



**PEAK TO PEAK**  
CHARTER SCHOOL

College Prep in a Small School Environment

**High School Academic Planning Guide  
and  
Course Description Booklet**

**2020 / 2021**



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## **Peak to Peak Overview**

### **What is Peak to Peak?**

Peak to Peak is a challenging liberal arts, college preparatory, kindergarten through 12th grade, public charter school designed to provide students with excellent preparation for entrance to the best colleges and universities. Peak to Peak intends to become known as one of the top 100 schools in the United States.

Charter schools, public schools with their own boards of directors, operate within local public school districts. Because they are public schools, charter schools receive public funding and do not charge tuition.

### **Peak to Peak's Mission**

- Provide broad access to exemplary K-12 liberal arts, college preparatory education that challenges students to achieve their academic potential.
- Be a community that values and recognizes scholarship, academic achievement and creativity.
- Provide an environment in which each student is known, respected and valued as an individual of great potential and promise.
- Prepare students to become active and responsible citizens of an interdependent world.

### **Peak to Peak's Vision**

The Peak to Peak community will inspire students to fulfill their academic dreams for college, to develop their creative passions and athletic talents, and to become responsible citizens.

### **History of Peak to Peak**

In early 1998, the founders envisioned a school climate of consistent, high expectations and encouragement for students to work hard and strive to achieve their full potential. Consultation with more than eighty public and private colleges across the country led to the development of the required and elective courses at the high school level. The kindergarten through 8th grade program was designed to provide a continuous scope and sequence of critical thinking skills and academic content to thoroughly prepare students for the rigorous high school program. Throughout the process, school founders consulted university professors, educators, community members, and other focus and charter schools to ensure the highest standards for Peak to Peak. In May 1999, Peak to Peak Charter School received approval of its contract from the Boulder Valley School District.

### **Peak to Peak Differentiators**

- The high school at Peak to Peak is small, with a maximum capacity of 600 students (compared with 1,200 to almost 2,000 at other Boulder Valley high schools). Peak to Peak offers the security of a monitored modified closed campus and honor code as well as a collegial atmosphere in which class sizes are moderate, and students have the opportunity to develop sustained relationships with members of the faculty. Students feel safe, supported, and connected to peers and teachers.
- Peak to Peak's high school features the "Peak Scholar Award." Designed for students who desire a challenging, well-rounded high school experience, the Peak Scholar indicates to highly selective colleges the student's commitment to excellence.
- The school is small enough to ensure that each student is known and valued, but large enough to provide a variety of academic, athletic, and extracurricular activities. Peak to Peak students nurture their artistic talents in a variety of vocal and instrumental music classes, fine arts courses, and theatrical performances. Athletic talent shines as athletes compete on Peak to Peak's CHSAA teams such as soccer, volleyball, softball, golf, basketball, cross country, and track, leadership skills are honed with involvement in student council, academic competitions, "Reading Buddies," the National Honor Society, and other extracurricular activities.

- Peak to Peak is an excellent school for students who wish to contribute to creating the culture and the programs that will shape the school now and in the future. Furthermore, many colleges seek students who have made an impact on their high schools or other organizations. For motivated students, Peak to Peak offers many opportunities to stand out in the college admissions process. We welcome and embrace student voices in fulfilling the mission and vision of the school.
- Students are asked to meet or exceed college preparatory high school requirements by taking a prescribed number of required courses (refer to following sections for further detail). This ensures that students will meet or exceed minimum requirements to attend the college of their choice. Students demonstrating mastery of the knowledge and skills of a particular course will be encouraged to enroll in a more advanced course.
- Students entering the high school level with prior educational deficits, as determined by assessments given to all students in key subjects, are encouraged to undertake relevant summer school coursework to ensure that they will be adequately prepared for the school's rigorous classes. In addition, students can seek help during teacher office hours or through regularly scheduled after-school tutoring programs.
- Peak to Peak recognizes that acquisition of efficient work and study habits is a significant contributor to students' sense of comfort and their eagerness to take on new challenges. Students will be taught how to organize, plan, and track their work so that they can meet their goals.

## **Class Load**

As Peak to Peak is an academically rigorous school with a closed campus, all students must take seven classes per semester or six classes plus a study hall (minimum 60 credits per year) unless enrolled in off-site post-secondary classes. The Peak to Peak Board of Directors has determined a policy for upper-level high school students to earn off-campus privileges, allowing for a closely monitored modified closed campus. Students enrolled in post-secondary classes, generally juniors and seniors, must maintain a minimum class load that satisfies Peak to Peak's full-time student status requirements, estimated to be five total classes including up to two post-secondary classes. For those students concurrently enrolled in post-secondary classes, flexibility in the total class load should be coordinated with appropriate Peak to Peak personnel to ensure adequate rigor while allowing for travel to and from post-secondary classes.

Students who wish to graduate early should contact appropriate Peak to Peak personnel for further details.

## **Advanced Placement Program**

The College Board's Advanced Placement (AP) Program is a challenging academic program designed to provide motivated high school students with college level academic courses. The courses provide an excellent opportunity to build study skills for a successful college experience. Attending a high school that offers numerous AP courses, such as Peak to Peak, provides the following benefits for students:

- More than 90% of U.S. colleges and universities give college credit to students who achieve a qualifying grade on the exam.
- More than 300 additional universities in 20 countries recognize AP courses and exams.
- Approximately 50% of U.S. colleges grant a full year of credit (sophomore standing) to qualifying students.
- Students may take AP courses in all high school years if prepared for the coursework.

Peak to Peak expects that all students who take an AP course also take the exam. Students who cannot afford fees associated with the AP exam should consult appropriate Peak to Peak personnel to arrange for scholarships.

The Advanced Placement Program recognizes high school students who have demonstrated outstanding college level achievement through AP courses and exam grades. Peak to Peak students can qualify for the following awards through the Advanced Placement Program:

**AP Scholar Award:** Grade of three or higher on at least three full-year AP exams

**AP Scholar with Honors Award:** Grade of three or higher on four full-year AP exams and have an average exam grade of at least 3.25

**AP Scholar with Distinction Award:** Grade of three or higher on at least five full-year AP exams and have an average exam grade of 3.5

As Peak to Peak's students advance to higher-level courses, additional AP classes will be added incrementally. While college requirements and student interest will determine final course offerings, it is expected that Peak to Peak will offer the following AP classes; course indicated by an asterisk will not be offered in the 2014/2015 school year:

- AP Language & Composition
- AP Literature & Composition
- AP French Language
- AP Spanish Language
- AP Human Geography
- AP U.S. Government & Politics
- AP U.S. History
- AP Psychology
- AP Calculus AB
- AP Calculus BC
- AP Statistics
- AP Environmental Science
- AP Biology
- AP Chemistry
- AP Physics (Mechanics)
- AP Physics (Electricity)
- AP Computer Science AB
- AP Art History
- AP Studio Art Drawing
- AP Studio Art 2D Design
- AP Studio Art 3D Design

## **Peak to Peak Standards-Based Graduation Recognitions**

Peak to Peak believes in recognizing all graduating seniors who achieve high levels of academic achievement as reflected in cumulative, weighted grade point averages (GPA). As a school, Peak to Peak does not rank students in order or calculate GPA's to determine a valedictorian. Peak to Peak encourages all students to take at least one advanced placement course during high school, and recognizes all students who achieve excellence during their high school careers. In addition to the Peak Scholar Program and honor society recognitions for achievement, Peak to Peak recognizes seniors who qualify for graduation with the following, standards-based achievement categories:

Summa Cum Laude: 4.5 and above (weighted GPA)

Magna Cum Laude: 4.2 - 4.49 (weighted GPA)

Cum Laude: 3.9 - 4.19 (weighted GPA)

Students who achieve these levels of academic success will be recognized during end-of-year awards presentations as well as during the graduation ceremony. Honoring graduates in this way aligns with the best practices of standards-based achievement, and encourages all students to pursue and excel in their academic passions during high school.

## Peak Scholar Program

Designed to challenge students who desire a well-rounded high school experience, the Peak Scholar Awards indicate to highly selective colleges the student's high level of commitment to excellence. Importantly, the Peak Scholar Program is designed based on the admissions guidelines of top universities.

Students may choose to enroll in the Peak Scholar Program at beginning with their senior year. To apply, students must complete an application, which is available in the college counseling center, and return it to the counseling center signed by the student and the student's parents.

The Peak Scholar Awards demonstrates achievement in the following areas:

- Advanced Placement courses and exams
- Honor Roll distinction
- A commitment to community service
- Leadership or extracurricular activities

In addition to a scholastic transcript, students will receive an individualized vita highlighting the student's character, community service, and honors as well as awards in academics, leadership, visual and performing arts, athletics or technology. The focus of the vita will be high school years; however, the college counseling center will build a database of student information beginning in elementary years to show a complete and well-rounded picture of the student.

### Peak Scholar Award

Advanced Placement

AP Scholar Award:  
Completing at least 3 AP exams by the end of the senior year and receiving a grade of 3 or higher on at least 2 AP exams taken by the end of the junior year.

Academic Achievement

Honor Roll: 3.3 GPA

Community Service Hours

Requires 100 hours of community service over 4 years.

Leadership, Arts, Athletics, Technology

Brief essay on demonstrated excellence in any area of leadership, arts, athletics or technology and discussion with college counselor.

### Peak Scholar

#### with Honors Award

Advanced Placement

AP Scholar with Honors Award:  
Completing at least 4 AP exams by the end of the senior year and receiving a grade of 3.25 or higher on at least 3 AP exams taken by the end of the junior year.

Academic Achievement

High Honor Roll: 3.7 GPA

Community Service Hours

Requires 125 hours of community service over 4 years.

Leadership, Arts, Athletics, Technology

Brief essay on demonstrated excellence in any area of leadership, arts, athletics or technology and discussion with college counselor.

### Peak Scholar

#### with Distinction Award

Advanced Placement

AP Scholar with Distinction Award: Completing at least 5 AP exams by the end of the senior year and receiving a grade of 3.5 or higher on at least 4 AP exams taken by the end of the junior year.

Academic Achievement

Dean's List: 3.9 GPA

Academic Lettering: 3.9 GPA

Community Service Hours

Requires 150 hours of community service over 4 years.

Leadership, Arts, Athletics, Technology

Brief essay on demonstrated excellence in any area of leadership, arts, athletics or technology and discussion with college counselor

## Seal of Biliteracy

The Seal of Biliteracy is an award given by a school, district, or county office of education in recognition of students who have studied and attained proficiency in two or more languages by high school graduation.

The SEAL shall be awarded by the high school principal and president of the board to students who complete the requirements for a Peak to Peak High School diploma and who meet the two following requirements:

1. Pass the ACT administered in grade 11 with a score of 18 or above for English composition and 22 or above for reading comprehension.
2. Pass a world language Advanced Placement (AP) test with a score of three or higher.  
OR
3. Pass level 5 of the National Spanish Exam or National French Contest (or equivalent in the world language in which the seal is sought) at the bronze level (75-84% percentile) or higher.

In addition, students that earn a GPA of 3.0 or higher will receive a medal in recognition of superior accomplishment.

## Graduation Requirements

Peak to Peak's graduation requirements have been developed based on the entrance requirements of top colleges and universities as well as through analysis of the components of a strong, academic high school curriculum. Students must successfully complete a *minimum* of 220 credits in order to graduate from Peak to Peak. This includes the provision that all students complete four years of math, four years of English, three years of social studies (including human geography, US government and US history), and three years of science including biology and chemistry while in high school. All students are also required to complete three years of world language study during high school, or complete through level 40 of the same language to meet graduation requirements. Students have the potential of earning up to 280 credits in four years of high school at Peak to Peak (seven classes per semester during each semester of high school). Moreover, there is considerable flexibility in a student's high school coursework to allow pursuit of a variety of courses and a wide range of interests. In addition, each student is required to complete a minimum number of hours of community service as a graduation requirement. The minimum number of community service hours is 100 hours, which may be earned on or off campus.

### Peak to Peak graduation requirements include:

SUBJECT AREA	REQUIRED CREDITS
English	40 credits
Math	40 credits
Science	30 credits (40 recommended) (to include Biology & Chemistry)
Social Studies	30 credits (40 recommended) (to include 10-US History, 10-Gov't, 10-Geog)
World Language	30 credits of same selected language or through Level 40
Visual & Performing Arts	20 credits
Technology	5 credits
Health	5 credits (Colorado State requirement)
P.E.	10 credits (minimum 5 to be earned on campus)
General Electives	10 credits (up to 80 credits may be earned)
*College Research Seminar	5 Credits, Attendance and Participation (description below)
**Community Service	100 Hours (description below)
CO SAT	Required Participation for All Juniors

\* **College Research Seminar** 5 total credit required course for juniors and seniors to be earned in the spring semester of 11<sup>th</sup> grade and the fall semester of 12<sup>th</sup> grade. To encompass college readiness curriculum that allows students to find their best fit college by preparing every student to research colleges and careers, develop a personal college list, understand college financing, and apply to college. It includes college field trips, a two college comparison presentation, college application Boot Camp, College Day, and multiple assignments/projects that prepare students in their college research and application process. The curriculum aligns with Peak to Peak's mission that every student attend the college of their choice by preparing them to develop a personalized list of colleges based on 'best fit' to which to apply.

\*\***Community service** is voluntary time and therefore cannot be a paid service. Students have the option to earn community service hours through student aiding. They can earn up to 25 hours per semester if they select the community service hours option instead of a letter grade and they can take this option twice in their HS career for a total of 50 hours. The Community Service Option form must be completed and turned in within the first week of a new semester to make this option valid. The Counseling office reserves the right to revert back to letter grade distribution if deemed necessary.

## **Grades and Grading Scale**

Note: the grading scale has been modified to eliminate the "D" grade, effective with the 2005-06 academic year. Students already enrolled at Peak to Peak who received "D" grades prior to the 2005-06 school year receive grade points and credits for those grades.

Letter grades will be assigned for all high school classes, as follows:

A = exceptional achievement; grade percentage 89.5 % and above

B = high achievement; grade percentage 79.5 %-89.49%

C = average achievement; grade percentage 69.5 %-79.49%

F = failure to achieve; grade percentage below 69.49%

I = incomplete.

WP = withdraw pass

WF = withdraw fail

- ❖ Semester grades are whole grades only, without +/- modification. Semester grades are final and are used to calculate student grade point averages.
- ❖ Progress Report grades are in-progress grades and may include +/- modification to the letter grade as appropriate, based on the percentage grade. The +/- grade modification provides more specific course progress information to students and parents.
- ❖ A student in a high school course may receive pass/no pass grading only as approved on a case-by-case basis in consultation with the student's counselor and classroom teacher.
- ❖ A student must achieve at the equivalent of C grade work in order to pass a course that is graded pass/no pass.
- ❖ A grade of I (Incomplete) is assigned when, due to extenuating circumstances, a student has not completed sufficient coursework for the teacher to assess student work and assign a grade reflective of the student's achievement, e.g. due to extended illness or recent enrollment in the class. It is not an alternative to a grade of F, which reflects failure to achieve.
- ❖ Assignment of a grade of I requires approval of the student's counselor or a Peak to Peak administrator.
- ❖ The teacher is responsible for converting a grade of I to a regular letter grade no more than three weeks after the end of the grading period. If a student does not complete missing assignments by this deadline, each missing assignment receives a score of zero

percent and the grade calculation for the applicable grading period will be made on this basis.

- ❖ Grades of F or I do not receive credit and do not count towards fulfillment of course or graduation requirements.
- ❖ Students that transfer to Peak to Peak from another high school do not receive credit at Peak to Peak for any D grade in course work on their transferred transcripts.
- ❖ If a high school student repeats a course for improved grade it must be the exact course or the same course at a higher level (e.g., Algebra 1 Honors as a repeat for Algebra 1). Only calculation of the higher grade will be included in the student's GPA and credit will be given only once. The lower grade and credit will be ignored although the course and grade will remain on the transcript. This is the regulation only for classes taken in Boulder Valley Schools. Transcripts for other schools will not be altered.
- ❖ If a student withdraws from a course after the add/drop deadline they will receive a WP or WF as stated in the add/drop policy below.
- ❖ If a student drops a year-long course at the completion of the 1st semester, or at any time during the 2nd semester, they will receive the grade of "F" for the second term.

### **Course Add-Drop and Withdrawal Procedures and Timeline**

The master schedule is created from the course selections students make during registration in the spring. Staffing of these courses is then assigned accordingly. It is explained and impressed upon students that schedule changes are very difficult to make. Consideration of course selection is a very important and serious process. All students are required to create and maintain a four-year academic plan. Students and parents are strongly encouraged to formulate class schedules together, as course changes and drops are restricted.

**Schedule Changes:** Schedule changes may be made by appointment with a counselor according to the below timeline. Students are responsible for reviewing their four-year plan and credit count to determine how the schedule change affects the student's plan.

Schedule changes are made for reasons of 1) class conflicts, 2) failing a core class, 3) school error, 4) imbalance of class size, or 5) incomplete schedules. A class will not be overloaded to make a schedule change.

#### **Procedure to change schedule:**

- ❖ The last day to add a class for first semester is 5 school days after the beginning of the school year. The last day to add an elective class for second semester is 5 school days after the semester begins.
- ❖ Add/Dropped Classes: To add or drop a class, students must complete a schedule change form, get this signed by the teacher and parent, and receive approval by the counselor before the change is effective and before students may discontinue attendance or begin a new class.
- ❖ Students are allowed to drop a standard or honors-level class during the first 5 school days of the semester with no grade reported on the transcript. For a full-year core or elective class, this policy only applies in the first semester.
- ❖ Students are allowed to drop an AP-level course within the first 15 school days of the semester (not including weekends, holidays, or professional days) with no grade reported on the transcript.

- ❖ Students who drop a standard/honors class in the 6<sup>th</sup> through the 20<sup>th</sup> school day of the semester, or an AP-level class after the 16<sup>th</sup> through the 20<sup>th</sup> school day, will be issued a grade of WP (withdraw passing) or WF (withdraw failing) in accordance with their current course grade, which will be recorded on the student's permanent transcript. This grade does not impact the student's cumulative grade point average (GPA). The WF or WP will be issued for both semesters for a year-long course. Note: AP Physics C (Electricity) & AP Physics C (Mechanics) together are a year long course and any drops during the first semester will be for the entire year.)
- ❖ Students who drop any class after the 20<sup>th</sup> school day of the fall semester will receive a grade of "F," regardless of the quality of the student's work. This grade will be recorded on the student's permanent transcript and will be averaged into the student's cumulative grade point average. The grade of "F" will be issued for the first semester, and WF for the second semester for a year-long course dropped in the first semester.
- ❖ Students who drop a year-long course at the completion of the 1st semester, or at any time during the 2nd semester, will receive the grade of "F" for the second term.

## **Weighted Grades**

To encourage students to select the most demanding courses available and to recognize the additional time and effort required, honors, AP, and post-secondary courses will be weighted for calculation of a student's GPA.

Because universities and colleges vary in their admissions practices, Peak to Peak may list two GPAs on the high school transcript: one based on a weighted scale (A = 5 points, B = 4 points, C = 3 points, F = 0 points) and one based on the standard four-point scale (A = 4 points, B = 3 points, C = 2 points, F = 0 points).

## **Academic Lettering**

Peak to Peak has implemented an academic letter system whereby students receive letter awards for high academic achievement. Essentially, students can earn an academic letter award each year for maintaining a 3.9 GPA for that year.

## **Library**

The Peak to Peak library is available for all Peak to Peak students for researching, studying and recreational reading. A variety of materials are available for students, and library staff is ready to assist students in finding and using materials. Library hours of operation are 7:30 am – 4:00 pm Monday through Thursday, and 7:30 am – 3:05 pm Friday.

## **Extracurricular Activities**

Opportunities are available for students to participate in numerous extracurricular activities. Peak to Peak responds to students' interest levels for creating additional clubs and activities. Current extracurricular activities and examples of Access clubs are:

### **Activities**

Allies	Math Club	Science Bowl
Athletics	Mock Trial	Science Olympiad
Battle of the Books	Model United Nations	Society of Women Engineers
Book Club	Music performances	Sources of Strength
Ethics Bowl	National Art Honor Society	Speech & Debate
Eye to Eye	National Jr Honor Society	Sociedad Honoraria Hispánica
FTC Robotics	National Honor Society	Stock Market Games
Key Club	PAC	Student Council
Latino Student Union	Real World Scholars	Thespians

Tri M Music Honor Society

**Athletics and Extracurricular Sports**

All Peak to Peak teams compete in the Colorado High School Activities Association (CHSAA). High school sports, offered by season, include:

<b><u>Fall</u></b>	<b><u>Winter</u></b>	<b><u>Spring</u></b>
Boys: golf, soccer, tennis	Boys: basketball	Boys: baseball
Girls: cheerleading, softball, volleyball	Girls: basketball, cheerleading	Girls: soccer, golf, tennis
Co-ed: cross country		Co-ed: track

In future years, Peak to Peak may offer additional sports, depending on student interest and funding. Currently, Peak to Peak students participate at neighborhood schools in football, gymnastics, swimming, skiing, hockey and lacrosse.

Given the record of many of our current high school and 8th grade sports teams, Peak to Peak is well positioned to field highly competitive teams in CHSAA’s Metro League. The 2005 boys soccer team finished in first place in the Metro League 3A division, becoming the first Peak to Peak athletic team to earn a state championship. Adding to the strength of the athletic program are highly qualified coaches.

Students wishing to enroll in a sport not offered by Peak to Peak are entitled to try out for and participate in extracurricular and interscholastic activities offered by their district school of residence. Interested students should contact the athletic director at Peak to Peak. Fees for high school athletics at Peak to Peak are \$200 per sport (\$525 maximum fee per student per year; \$675 maximum fee per family per year). The fee for Cheerleading is \$300 which covers the cost for two sport seasons.

Regarding eligibility, CHSAA requires that during the period of athletic participation, the student must be enrolled in at least five classes and may not be failing more than one class.

**Preparation for College Entrance**

The Peak to Peak Counseling/College Planning Center encourages every 9<sup>th</sup> grade student to begin planning for post-high school training. To assist students and parents, the following provides a brief summary of the essential components for preparing for college entrance. Outlined below are the admission criteria employed by selective and highly selective colleges. More comprehensive information is available through the Counseling/College Planning Center.

**Summary of Required Subject Area Credits for College and University Admission and Comparison with Peak to Peak Graduation Requirements**

<b>Subject</b>	<b>Selective Colleges and Universities</b>	<b>Highly Selective Colleges and Universities</b>	<b>Peak to Peak Graduation Requirements</b>
English	40	40	40
Math	40	40	40
Science	30	30 - 40	30 (40 recommended)
Foreign Language	30 (single language)	30 (single language)	30 (single language)
Social Studies	30	30 - 40	30
Technology			5

Visual and Performing Arts			20
Advanced Placement		may be required	strongly recommended
Health			5
P.E.			10
General Electives			10
<b>Minimum Credits Required</b>	<b>170</b>	<b>170</b>	<b>220</b>

Colleges and universities generally use an index that includes a combination of grade point average (GPA) and test scores (SAT I or ACT) to determine admission in combination with other criteria. While specific information on each college and university is available in the Peak to Peak counseling office, students should also be aware of the following general guidelines that colleges and universities use in evaluating potential candidates.

**Quality of Work**

Colleges closely examine the quality of a student’s record. Quality is based on both the courses taken and the student’s performance in those courses. In considering course selection, the depth and breadth of study a course provides should be considered. Selective colleges look for evidence that students have challenged themselves by taking the most advanced courses available to them. The high school scholastic record as reflected in the student’s GPA still serves as the best predictor of academic success in college. Grades, therefore, are important for college entrance. The GPA is computed at the end of each semester, and only semester grades are used in the computation. Grades earned in each semester of grades 9, 10, 11, and 12 will be used to determine the overall high school GPA, which is included on transcripts of high school coursework. A low GPA severely limits choices for college admission.

**Credit Recovery / Grade Replacement**

Accepted credit recovery or grade replacement sites are:

- BVSD Online (FuelEd)
- BVSD Summer Program

Any course taken must be added to transcript.

**Outside Credits**

*As a charter school within Boulder Valley School District, Peak to Peak has created its own unique courses. Due to our courses not necessarily reflecting the same content as BVSD courses, Peak to Peak students may not take BVSD online courses for original credit. If a student wishes to pursue a waiver for unique circumstances, they must contact their counselor, and follow the pathway to get approval from the department lead and the HS Principal. Since Peak to Peak transitioned to an 8-period day, there is little cause for a student to take an online course due to schedule conflicts. In order to move ahead a transcript for the course taken must be received.*

**Performance on Appropriate Tests**

Most colleges and universities use two primary testing programs — ACT and SAT — in the admissions and placement process. Further information is provided below and is also available in the counseling office. The PSAT/NMSQT is used to identify National Merit awards.

**SAT Procedures for Peak to Peak:**

- The SAT is a vital measure of student achievement for students at Peak to Peak, Boulder Valley School District, the state of Colorado and for institutions of higher education across the nation.

- Each year, Peak to Peak will set content area and composite score targets for the junior class per College Readiness guidelines for the ACT exam.
- All juniors at P2P are required to participate in SAT test preparation courses during Access class sessions and to take all practice SAT's administered at P2P.
- In order to graduate all juniors at P2P are required to participate in annual, state-mandated SAT testing. A student's score on the state-mandated SAT will be included on his/her official school transcript.
  - If a student takes the SAT on a national test date after the Colorado ACT, he/she can request that those scores be included on the transcript in place of the Colorado SAT scores. In order to make such a request, the student must submit an 'SAT Score Replacement Option' form along with the replacement test scores to the school post grad coordinator.
- **American College Test (ACT):** The ACT results are accepted by all colleges in Colorado. ACT tests are designed to measure the student's ability to perform the kind of intellectual tasks typically performed by college students. The major portion of the ACT battery consists of four tests: English, Mathematics, Reading, and Science Reasoning. In addition to the tests named, there is an Interest Inventory in the student profile section. The Interest Inventory provides data on the ability of the student to relate his or her interest pattern to 24 college majors and the world of work in general. The ACT is administered nationally in professional test centers six times each year: in September, October, December, February, April, and June. The National ACT also includes an optional writing exam required at some of the highly selective Colleges and Universities.
- **College Board Scholastic Aptitude Test (SAT Reasoning and SAT Subject Tests):** The SAT I is used by colleges and universities as an entrance test. The SAT Reasoning test consists of multiple sections: one math and one verbal, with a third section that tests writing skills. The test is designed to provide reliable indications of a student's ability to do college level work and is administered nationally in November, December, January, March, May, and June. SAT Subject tests provide information about a student's knowledge of subject-specific matter and are used extensively for placement purposes by some institutions. Students should consult with the counseling office to determine institution requirements.
- **Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test (PSAT/NMSQT):** The PSAT/NMSQT is designed to give students (typically juniors) experience with tests similar to those required for college admission. In addition, results of this test are used as a competitive examination in the National Merit Scholarship Program. All Peak to Peak high school students will take the PSAT or PLAN in October.

### **Participation in Co-Curricular and Extra-Curricular Activities**

Participation in a variety of activities both in and out of school is important to demonstrate to colleges that the student is well rounded. Participation in activities such as clubs, student government, athletics, and community service is a significant consideration in college admission. The critical point is not necessarily how many activities but the quality of participation, including positions of responsibility held and the student's demonstrated commitment to the activity or activities.

### **Personal Recommendations**

Developing positive and professional relationships with adults, including teachers, counselors, and coaches, for letters of recommendation is an important aspect of college entrance. Although not all colleges and universities include personal recommendations in the admissions process, some schools place considerable weight on these documents, which include factors such as judgment, industry, and reliability in addition to intellectual capabilities. Students are not allowed to ask for letters of recommendation until their college counselors give permission to do so. Teachers are limited to writing 10 letters of recommendation.

## **Leadership**

Peak to Peak is an excellent school for students who wish to contribute to creating the culture and the programs that will shape the school now and in the future. Furthermore, many colleges seek students who have made an impact on their high schools or other organizations. For motivated students, Peak to Peak offers many opportunities to stand out in the college admissions process. We welcome and embrace student voices in fulfilling the mission and vision of the school.

## High School Course Descriptions

Based on the entrance requirements of top universities, Peak to Peak has outlined a comprehensive set of college preparatory courses. The recommended pathways are indicated through the prerequisite courses; however, Peak to Peak remains true to its mission to challenge students at a level appropriate to each individual. Changes from the recommended pathways occur through department level or instructor consent.

Classes that are 10 credits meet every day for a full year; classes that are 5 credits meet every day for one semester, or every other day for a year. In the future Peak to Peak will continue to add courses based on student and faculty interest. Certain classes may be offered only one term per year or may be offered every other year depending on demand. Note: Peak to Peak reserves the right to cancel classes due to insufficient enrollment.

### **English**

The English Department challenges students to strive for mastery in all areas of Language Arts in order to become excellent scholars. The Department promotes effective expression, critical thinking, and life-long learning. The Department is committed to fostering a passion for literature and love of reading and writing for every student. The texts taught in English classrooms are chosen based on literary merits, importance in a college preparatory curriculum, and character education themes. English classrooms are nurturing environments where students of all abilities feel safe to take risks and challenge themselves.

Peak to Peak offers a literature-based curriculum that exposes students to many of the major works in the English literary canon. As an Advanced Placement school, Peak to Peak selects literature from the AP list of suggested authors. Chosen texts reflect variety in genre (novels, plays, etc.) and variety in authors (gender, race, era, etc.) while at the same time providing thematic coherence to a given course. Each course focuses on responding to and analyzing written works orally and in writing, with emphasis on the writing of essays and other full-length products. In addition, the English Department spirals grammar study throughout each level, with topics introduced or re-taught as necessary.

**Graduation Requirement:** Peak to Peak students must successfully complete four years of English.

**English: World Literature:** 10 credits. *No prerequisite.* This survey literature course introduces students to close and critical reading and responding (orally and in well-crafted writing) to significant works (novels, short stories, essays, plays, and poetry) by a variety of authors from different times and places in history. Students will be introduced to literary analysis and will be given many opportunities to discuss literature and apply writing skills to the development and refinement of literary arguments.

**English: World Literature Honors:** 10 credits. *Weighted. Prerequisite: teacher recommendation.* This is a faster paced and more rigorous course than World Literature, designed for the student who wants an extra challenge and is willing to accept significant responsibility for the learning process. Topics covered are the same as those in World Literature.

**English: Why Writing Matters:** 10 credits. *Prerequisite: World Lit or World Lit Honors.* In this sophomore level course, students will consider how writing we read and writing we produce matters. Students will read and analyze a broad range of texts that have made a difference culturally, socially, and politically. Students will respond to these readings analytically and practice the craft of writing--from generating original ideas to developing theses to employing more sophisticated grammar and structure--as they learn to interpret, synthesize, narrate, inform, and persuade to create their own writing that matters.

**English: Why Writing Matters Honors:** 10 credits. *Weighted. Prerequisite: World Lit or World Lit Honors and teacher recommendation.* This is a faster paced and more rigorous course than Why Writing Matters designed for the student who wants an extra challenge and is willing to accept significant responsibility for the learning process. Topics covered are the same as those in Why Writing Matters.

**□ English: English Language & Composition:** 10 credits. *Prerequisite: Why Writing Matters or Why Writing Matters Honors.* The course focuses on analyzing how language is used in significant, well-crafted works of fiction and non-fiction and evaluating and developing arguments with heightened attention to the connections between purpose, audience, and subject. Students will compose fluent, effective expository and persuasive writing through growth in organization, vocabulary, and grammatical conventions. In addition to essays, critical discussions, and oral presentations, students will complete a major researched argument paper. The goal of the course is to prepare students for the type of persuasive, well-supported, argumentative writing that will be expected in the college classroom.

**□ English: Senior Literature and Composition:** 10 credits. *Prerequisite: English Language & Composition.* This course prepares students for the rigors of college-level work and real-world writing, focusing on literary analysis, composition, and rhetoric. Students will engage in close critical reading and analysis of novels, short stories, poetry, critical articles, classic essays, and contemporary commentary. Students will respond to literature in a variety of written forms, including a culminating project on a literary topic. They will also hone skills with other writing forms, such as the college/scholarship personal essay, persuasive letters, and critical essays.

**□ Communications Innovations Honors:** 10 credits. This English course requires students to engage with our contemporary world, collaborating and using cutting edge communication tools in order to solve our student-identified issues. In addition to the foundational requirements of a rigorous English class, students will analyze media, connectivity and society. Following best practices of design-theory, they will use empathy to understand problems, research issues, ideate possibilities, prototype solutions, and test to find the best innovations. They will then present these solutions not just in class but to a wide audience. In order to make these innovations an actuality, students will create campaigns, abstracts, pitch decks, proposals and innovate a final project of their choice. This final project will engage their world, communicate in real time, and create actionable solutions. This project will also be entered in competitions such as the World Series of Innovation, and may be used to meet the STEM certification requirements, as well as being featured in a final innovation showcase. Students enrolled in this course will be eligible for Peak to Peak's new Innovator of the Year award.

**□ English: Advanced Placement Language and Composition:** 10 credits. Weighted. *Prerequisite: Why Writing Matters or Why Writing Matters Honors, and teacher recommendation.* Because this course is intended to parallel a college composition course, it is faster paced and more rigorous than American Literature; it is designed for the student who wants an extra challenge, is willing to accept significant responsibility for the learning process, and approach college-level content maturely. The College Board emphasizes that AP Language and Composition goes beyond pure American literature content to focus on rhetoric: "By their writing and reading in this course, students should become aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way generic conventions and the resources of language contribute to effective writing." Topics covered are similar to those in American Literature, with the added focus of preparing students for the AP English Language and Composition exam in the spring and becoming successful college writers.

**□ English: Advanced Placement Literature and Composition:** 10 credits. Weighted. *Prerequisites: English Language & Composition, and teacher recommendation.* The course outline and readings will closely follow the description issued by the College Board. This course prepares students to take the AP Literature and Composition exam in the spring and succeed in college literature classes. The course will require challenging reading drawn from the AP reading list and students will write critically in response to these literary works. Students should consider the reading and writing load when planning the remainder of their course schedule. Students in this course are expected to take the AP Literature and Composition exam.

## **Mathematics**

Mathematics not only facilitates logical thinking but is also used to describe and analyze our world. At Peak to Peak, our math classes teach students to value mathematics as a discipline unto itself, to make connections between mathematics and other disciplines, and to examine the applications of mathematics in our world. We balance the development of formal mathematical algorithms with

critical reasoning and investigating mathematical properties and ideas. We expect students to think through the mathematics behind formal skills rather than simply following set procedures. Through practice, students become proficient with their formal skills and develop strategies for thinking critically.

**Graduation Requirement:** Peak to Peak students must successfully complete four years or 40 credits of mathematics. This is in accordance with newly-approved Colorado requirements. Furthermore, students are encouraged to take four full years of mathematics for college admission to the University of Colorado, University of California, and many other selective public and private colleges. Additionally, many engineering schools require four years of mathematics and strongly recommend calculus. Any course below Algebra I in Peak to Peak's math course pathway does not receive high school credit.

**□ Math: Algebra I:** 10 credits. *Prerequisite: Pre-Algebra.* In this course, students will cover operations with integers, expressions, order of operations, exponents, scientific notation, properties and axioms, solving of one-step and multi-step equations, quadratic equations and the quadratic formula, polynomials, graphing, and probability. NOTE: After this course, students will be ready to continue their work in Algebra 2 but will not have enough background to take Algebra 2/Trigonometry Honors without additional independent work.

**□ Math: Geometry and Probability:** 10 credits. *Prerequisite: Algebra I.* In this course, students will study Euclidean geometry combined with an Algebra review of linear and quadratic equations and systems and polar coordinates. Topics will include properties and theorems of points, lines, rays, polygons, circles, planes, congruence, parallelism, perpendicularity, and similarity. Further investigation will follow into calculation of volume, area, and perimeter of plane and solid geometric figures, basic trigonometry, Pythagorean Theorem, coordinate geometry, and introductory methods of proof.

**□ Math: Geometry & Probability Honors:** 10 credits. *Weighted. Prerequisites: Algebra I Honors and teacher recommendation.* Students will study Euclidean geometry with a more detailed emphasis on inductive and deductive reasoning and will be asked to demonstrate their knowledge of the material primarily by way of proof. Topics include properties of points, lines, rays, planes, polygons, circles, spheres, congruence, parallelism, perpendicularity, similarity, transformations, basic trigonometry, calculation of area/perimeter/volume, and the Pythagorean Theorem along with other theorem work.

**□ Math: Algebra II / Trigonometry:** 10 credits. *Prerequisite: Algebra I.* Students will continue with the study of Algebra I through more complex topics like factoring, linear systems, rational and radical expressions and equations, rational and irrational numbers, inequalities, and specific families and the vocabulary of functions, i.e. quadratic, exponential, and logarithmic, and word problems associated with those functions.

**□ Math: Algebra II / Trigonometry Honors:** 10 credits. *Weighted. Prerequisites: Algebra I Honors, Proof Geometry Honors, and consent of instructor.* This fast-paced course is intended for math students who need little to no Algebra I review of basic concepts like graphing of lines, substitution/elimination, solving equations, exponents, factoring, and the quadratic formula. In this course, students study and perform operations with all functions such as linear ones with a two and three-dimensional analysis, quadratic functions, exponential and logarithmic functions, and all trigonometric functions and their inverses. Topics include: function vocabulary, Cramer's Rule, linear programming, introduction to vectors, solving quadratic equations and analyzing them graphically with real or imaginary solutions, exponential growth and decay, all logarithm properties, financial applications, sequences and series, probability through combinations and permutations, trigonometric ratios, formulas, the unit circle, and the law of sines and cosines.

**□ Math: Pre-Calculus:** 10 Credits. *Prerequisite: Algebra II.* This course includes the study of polynomial functions, equations, rational functions, matrix algebra, logarithm and exponential functions, conic sections, and the three dimensional coordinate system. It also includes the study of circular functions, special angles, graphs, identities, inverse trigonometry functions, solutions of right and oblique triangles, and polar coordinate systems and their applications.

**□ Math: Pre-Calculus Honors:** 10 credits. *Weighted. Prerequisite: Algebra II Honors.* Students will take this course as direct preparation for the AP Calculus BC course next year. Topics will include function work with composition and inverses, extensive graphical analysis of functions' maxima, minima, bounds, zeros, intercepts, asymptotes, end behavior, transformations, polynomial functions, matrix algebra, conic sections, the three dimensional coordinate system, vectors and their applications,

circular functions, trigonometric graphs and their amplitude, period, frequency, phase shift, parametric equations, and the polar coordinate system.

**□ Math: Finance Models; PreCalc Honors:** 10 credits. Weighted. *Prerequisite: Algebra II Honors.* Navigating the financial world is becoming increasingly difficult and important as our economy becomes more complex and as levels of debt continue to rise. Everything from mortgages and student loans to investments and strategic budgeting require levels of critical thinking, mathematical reasoning, and math content knowledge. This course will focus on all of the prerequisite knowledge needed to succeed in a Calculus I course—including logarithmic and exponential functions, limits, differentiation, and integration—but will do so in a way that connects to financial literacy. Students will learn how to use spreadsheets and other technology to analyze financial data.

**□ Math: Discrete Math and Math Applications:** 10 credits. *Prerequisite: Algebra II/Trigonometry.* There is no escaping the importance of mathematics in the modern world. However, for many students, the importance of mathematics lies not in its abstract ideas, but in its application to personal and social issues. This course is designed with such practical considerations in mind. The three specific purposes of the course are:

- 1) To prepare the student for the mathematics he or she will encounter in other college courses, particularly core courses in social and natural sciences.
- 2) To develop the student's ability to reason with quantitative information in order to help the student achieve success in his or her career.
- 3) To provide the student with the critical thinking and quantitative reasoning skills needed to understand major issues in life.

The course is primarily designed for those are not planning to major in a field that requires advanced mathematical skills, particularly anyone who has felt anxiety or fear about mathematics. Hopefully, the student will discover that mathematics is much more important and relevant to an individual's life than he or she would have previously guessed. Upon completion of the course, the student should be prepared to understand more quantitative issues they encounter.

**□ Math: Advanced Placement Calculus AB:** 10 Credits. Weighted. *Prerequisite: Pre-Calculus Honors or Pre-Calculus and teacher recommendation.* This course is for highly motivated and mathematically able students who are ready for calculus but are not yet ready for the intensity and the advanced concepts of the AP Calculus BC class. This course prepares students to take the AP Calculus AB exam in the spring. Advanced Placement Calculus AB examines the theory of limits, differentiation, functional analysis, and integration. Students develop their knowledge of calculus through applications of differentiation and integration. Students in this course are expected to take the AP Calculus AB exam.

**□ Math: Advanced Placement Calculus BC:** 10 credits. Weighted. *Prerequisite: Pre-Calculus Honors and teacher recommendation.* This course is for students with superior motivation and ability in mathematics. This course prepares students to take the AP Calculus BC exam in the spring. AP Calculus BC is a full year course in the calculus of functions of a single variable. The AP Calculus BC course reviews the topics addressed in AP Calculus AB and, additionally, covers improper integrals, infinite series, the calculus of parametric and polar curves, L'Hôpital's Rule, vector functions, and applications of integrals. Students in this course are expected to take the AP Calculus BC exam.

**□ Math: Advanced Placement Statistics:** 10 Credits. Weighted. *Prerequisite: Algebra II Honors and teacher recommendation.* This course is designed to be equivalent to an introductory, non-calculus based college course in statistics. This course prepares students to take the AP Statistics exam in the spring. The purpose of this course is to introduce students to the major concepts and tools for data collection, data analysis, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data (observing patterns and departures from patterns), planning a study (deciding what and how to measure), anticipating patterns (producing models using probability and simulation), and statistical inference (confirming models). This course also includes instruction in formal logic. Students in this course are expected to take the AP Statistics exam.

**□ Math: Differential Equations Honors:** 10 Credits. Weighted. *Prerequisites: AP Calculus BC, or AP Calculus AB and consent of the instructor of AP Calculus AB.* Differential Equations are the language in which the laws of nature are expressed. Understanding properties of solutions of differential equations is

fundamental to much of contemporary science and engineering. Topics include solutions of Ordinary Differential Equations (ODE's), by analytical, graphical, and numerical methods; Linear ODE's, especially second order with constant coefficients; Undetermined coefficients and variation of parameters; Sinusoidal and exponential signals: oscillations, damping, resonance; Complex numbers and exponentials; Fourier series, and Laplace transform methods; Matrix and first order linear systems; eigenvalues and eigenvectors; and Non-linear autonomous systems: critical point analysis and phase plane diagrams. If time remains partial differential equations will be explored. Students will also become beginner-level proficient with MATLAB, a powerful computing program that is used professionally by scientists, engineers and mathematicians.

□ **Math: Multivariable Calculus 3 Honors:** 10 Credits. Weighted. Prerequisites: AP Calculus BC. This course is designed to replicate the third semester of calculus in a college math sequence, and depending on the school, is referred to as Calculus III, Calculus C, or Multivariable Calculus. Topics include trigonometric integrals, vectors, matrices, operations on vectors, vector-valued functions, velocity and acceleration, 3 dimensional representations, partial derivatives, directional derivatives, optimization of functions of two or more variables, integration over two and three dimensional regions, and vector analysis. Students will also become beginner-level proficient with MATLAB, a powerful computing program that is used professionally by scientists, engineers and mathematicians. *(This course is based on sufficient enrollment.)*

## **Science**

The Peak to Peak Science Department seeks to create excitement for, and excellence in, the pursuit of knowledge and understanding of the natural world. Students are asked to approach scientific problems both critically and creatively, while developing a fundamental understanding of science as a thought process and applying those skills to real world situations in all disciplines. Specifically, students will be encouraged to develop their abilities to interpret current events, both scientific and otherwise, using inquiry and logic-based thought.

Many of the department's courses are heavily lab-based, promoting the philosophy that the acquisition of scientific understanding is best derived from experimentation and not simply the memorization of facts. Students are actively encouraged to explore their interests above and beyond the scope of the classes with full faculty support.

Science is a constantly evolving discipline and, consequently, the science faculty is dedicated to achieving and maintaining the highest level of scientific expertise, with a current knowledge of today's struggles and breakthroughs in the sciences. In addition to providing challenging honors and AP science classes, the science department is dedicated to helping students broaden their skills and breadth of knowledge by offering challenging electives and individual research opportunities. The ultimate goal of the department is to create in the students a long-term love of learning and a methodology to use in interpreting and understanding the world around them—abilities to last and serve a lifetime.

Science and technology go hand-in-hand in today's world and an understanding of the technology behind modern living is essential to being successful in college and in most careers. For this reason, Peak to Peak expects each of its graduates to have facility with and an understanding of technology and its role in modern society.

**Graduation Requirement:** Peak to Peak students must successfully complete three years of laboratory science, including Biology or Biology Honors and Chemistry or Chemistry Honors. The third year must be selected from Physics, Anatomy & Physiology, or the AP sciences. A fourth year of science is required by many engineering schools and is strongly recommended for students contemplating a college major in science, math, or the social sciences. Peak to Peak students must also successfully complete a minimum of 5 credits in Technology.

□ **Science: Biology 1:** 10 credits. In this introduction to the science of biology, students will explore ecology, biochemistry, cellular structure and function, energy transfer in cells, information transfer in cells, cell division, heredity, molecular genetics, biotechnology, and evolution. Laboratory exercises will introduce and reinforce safe and correct laboratory technique, use of technology, research

documentation, and reporting. Throughout each unit student's inquiry skills will be developed and refined. Opportunities to develop a deeper understanding of the nature of science and its application within society are also an essential component of the course.

**☐ Science: Biology 1 Honors:** 10 credits. Weighted. This course is designed for the student wishing to accelerate in the field of biology. The course explores ecology, biochemistry, cellular structure and function, energy transfer in cells, information transfer in cells, cell division, heredity, molecular genetics, biotechnology, and evolution. Laboratory exercises will introduce and reinforce safe and correct laboratory technique, use of technology, research documentation, and reporting. Throughout each unit student's inquiry skills will be developed and refined. Opportunities to develop a deeper understanding of the nature of science and its application within society are also an essential component of the course. This is a more rigorous course than Biology, designed for the student who wants a greater level of challenge and is willing to accept significant responsibility for the learning process. This course is ideal for preparing students for AP Biology.

**☐ Science: Chemistry 1:** 10 credits. *Prerequisites: Biology or Biology Honors; Algebra 1 or Algebra 1 Honors.* Students will explore the structure of matter; understand chemical and physical changes; write and balance chemical equations; make calculations related to chemical reactions; understand the structure and use of the periodic table; use the periodic table to compare, contrast and predict chemical interactions; describe the role of energy during chemical reactions; understand and use safe laboratory work habits; and learn to conduct, document, and report laboratory results.

**☐ Science: Chemistry 1 Honors:** 10 credits. Weighted. *Prerequisites: Biology or Biology Honors; Algebra 1 or Algebra 1 Honors.* This course is designed for the student wishing to accelerate in the field of chemistry. The course explores the structure of matter; understanding of chemical and physical changes; writing and balancing chemical equations; making calculations related to chemical reactions; understanding the structure and use of the periodic table; using the periodic table to compare, contrast and predict chemical interactions; describing the role of energy during chemical reactions; understanding and using safe laboratory work habits; learning to conduct, document, and report laboratory results in greater depth and with a more rigorous mathematical approach than Chemistry. A strong emphasis will be placed on problem solving and the process of science. There will be a strong lab component to the course with the goal of preparing students for the AP Chemistry program.

**☐ Science: Physics 1:** 10 credits. *Prerequisites: Biology or Biology Honors and Chemistry 1 or Chemistry 1 Honors. Co-requisite: Algebra II/Trig.* The purpose of this course is to prepare students to be critical thinkers in society and have a foundational understanding of physical principles. Students will see the world in a whole new light as they explore the world around them using the tools of physics. Along the way, students will explore Newtonian mechanics (work, energy, power, motion, momentum, gravity, mass); temperature and heat, kinetics and thermodynamics, electricity and magnetism, optics and waves, relativity, and quantum mechanics. This is a lab-based class that emphasizes understanding and use of safe laboratory work habits, and learning to conduct, document and report laboratory results.

**☐ Science: Physics 1 Honors:** 10 credits. *Prerequisites: Biology or Biology Honors and Chemistry 1 or Chemistry 1 Honors; Algebra II/Trig Honors.* The purpose of this course is to prepare students to take calculus based college physics or AP Physics. Honors Physics is for the student with a high level of interest in the field and a strong interest in pursuing a career in science or engineering. Students will explore Newtonian mechanics (work, energy, power, motion, momentum, gravity, mass); temperature and heat, kinetics and thermodynamics, electricity and magnetism, optics and waves, relativity, and quantum mechanics in more depth and with more mathematical rigor than Physics. This is a lab-based class that emphasizes understanding and use of safe laboratory work habits, and learning to conduct, document and report laboratory results.

**☐ Science: Anatomy and Physiology Honors:** 10 credits. Weighted. *Prerequisites: Biology or Biology Honors and Chemistry 1 or Chemistry 1 Honors.* This is a full-year course in anatomy and physiology, with laboratory dissections playing a key role in the curriculum. The course is designed for those students who want a depth of understanding in the structure and function of the human body. The course explores language and organization of the human body, homeostasis, bones, muscles, joints, nutrition & metabolism, the cardiovascular system, the respiratory system, the digestive

system, the urinary system, special senses, and an introduction to the brain and psychology. This course is appropriate for students who are considering a health sciences career.

**□ Engineering the Future Honors:** 10 credits. Weighted. *Prerequisites: Physics I or Physics I Honors and Pre-Calculus or Pre-Calculus Honors.* Interested in the relationship between engineering and the shape of human society in the world? In this course, students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects aimed at solving world issues. Engineering is a means to helping the world through application of technology. Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and sustainability. Students will develop a broad understanding of major fields of engineering: civil engineering, mechanical engineering, aerospace engineering, environmental engineering, among others. Students develop skills in problem solving, research and design while ultimately creating the understanding that engineering is a tool with which humans can solve world issues and improve the human condition.

**□ Science: Advanced Placement Environmental Science:** 10 credits. Weighted. *Prerequisites: Biology or Biology Honors and Chemistry 1 or Chemistry 1 Honors.* The AP Environmental Science course follows the recommendations set by the College Board for the scope and sequence of a one-semester introductory environmental science college course; the content focus is on scientific principles and analysis and laboratory investigations. The course description, as published by the College Board on the AP Environmental Science website is "to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them." While the content spans many different areas of study, there are six unifying themes at the foundation of the course: 1. Science is a process; 2. Energy conversions underlie all ecological processes 3. The Earth itself is one interconnected system 4. Humans alter natural systems 5. Environmental problems have a cultural and social context and 6. Human survival depends on developing practices that will achieve sustainable systems. Students will study nine interrelated units throughout the year which mirror the major outline topics of the College Board; Earth's systems and resources, energy flow and cycles of matter, biodiversity, population, land use and food production, air and water pollution, energy resources and use, climate change, and sustainability.

**□ Science: Advanced Placement Biology:** 10 credits. Weighted. *Prerequisites: Biology or Biology Honors, Chemistry 1 or Chemistry 1 Honors and teacher recommendation.* This is a full-year course in general biology as commonly offered to college freshmen. The course prepares students to take the AP Biology exam in the spring. Students will explore molecules, cells, heredity, evolution, organisms, and populations. The themes of science as a process, energy transfer, continuity and change, relationship of structure to function, regulation, interdependence in nature, and science, technology, & society are woven throughout the course. The course places a heavy emphasis on laboratory investigations, with 12 required labs designed specifically for AP Biology. Students in this course are expected to take the AP Biology exam.

**□ Science: Advanced Placement Chemistry:** 10 credits. Weighted. *Prerequisites: Biology or Biology Honors and Chemistry 1 or Chemistry 1 Honors, Algebra II/Trig or Algebra II/Trig Honors and teacher recommendation.* This course is a full-year course in general chemistry as offered in typical colleges. This course prepares students to take the AP Chemistry exam in the spring. Topics include structure of matter, states of matter, and types of chemical reactions, gas chemistry, thermochemistry, kinetics, thermodynamics, acid-base chemistry, chemical equilibrium, electrochemistry and laboratory experiments with known and unknown substances. A college-level chemistry textbook will be used, and the specific course topics and exercises will be adapted to meet the current AP syllabus as outlined by the College Board. Students in this course are expected to take the AP Chemistry exam.

**□ Science: Advanced Placement Physics C, Mechanics:** 5 credits. Weighted. *Prerequisite: Physics 1 Honors; corequisite: AP Calculus AB or BC and teacher recommendation.* This is a semester course in calculus-based physics as offered in a typical college program. Topics include kinematics and dynamics, circular motion and rotation, conservation laws, oscillation, and gravitation. While there

is some overlap with topics covered in Physics 1, the topics are covered to greater depth and with increased mathematical rigor. Use is made of graphing calculators, and laboratory exercises include the design, conduct, analysis and communication of results. Students in this course are expected to take the AP Physics C: Mechanics exam May. Fall semester only. (Note: this course is paired with Science 95 as a year long course)

**□ Science: Advanced Placement Physics C, Electricity and Magnetism:** 5 credits. Weighted. *Prerequisites: Physics C, Mechanics; corequisite: AP Calculus AB or BC and teacher recommendation.* This is a semester course in calculus-based physics as offered in a typical college program. Topics include electrostatics, electrical circuits, magneto statics, and, electromagnetism. While there is some overlap with topics covered in Physics 1, the topics are covered to greater depth and with increased mathematical rigor. Use is made of graphing calculators, and laboratory exercises include the design, conduct, analysis and communication of results. Students in this course are expected to take the AP Physics C: Electricity and Magnetism exam May. Spring semester only. (Note: this course is paired with Science 94 as a year long course)

**□ Science: Science Research Seminar Honors:** 10 credits. *Prerequisite: Students must be seniors and have department chair recommendation. Co-requisite: AP Biology, AP Chemistry or AP Physics.* Peak to Peak offers this class for seniors interested in research in science. The purpose of this class is to provide an opportunity for students to pursue independent scientific research. Students will experience several months of working in a lab or science facility with science or technology mentors who provide guidance and supervision as the student pursues his/her research. Students prepare a research project for the District Science Fair in February and compete in the Boulder Valley Science Symposium in April. Typically, students spend approximately 10 hours/week at their internship location, working on their research. The amount of time that the mentors spend with the student varies depending on the nature of the project. During the initial interview, the student, mentor and classroom teacher clearly define what each person is able to contribute during the year. The course requires that a student be able to transport themselves to and from their internship location and be available to work with their mentors directly afterschool a minimum of 3 days a week throughout the entire school year.

## **Social Studies**

The Social Studies Department engages its students in a learning process in which every student's ideas and participation are valued. Students are encouraged to be intellectually curious, seek multiple perspectives in reading and discussion, and question what they read and hear in and outside of the classroom. Critical thinking skills and relevant content pieces are taught and supported at each level, essential to understanding a complex and constantly changing world. Students use the content knowledge they gain in each course in order to discuss and engage academically about their local, national and global communities, in which an understanding of the past is crucial to discussing current historical conflicts, modes of decision making, and political, economic and social paradigms.

Ultimately, the department's objectives are: to excite students about social studies and lifelong learning, to attend to students' academic needs, and to assist students in achieving their academic potential. To motivate student involvement in the school and local communities, the department promotes creative decision-making, engages students in current events and international affairs, and teaches the skills necessary to help students become active and engaged citizens. Department members make social studies relevant and challenge their students to grasp the interdependence of diverse peoples and cultures, both past and present.

**Graduation Requirement:** Peak to Peak students must successfully complete three years of social studies, which must include a full year of human geography, a full year of US government and politics, and a full year of US history.

**□ Geography: Human Geography:** 10 credits. Students explore the ways in which humans interact with and modify their physical environments. Students study population and demographics, human migration, culture, political geography and conflict, and environmental issues. In connection with the geography content.

**□ Geography: Advanced Placement Human Geography:** 10 credits. Weighted. *Prerequisites:* Teacher recommendation. This course prepares students to take the AP Human Geography exam in the spring. Similar in content to Geography 10, students explore the ways in which humans interact with and modify their physical environments. Students study population and demographics, human migration, culture, political geography and conflict, rural land use and agriculture, urbanization, and development. In connection with the geography content, students will also learn and apply basic concepts of microeconomics.

**□ Civics: United States Government:** 5 credits. *Prerequisites:* Human Geography. United States Government is an inquiry based course normally taken during a student's sophomore year. Students will engage in a variety of projects, writing assignments, discussions, simulations, and thesis-driven research as they explore the concepts and responsibilities of government and citizenship. Beginning with the founding of the United States and the Constitution students will learn how to critically analyze and understand diverse perspectives as well as formulate through writing and oral presentation their own thoughts and conclusions about the transformation of policies from the late 18<sup>th</sup> century to the present.

**□ Social Science: Economics:** 5 credits. This is a one-semester course normally taken in a student's sophomore year. It will give students the opportunity to master economic skills and content by spending significant time in a focused and cohesive multi-unit course on economics and personal financial literacy. The curriculum has been developed in adherence with the CDE economics standards as well as economic standards created by Peak to Peak. Broadly, students will, "understand the allocation of scarce resources in societies through analysis of individual choice, market interaction, and public policy" and will, "acquire the knowledge and economic reasoning skills to make sound financial decisions" (CDE pg. 68). The units within this course will cover the major economic principles and economic reasoning skills, the various economic systems, how the government is involved with the economy, and a final unit on personal financial literacy. Students will participate in individual and group projects, Socratic seminars and debates, multiple simulations, and a culminating research and writing project. Importantly, students will understand how individual or collective choices impact the availability and distribution of scarce resources. Students will spend time evaluating the major economic systems and government involvement in the economy in an effort to understand how these forces guide the production and distribution of scarce resources throughout society. Additionally, students will participate in a Personal Financial Literacy unit in order to gain the skills and knowledge to make informed financial decisions.

**□ Civics: Advanced Placement United States Government and Politics:** 10 credits. *Weighted. Prerequisites:* Human Geography and teacher recommendation. AP United States Government is a year-long inquiry based course normally taken during a student's sophomore year. Students will explore how the factors of structure, process, and policy influence each other at the local, state, and federal levels of government. Emphasis is on teaching students how to develop a critical understanding of diverse perspectives from the founding of the United States and the Constitution to political beliefs and behaviors that influence current public and economic policy. Students will engage in frequent writing assignments, simulations, thesis-driven research, debates, Socratic seminars, and analysis of current events and policies in order to gain the concept mastery and skills essential in preparation for the AP Exam in the spring. Students are expected to take the AP exam at the end of the year.

**□ History: United States History:** 10 credits *Prerequisite:* Human Geography and United States Government. United States History is a required, year-long inquiry course generally taken during a student's junior year. This course explores the events of America's past and present through a diversity of perspectives and integrates concepts in geography, economics, politics, social science, current events, and international affairs. The course stresses how events of the past shape the present and how politics, economics, gender and race/ethnicity have affected, and continue to affect, North American societies. The course traces early contact among Europeans, Native Americans, and Africans, summarizes the causes/impacts of major domestic and international conflicts, uncovers the socio-political forces affecting cross-cultural relations, examines the impacts of landmark political and economic events and tackles contemporary political issues among other topics. Students are engaged

in critical thinking, conduct thesis-driven research, complete various types of historical reading and writing, and present arguments and presentations before small and large groups.

**□ History: Advanced Placement United States History:** 10 credits. Weighted. *Prerequisites:* *Human Geography, United States Government and teacher recommendation.* AP United States History is a detailed inquiry course that explores America's past and present while engaging students in frequent debate, detailed research and writing projects, analysis of landmark events, and discussion of how U.S. policies impact the international arena. Similar to U.S. History, AP U.S. History integrates concepts in geography, economics, politics, social science, current events and international affairs into a rigorous curriculum that prepares students to take the AP United States History exam in the spring. In preparation for the AP exam, students construct responses to document-based and free response questions, while also conducting independent and original research. Students in this course are expected to take the AP United States History exam.

**□ History: Advanced Placement World History:** 10 credits. Weighted. *Prerequisites:* *Human Geography, United States Government, US History and teacher recommendation.* AP World History is a rigorous, year-long inquiry course that explores in-depth the development of human civilizations from prehistory to the post-Cold War era in Africa, Asia, Europe, and the Americas. This course prepares students to take the AP World History exam in the spring. Frequent essay writing and research projects will prepare the student for the three essay topics (document-based, change over time, and comparative) on the exam. Students in this course are expected to take the AP World History exam. *(This course is on hold at this time)*

**□ Social Science: Introduction to Philosophy:** 5 credits. The study of philosophy taps into human's—and particularly teens'—deep wonder about the universe and about who we are: questions concerning the possibility and nature of knowledge and truth, the nature of reality, consciousness, freedom, identity, and the existence of God, and the nature of morality and the good life. Philosophy tasks us to apply reasoned critical thinking to the most basic question: how do I decide what to believe? Introduction to Philosophy uses an inquiry-based approach into these questions in which students: 1) develop the ability to critically and creatively evaluate beliefs and knowledge claims; 2) become more aware of the effects of individual and global historical perspectives on beliefs and knowledge claims; and 3) apply different ethical frameworks for analyzing complex, ambiguous, and difficult to resolve moral issues, fostering the capacity for ethical understanding and action.

**□ Social Science: Global Issues:** 5 credits. A semester-long, senior level elective course that challenges students to analyze complex, real-world political, social and economic issues and their historical roots through an ethical lens. Topics will include international relations issues, environment and public health, global trade and economic integration, and others. Each unit will consist of an in-depth study of one issue. Students will investigate the historical roots of the issue, analyze multiple perspectives on the issue and its potential solutions, and apply ethical frameworks to recommend solutions.

**□ Social Science: Advanced Placement Psychology:** 10 credits. Weighted. *Prerequisites:* *Human Geography, United States Government, United States History and teacher recommendation.* This course is currently offered to seniors who have completed all requirements in Social Studies. As stated by the AP Psychology course description published by the College Board, the "course is designed to introduce students to the systematic and scientific study of behavior and the mental processes of human beings and other animals. Students are exposed to the psychological facts, principles and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice." Units include history and approaches to psychology, research methods in psychology, biological bases of behavior, sensation and perception, states of consciousness, learning, cognition, motivation and emotion, developmental psychology, personality, testing and individual differences, abnormal behavior, treatment of abnormal behavior and social psychology. These units are explored in a rigorous collegiate level learning environment that focuses on student-driven critical analysis and discussion, reviews of academic journal articles, intense writing practice in preparation for the AP exam free response questions, independent and original research development, and daily content review via in class activities and simulations that prepare students to take the AP exam. All students in this course are expected to take the AP Psychology exam in the spring.

□ **Humanities Research Capstone:** 10 credits. This full year course offers senior students an opportunity to develop a research-based project in the humanities under the guidance of a mentor who is a professional in the field. Students will use each class session to develop their research and/or their writing for their proposed projects and students are expected to produce a final product for publication, although the form of this product may vary based on individual student projects. This may include, but is not limited to, submission of their work to one or more publications, a submitted piece of legislation or a final product like theatrical production. All students are also expected to complete a public presentation component, including, but not limited to: preparation for History Day, presentations to peers and an on-campus public showcase. Students must submit a proposal for their topic to the instructor prior to being accepted into this course and must be recommended by their junior level social studies instructor and/or counselor.

## **World Languages**

The World Languages Department believes that through the dedicated study of French or Spanish, our students will graduate with both a functional fluency in the language as well as a greater awareness and appreciation of other cultures. These will promote lifelong language learning, provide students with a better understanding of the global community, and help them take an active role as world citizens.

The department strives to develop each student's ability to attain at least an intermediate-high level of proficiency in all four language skills (reading, writing, listening, and speaking) as defined by the American Council on the Teaching of Foreign Languages (ACTFL). To further this goal, we believe in using the target language as much as possible. The classroom experience includes minimal English in order to immerse students in French or Spanish.

**Graduation Requirement:** Students must complete three years of a single world language in high school or through Level 40. Students are welcome to concurrently enroll in more than one world language. Please note that course offerings are based on sufficient enrollment.

□ **Spanish 10 / French 10:** 10 credits. *No prerequisite.* This class introduces students to the basic grammar and vocabulary needed to speak rudimentary Spanish/French in the present tense. Students will acquire knowledge of these components: listening, speaking, reading, writing and culture. The class is conducted primarily in the target language, with some concept explanations in English. Students will communicate with the teacher and with one another in the target language through oral exercises in the text, paired, and group communicative exercises and daily conversation. Throughout the course of the year, students will move from set phrases to more spontaneous use of the language. Topics covered include conversational phrases related to introductions and small talk, descriptions of people and things, family, professions, shopping, and eating in a restaurant. Students' vocabularies will also be expanded to include a variety of topics such as foods, animals, clothing, sports and recreational activities, and rooms and furniture in the house. By the end of this course, students have a solid basic understanding of a native speaker and are able to participate in basic, daily-life type conversations. The course follows the National Standards for Foreign Language.

□ **Spanish 20 / French 20:** 10 credits. *Prerequisite: Spanish/French 10.* This class expands upon and improves the skills that the student has acquired in Spanish/French 10. Additionally, the class introduces new grammatical structures, tenses, and vocabulary. The class is conducted in Spanish/French and students are expected to speak the target language during the class. Students have ample opportunity to speak in the target language by means of oral exercises from the text, conversational opportunities with the teacher and other members of the class, and frequent paired and grouped activities. By the year's end, the student will hold general conversations, speak in a comprehensible fashion, and understand what s/he hears. The student will be able to use, in speaking and writing, the present tense, and both past tenses. The students will be able to use both the regular and irregular verbs in these tenses as well as have a mastery of object pronouns, reflexive verbs, and stem-changing verbs. By the end of this course, students should be able to understand a native speaker speaking in several different situations. They should also be able to participate in a more thorough conversation, begin to express their opinions, and ask others for further information. The course follows the National Standards for Foreign Language.

□ **Spanish Heritage Speakers 2:** 10 credits. *Prerequisite: placement based on the WIDA standards for proficiency.* Spanish for Heritage-Speakers is a Spanish course designed to support heritage Spanish speakers in achieving full academic bi-literacy. The course provides explicit literacy instruction utilizing heritage language acquisition pedagogy to build students' academic fluency in Spanish as well as explicit instruction in transferring these literacy skills to other courses. With a curriculum rooted in identity, culture, and themes aligned with the AP Spanish exam, the course uses best practices to engage heritage language learners' prior knowledge and prepare them for success on the AP exam.

□ **Spanish 30 / French 30:** 10 credits. *Prerequisite: Spanish/French 20.* Spanish/French 30 is the third course needed to fulfill the Peak to Peak foreign language graduation requirement. The content of the previous courses is reviewed and expanded to complete the first cycle of basic grammar, vocabulary, and culture. Content coverage occurs in greater detail and with rising expectations for performance. The class is conducted in Spanish/French, and students are expected to interact in Spanish/French. Major goals for this course are oral communication and vocabulary acquisition. Students read for information rather than purely for skill development. Composition work increases in frequency and length with greater emphasis on grammatical accuracy. French/Spanish grammar content is presumed to be mostly in place, although accuracy levels will vary. Present subjunctive is presented for the first time in the second semester. Commands, present perfect, past perfect, past (preterit), imperfect, future, and conditional verb tenses are (re)introduced and frequently reviewed. Although other aspects of grammar are also reviewed, control of verb tenses is a major objective for the year. The course follows the National Standards for Foreign Language. Furthermore, level-appropriate materials (films, literature, etc.) will be used in this course.

□ **Spanish 35 Honors:** 10 credits. Weighted. *Prerequisite: Spanish 2/20.* This course covers the same topics as Spanish 30, but is faster paced and more rigorous. Students are expected to demonstrate greater oral and written accuracy to a greater depth of both the grammatical and vocabulary themes."

□ **Spanish Heritage 3 Honors:** 10 credits. Weighted. *Prerequisite: placement based on the WIDA standards for proficiency.* Spanish for Heritage-Speakers is a Spanish course designed to support heritage Spanish speakers in achieving full academic bi-literacy. The course provides explicit literacy instruction utilizing heritage language acquisition pedagogy to build students' academic fluency in Spanish as well as explicit instruction in transferring these literacy skills to other courses. With a curriculum rooted in identity, culture, and themes aligned with the AP Spanish exam, the course uses best practices to engage heritage language learners' prior knowledge and prepare them for success on the AP exam.

□ **Spanish 40: Conversation** 10 credits. *Prerequisite: Spanish 30 or Spanish Hon. 35.* Spanish 40 is an advanced course designed to increase students' oral proficiency and exposure to contemporary topics in language and culture. The course is designed for students who want to continue their study of the language, but are not necessarily wishing to pursue study at the AP level. Classroom activities will stress the oral production of the language through investigation and discussion of contemporary issues affecting native speakers of the language. Vocabulary acquisition is also a principle goal of this course. The course will provide a comprehensive review of grammar points and include materials of an authentic, mature, and sophisticated nature (films, literature, etc.). This course will alternate years with Spanish 41: Cultural Exploration and Oral Practice.

□ **Spanish 41: Cultural Exploration and Oral Practice** 10 credits. *Prerequisite: Spanish 30 or Spanish Honors 35.* Spanish 41 is an advanced course designed to explore a variety of cultural aspects from the Hispanic world while increasing students' conversational Spanish skills. Through an exploration of authentic written and recorded cultural material from the Spanish-speaking world, students will continue to increase their oral and aural proficiency as well as their cultural competency. This course is designed for students who want to continue their study of the language, but do not wish to pursue study at the AP level. Classroom activities will stress the oral production of the language, the ability to offer and defend one's opinion, strategies for navigating authentic texts, and the continued acquisition of vocabulary. The course will provide a review of key grammatical points as well. This course will alternate years with Spanish 40: Conversation

□ **Spanish 45 / French 45** 10 credits. Weighted. *Prerequisite:* A grade of "B" or higher in Spanish/French 30 or Spanish 35. Spanish/French 45 is an honors course designed to prepare students for the AP Spanish/French Language class and is conducted 100% in Spanish/French. Students will acquire strong oral, listening and writing proficiencies and will begin to read authentic texts with more frequency. Classroom activities will stress the oral production of language through extended conversations and discussion of texts, culture, and grammar concepts studied. Students will nearly complete their study of the finer points of grammar in the language, and materials of a mature and sophisticated nature (films, literature, etc.) will be used.

□ **Spanish / French: Advanced Placement Spanish/French Language & Culture:** 10 credits. Weighted. *Prerequisite:* A grade of "B" or higher in level 45. This course is designed to be comparable to a 3<sup>rd</sup>-year college-level course. The principle goal is for students to achieve a high level of proficiency in all four language skills (speaking, listening, reading, and writing) and then to demonstrate this on the AP Spanish/French Language & Culture exam in May. All classes and assignments will be dedicated to having students practice and improve these skills. Students will also broaden their understanding of the cultures that comprise the Spanish/French-speaking world through the study of history, literature, art, music, and current events. Furthermore, as this is a college-level course, materials of a mature and sophisticated nature (films, literature, etc.) will be used. Students in this course are expected to take the AP exam in May.

□ **Spanish: Hispanic Honors, Culture and Oral Expression:** 10 credits. Weighted. *Prerequisite:* AP Spanish Language. This class is modeled after similar post-AP Language-courses in college that aim to further develop students' advanced proficiencies in reading, writing, listening and speaking the Spanish language. Particular emphasis will be placed on students' continued improvement of their oral skills as well as their cultural awareness. Through the study of current events, issues and cultures in the Spanish-speaking world, students will gain various historical and cultural perspectives and analyze these as they relate to relevant topics in today's society. Authentic, sophisticated and culturally relevant sources will regularly be incorporated in the classroom through literature, the Internet, movies, magazines and newspapers.

□ **French: Francophone Honors, Culture and Oral Expression:** 10 credits. Weighted. *Prerequisite:* AP French Language. The objective of this class is to provide advanced students of French a chance to practice their conversational skills and expand their knowledge of francophone culture and current events. This class is modeled after post-AP Language-courses in college that aim to further develop students' advanced proficiencies in reading, writing, listening and speaking the French language. Particular emphasis will be placed on students' continued improvement of their oral skills. Through the study of current events and issues in the French-speaking world, students will gain various historical and cultural perspectives and analyze these as they relate to relevant topics in today's society. Authentic, sophisticated and culturally relevant sources will regularly be incorporated in the classroom through literature, the Internet, movies, magazines and newspapers.

## Electives

### Technology

Science and technology go hand-in-hand in today's world and an understanding of the technology behind modern living is essential to being successful in college and in most careers. For this reason, Peak to Peak expects each of its graduates to have facility with and an understanding of technology and its role in modern society.

**Graduation Requirement:** Peak to Peak students must successfully complete a minimum of five credits in Technology.

□ **Technology: Intro to Computer Programming:** 5 credits. *Prerequisite:* None. This one semester course provides students with a foundation of how to program computers to solve basic computational

and graphical tasks. Through a series of projects, students will learn how to create, edit, and publish webpages (using HTML and CSS), how to write basic Python programs to perform mathematical and graphical tasks, and to build electronic circuits and program them with Arduino microcontrollers. Students do not need any experience in any of these areas prior to taking this course.

**□ Technology: Web Mastering:** 5 credits. *Prerequisite: Intro to Computer Programming or teacher recommendation.* Students learn how to create and publish dynamic web pages to interactively present information via the World Wide Web. A variety of tools are used to teach students the mechanics of HTML, CSS and JavaScript. Using HTML and CSS, students will construct static web pages to present documents. Using the JavaScript programming language, students will learn the fundamentals of computer programming and write a series of programs to allow sophisticated interaction with users of their web pages. The final project for this class is a complete computer game or other interactive web environment written by the student.

**□ Technology: Advanced Placement Computer Science A:** 10 credits. Weighted. *Prerequisites: Intro to Computer Programming and Algebra II/Tria.* This course is designed to follow the first semester of a standard college Computer Science curriculum, emphasizing the organization of information, the implementation and comparison of common data structures, and techniques of data abstraction - including encapsulation and inheritance. Students also explore recursion and the close relationship between data structures and algorithms. Hands-on programming is a central component of this course. The course includes numerous labs during normal class time. Outside programming assignments continue the focus on the design, implementation, and testing of object-oriented programs. At the conclusion of this course, students will understand common data structures and algorithms and be able to apply that understanding to implementing new data abstractions and using existing library components. Students will also be stronger programmers and feel comfortable programming in Java. Students in this course are expected to take the AP Computer Science A exam.

**□ Technology: Advanced Computer Science Honors; Data Structures:** 5 Credits. Weighted. *Prerequisites: AP Computer Science A.* This course is designed to follow the second semester of a standard college Computer Science curriculum. It extends the concepts of AP Computer Science A with an emphasis on object-oriented programming (OOP) and design. The primary application of these programming concepts will be towards modeling data using complex data structures, including one and two dimensional arrays, array lists, stacks, queues, priority queues, linked lists, trees, sets, maps, and heaps. Students will also develop greater proficiency in the development of algorithms, algorithmic analysis, object oriented design, implementing interfaces, and creating and implementing classes to solve common data storage problems. Prior to 2009, this material was presented as AP Computer Science AB.

**□ Technology: Advanced Computer Science Honors; Web Programming:** 5 credits. *Weighted. Prerequisite: AP Computer Science A or teacher approval.* Students receive a solid grounding in the fundamentals of web-based computer programming and software engineering through the use of the programming language php. Topics include object-oriented software design, algorithms, user interface design, the client/server model, security, database management, debugging techniques, and software testing. Students design, build, and test increasingly complex programs in php, addressing real-world scenarios such as content management systems. The final project for this class is the construction of a web-based interactive database-driven project. Programs will be constructed in a manner consistent with good software development practice and modern design techniques.

**□ Technology: Technology Capstone:** 5 credits. . *Prerequisite: Advanced Computer Science: Data Structures or Advanced Web Programming and cannot simultaneously be enrolled in Science Research Seminar.* This one semester course offers advanced technology students an opportunity to work in a small to medium sized group to collaboratively build a solution to a complex software task. Students will be assigned individual roles and will be required to contribute to different elements of the

project in a way that creates a single, publicly presentable solution. Skills developed include those in project management, peer collaboration, software version control, software maintenance, and public presentation

## **Visual and Performing Arts**

**Graduation Requirement:** Students must successfully complete at least 20 credits in the visual and performing arts (Art, Music, and/or Theater courses).

### **Visual Arts**

The ability to think aesthetically, applied across the board, can make a substantial difference in the quality of life. That is why the arts are not the domain of the privileged, the rich, or the talented but belong to us all.

- Charles Fowler, *Great Arts, Great Schools*, 1996

When students can exhibit and perform creative applications of knowledge, then learning has taken place. Art is a discipline that teaches students to see by training their eyes. Art also helps students understand different cultures throughout history and enables them to express themselves and their own culture. The discipline of art involves teaching students how to create art using materials and principles of art as well as art history and art criticism.

☐ **Art 10: Foundations in Art:** 5 credits. *No prerequisite.* This beginning drawing, painting and design course emphasizes artistic expression and techniques for students. Students will express their ideas by using art as a form of communication. The course serves as an introduction to the two-dimensional and three-dimensional thought processes through the understanding and application of the Elements and Principles of Design. A wide range of mediums are used in this course including, but not limited to, value pencils, charcoal, ink, cut, torn paper & found objects, water color, pastels, color pencils, and clay. The course requires weekly sketchbook assignments related to a variety of aspects of each unit of study. Students will develop the confidence and ability to evaluate and discuss their own work and the work of others. As students work toward an appreciation and understanding of art, they will relate visual arts to various historical and cultural traditions. Students will learn to respect their own ideas and artistic expressions and those of others as they analyze and evaluate works of art. Upon completion of this course students will be prepared for Art 20, Studio Practices.

☐ **Art 20: Studio Practices:** 5 credits. *Prerequisite: Art 10, Foundations in Art.* Art 20 students will experiment with a variety of media to create visual art during the semester long course. The elements of art, (line, shape, space, color, value, texture, and form) are studied in two-dimensional and three-dimensional work. Students will begin to apply the principles of design, (rhythm, movement, balance, proportion, variety, emphasis, and unity) in their art expression. The development and application of artistic techniques and skills are emphasized. Students will express their ideas by using art as a form of communication. A wide range of mediums are used in this course including, but not limited to, value pencils, charcoal, ink, cut, torn paper & found objects, water color, pastels, color pencils, and clay. The course requires weekly sketchbook assignments related to a variety of aspects of each unit of study. Students will develop the confidence and ability to evaluate and discuss their own work and the work of others. As students work toward an appreciation and understanding of art, they will relate visual arts to various historical and cultural traditions. Students will learn to respect their own ideas and artistic expressions and those of others as they analyze and evaluate works of art. Upon completion of this course students will be prepared for Art 30, Media & Voice in Art.

☐ **Art 30: Media & Voice in Art:** 10 credits. *Prerequisite: Prerequisite: Art 10, Foundations in Art and Art 20, Studio Practices or portfolio review with Art 30 teacher recommendation.* This vigorous Pre - AP Studio Art course is a study of the principles and elements of art using a variety of studio media to explore compositional possibilities on a two dimensional surface and three dimensional space. The

elements of design are like a palette of possibilities that artists use to express themselves. The principles of design help guide artist in making decisions about how to organize the elements on a picture plane in order to communicate content. In order to think critically about visual design, this course will begin with a practical approach to solving visual problems while introducing the vocabulary of visual terms and visual analysis. Through structured studio experiences, students will learn the intrinsic qualities of various media and develop an understanding of compositional strategies, technical skills and design processes. The importance of good craftsmanship and a professional approach to studio practices will be emphasized along with the experimental and imaginative manipulation of form and content. Increasing emphasis will be placed on subjectivity, content and conceptual development in student work. Upon completion of this course students will be prepared for Art 90, AP Studio Art: Drawing or 2D Design.

**□ Art: Digital Art & Photography I:** 5 credits. *Prerequisite: None.* Digital Art and Photography I is an exciting, fast paced course designed to expose students to a variety of digital art and photography projects. These projects will examine the following topics and much more: the history of photography, elements of art, photomontage, digital animation, self-portraiture, ephemeral art, and night photography. Students will discover tips for taking exceptional photographs while paying attention to their camera functions (shutter speeds, ISO, aperture), lighting, and compositional settings. Students will create artworks designed to meet visual art and technology standards, while learning strategies to manipulate their photographs in programs like Adobe Photoshop CS4 and Macromedia Flash. Some instruction may be given on an individual basis with the student's particular art or career goals in mind. Moreover, students will be expected to write about and talk about their art making on a regular basis. At the end of this course students will reflect on their art making by creating a portfolio with their art.

**□ Art: Digital Art & Photography II:** 5 credits. This course satisfies either the Technology or Art requirement for graduation. *Prerequisite: Digital Art and Photography I or portfolio review by instructor.* Digital Art and Photography II is designed to advance art skills and thought processes in preparation for AP Studio Art: 2D Design or Drawing. Students will continue to examine the principles of design and elements of art while using various digital art programs and technologies to explore design opportunities with cameras and computers. This course continues to foster an understanding of artists and art history, as well as writing and discussing art making on a regular basis. Moreover, students may visit a museum or gallery and exhibit their art in a local art show. To complete this course, students will create a final portfolio.

**□ Art: Architecture Design I:** 5 credits. *Prerequisite: Digital Art & Photography I.* In this Art elective course, high school students will be introduced to the wider world of architecture that includes the design of any built environment, structure or object and the professions of planning, urban design, and landscape architecture. Students will use design, creativity, spatial and analytical thinking skills to meet real-world design challenges in this intro to Architectural Design course. Students will tackle a real world design challenge\* over the course of a semester and propose a culturally appropriate solution that will be explored through research, drawing, model making, and design iterations which will culminate in students presenting their research and ideas at the end of the semester.

**□ Art: Advanced Placement Art History:** 10 credits. Weighted. AP Art History is designed to give students the opportunity to discover, appreciate, and acquire knowledge of art history through the ages, from the Paleolithic era to contemporary times. The students will learn to examine and critically analyze major forms of artistic expression from diverse cultures and understand their contributions to the arts. A variety of art media and styles will be studied as the students look at architecture, manuscripts, painting, drawing, printmaking and sculpture, as a reflection of a given civilization and time period. This class will give students the opportunity to use their prior knowledge of history, geography, politics, religion, languages, literature, and the visual arts. The curriculum is modeled after introductory college level art history survey courses and reflects the College Board AP Art History Course Description. Students are to approach their study in a self-disciplined manner, including preparation for class,

reading, visual and written note taking, essay writing, and class participation. Students enrolled in this course are expected to take the AP Art History examination.

**□ Art: Advanced Placement Studio Art / Drawing:** 10 credits. Weighted. *Prerequisites:* This course is only for fine artists. Completion of Art 10; Foundations in Art, Art 20; Studio Practices, and Art 30; Media & Voice in Art are required. Students may also enroll in AP Studio Art: Drawing with AP Art (Drawing) instructor recommendation and portfolio review. AP Studio Art: Drawing is the fine art only AP Art option. Whereas 2D Design involves both fine and digital art approaches, this course fully focuses on developing traditional mark making fine art skills and techniques. Moreover, this course provides the opportunity for the visually inclined students to excel and receive recognition on a national level. It allows students to compare their work with other high school students throughout the nation, and helps them prepare an excellent portfolio for study at the college level. AP Studio Art: Drawing is a two semester course that focuses on producing a large number of quality works that demonstrate mastery of fundamental artistic concepts. In their work, students will investigate all three components of the AP Portfolio; Quality, Concentration and Breadth by creating 26- 29 fine artworks. The AP Drawing Portfolio is designed to address a very broad interpretation of drawing issues and media. Light and shade, line quality, rendering of form, composition, surface manipulation, and illusion of depth are drawing issues that can be addressed through a variety of means, which could include drawing, painting, and printmaking. Abstract, observational, and inventive works may demonstrate drawing competence. The range of marks used to make drawings, the arrangement of those marks, and the materials used to make the marks are endless. Projects will be structured around the elements of art and principles of design. This fast paced course requires the student to be highly motivated and interested in the serious study of art which may lead to college credit. Motivation, imagination and commitment are required to succeed in the course.

**□ Art: Advanced Placement Studio Art; 2D Design:** 10 credits. Weighted. *Prerequisites:* Vary depending on student's pathway (fine art or digital art) for fine artists: Art 10; Foundations in Art, Art 20; Studio Practices, and Art 30; Media & Voice in Art are required. For digital artists: Digital Art & Photography I and Digital Art and Photography II are required. Students may also enroll in AP Studio Art: 2D Design with AP Art instructor recommendation and portfolio review. AP Studio Art: 2D Design provides the opportunity for the visually inclined students to compare their work with other high school students throughout the nation, and helps them prepare an excellent portfolio for study at the college level. All students enrolling in the course are expected to submit an AP Portfolio. The purpose of AP Studio Art is to provide an intensive study of the process of creating two-dimensional design (2-D) artwork using both traditional fine and digital art media (materials and tools). Students must have an excellent understanding of their camera and digital art programs before entering the course. However, 2D Design allows for both Emphasis is placed on the quality, breadth and concentration of the student's production and experiences in digital art, photography, drawing, and design. Projects will be structured around the elements of art and principles of design. In these projects, students will need to use their knowledge of technique and materials to communicate through their art. This encourages students to use critical thinking skills, while also developing their own voices as visual artists. Thus, students will develop mastery in concept, composition, and execution of their personal artistic vision. This fast paced course requires the student to be highly motivated and interested in the serious study of art which may lead to college credit. Motivation, imagination and commitment are required to succeed in the course.

**□ Art: Advanced Placement Studio Art; 3D Design:** 10 credits. Weighted. *Prerequisites:* Vary depending on student's pathway (fine art or digital art) for fine artists: Art 10; Foundations in Art, Art 20; Studio Practices, and Art 30; Media & Voice in Art are required. For digital artists: Digital Art & Photography I and Digital Art and Photography II are required. Students may also enroll in AP Studio Art: 2D Design with AP Art instructor recommendation and portfolio review. AP Studio Art: 3-D Design is a two-semester course that focuses on producing a large number of quality works that demonstrate

mastery of fundamental artistic concepts. In their work, students will investigate all three components of the AP Portfolio, **Quality, Concentration, and Breadth**. Students will further develop their technical skills and creative thought processes as they find their own way to communicate visually. Students will also be presented with problems that require unconventional and imaginative solutions

## General Art

☐ **Yearbook:** 10 credits. *No prerequisite.* This full year course focuses on learning and practicing the skills associated with yearbook production. Students will learn how to develop an action plan, conduct interviews, write journalistically competent copy and captions, take quality photographs, and complete layouts which include not only photos and captions, but infographics and other graphic elements. Students learn to use PhotoShop InDesign, and other associated software as well as utilize scanners, card readers, digital cameras and supporting equipment. Students learn how to manage and secure file storage, and how to prepare files for publication. Additionally, students learn how to download, crop, adjust, and manage digital photos. Students work cooperatively with peers, peer leaders and adults to set and achieve goals towards completing the yearbook publication. In the end, students develop the school's yearbook from concept to production as well as create a distribution event for the whole school in a course that models an actively running business. Students *must* be willing to work outside of class to capture and document school activities and spirit. *This course may be repeated for credit if the student receives a grade of B or better.*

☐ **Architecture Design I:** 5 credits. *Prerequisite: Digital Art & Photography I.* In this Art elective course, high school students will be introduced to the wider world of architecture that includes the design of any built environment, structure or object and the professions of planning, urban design, and landscape architecture. Students will use design, creativity, spatial and analytical thinking skills to meet real-world design challenges in this intro to Architectural Design course. Students will tackle a real world design challenge\* over the course of a semester and propose a culturally appropriate solution that will be explored through research, drawing, model making, and design iterations which will culminate in students presenting their research and ideas at the end of the semester.

## Music

The Music Department is committed to providing students with a broad base of performing opportunities at Peak to Peak and in the community. Through experiencing choir, band, orchestra, or other musical activities, students can find personal expression and work in team-building endeavors. The benefits of performing in musical activities include:

- Fostering a sense of cooperation and participation, while not discouraging healthy competition.
- Providing a channel for students' creative impulses while developing problem solving skills through a forum that meets the needs of aural, kinesthetic and visual learning styles.
- Encouraging students to engage in performing music at ever higher levels of ability; this character building aspect requires that students develop self-discipline and motivation to master complex tasks over a long period of time. Music at Peak to Peak is an integral part of the students' entire learning experience.

The Music Faculty believes that a thriving music program supports the Peak to Peak philosophy of preparing well-rounded students.

☐ **Music: Ukulele:** 5 credits. *No prerequisite.* (one semester course) Prerequisite: None. This course is designed for the student with little or no experience playing the ukulele. While learning basic ukulele playing skills, they will acquire knowledge in the elements and theory of music and have opportunities to compose and improvise. Students are given instruction in the fundamental elements, techniques, and procedures of beginning ukulele music.

☐ **Music: Guitar Lab:** 5 credits. *No prerequisite.* (one semester course) Prerequisite: None. In this semester course, developing guitarists in 9-12 grade will work collaboratively and independently to

develop a semester portfolio or “album” which represents their development as an artist technically and musically through the semester. The curriculum will follow the Comprehensive Musicianship through Performance model including skill, knowledge, and affective objectives. Examples of each section are included in the table below. Through this course, students not traditionally in music, interested specifically in guitar, and/or unable to fit a performing arts elective in their schedule due to full-year conflicts will be able to pursue or explore a new or passion area. Peak to Peak supports all students' exploration and development of their creative passions. This course would provide a flexible, academically-accessible option for many students at Peak to Peak to develop a new way of learning, thinking, and creating. (This course is repeatable)

**□ Music: Piano Lab:** 5 credits. *No prerequisite.* (one semester course) Prerequisite: None. This course is designed for the student with little or no experience playing the piano. While learning the basic piano playing skills, they will acquire knowledge in the elements and theory of music and have opportunities to compose and improvise. Students are given instruction in the fundamental elements, techniques, and procedures of beginning piano music.

**□ Music: General Choir:** 5 credits. *No prerequisite.* This class instills a love of singing, while introducing the students to a varied repertoire of music. Students will learn about reading, notation, listening to, analyzing, and describing music, as well as about evaluating music and music performances. In addition, they will study music in relation to history and culture.

**□ Music: Concert Choir:** 10 credits. *No prerequisite.* The Concert Choir will study and perform a variety of choral repertoire including sacred, secular, folk songs, and show tunes. The students will develop their music reading, notating, and listening skills, with emphasis on vocal techniques in a large ensemble. *Participation in concerts is required.*

**□ Music: Puma Pride Honors (Select Choir):** 10 credits. *Weighted. Prerequisite: Enrollment is by audition only.* Students will continue developing musical skills and performance of more challenging choral repertoire, drawn from classical and modern works sung both with accompaniment and a *Capella*. Sight reading, interpretation, breath control, diction and foreign language pronunciation, blending, and ensemble skills will be stressed. Advanced students will have the opportunity to do more solo work and to serve in leadership positions within the choir. *Participation in concerts is required.*

**□ Music: Glee Club Choir:** 5 credits. *No Prerequisite:* Students in this vocal ensemble will study a mix of classical, folk, and popular music. Rehearsals will focus on developing strong vocal technique, with emphasis on breath control, tone, and blending within a small ensemble.

**□ Music: General Band:** 10 Credits. *No prerequisite.* This class is for students who are committed to exploring a new band instrument. Band instruments are: flute, clarinet, oboe, saxophone, French horn, trumpet, baritone, trombone, bassoon, tuba, and percussion. No prior music experience is necessary. Students will learn about music theory, playing music in a group, music history, and musical performance. Students will play a variety of musical styles. Students are responsible for renting or owning their own instrument. *Practice and participation in concerts is required.*

**□ Music: Concert Band:** 10 credits. *Prerequisite: Enrollment is by audition only.* The concert band will play a wide variety of sheet music. The band will develop each student's sight-reading skills. Students will play a variety of musical styles. Students are responsible for renting or owning their own instrument. *Practice and participation in concerts is required.*

**□ Music: Wind Symphony Honors:** 10 credits. *Weighted. Prerequisite: Enrollment is by audition only.* This band will focus on performance goals as they develop the musical skills needed to play challenging repertoire. Music will be drawn from a variety of styles which may include: classical, jazz, Broadway, movie soundtracks, and pep band music. Students are responsible for renting or owning their own instrument. This group will perform pep band music at some varsity games and attendance at those games will be required. *Practice and participation in concerts is required.*

**□ Music: Jazz Band:** 5 credits. *Prerequisite: Enrollment is by audition only.* This jazz ensemble will study, practice, and perform jazz music. Students will develop skills in improvisation. A significant amount of the “homework” for this class will be listening to great jazz performers. This class is open only to those students who are enrolled in a Peak to Peak musical ensemble, with the exception of those

who play the piano or guitar. This class may meet before, during, or after school. *Performance in concerts is required.*

**□ Music: Advanced Jazz Band:** 5 credits. *Prerequisite: Enrollment is by audition only.* This jazz ensemble will study, practice, and perform jazz music. Students will develop skills in improvisation. A significant amount of the "homework" for this class will be listening to great jazz performers. This class is open only to those students who are enrolled in a Peak to Peak musical ensemble, with the exception of those who play the piano or guitar. This class may meet before, during, or after school. *Performance in concerts is required.*

**□ Music: General Orchestra:** 10 Credits. *Prerequisite: One year of string instrument study, or permission of the instructor.* String players will learn the joy of performing in an orchestral ensemble, with an emphasis on co-operation and participation. Goals will focus on improving music reading skills, learning methods to acquire quality technique, and preparing for public performance. All students are responsible for acquisition and maintenance of their own string instrument. *Weekly practice and concert participation is required. Private lessons are strongly recommended but not required.*

**□ Music: Concert Orchestra:** 10 Credits. *Prerequisite: Three years of string instrument study, previous orchestral experience, or permission of the instructor.* High school students with string experience will enjoy working on a variety of music to improve skills in intonation, balance, sound production, music theory, and ensemble performance. Music reading will introduce students to a variety of music from different cultures and eras. All students are responsible for acquisition and maintenance of their own string instrument. *Weekly practice and performance in concerts is required. Private lessons are strongly recommended but not required.*

**□ Music: Chamber Honors Orchestra:** 10 Credits. *Weighted. Prerequisite: Enrollment is by audition only.* This class may meet before, during or after school. Designed for advanced string players, chamber orchestra will challenge each student to perform at a high level of skill in an ensemble setting. This orchestra will emphasize sound production, solid technique development, advanced music theory, and ensemble performance. Students should have sound music reading skills and will be assigned progressively more difficult music. All students are responsible for acquisition and maintenance of their own string instrument. *Weekly practice and performance in concerts is required. Private lessons are strongly recommended but not required.*

## Theater

The Theatre Department strives to provide a comprehensive introduction to the various dramatic arts as well as production techniques and processes. High school level theatre classes will emphasize acting and technical technique, college level aesthetic analysis, and producing a variety of plays for the stage. Students will be encouraged to participate in all areas of production, including an array of backstage opportunities. They will become familiar with job hierarchy and the multitude of positions in a professional theater organization. Students will leave the department with an understanding of the academic theatre world, what it means to be a theatre artist, and the wide variety of theatre opportunities that are available.

**□ Theater: Art of Drama:** 5 credits. *No Prerequisite.* Theatre arts encompasses many disciplines, including performance and fine arts. Students in Art of Drama will explore the rich variety of artistic roles incorporated under the "Theatre Arts" umbrella. These disciplines include directing, technical theatre, design, playwriting and dramaturgy. Disciplines are introduced through the context of theatre conventions, history, and best practices. Students will have the opportunity to develop communication skills (visual and spoken), creativity, problem solving, research and analysis skills. These experiences will bolster performance in core classes, increase aesthetic awareness and appreciation, as well as prepare students for additional coursework and opportunities in Theatre at and outside of Peak to Peak.

**□ Theater: Acting; Contemporary/Realistic:** 5 credits. *No Prerequisite,* Realistic acting requires the ability to understand context, analyze text, and develop personal and cultural connections. These skills allow students to develop authentic, believable characters in performance. Students will perform

challenging scenes and monologues from realistic and naturalistic performance texts. Instruction will focus on script and character analysis, relationships, behavior/motivation, movement, vocals, sub-text, and beats. Various techniques, including improvisation and incorporating group and solo performance, will be utilized to enhance creative expression and interpretation. Students will leave the class with a greater understanding of general acting techniques for realistic works.

**□ Theater: Acting; Classical/Conceptual:** 5 credits. No *Prerequisite*, Actors must analyze, explore, and understand historical, cultural, and artistic context when approaching a classical or stylized text. These core understandings allow students to produce accurate, understandable, and creative approaches to non-realistic performance. Instruction focuses on use of language, physical control and expression, breaking and challenging theatrical conventions, and creating multi-tiered approaches to challenging performance texts. Various skills, including research, analysis, and creative problem solving, are used in developing rich conceptual performance. Students will leave the class with a deeper understanding of non-realistic styles in the arts, as well as developed tools of analysis and perspective.

**□ Theater: Technical Theater and Performance** 5 credits. No *Prerequisite*. Students will be introduced to the professional world of theatrical production. Working collaboratively in production teams, each student will specialize in an area of technical theatre: Direction, stage management, design, or fabrication. Students will be assessed on successful completion of each step of a performance, from pre-production meetings and planning, to post-production analysis. Students hire or cast their classmates in the capacity of actors, assistants, and crew for one or more one-act plays. Plays are fully produced and performed in a showcase at the end of the semester. This class allows students to take creative control of a production, while giving them hands-on experience with the requirements of a professional creative process. *This course may be repeated for credit.*

**□ Theater: Theater; Advanced Topics** 5 credits. *Prerequisite: One P2P Theater course, MS or HS.* This is an Advanced Level High School student-driven course providing in depth explorations of theatrical topics to expand skills and performance work. The course is intended to be collaborative and cultivate innovation, professionalism and creativity. This course will culminate in a showing of performance work for an invited audience at the end of the semester. Special topics may include: Devised Theatre, Stage Combat, Improvisation, Musical Theatre & Dance, Shakespeare in Performance, Cross-Cultural Storytelling, Technical Theatre & Design, One Act Performance, Dramatic Literature (examples Pulitzer - prize winning plays, plays that take on mental health in the US, plays about social / political topics, etc.), Movement for Actors Scene Study, Directing, Playwriting & Screenwriting, in addition to other topics of theatrical interest.

**□ Theater: Theater Production:** 5 credits. *Prerequisite: Intro to Theater and Performance and consent of instructor and/or audition.* This class rehearses and produces a main-stage production culminating in public performances. Students employ text and character analysis, rehearsal techniques, and independent research to bring the playwright's story to life. Students are expected to demonstrate proper theater/rehearsal etiquette and vocabulary, the ability to collaborate within the ensemble/production team, and dedication to the project. To earn credit for participation, students must attend all after-school rehearsals (typically M T Th F from 3:30 to 5:30) and work extra hours during tech week prior to the production. Students may participate in both acting and technical aspects of the production, and are expected to contribute minimally through participation in work days, build/load-in, tech week, and strike. This course may be repeated for credit. Community service hours will be offered to roles that do not require full time participation; crew, walk on roles, etc.

## **Health**

Health Education introduces students to information necessary to make smart decisions throughout their lifetime. The material presented is relevant to everyday life and takes into account the diverse physical,

emotional, social, and intellectual needs of high school students. Subjects include wellness, mental and emotional health, nutrition, substance use/abuse and gateway drugs, disease awareness, personal well-being, and sexual education.

**Graduation Requirement:** Students must successfully complete one 5-credit course in health and wellness. It is recommended that Health & Wellness be taken in 10<sup>th</sup> or 11<sup>th</sup> grade.

**□ Health & Wellness 10:** 5 credits. *No prerequisite.* This course will focus on providing students with the knowledge, skills, and behaviors associated with living a healthy lifestyle and promoting optimal wellness. Decision making, stress management, relationships, nutrition, drug and alcohol use or abuse, personal safety, human sexuality, and community resources will be presented.

## **Physical Education**

The Physical Education Department fosters a love of physical activity and play in order to develop a life-long pursuit of physical fitness. The department focuses on the development of fair play, cooperation, and self-esteem, with an emphasis on skill development, knowledge, and practice. Department members share new strategies for teaching, provide feedback, and support one another. Teachers within the Physical Education Department will encourage and promote a positive environment where students are safe, are empowered to take risks, and are successful. This class consists of a variety of sports and games as well as a fitness component that focuses on the development of skills with the emphasis on fun and competitive play. Some examples of sports and activities are flag football, soccer, basketball, volleyball, ultimate Frisbee, hockey, and many other activities and sports. There will also be an element of educating students to explore and understand the importance making exercise and/or playing sports part of living a healthy lifestyle.

**Graduation Requirement:** Students must successfully complete at least 10 credits of physical education. 5 of the 10 credits required must be earned during school hours and will be assigned, if not selected by students, in 9<sup>th</sup> grade. Students who participate in extracurricular or outside sports or athletic activity may receive credit for those activities towards the physical education requirement; credit will be determined on an individual basis. Appropriate documentation must be completed by the student, family, and coach and must be pre-approved each time credit is requested. A maximum of five units of P.E. credit may be earned in this manner in any school year. P.E. courses may be repeated for credit. A student who wishes to receive an exemption from a P.E. course or the P.E. requirement must submit a P.E. exemption request, prior to the registration deadline for the applicable semester, for consideration by the Academic Affairs Committee. *A new P.E. exemption request must be submitted for each semester in which the exemption will apply.*

Future P.E. offerings, dependent on student interest and facilities available, may include specialized sports.

**□ PE: Physical Education:** 5 credits. This class consists of a variety of sports and games as well as a fitness component that focuses on being competitive and participating at a level of intensity that is greater than the non-competitive P.E. class. Some examples of sports and activities are flag football, soccer, basketball, volleyball, ultimate Frisbee, hockey, and many other activities and sports. The course incorporates an element of educating students to explore and understand the importance making exercise and/or playing sports part of living a healthy lifestyle.

**□ PE: Athletic Weights & Conditioning:** 5 credits. *Prerequisite: Signature of coach, or instructor consent.* The purpose of this course is to provide student-athletes an opportunity to maximize their physical and mental potential in their selected areas of sports. The unique needs of both male and female athletes will be considered and instruction methods will be adjusted accordingly. Students will learn the proper techniques and form to operate the equipment in the weight room. Stretching techniques will be emphasized, as well as how to design the proper diet. Students will learn how and

when to increase the intensity of their individual workout program. Goal setting, creating a positive mental mindset for competition, and leadership skills will also be a component of this course.

**□ PE: Basketball IQ:** 5 credits. This class is for current players of the Peak to Peak Boys' and Girls' basketball programs and will provide players with instruction of fundamentals in shooting, passing, and dribbling. The class will prepare players for both offensive and defensive game situations through various drills and breakdowns. We will also focus on general and basketball specific fitness, strength, and nutrition.

**□ PE: Lifelong Fitness:** 5 credits. This course is designed to give secondary students both the knowledge and the physical skills to develop and continue personal lifelong fitness habits outside of a "team" sport. Activities offered are similar to those of a health club or home gym and focus on the five components of fitness (cardiovascular endurance, flexibility, muscular strength, muscular endurance, and body composition). Each student would be required to keep a notebook of personal progress, personal goal setting, and personal wellness (such as nutrition, body image, and heart rate). *Weekly physical activity will be based on individual goals and include a group fitness activity.*

### **Weekly Plan**

**Monday-** warm up, cardio (walk, jog, run, jump rope, jumping jack, stairs, step ups, burpee, mountain climbers, grapevine, etc.), abdominals, learn basic movements for group fitness this week, cool down

**Tuesday-** warm up, individual Nike Training workout, cool down

**Block-** group discussion of Health topic, personal notebook reflection of weekly progress / life, warm up, group fitness workout, cool down

**Friday-** warm up, YOGA, cool down

\*Students will be using the "Nike Training Club" app and will be encouraged to purchase and bring in their own 3-5 lbs hand weights.

**□ PE: Aerobic Walking:** 5 credits. This fall semester course is designed for students in grades 10-12, to improve personal cardiovascular fitness and mental health through walking. Students will learn how to increase their personal walking speed (3mph or greater), walking time (monthly mile assessment) and distance (10-60minute walks with varied intensity) by using the school's track, local trails, and community sidewalks. Students will also learn correct walking form, safety, body weight exercises, and stretching. Course will be graded on participation, attendance, personal improvement, and completion of five Presidential Fitness assessments (sit ups, plank, sit-n-reach, push-ups, and mile walk).

## **General Electives**

The elective courses listed in this section do not fulfill specific Peak to Peak course requirements. However, these courses may be taken to earn general elective credits, as noted above in the explanation of graduation requirements.

**□ Design Thinking Innovations Honors:** 10 credits. This class for curious 10<sup>th</sup> and 11<sup>th</sup> grade students puts cross-curricular design thinking into practice. This course requires students to solve an increasingly difficult series of problems by creating, evaluating and analyzing, while collaborating towards a final public innovation showcase. In order to gain key skills to succeed in this final showcase, students must fail productively while developing empathy, testing prototypes and solving problems using Stanford's d.school design model.

**□ Speech & Debate:** 2.5 credits. *No prerequisite.* This course will introduce students to the craft of developing arguments and speeches for debate, extemporaneous speaking, oratory, and other areas of competitive forensics. This course may be repeated for credit. *In case of insufficient course enrollment to offer this course for credit, it may be offered instead as a high school club activity.*

**□ Kitchen Chemistry:** 5 credits. *The science behind food and cooking.* In this hands-on general elective course, students will explore the composition, structure and properties of food and the chemical changes that occur during its preparation and cooking. Students will learn and use scientific

methods of inquiry to examine the various effects that different substances, microorganisms and cooking techniques have on food, both in the laboratory and in the kitchen, often with the goal of developing their own recipes. By the end of the semester, students will have gained a deeper understanding of the molecular basis of food and cooking while studying the chemistry and biology of baking, basic cheese making, molecular gastronomy, pickling, fermenting, browning and other food preparation techniques. Competitions and tastings will be an integral part of the class, as will guest presentations by local professionals.

**□ First-Year Intro to Innovation:** *10 credits.* This class introduces all ninth-grade students at Peak to Peak High School to the Colorado Department of Education's Essential Skills including communication, collaboration and empathy through an introduction to design thinking. The CDE breaks these essential cross-curricular skills into the categories of personal skills, entrepreneurial skills, civic/interpersonal skills, and professional skills. As a course taught in collaboration with the counseling department, students will also develop vital social-emotional skills. By employing these skills to complete design thinking, project-based learning, students will use self-efficacy, design thinking, leadership and empathy to help them succeed in high school, in college and in the jobs of the future. In this class, students will practice failure, self-reflection, creative problem-solving and collaboration in order to take informed risks in pursuit of "tangible and useful contributions" while participating in the civic life of their high school and community.

**□ Student Council:** *10 credits.* Student Council/Leadership will provide an academic course that will prep students in a variety of ways to better lead and serve the community as a whole. The class will introduce a variety of leadership strategies and opportunities that will increase Student Council's positive impacts within the school as well as provide students for leadership both in and outside of the Peak to Peak Community. Lessons and units will focus on a variety of topics including Interpersonal Communication, Public Speaking, Leadership and Decision Making, Industrial-Organizational Psychology, Sportsmanship and Community, Media and Publicity, and Finance and Budgeting. Students will come away with a better understanding of how their own personality and leadership styles can instruct their understanding of others and how the decisions they make affect others as well. *Along with joining the Student Council class, students will be expected to attend meetings, events, etc. outside of class hours.* Student Council will still remain as a Club/Access option for those who do not take/are not admitted to the class in Grades 9-12. *This course is repeatable.*

**□ Student Aide:** *5 credits.* This class is for the conscientious and trustworthy student who is interested in learning about various aspects of the school by providing service to the school community. Responsibilities may include assisting teachers in their classrooms, assisting principals or other administrators, assisting office managers and other personnel, or helping with facility maintenance. Aide positions are available only with approval of the principal or assistant principal and any appropriate supervisors. Students must maintain good academic standing and must complete mandatory online training to be awarded an in-school aide placement. *This course may be repeated for credit, and/or used for community service hours if elected at the start of the semester. The community service option can be taken twice for aiding throughout a student's high school career, or for a max of 50 hours. If the community service option is elected, the teacher or administrators reserve the right to change back to letter grade distribution if deemed necessary.* A student aide is required to attend daily to the teacher or staff member that he/she is assigned.

**□ Teaching Assistant:** *5 or 10 credits, Prerequisite: Instructor and counselor recommendation. It is required that the student commit to the entirety of the course whether it be a full year or a semester long course.* Offered to students who have shown mastery in one or more of our liberal arts areas of content at Peak to Peak. Students who have demonstrated high achievement, growth and a keen interest in leading peers may be recommended for this assignment. Duties routinely involve assisting students with differentiated assignments and projects, supporting curriculum development, leading small and/or whole group instruction, conducting research to support teacher lessons and units, grading

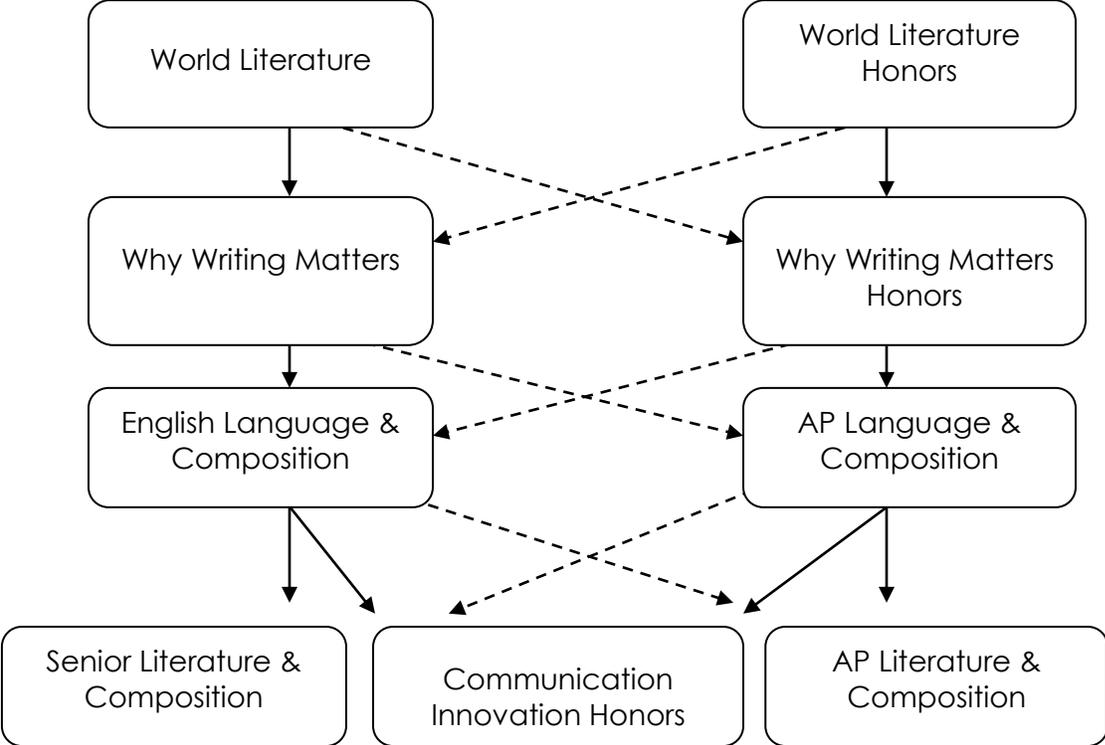
*I will strive to achieve excellence in scholarship and character. — Peak to Peak's Honor Code*

student work and conducting independent projects to be shared with students in the target content. (This course must be taken for credit, there is no community service option.)

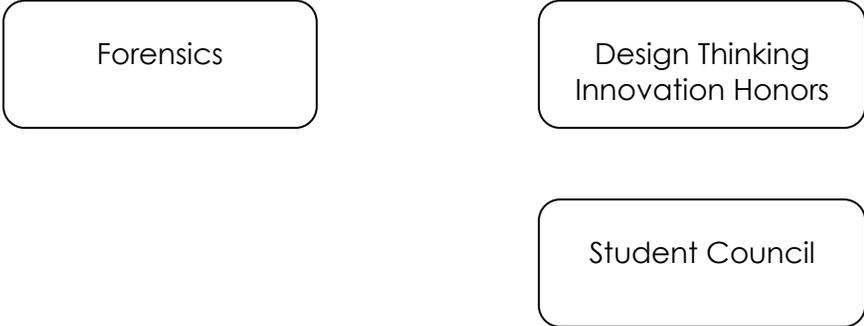
**□ Study Hall:** *Not for credit.* This course offers students an opportunity to work on their own in a supervised environment.

## **CURRICULAR PATHWAYS IN ENGLISH**

### Peak to Peak High School

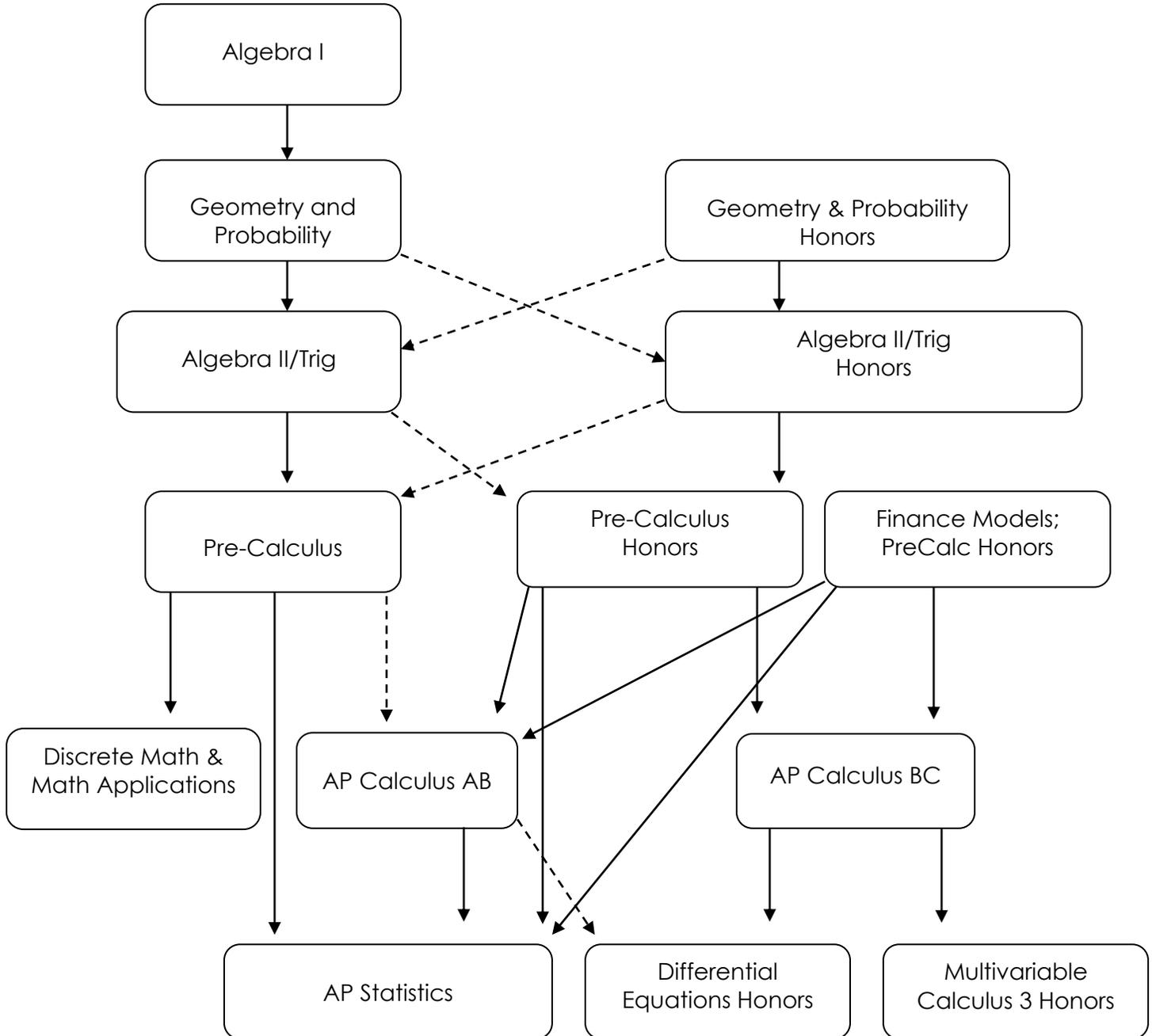


### Elective Choices



## CURRICULAR PATHWAYS IN MATH

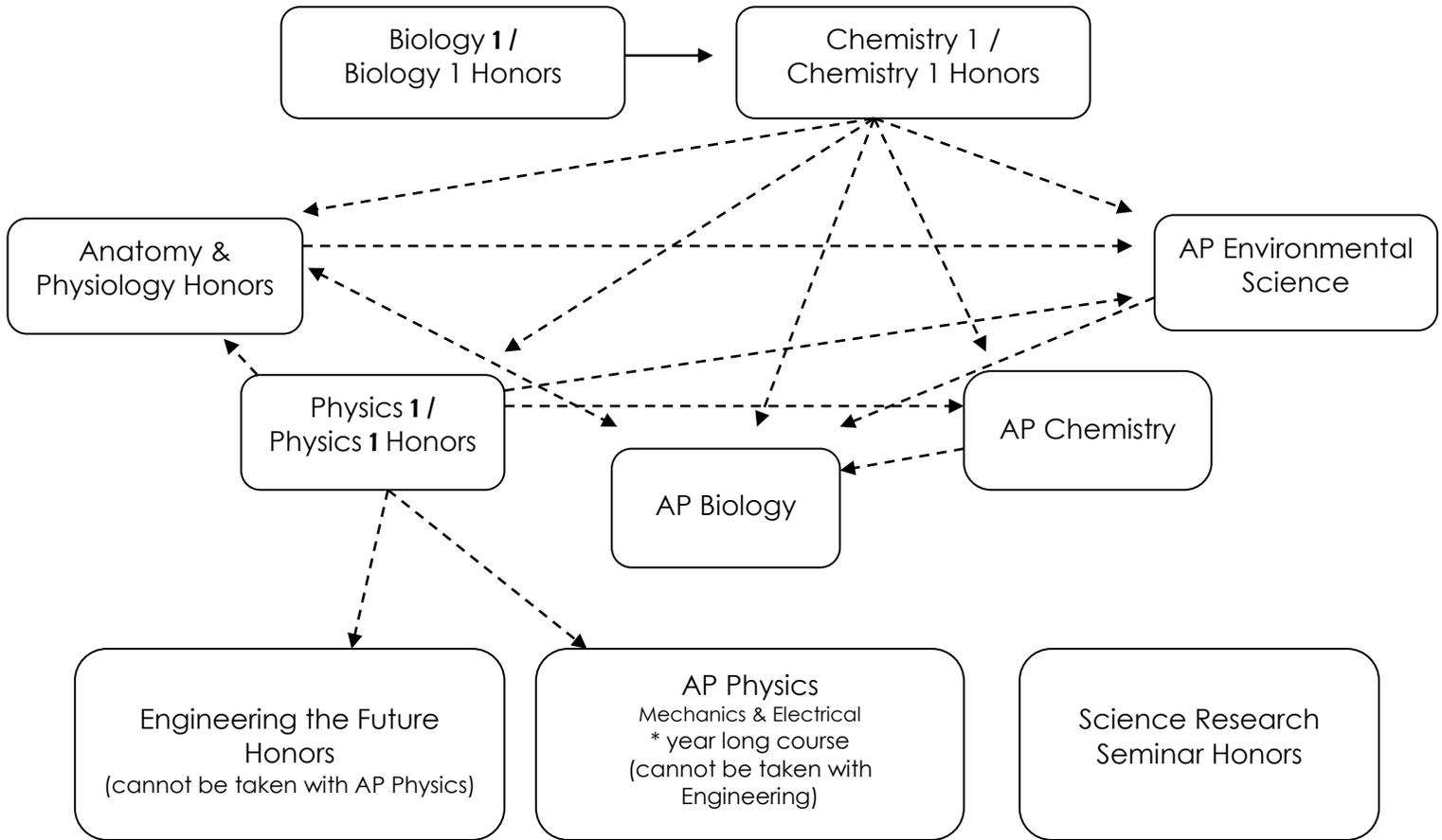
Peak to Peak High School



## CURRICULAR PATHWAYS IN SCIENCE & TECHNOLOGY

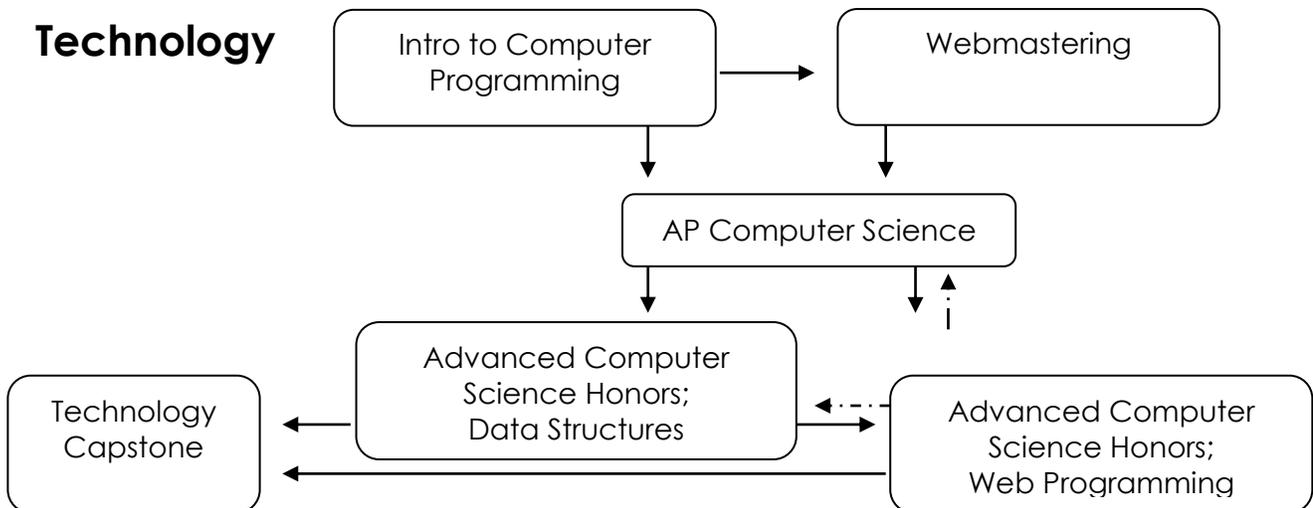
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### Science



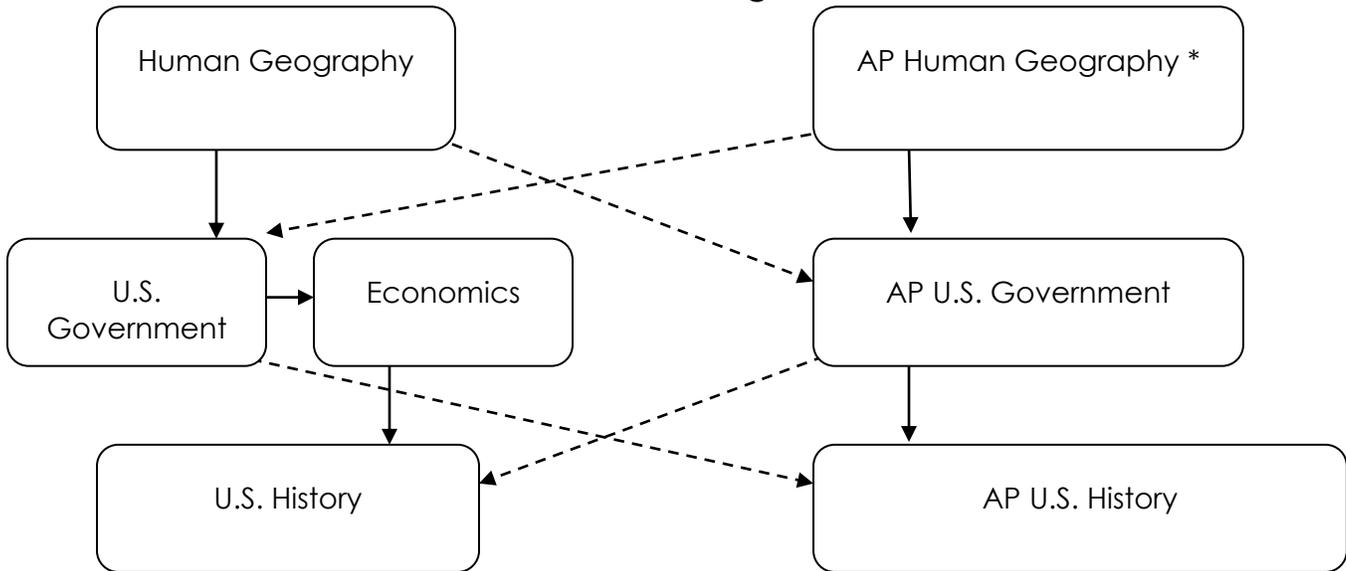
### Science Elective Choice

### Technology



## CURRICULAR PATHWAYS IN SOCIAL STUDIES

Peak to Peak High School



### Social Studies Elective Choices

Introduction to Philosophy

Global Issues

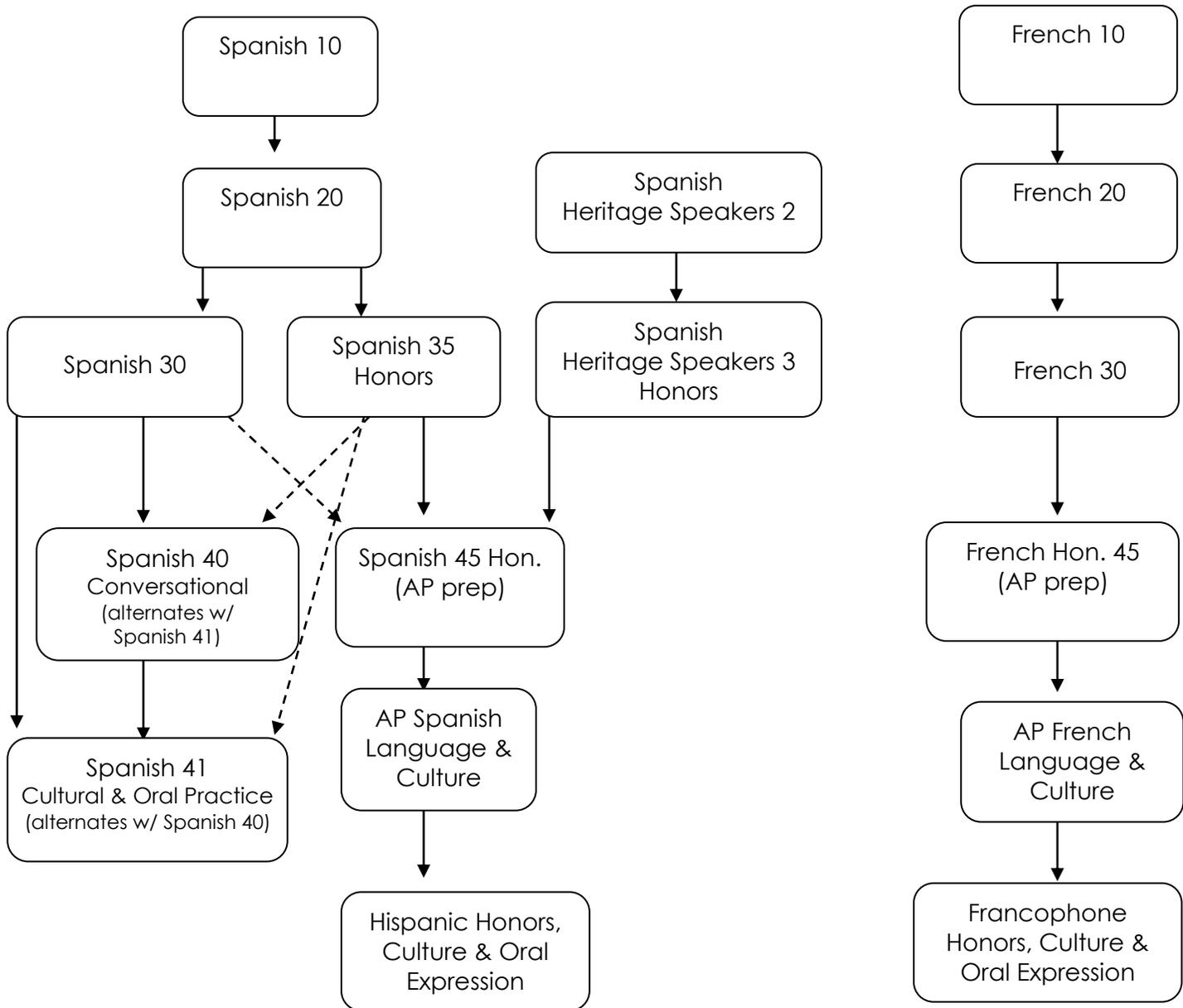
Humanities Research Capstone

AP Psychology

\* Incoming 9<sup>th</sup> grade students may enter at this course level, pending Social Studies Department approval and testing.

## CURRICULAR PATHWAYS IN WORLD LANGUAGES

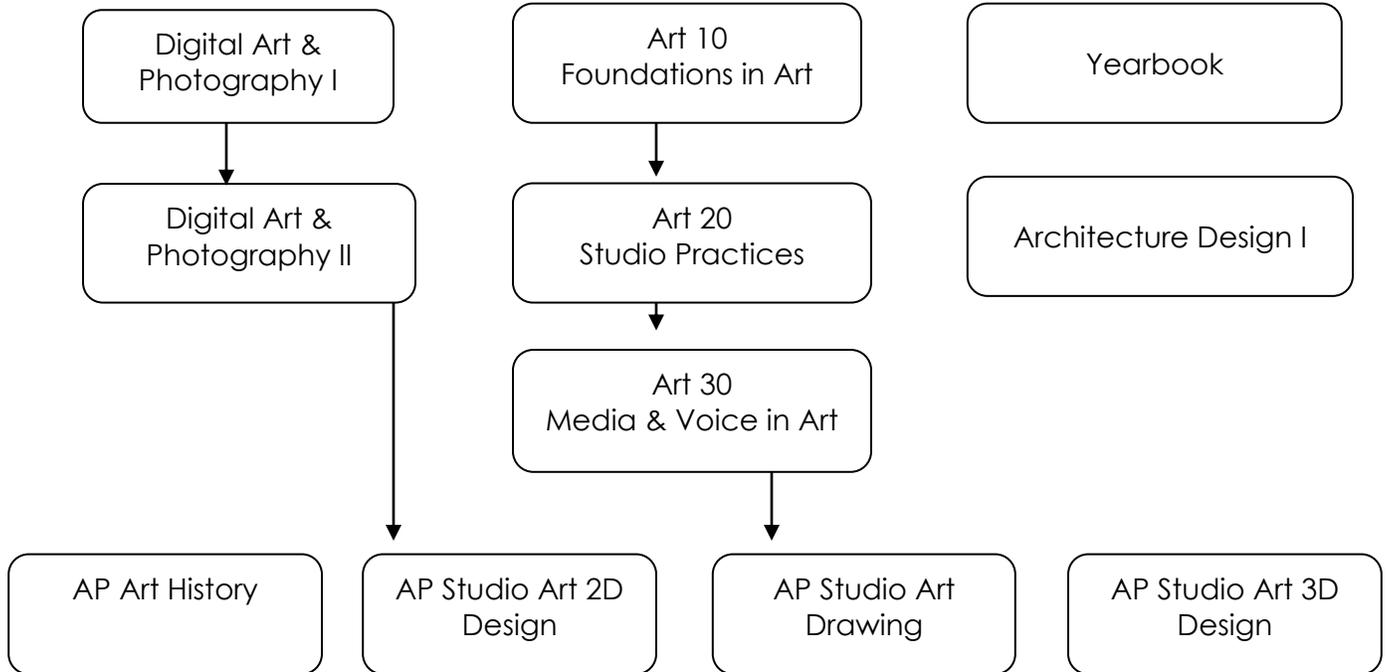
Peak to Peak High School



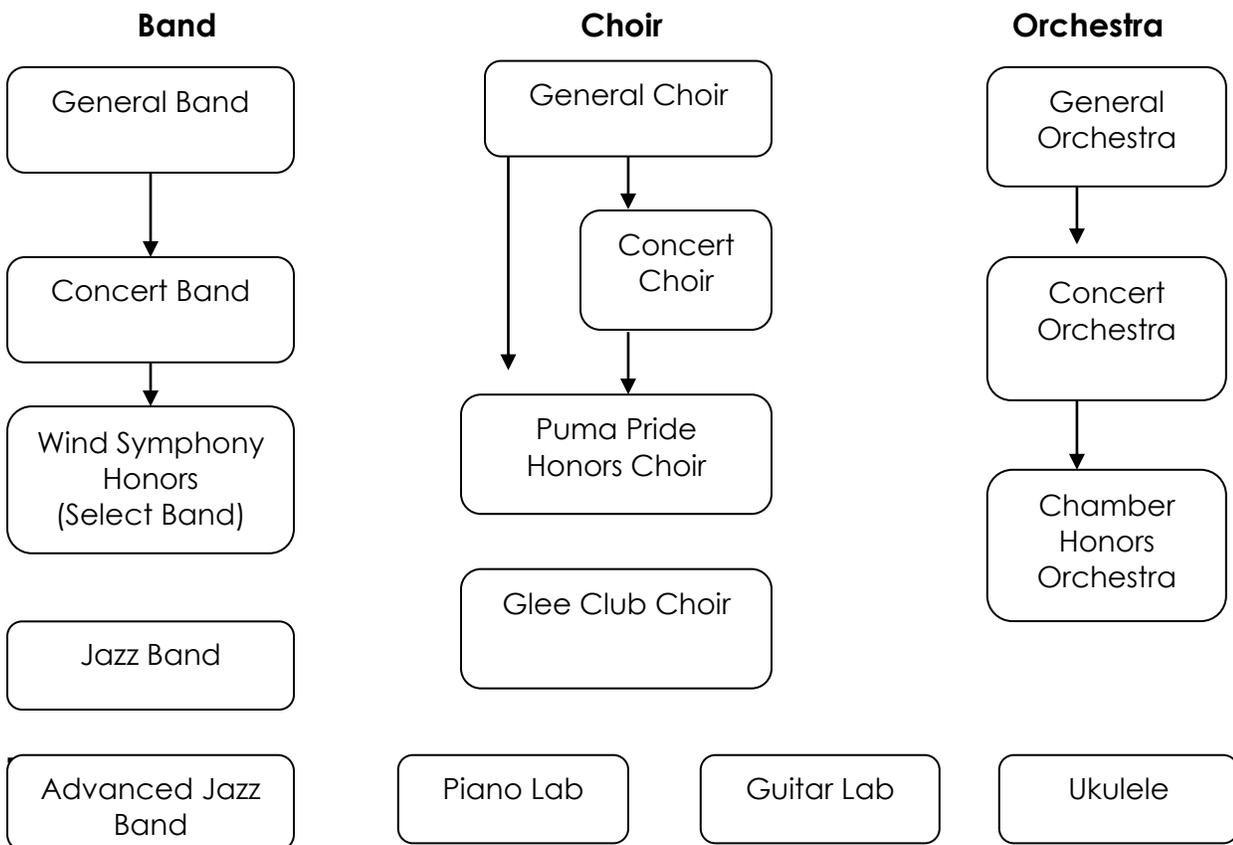
## CURRICULAR PATHWAYS IN VISUAL & PERFORMING ARTS, HEALTH, and PHYSICAL EDUCATION

Peak to Peak High School

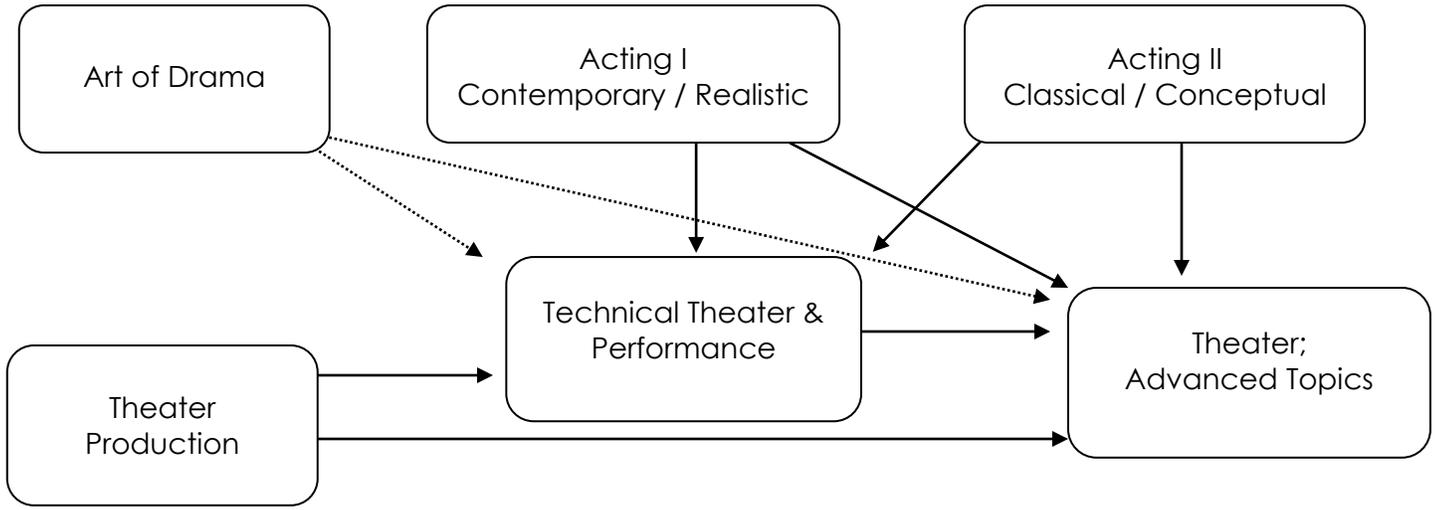
### Art



### Music



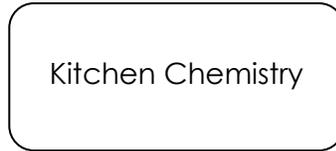
## Theater



## Health & Wellness



## Other



## Physical Education



### P.E. credits:

- 10 credits required for graduation. (5 must be earned during school hours)
- 2.5 credits may be earned for each participation in Peak to Peak athletics or approved outside activity, with a maximum of 5 credits per year earned in this manner