The AP® Program & Dual Enrollment at Methacton High School
Tonight’s Objectives

• Provide an overview of the Advanced Placement Program

• Hear from our current AP teachers about their course content and course expectations

• Hear about our Dual Enrollment opportunities

• Break Out Sessions in cafeteria
  • Ask questions of teachers and current students about the course
What is Advanced Placement?

The Advanced Placement Program is a cooperative educational endeavor between secondary schools and colleges and universities. The Program has provided motivated high school students with the opportunity to take college-level courses in a high school setting. Students who participate in the Program not only gain college-level skills, but in many cases they also earn college credit while they are still in high school.
AP Courses Offered by Our School:

Methacton currently offers 17 courses

- Biology
- Calculus AB and BC
- Chemistry
- Computer Science A
- English Language
- English Literature
- Environmental Science
- Human Geography

- Physics C: Mechanics
- Psychology
- Spanish Language & Culture
- Statistics
- U.S. Government
- U.S. History
- Music Theory
- Studio Art
New AP Course for the 2015/2016

AP French Language & Culture
Course Content:

- Biochemistry
- Cells and Cellular Processes
- Genetics (molecular and classical)
- Biotechnology
- Evolution
- Ecology and environmental issues
- Animal and Plant Anatomy and Physiology
- Emphasis on lab investigations and data analysis

Prerequisites:

- 85% average in Honors Biology OR 95% in Academic Biology AND
- 80% average in Honors Chemistry OR 85% average in Academic Chemistry
Course Content:

- Explain the concept of a limit and how it is used to make sense of instantaneous rates of change and area under a curve.
- Compute limits, derivatives, and integrals using a variety of techniques.
- Apply properties of derivatives to solve problems involving related rates, curve sketching, and optimization.
- Use logical reasoning and correct mathematical notation to present clearly written solutions to multi-step problems.

Prerequisites:

- Student must pass Honors Precalculus with an 80% average or higher OR
- Student must pass Precalculus with an average of 95% or higher, have teacher recommendation, and pass appropriate placement exam.
Course Content:

- Compute indefinite and definite integrals using a variety of techniques.
- Apply the techniques of integration to solve problems involving area, volume, and work.

Course Content:

- Solve problems involving sequences and infinite series.

Prerequisites:

- Student must pass AP Calculus AB with an 80% average or higher and have teacher recommendation.
College Equivalent:
2 Semesters of “Principles of Chemistry”… 8 Credits!

Prerequisites:
• 80% in Honors Biology
• 80% in Honors Algebra II/Trig. (or 90% in Academic Alg II / Trig).
• 85% average in Honors Chemistry (95% average in Academic CChem 93% in DE Chemistry)

Course Content:
• Atomic Structure, Stoichiometry and Reaction Classification
• Chemical Bonding
• Intermolecular forces of attraction & their effects on the properties & behavior of liquids, gases, solids & solutions.
• Thermodynamics, Reaction kinetics
• Gas phase, acid/base and solubility equilibria, Electrochemistry
Course Content:

- Object-Oriented Program Design. Read, understand, and develop class specifications, interfaces, and extend classes through inheritance.
- Program Implementation. Primitive types vs. objects; control structures; iteration.
- Program Analysis. Identify and correct syntax, run-time, and logic errors.
- Data Structures. Simple data types (int, double, Boolean), classes, lists, arrays.

- Visit MrSawyer.com for more information.

Prerequisites:

- 80% in Algebra 2 or higher (and this is a bare minimum).
- Strongly recommended taking “Introduction to Java” (80% or better)
- Course is open to 10th, 11th, and 12th grade students.
Course Content:

• Scientific Analysis
• Interdependence of Earth’s Systems: Fundamental Principles and Concepts
• Human Population Dynamics
• Renewable and Nonrenewable Resources: Distribution; Ownership, Use, Degradation
• Environmental Quality
• Global Changes and Their Consequences
• Environment and Society: Trade-Offs and Decision Making
• Choices for the Future

Prerequisites:

• 80% average in Honors Biology, 85% average in Academic Biology, 75% average in Honors Chemistry, 80% average in Academic Chemistry, and 70% Average in Algebra
• Course is open to 11th and 12th grade students.
**Course Content**

- AP English 11 explores a variety of texts and genres, ranging from the Greek Classical Age through the theatre of the absurd. Throughout, we focus on the skills of analytical reading and both written and oral response to text.

**Prerequisites:**

- Students must achieve an 85% or above in Honors English 10
Course Content:

• This course utilizes a variety of fiction and non-fiction of various genres.

• More important than the reading is the writing. We write at least two large research papers, one in the fall and one in the spring. We also write many smaller pieces attempting to cover all modes of writing multiple times in preparation for the AP exam in the spring.

• As we approach the exam we will begin writing specifically to AP prompts, which focus on Synthesis, Argument, and Analysis. We will also work on multiple choice strategies to help prepare for that section of the exam.

Prerequisites:

• Students must have a 70% in AP Literature and Composition (AP English 11).

-OR-

• Students must have an 85% to move into AP Language and Composition from Honors English 11.
Course Content:

- Course is taught exclusively in French and gives students the opportunity to develop proficiency in the three modes of communication: Interpersonal, Interpretative, and Presentational.

- Purpose is to promote fluency in language use, and expand cultural perspectives within the francophone world.

- Uses authentic resources including online print, audio, and audiovisual resources, as well as traditional print resources including literature, essays, and magazine and newspaper articles.

- Course is divided into 6 thematic units: Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities, and Beauty and Aesthetics.

Prerequisites: 85% or higher in French 4 Honors and Teacher Recommendation
• **Course Content:**

  - Human geography studies how people make an impact on the planet.
  - The course teaches students about how life has changed over the course of civilization and the ways people have adapted to the world around them.
  - 7 Major Units – Geography, Population, Cultural Patterns and Processes, Political Geography, Agricultural and Rural Geography, Industrial and Economic Geography, City and Urban Geography
  - Additional materials and technology are used to increase student knowledge and application of course materials

• **Prerequisites:**

  - 95% or higher in honors European studies class taking as a replacement for 10th grade honors World Cultures course with teacher recommendation
  - Prerequisites for other grades are listed in the program planning guide
Course Content:

- AP Physics C: Mechanics is a calculus-based physics course that covers kinematics, dynamics, energy, momentum, rotation, gravitation and oscillation. This course is the first of a two-course sequence that is equivalent to the introductory physics sequence taken by science and engineering students at most colleges and universities.

- Student-led discussions, group problem solving sessions, and student lab design are integral parts of the course. Students will meet for 8 class periods every 6 day cycle. Two of the periods are dedicated as “lab” mods. Many times it will be prudent to have problem solving sessions in place of a lab in order for students to discuss examples that are of college-level.

Prerequisites:

- Student must have successfully completed a first year algebra-based Physics course.

- Must have completed or are taking concurrently Calculus.
Course Content:

- Students will be expected to participate in classroom discussions, and stay current on events concerning psychology.

Prerequisites:

- 90% average in previous Academic Social Studies course or 85% average in previous Honors Social Studies course or 70% average in previous AP Social Studies course and obtain a SS teacher recommendation.
- Course is open to 11th, and 12th grade students.
- Students do NOT have to previous taken Psychology to take AP Psychology. However, students who take AP Psychology in their junior year will be eligible to take Forensic Psychology in their senior year.
Course Content:

• Course is taught exclusively in Spanish and gives students the opportunity to develop proficiency in the three modes of communication: Interpersonal, Interpretative, and Presentational.

• Purpose is to promote fluency in language use and cultural knowledge and appreciation

• Uses authentic resources including online print, audio, and audiovisual resources, as well as traditional print resources including literature, essays, and magazine and newspaper articles.

• Course is divided into 6 thematic units: Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities, and Beauty and Aesthetics

Prerequisites: 85% or higher in Spanish 4 Honors and Teacher Recommendation
Course Content:

• Exploring Data: Describing patterns and departures from patterns.
• Sampling and Experimentation: Planning and conducting a study.
• Anticipating Patterns: Exploring random phenomena using probability and simulation.
• Statistical Inference: Estimating population parameters and testing hypotheses.
• Open to 11th & 12th Grade

Prerequisites:

• Minimum 85% in Algebra 2/Trigonometry or an 85% in their most recent mathematics course if the course is higher level than Algebra 2/Trigonometry.
Course Content:

- Economic and Domestic Policy & Political Ideology, Participation, and Public Opinion
- Political Parties, Campaigns and Elections
- Foundations and Origins of the American Government & The Constitution
- The Judicial Branch (Courts), Civil Liberties and Rights, The Legislative Branch (Congress), Federalism
- President and Foreign Policy, The Executive Branch (Executive Agencies)
- Interest Groups and Media

Prerequisites:

- 90% or higher in 11th grade honors US History course or 70% or higher in 11th grade AP US History
Course Content

- In-depth survey of American history from the age of European realization of the America’s existence through the modern era.

- The course is based on nine periods of history that range from Native Americans & European Exploration through 1980’s & Redefining National Identity.

Prerequisites:

- 90% or higher in World Cultures Honors is required.

- Highly recommended that students possess strong reading and writing skills and the ability to think analytically.

- Students should be capable of independent learning, which is required in parts of the course.
Music & Art

• AP Studio Art
  • Drawing
  • 2D
  • 3D
• AP Music Theory
• Colleges and universities throughout the world offer credit and/or placement for qualifying Advanced Placement Exam Scores. Information about AP credit and placement policies at many colleges and universities is now available on the College Board’s website:

• http://collegesearch.collegeboard.com/apcreditpolicy/index.jsp

• The specific steps are outlined on tonight's handout
Carolyn White - Assistant Director of Admissions
Dual Credit/Enrollment
What is Dual Credit?

Enrollment in college credit courses, receiving both college credit and credit towards meeting high school graduation requirements

Credit is received at the HS and the College

For high school students age 15 and older who meet the pre-req’s for courses
Benefits of Dual Credit

• Earn credits for College AND High School

• Take courses beyond AP offerings and challenge yourself (*may not apply to all schools*)

• Show initiative and improve your application profile

• Take advantage of a reasonable tuition rate
Process

• Visit mc3.edu and complete the Dual Enrollment Application

• Exemptions and/or Pre-requisites (if necessary)

• Complete Dual Enrollment Registration Form

• Submit tuition payment

Note: Minimum of 10 students taking class for DC in order to receive college credit
DE Courses at Methacton High School

Taught by Approved High School Dual Credit teachers:

- CHE 121 - GENERAL CHEMISTRY I
- ENG 238 - LITERARY VISION OF FILM

Taught by MCCC faculty:

- CHI 101 - ELEMENTARY CHINESE
- EDU 100 – INTRODUCTION TO EDUCATION
- ECO 121 - MACROECONOMICS
- ECO 122 - MICROECONOMICS (pre req: ECO 121)
- ITA 101 - ELEMENTARY ITALIAN I
• **Dual credit classes taught by College faculty in 2014-15, was $158/credit ($474 for a three credit class).** An increase in the per credit charge is expected for 2015-16.

• **Textbooks are an additional required fee and can range in price**

• **Courses this applies to:** Elementary Chinese, Intro to Education, Micro/Macro Economics & Elementary Italian
Tuition – Dual Credit Taught by Approved Teachers

• For dual credit classes taught by approved high school teachers, students will be charged the cost of one credit for a three or four credit course. The charge in 2014-15 was $158/credit. An increase in the per credit charge is expected for 2015-16.

• Courses this applies to: General Chemistry & Literary Vision of Film
Dual Enrollment General Chemistry

• Students can earn 4 “Gen Ed” college laboratory science credits.

• DE Chemistry is only slightly more rigorous than Methacton’s “academic” chemistry.

• Not as rigorous as Methacton’s “honors” chemistry. (Students with the pre-requisites for honors chemistry may NOT take DE Chemistry)

• Students pay a 1 credit tuition fee to MCCC and must purchase their textbook from MCCC
• Course Instructors and current AP students will be available to answer any questions about their course in the cafeteria. Please feel free to talk with them.

• Ms. Landis, Dr. Kochenour, and Mr. Peck will be on hand to answer additional questions.

• *After tonight’s program:* Please contact your child’s Guidance Counselor with any further questions regarding the AP program.

• Thank you for attending!