technology.

In addition to grammar and translation assignments, this two-semester course includes seven (7) mini-projects on Roman Life, four (4) mini-projects on Greek and Roman mythology, and four (4) Word Studies. Students will also participate in class discussions and work in groups on projects related to archaeological excavations Roman towns, including Pompeii, Herculaneum, and Zeugma, and Roman inventions.

LATIN 2 (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: Latin 1 1 Credit

Latin 2 is the continuation of Latin grammar and a deeper study of Roman Mythology and history. The grammar in Latin 2 reviews topics from Latin 1 with expanding use of declensions, adjectives, adverbs, and cases. These skills will be used to translate longer Latin texts to English that require more knowledge of grammar rather than just vocabulary recall. The culture part of the course is an in-depth study of The Odyssey, the underworld, the rulers and kings of Rome, and entertainment.

WORLD LANGUAGE SURVEY (WVS)

OPEN TO: Grades 9 - 12 Elective
PREREQUISITE: None .5 Credit

In this world language course, students will be introduced to 6 different languages within 18 weeks. The languages include Spanish, French, German, Latin, Chinese and Japanese. Each language will be taught in a period of 3 weeks. This multilingual course is designed to give students an opportunity to gain understanding of a language that they might want to further study in the future. The course takes a multi-perspective approach for teaching the culture of the people that speak the language, along with fundamental communication skills in the target language. Activities that engage students and make language learning exciting and fun will be incorporated to build acquisition. The language will be taught using the communicative method which combines listening, speaking, reading and writing in the target language with the use of multimedia resources.

APPENDIX C

Wisconsin Virtual School

AP Course Offerings

(Go to www.wisconsinvirtualschool.org for course syllabus information.)

*All courses are year-long, divided into two semesters, unless marked with a * (those are 1 semester courses). Students must register for each semester separately, during the term they plan to take that course.*

Students choosing to take Advanced Placement courses should have a 3.5 cumulative grade point average or better, and must excel in the academic area.

AP Exam Review

Wisconsin Virtual School (WVS) and its online partner, Aventa Learning, offer FREE Exam Reviews in 16 subjects. The Aventa Learning Advanced Placement Review provides quality review strategies and resources to help AP students earn their highest possible score on the Advanced Placement exam. Students in 16 AP classes use the Aventa Learning exam review to focus their preparation, identify areas of weakness, and complete their final preparations.

Art

AP ART HISTORY (WVS)

OPEN TO:	Grades 11 – 12	ELECTIVE
PREREQUISITE:	None	1 Credit

This course is designed to foster in students an understanding and knowledge of architecture, sculpture, painting, and other art forms within diverse historical and cultural contexts. Students examine and critically analyze major forms of artistic expression from the past and the present from a variety of cultures. In addition to visual analysis, this course emphasizes understanding works in context, considering such issues as patronage, gender and the functions and effects of works of art. Prior art training is not a prerequisite nor does the course cater exclusively to future Art History majors. This course was designed to meet the requirements of the Advanced Placement Art History requirements precisely.

Business

*AP MACROECONOMICS (WVS)

OPEN TO:	Grade 11-12	ELECTIVE
PREREQUISITE:	None	.5 Credit

Macroeconomics is an emphasis on how the economic system works as a whole. Students study how the economy is measured by using concepts such as gross domestic product (GDP) and other indicators. They examine concepts such as inflation, unemployment, world trade patterns, and the role of the Federal Reserve Bank. Students engage in decision-making processes to create an environment where high employment and a higher standard of living are achievable by using the economic tools of fiscal and monetary policy. This course prepares students for the AP Exam in Macroeconomics. Textbook and workbook required.

***AP MICROECONOMICS (WVS)**

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: None .5 Credit

Microeconomics emphasizes how individuals make choices with limited resources. Students will examine concepts such as supply and demand, factors of production, roles of labor and management, the relationship between the environment and the economy, and the impact of the government on individual decision making processes. Students study the stock market as an investment option and trace various stocks through the semester using the Wall Street Journal and the Internet as resources. This course prepares students for the AP Exam in Microeconomics. Textbook and student workbook required.

Computer

AP COMPUTER SCIENCE A (WVS)

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: None 1 Credit

This advanced course emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development and is meant to be the equivalent of a first semester college-level course in Computer Science. It also includes the study of data structures, design, and abstraction, but these topics are not covered to the extent that they are in Computer Science AB.

English

AP ENGLISH LANGUAGE (WVS)

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: None 1 Credit

This advanced course focuses on reading and analyzing non-fiction prose, with an emphasis on philosophy. Written assignments focus on philosophical topics, which include ethics, knowledge and thought, the problem of truth, causality, metaphysics, political philosophy, and aesthetics.

AP ENGLISH LITERATURE AND COMPOSITION (WVS)

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: None 1 Credit

In this advanced placement course, students learn to read and comprehend some of the finest poetry, plays, novels, short stories, and essays written at various times in various cultures, with an emphasis on literature originally written in English. Through reading and writing, students learn how to discover meaning in literature by being attentive to language, image, character, action, argument, and the various techniques and strategies authors use to evoke emotional response from readers. This course prepares students for the AP Literature and Composition exam.

Math

AP CALCULUS AB (WVS)

OPEN TO: Grades 11-12 ELECTIVE
PREREQUISITE: Trigonometry/Pre-Calculus 1 Credit

This Advanced Placement course introduces limits, differentiation, and integration of functions. Students will find and evaluate finite and infinite limits graphically, numerically, and analytically. They will find derivatives using a variety of methods including The Chain Rule and Implicit Differentiation. They will use the First Derivative Test and The Second Derivative Test to analyze and sketch functions.

Subsequently, students will find antiderivatives using a variety of methods including substitution. They will evaluate integrals using a variety of methods including numerical integration. They will understand and apply Riemann sums, definite integrals, and The Fundamental Theorem of Calculus. In particular, they will differentiate and integrate logarithmic, exponential, and inverse trigonometric functions. They will solve simple differential equations that can be solved by separation of variables and use them to solve applied problems. They will use integration to determine the area between two curves and the volume of solids. TI 83 Plus Calculator required. Optional text.

AP CALCULUS BC (WVS)

OPEN TO: Grades 11-12 ELECTIVE
PREREQUISITE: Advanced Algebra 1 Credit

This is a college level course covering derivatives, integrals, limits, approximation, applications and modeling, and sequences and series. Knowledge of algebra, geometry, trigonometry, analytic geometry, and elementary functions required. TI 83 Plus Calculator required. Optional text

AP STATISTICS (WVS)

OPEN TO: Grades 11-12 ELECTIVE
PREREQUISITE: Advanced Algebra 1 Credit

AP Statistics data analysis is dependent on the use of technology. Students should have access to computers that include software capable of doing data analysis. Students will be required to interpret output generated by statistical software programs. Students are not expected to learn how to use various statistical programs. In addition one of the following Texas Instruments calculators is required, TI-83, TI-83+, TI-84, TI-84+, or a TI 89. The TI-83+ is the most popular calculator for AP Statistics. In most cases the calculator is sufficient but the fundamental tool of data analysis is the computer. Textbook Required.

Science

AP BIOLOGY (WVS)

OPEN TO: Grade 12 ELECTIVE
PREREQUISITE: Biology, Chemistry 1 Credit

This course is a comprehensive analysis of general biology that includes biochemistry, molecular biology, genetics, mechanisms of evolution, evolutionary history of biological diversity, plant and animal form and function, and ecology. The AP Biology course is designed to be the equivalent of a college introductory biology course usually taken by biology majors or pre-medical students their first year. The textbook used, the range and depth of topics covered, discussion topics and kinds of labs done in this course are equivalent to those taking this course in college. College Board guidelines are followed in determining the course. Textbook Required. Lab kits are optional.

AP CHEMISTRY (WVS)

OPEN TO: Grade 12 ELECTIVE
PREREQUISITE: Chemistry 1 Credit

Advanced Placement Chemistry is designed to duplicate an equivalent full-year introductory college course covering all aspects of general Chemistry. Students will learn fundamental analytical skills to logically assess chemical problems proficiently. Through fascinating and elaborative lessons, students will develop the skills necessary to arrive at conclusions based on informed judgment and present evidence in clear and persuasive essays. Textbook Required; Lab kits are optional.

***AP ENVIRONMENTAL SCIENCE (WVS)**

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: Biology, Chemistry, Algebra 1/2 Credit

This course is designed to acquaint students with the physical, ecological, social, and political principles of environmental science. The scientific method is used to analyze and understand the interrelationships between humans and the natural environment. The course shows how ecological realities and the material desires of humans often clash, leading to environmental degradation and pollution. The course consists of six chapters covering the following topics: Earth's Systems, Human Population Dynamics, Natural Resources, Environmental Quality, Global Changes and Environment and Society. Chapters are divided into several subsections, each of which contains text, animations, laboratory simulations and video presentations by experts. Textbook Required.

AP PHYSICS B (WVS)

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: Algebra 2 1 Credit
Physics Recommended

AP Physics is a yearlong introduction to the algebra-based major areas of physics – mechanics, fluids, waves, optics, electricity, magnetism and modern physics (atomic and nuclear). Students learn to think like scientists: making predictions based on observations, writing hypothesis, designing and completing experiments, and reaching conclusions based on the analysis of data derived from these experiments. Students apply the concepts of physics to their everyday experiences and current events and issues in science and engineering. The course provides opportunities for guided inquiry and student-centered learning to foster critical thinking skills. Textbook required Lab kits are optional.

Social Studies

AP EUROPEAN HISTORY (WVS)

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: None 1Credit

This course is the study of the social, economic, cultural, intellectual, political and diplomatic history of Modern Europe and its place in the history of the world from the fall of Constantinople to the fall of the Berlin wall and the Soviet Union. The course will be taught at a level and rigor equivalent to that required of students in a college freshman or sophomore Modern European History course. Students will develop an understanding of the major periods, ideas, movements, trends, and themes that characterize European history from approximately 1450-the high Renaissance-to the present. Students develop the ability to analyze historical evidence and express understanding and analysis in writing. The course will prepare students for the College Board examination in European History. Textbook Required.

***AP PSYCHOLOGY (WVS)**

OPEN TO: Grade 12 ELECTIVE
PREREQUISITE: None .5 Credit

This course is a survey of psychology that introduces students to the major topics of the field, the terminology and methodology of psychology, and the historical and current understanding of human behavior and thought-processes. Students learn to analyze human experiences like psychologists do and to apply what they have learned to the world around them. The focus of the course is to prepare students to take the Advanced Placement Psychology course administered by the College Board in the spring of each year. Textbook required

***AP U. S. GOVERNMENT AND POLITICS (WVS)**

OPEN TO: Grade 12 ELECTIVE
PREREQUISITE: US History (1700-Present) .5 Credit

This course will survey the complex subjects of U.S. Government and politics. We will analyze in some detail the processes and institutions (both formal and informal) through which the political system functions and policy decisions are made. This analysis will include the Constitutional structure of Government, participatory politics, the formal institutions of power, the extra constitutional influences on those institutions, and public policy and individual rights and liberties. Two Textbooks Required.

AP U.S. HISTORY (WVS)

OPEN TO: Grades 11-12 ELECTIVE
PREREQUISITE: None 1 Credit

This college-level course explores the history of the United States from the first European explorations of the Americas to present day events and trends. Students examine political institutions and behavior, public policy, social and economic change, diplomacy and international relations, and cultural and intellectual developments. Textbook required.

AP WORLD HISTORY (WVS)

OPEN TO: Grade 11-12 ELECTIVE
PREREQUISITE: None 1 Credit

AP World History covers the history of the world from 600 C.E. to the present with an introduction unit on the period before (covering around 8000 B.C.E to 600 C.E.). The course emphasizes “patterns of change” and the connections between the various world cultures throughout the time period being studied. Students will gain an understanding of the global experiences of humanity and be able to apply that knowledge to their growth and development as “world citizens”. The class has two major goals: 1) to prepare students to be successful on the AP World History exam and 2) to provide students with an understanding on why the world developed the way it did. Textbook required.

World Languages

AP FRENCH LANGUAGE (WVS)

OPEN TO: Grades 12 ELECTIVE
PREREQUISITE: French 4/5 with 3.5 grade average 1 Credit

AP French Language students apply their French grammar and vocabulary knowledge and their listening, reading, speaking, and writing skills to a wide variety of real-world contexts. Students learn to speak fluently and accurately, write complicated compositions, and comprehend native speakers. The equivalent of a college-level language course, AP French Language prepares students for the AP Exam and for further study of French language, culture, and literature. The course does not use a specific text. Rather, a variety of poems, short stories, essays, and plays are provided within the course. Students must have a microphone to submit speaking assignments.

AP SPANISH LANGUAGE (WVS)

OPEN TO:	Grades 12	ELECTIVE
PREREQUISITE:	Spanish 4/5 with 3.5 grade average	1 Credit

AP Spanish Language students practice perfecting their Spanish speaking, listening, reading, and writing skills. They study vocabulary, grammar, and cultural aspects of the language, and then apply what they've learned in extensive written and spoken exercises. By the end of the course, students will have an expansive vocabulary and a solid, working knowledge of all verb forms and tenses. The equivalent of a college-level language course, the two-semester AP Spanish Language prepares students for the AP Exam and for further study of Spanish language, culture, or literature. The course does not use a specific text, however a variety of poems, short stories, essays