**Science and Math Mentors Academy L.L.C.**

**AP Course Packages**

SMM is an online learning institution that provides tuition primarily, but not exclusively to college bound students preparing for Advanced Placement® exams in science and mathematics. Course delivery involves the use of a learning management system (LMS), a Students Information Management system (SIMS), recorded presentations using live, interactive webinars and a student’s response system. Recorded sessions are made available so absent students may also view sessions at their convenience.

SMM academy introduces courses in sciences and mathematics that may enable students to achieve any or all of the following;

1. Savings of up to one quarter of million dollars in the cost of the traditional US 4 year college baccalaureate (bachelor’s degree)
2. Skipping of the freshman year for the said four year baccalaureate.
3. Increasing the chances of ingoing freshmen obtaining grants and scholarships.

This is not a gimmick. College level studies are challenging, expensive and time consuming, but careful planning and good academic preparation prior to entering usually leads to good careers at relatively low cost.

At SMM academy, our primary mission is to provide students with a good science and math foundation in preparation for college. This idea is not new and is being practiced in many places in the world. High school students essentially begin taking first year College courses while still in high school and obtain transferable college credits for these courses. In the US, there are several pathways available to achieve this goal. However, probably the best way is to do this is to prepare for, and take The College Board’s ® Advanced Placement (AP) exams for the various courses. The College Board is the same institution that offers the Scholastic Aptitude Tests (SAT) I & II and several others.

There are many AP subjects available. In career planning, students usually study courses which they expect to help in their college studies. Often though, they choose the wrong or easy subjects and ignore the more challenging, required sciences and mathematics course options. Our philosophy at SMM Academy is to prepare the students by developing proficiency in the base physical science and mathematics AP subjects because;

* Physics, Chemistry and Calculus are probably the most challenging subjects in high schools. Mastery of these subjects should make the study of the other sciences easier and facilitate the earning of the adequate number of AP subjects required to skip most freshman courses in college.
* Teaching these subjects in-tandem complements the students’ understanding of math and the physical sciences.
* Teaching them over 2 or 3 years give students enough time to assimilate the information and also provides the opportunity to study other subjects as well.

We also hold the view that students do not need to take too many of these AP subjects. The base subjects and one or two more that will assist them in their specific course of study should suffice. To this end, we are offering them in three proposed packages at reasonable cost.

1. The Pre-College Package (PCP)

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| --- | --- | --- | --- | --- | --- |
| Year 1  (Sophomore) | AP Physics1 | AP Chemistry  (1st half) | AP Calculus AB | SAT I |  |
| Year 2  (Junior) | AP Physics 2 | AP Chemistry  (2nd half) | AP Calculus BC | SAT 1 &  SAT II | ACT |

1. The Pre-Engineering Package (PEP)

PEP1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year 1  (Sophomore) | AP Physics1 | AP Chemistry  (1st half) | AP Calculus AB | SAT I |  |
| Year 2  (Junior) | AP Physics 2 | AP Chemistry  (2nd half) | AP Calculus BC | SAT 1 &  SAT II | ACT |
| Year 3  (Junior) | AP Physics C  (Mechanics) | AP Physics C  (Elec. & Mag.) |  |  |  |

PEP2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year 1 | AP Physics1 | AP Chemistry  (1st half) | AP Calculus AB | SAT I |  |
| Year 2 | AP Physics C  (Mechanics) | AP Chemistry  (2nd half) | AP Calculus BC | AP Physics C  (Elec. & Mag.) | SAT 1 SAT II &  ACT |

1. Pre-Management Package (PMP)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year 1  (Sophomore) | AP Physics1 | AP Chemistry  (1st half) | AP Calculus AB | SAT I |  |
| Year 2  (Junior) | AP Physics 2 | AP Chemistry  (2nd half) | Statistics | SAT 1 &  SAT II | ACT |

The pre-requisites for these courses are a high school science course (such as biology, chemistry, physics, general science and environmental science), algebra 2 which should include trigonometry and English language Arts/Literacy. Students whose algebra 2 course did not include trigonometry should have taken pre-calculus; otherwise they may experience difficulty in calculus AB in the first year.

The AP Physics C courses are semester long, with Mechanics taught in the first semester and Electricity & Magnetism taught in the second semester.

Most of the Lab based AP Science courses transfer as 4 college credits while the mathematics courses may transfer as 3 or 4 college credits. The PCP package is intended for students who are unsure of exactly what they want to study in college and it includes chemistry, physics and calculus. Students who wish to study medicine /medical sciences may replace the AP calculus BC with AP Biology or take it at a later time.