

# Lion's Lore

Littleton High School Course Description Guide (grades 9 -12) 2017 - 2018

## **LITTLETON INDIVIDUAL CAREER AND ACADEMIC PLAN**

Beginning with the Class of 2021, students will have three separate areas of graduation requirements including 210 credits, completion of an Individualized Career and Academic Plan and demonstration of academic competency in English and Math. As you plan your four years of study at Littleton, keep in mind not only the graduation requirements, but also your postsecondary goals. Most colleges and universities require much more than what is required for graduation. Use the provided materials to help plan your course of study.

Graduation Requirements	Grade 9	Grade 10	Grade 11	Grade 12
Language Arts: LHS: 40 Credits *CCHE: 4 years				
Social Studies: LHS: 35 Credits *CCHE: 3 years (at least one unit of U.S. or world history)  Mathematics: LHS: 20 Credits *CCHE: 4 years (Must include				
Algebra I, Geometry, Algebra II or equivalents)				
Science: LHS: 20 Credits of Lab Science *CCHE: 3 years (two units must be lab-based)				
Fine Arts LHS: 5 or 10 Credits				
Practical Arts: LHS: 5 or 10 Credits				
Physical Education: LHS: 12 Credits Health (4) and Swimming (4) Or Life Sports Required				
World Language: LHS: None. *CCHE: 2 year				
Additional Electives: LHS: At least 68 to make Total Credits equal to or above 210. *CCHE: 2 years of Academic Electives				
Total: 210 Credits	Total:	Total:	Total:	Total:

<sup>\*</sup>Colorado Commission on Higher Education College Entrance Requirements: The Colorado Commission on Higher Education has adopted the Higher Education Admission Requirements which are entry requirements for students planning to attend any of Colorado's public four-year colleges or universities. These students will need to complete these classes in order to fulfill the Higher Education Admission Requirements. For more information click here.

## **Individualized Career and Academic Plan (ICAP)**

Students will complete their Individualized Career and Academic Plan over four years in Seminar. Littleton High School students will utilize two internet-based platforms, College in Colorado and Naviance. Successfully passing Seminar for eright semesters will indicate completions of the ICAP.

## **Academic Competencies**

Students must demonstrate competency on at least one of the district adopted measures in both English and Mathematics. Students and parent should become familiar with the assessments on the district menu, as well as how state assessments taken as a freshman and sophomore align with these assessments.

9th Grade	10th Grade	11th Grade	12th Grade
CMAS English/Language Arts	PSAR Evidence-Based Reading and Writing (ERW)	SAT Evidence-Based Reading and Writing (ERW)	
CMAS Math	PSAT Math	SAT Math	

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## **EDUCATION IS OUR BUSINESS**

The staff at Littleton High School lives by its belief that education is its highest priority. Mindful that the nature of society and education is rapidly being transformed by technology, the information era, and demographic shift, the staff is keeping abreast of the growing demands on its students and striving to prepare its youth for a fulfilling life in the 21st century. Despite adjustments and change, however, Littleton High School will continue to strive for quality education through its long tradition of a demanding curriculum, the number of hours students are required to devote to studies, and the examination system, combined with a healthy school environment and the crucial role of the home.

This handbook includes the listing of courses offered to students at Littleton High School during the 2014-15 school year. The number of specific courses offered in a school at a particular time, as well as the courses themselves, reflect the educational priorities identified by the professional staff and the number of students requesting specific courses. Factors considered in course selection include course prerequisites, students' grade levels, students' ability levels, high school graduation requirements, career and college goals, and student/parent preferences.

Organizational theorist Terry Deal suggests organizations describe what their organization stands for in four words or less. According to the faculty and staff, the four words that best describe Littleton High School are:

**Vision** – A common research-based learning theory guides decision-making at the school, and there is some agreement about what teaching and learning should "look like." Members of the professional staff believe that there is a desired state of affairs in today's world that is worth striving for. Exploration and responsible risk taking in support of the school's vision is not only encouraged but expected.

**Excellence** – Student achievement is job one. There is a clear definition of what students are supposed to know and be able to do, and about the level of performance that is expected, at the course, department, program, and school levels. Collective critical reflection is focused on student achievement.

**Diversity** - Differences, whether it be in the way people dress, their ethnicity and culture, or the activities in which they find enjoyment, are not just tolerated, they are valued. It is not necessary for everyone to fit the same mold. Littleton High School's strength, and the richness of the school community, is due in part to the diversity of its people.

**Personalization** - The Littleton High School staff believes it is important that every student is known well by at least one adult in the school. Academic, social, and personal problems are resolved in ways that best meet the needs of the individual students involved to the extent that fairness to all students permits. Student ownership and choice, when in harmony with other school values and when feasible given the school's limited financial resources, are promoted.

#### Nondiscrimination Statement

Littleton Public Schools does not discriminate on the basis of race, color, sex (which includes marital status), sexual orientation, religion, national origin, ancestry, creed, age, disability, or need for special education services. The following individuals have been designated to handle inquiries regarding the non-discrimination policies: Mike Jones, Assistant Superintendent of Human Resources or Melissa Cooper, Director of Special Education and Student Support Services; Littleton Public Schools; 5776 S. Crocker; Littleton, CO 80120; 303-347-3330

## **VISION STATEMENT**

The world needs young people who know how to learn, as well as how to read, write, speak, and compute. The world needs young people with strong interpersonal skills, the ability to contribute to economic productivity and social progress and justice. The world needs young people who can acquire, analyze, and apply information, so as to think creatively, and solve problems.

As workers, parents, citizens, and individuals, members of the next generation should know how to question, invent, anticipate and dream.

We of the Littleton High School community should work every day to help young people do these things, so that they can move, at last, beyond us, each prepared to make a living, make a life, and make a difference.

## **MISSION STATEMENT**

Littleton High School is proud to be a diverse International Baccalaureate World School, where every student demonstrates the knowledge and skills necessary to thrive in an interdependent and ever-changing world. Committed students, staff, parents, and family, united with the greater Littleton community, share the responsibility of educating individuals equipped to engage fully and successfully in post-graduate experiences.

## **GRADUATION REQUIREMENTS**

## Please click here detailed LPS Graduation Competency Menu for class of 2021 and after

A student must earn a minimum of 210 credits in grades 9-12 to graduate from Littleton High School.

The minimum and maximum semester student loads shall be as follows (except as approved by the principal):

Grade 9 30-35 credits Grades 10 through 12 28-35 credits

Students enrolled in the Advanced Placement or International Baccalaureate programs may be granted exceptions regarding the maximum semester student loads. An exception to the maximum class load involving students enrolled in the area vocational school classes or other unusual circumstances must receive counselor approval.

Credits must be earned in the following subjects areas in order to meet graduation requirements:

LANGUAGE ARTS--40 credits distributed as follows:

(1) 9th and 10th grade Language Arts -- 20 credits -- 20 credits

SOCIAL STUDIES--35 credits distributed as follows:

(1) Early Civilizations -- 5 credits
World Geography -- 5 credits
(2) U.S. History -- 10 credits
(3) World History -- 10 credits
(4) Civics -- 5 credits

MATHEMATICS--20 credits distributed as follows:

(1) Algebra or higher -- 10 credits (2) Algebra II or higher -- 10 credits

SCIENCE--20 credits of lab science credit distributed as follows:

(1) Integrated Science I-II -- 10 credits
(2) Integrated Science III-IV -- 10 credits

FINE ARTS/PRACTICAL ARTS--15 credits distributed as follows:

- (1) 5 credits Fine Arts: Instrumental Music/Band/Choir, Drama, Art
- (2) 5 credits Practical Arts: Technology Education/Business/ Family & Consumer Science/Career & Technical Education
- (3) 5 credits additionally must be taken in Practical Arts OR in Fine Arts

## PHYSICAL EDUCATION--12 credits distributed as follows:

- (1) Health --4 credits
- (2) Swimming--4 credits. Students must take a swimming course unless they can demonstrate proficiency by passing the swimming skills test.
- (3) Electives-- In addition to the above each student must select other P.E. electives to complete the 12 required credits.

#### ADDITIONAL ELECTIVES -- 68 credits

In addition to the above requirements each student must select other electives from the above areas of study to complete the total of 210 credits required to graduate.

Colorado Academic Standards - According to the Colorado Department of Education, "the Colorado Academic Standards (CAS) are the expectations of what students need to know and be able to do at the end of each grade. They also stand as the values and content organizers of what Colorado sees as the future skills and essential knowledge for our next generation to be more successful. State standards are the basis of the annual state assessment." The standards have been developed in ten content areas: Colorado Arts (Music, Theatre, Dance and Visual Arts); Reading, Writing and Communicating; Math; Comprehensive Health and Physical Education, Science, Social Studies, and World Languages. At Littleton High School, we have worked collaboratively within each department listed above to align our curriculum with the CAS. You will find the "Standards at a Glance" for these departments listed at the beginning of each content area. Then, as you look at each individual course you will see the content-area standards which are covered in that course. For more detailed information related to the Colorado Academic Standards, visit <a href="https://www.cde.state.co.us/StandardsAndInstruction/ColoradoStandards.asp">www.cde.state.co.us/StandardsAndInstruction/ColoradoStandards.asp</a>.

## **GENERAL INFORMATION**

## **BUILDING YOUR SCHEDULE**

Because course placement, teacher assignments and building needs are all dependent on student course selection, careful thought should be given to the selection of courses. This curriculum catalog describes courses offered at Littleton High School. Course selection should be made by students and parents, with the help and expertise of each student's counselor.

Once courses and alternates are chosen through the online course selection process, the administration, through use of the Infinite Campus program will create the building schedule. The computer scheduling process determines the period and teacher a student receives for a particular course. Teacher and academic period requests cannot be considered at this point in the process, but can be requested during the schedule adjustment period as explained below.

## ADDING AND DROPPING CLASSES/SCHEDULE CHANGES

Schedule adjustment opportunities are available just before each semester begins. The dates and times for schedule adjustment are published on the LHS website <a href="http://littleton.littletonpublicschools.net/">http://littleton.littletonpublicschools.net/</a>. After the semester has begun, ADDING OR DROPPING COURSES AND REQUESTING SCHEDULE CHANGES ARE NOT PERMITTED WITHOUT ADMINISTRATIVE APPROVAL THROUGH YOUR COUNSELOR. This policy minimizes class disruptions and maximizes the possibility of success for students. Students who do not choose to select courses in the spring will be scheduled for core graduation requirements but are not guaranteed schedule adjustments. Counselors will review individual cases in the event of serious extenuating circumstances, i.e., a student acquires a physical disability, experiences a personal trauma, has medically documented evidence of illness, was erroneously placed in a course (lacking a prerequisite or adequate preparation), etc.

Any student who wishes to change level, from honors to non-honors must do so with teacher, parent, counselor and administrative approval. This can occur up to the sixth week of the semester.

#### STUDENT WITHDRAWAL FROM A CLASS

Students must carry a minimum of 28.0 credits in each semester of enrollment. The following scenarios include how students will approach withdrawal procedures from classes **so long as** students remain above the requisite 28.0 credits:

- 1. 0 2 Weeks into the Semester: Students may drop classes with a counselor contact and parent approval.
- 2. 2 6 Weeks into the Semester: Students may drop classes only if student is misplaced in an upper level (Honors or AP) class with teacher, counselor and administration approval. Otherwise, a withdrawal after two weeks results in an "F" grade.
- 3. After 6 Weeks: Students can no longer withdraw from a class without the penalty of a final grade of "F" on the permanent record (the option of W/P Withdraw Pass will no longer be an option at this point).
- 4. Students can opt to take a class on a Pass/Fail basis up through the fourteenth of a semester. Students can take the P/F option for a maximum of one course per semester, only if the course is **NOT** a graduation requirement.
- 5. Withdrawal requests after week 6 due to extenuating circumstances will be addressed by the assistant principal with the student and family.

*Note: Freshmen must carry a minimum of 30.0 credits both semesters.* 

#### **REPEATED COURSES**

Any student in grades 10-12 may repeat a course in which he/she received an F. The grade for the repeated course will be averaged with the previous mark and will be used in determining overall GPA. Repeated courses can be taken on-line, in the building or through summer school. Courses must be approved by a building administrator.

## **GRADE OPTION: Pass/Fail**

Students, of any grade level have the option of taking a maximum of five credits per semester on a pass/fail graded basis; however, pass or fail options are not cumulative.

- This option is open for all grades for any course not required for graduation up to a total of five credits per semester.
- 2. The Pass/Fail option can be exercised through the fourteenth week of the semester.
- 3. Students dropped for lack of attendance in a course taken with this grade option will receive an "F" for the semester.
- 4. A "P" passing grade will have no effect on GPA calculation; while an "F" grade will be used in the GPA calculation.
- 5. Students who produce quality work can have the option of changing a "Pass" to a letter grade. However, the grade can only be changed in accordance with a written agreement made with the cooperating teacher after a reasonable time following the semester final.

## **RECOVERABILITY FOR FRESHMEN**

Beginning with the class of 2013, N/C (no credit) will be applied to all courses failed by freshmen. This procedure places a value on what students know and can do, and not on past mistakes. The intent is to provide motivation for "starting new" after a poor freshmen year, and provide another incentive to work towards graduation.

At the end of each semester, teachers will give grades as they always do, including F's. All students, including freshmen, will receive report cards with the F's indicated. The freshmen F's will be converted administratively to N/C (no credit) after the report cards are printed. The N/C grades will not figure into the cumulative GPA. Repeated courses can be taken on-line, in the building or through summer school. Courses must be approved by a counselor or building administrator.

## **HOMEWORK POLICY**

Homework, work that is assigned during class to be done outside the regular class meeting time (at home, during academic prep time or at some other location and time), is an integral part of the educational program. Homework should be meaningful and relevant both to the class work and to the student. It should help the student develop useful skills and gain increased insight into class work. All homework should contribute directly as well as indirectly to the student's performance evaluation. Although regular homework requires self-discipline and individual commitment on the part of the student, the best results occur when homework is a collaborative effort between school, teachers, students, and parents. Yet it is recognized that some time in a student's out of school life must be devoted to physical, social, religious, and other activities. Homework is an educational tool, not a disciplinary measure.

A high school student can reasonably expect to complete an average of 30 minutes of homework per academic class for each credit received for the class during each week. For a five-credit class a student should receive approximately 150 minutes of

homework per week; for a three-credit class, 90 minutes, etc. A student with five academic classes of five credits each will have an average of 12 and one-half hours of homework each week, or an average of two and one-half hours per day. Clearly some classes will have more than 30 minutes of homework per class/credit hour per week while others will have much less; the average of 30 minutes should apply. Because this is an average amount, some students should expect to have more homework than this amount while others will have less.

## A student's responsibilities:

- To know what the assignment is before leaving the classroom.
- To make a written note of the assignment for later reference.
- To complete the assignment on time.
- To seek help when "stuck" on a problem or assignment.
- To do his/her own work.
- To use time wisely.
- To recognize that for some students some assignments will take more than the same assignment will take for other students.

## A teacher's responsibilities:

- To make the assignment clear.
- To show the relevance of the assignment to the class work.
- To be available to help students with assignment problems.
- To collect, grade (or in some form check or evaluate), and return the assignment quickly.
- To be aware of the recommended time limits for homework.
- To recognize that for some students some assignments will take more time than the same assignment will take for other students.
- To be aware that students have activities outside of school which provide valuable and necessary life lessons for them.
- To use homework to reinforce and practice, to expand and extend, to create and apply, to prepare and gain background, etc., but not to teach anew.
- To be sensitive to the unique factors inherent in group assignments.

## A parent's responsibilities:

- To provide a place for a student to do his/her homework.
- To monitor that homework is done.
- To organize activities (social, athletic, occupational, etc.) so that they do not interfere with the completion of homework.
- To recognize that for some students some assignments will take more time than the same assignment will take for other students.
- To know that a student always has homework i.e. formal assignments, practice work, material to read, getting ready for a test, general study and review of the material presented in a class.

## The school's responsibilities:

- To provide quiet study areas for students to use to do homework during the school day.
- To provide an area for teachers to work individually with students.
- To provide access to necessary facilities and equipment (library, laboratories, etc.).

#### FINAL EXAMINATIONS

Final exams are an integral part of most courses and are granted a value as high as 20 percent of the final semester grade. These exams are pre-scheduled for the last four days of the semester. In order to provide a valuable, consistent and fair opportunity for all students it is expected that students attend all final exams during the scheduled time. Any student absent from an exam must have a pre-arranged absence approved by the administration or a physician's note excusing the student from attending school. Make-up exams must be arranged with the instructor, counselor or the administration.

#### **SUMMER SCHOOL**

Our school district conducts a summer school program. Specific information regarding the dates for registration is made in a summer school bulletin issued in April, available in the Counseling Office. Each student must check with his/her counselor to approve registration for the proper course.

#### **GRADE POINT AVERAGE AND RANK**

GPA and Rank will be based on grades 9-12. All students are included in class rank and all courses for which the student received an A-F are included in the GPA. Area Career & Technical School and Learning Support classes are graded and included in the GPA and Class Rank computations.

#### **WEIGHTED GRADES**

The Littleton High School Accountability Committee determined the following weighted grading system:

Honors/Advanced Placement (AP)/IB course: A = 5; B = 4; C = 3; D = 1; F = 0

All courses not labeled Honors, AP, or IB: A = 4; B = 3; C = 2; D = 1; F = 0

Note: When a student transfers to Littleton High School, weighted credit will only be awarded to classes which are offered at Littleton High School.

## **ELIGIBILITY: CHSAA**

In order to maintain athletic eligibility for the next semester, a student-athlete cannot fail more than five hours in the semester in which he/she is currently enrolled. If a student-athlete fails more than five hours in a semester, he/she will be ineligible to participate in any athletic program until the sixth Thursday following Labor Day for the first semester and on the Friday immediately prior to March fourth for the second semester. At that time, grades will be checked to see if they meet LHS and CHSAA academic standards. If the student-athlete's grades meet the eligibility requirements at this time, then eligibility will be reinstated.

#### **ELIGIBILITY: NCAA**

Students who wish to participate in Division I and II college athletics must be registered with the NCAA Initial Eligibility Clearinghouse. Students must submit the Student Release Form, a final high school transcript, and ACT or SAT scores. Student Release Forms are available at <a href="https://web1.ncaa.org/eligibilitycenter/common">https://web1.ncaa.org/eligibilitycenter/common</a>.

The NCAA Eligibility Center has instituted new academic rule changes that impact the classes of 2013-2016 and beyond, and whether college-bound student-athletes will be eligible for practice, completion and financial aid in their first year at a NCAA Division I or II college or university.

## Where to find information

- a. See the Quick Reference Guide or the Initial Eligibility Brochure found in the school counseling office.
- b. See the NCAA Guide for the College-Bound Student-Athlete, available on the Resources page at www.eligibilitycenter.org.

## **ACTIVITY FEES FOR CO-CURRICULAR COURSES**

Littleton High School appreciates our students' participation in LHS activities. The school recognizes that extra and co-curricular activities provide unique learning opportunities for students and strengthen our school and community. Co-curricular courses in the LHS curriculum are those that involve students in both an instructional and an activity, performance or competitive setting. While the district does provide the school with some funds, maintaining outstanding

performance or competitive setting. While the district does provide the school with some funds, maintaining outstanding choir, band, orchestra, drama, speech, newspaper, yearbook and student council programs requires significant resources. In order to provide the most enriching and safe experience for our students, the school district must pay equipment, materials, training, uniforms or costumes, transportation, performance or competition costs, as well as stipends for teachers/sponsors for their after-school commitments.

To offset some of these costs, the LPS school board implemented a \$25 activity fee several years ago. Students who participate in any of the activities listed below are required to pay the fee. Fees will be reflected in each student's Infinite Campus account. Once fees have been posted in IC, payment can be made to Littleton High School with cash, check or credit card.

Students who participate in more than one activity (for example if a student is in Wind Ensemble *and* Concert Choir) only have to pay the activity fee once. No student will pay more than \$25 to participate in any or all of the following co-curricular activities:

- \* Chamber Orchestra
- Concert Band
- \* Concert Choir
- \* Corlionis (Yearbook)
- \* Drama

- \* Flags
- \* Iazz Band
- \* The Lions' Roar (Newspaper)
- \* Marching Band
- \* Troubadours

## LHS INTERNATIONAL BACCALAUREATE COURSE SEQUENCE

Subject	Grade 9	Grade 10	Grade 11	Grade 12	Exam: 3 or 4 HLs 3 or 2 SLs
Group 1: Language A (English)	Language Arts 9 Honors	Language Arts 10 Honors	IB Comparative World Literature	IB Advanced Literature Studies	Literature HL
Group 2: Language B (World Language)	Spanish II Honors	French II or III Honors Spanish II or III Honors	French III Honors or IV IB* Spanish III Honors or IV IB*	French IV IB Spanish IV IB	Language B SL
Group 3: Individuals and Societies (Social Studies)	World History Honors	AP US History (strongly recommended) take AP test or US History	IB European History	History	History of Europe HL
Group 4: Experimental Sciences	Integrated Science I-II Honors - must exempt IS III-IV	General Chemistry	IB Biology Year one and/or IB Chemistry* *one-year course	IB Biology Year two and/or IB Chemistry* *one-year course	Biology HL and/or Chemistry SL
	Algebra Honors	Geometry Honors	Algebra II Honors	IB Math Studies SL	Math Studies SL
Group 5: Mathematics	Geometry Honors	Algebra II Honors	Trig/Pre-Calculus Honors	IB Calculus (IB Math SL)	Mathematics SL
	Algebra II Honors	Trig/Pre-Calculus Honors	AP Calculus BC take AP exam	IB Beyond Calculus	Mathematics HL
	Art Foundations, Drawing and/or Art History	Drawing, Ceramics, Photography, Painting, Sculpture or Animation	IB Studio Art (SL or year one of HL)	IB Studio Art (SL year two of HL)	Visual Arts SL or HL
	Choice music elective	Choice music elective	IB Music Theory take AP Exam	IB Music year two	Musical Arts SL or HL
Group 6: Fine Arts	Introduction to Drama	Acting Study	Acting Study II	IB Theater Company	Theater Arts SL/HL
	Technology Studies (one-year course)	Technology Studies (one-year course)	IB Design Tech I	IB Design Tech II	Design Technology SL/HL
			IB Psychology (one-year course)	IB Psychology (one-year course)	Psychology SL

## Other IB Diploma Program Requirements

## Other Littleton High School Graduation Requirements

## Theory of Knowledge Course (ToK)

\* Class meets one evening a week -- second semester junior year and first semester senior year.

\* 100 hours of class time =two semesters

## **Extended Essay (EE)**

\* 4,000-word research essay on a topic of student's choice

\* Students begin the process in the spring of junior year
and complete the essay in the fall of senior year.

\* Each student works with a teacher-adviser.

## **Creativity, Activity and Service (CAS)**

\* 150 hours including a student-designed 50-hour service project.

\* The remaining hours are divided among a variety of creativity, activity and service experiences. 
\* Students undertake activities at the start of junior year

and complete all experiences, reflections, and supervisor reviews before March 1 of senior year.

Students must earn 210 credits in grades 9-12 Most semester courses are 5 credits

Language Arts—40 credits

Social Studies—35 credits

Mathematics—20 credits

Students on the IB/AP track automatically fulfill these credits

**Fine Arts/Practical Arts --** 15 credits distributed as follows:

Fine Arts: 5 credits Practical Arts: 5 credits

Another fine or practical arts course: 5 credits

**Physical Education --** 12 credits distributed as follows:

Health: 4 credits
Swimming: 4 credits

Another PE elective course: 4 credits

Students are advised to spread out their Fine Arts, Practical Arts and PE credits over the course of four years.

HL=Higher Level (2-year 240-hour course), SL=Standard Level (1-year 150-hour course)

#### Sixth Subject

Besides Groups 1-5, students choose a Sixth Subject to complete the Diploma Program: This can be from The Arts (above) or we also offer Chemistry SL (if it's not already your Group 4 requirement), Psychology SL, Philosophy SL, Design Technology SL or HL, or a second World Language.

## Theory of Knowledge (TOK) 100 hours

An interdisciplinary class designed to stimulate critical thinking: ask questions, examine truth and understand knowledge. 11<sup>th</sup> grade - 2<sup>nd</sup> semester, one evening each week; 12<sup>th</sup> grade - 1<sup>st</sup> semester, one evening each week, Diploma requirements-attend classes, two essays, external examiners assess 1 essay (1,200-1,600 words), internal assessment-oral presentation.

## Extended Essay (EE) 4,000 words

An independent and original, in-depth research project supervised by a teacher.

11<sup>th</sup> grade - begin process in the spring of junior year

12<sup>th</sup> grade - essay is due during the first semester of senior year

Diploma requirements-Submit essay for external assessment

## Creativity, Activity, Service (CAS) 150 hours

CAS broadens students' education beyond the classroom and encourages respect and concern for other people and the world. The students must stretch themselves to develop a project for which they have passion with the hope they will become involved in the world around them for life.

Creativity-33 hours This should be interpreted as imaginatively as possible to cover a wide range of arts and other activities and

to include creativity by the individual student in designing and carrying out projects at school or in the

community.

Activity-33 hours May include physical activities, both team and individual, and also training for service.

Service-33 hours Encompasses community and social service but may also include environmental and international projects.

50-hour Project A minimum of 50 hours must be devoted to one project of the student's choice. The project must encompass

the Service component and one of the two (Creativity, Activity) other components.

 $\underline{10^{th}}$  grade-students receive their CAS instruction in May of their sophomore year and may begin collecting hours Aug. 1 after their sophomore year. All CAS activities and approvals are completed through an online service called Manage Bac.

<u>11<sup>th</sup> grade-students</u> collect 33 hours in each of creativity, activity, and service -work on 50-hour in-depth community service project, pre-approved by the CAS Coordinator.

 $\underline{12^{th}}$  grade-students – Before March 1, complete and submit CAS activities, reflections and evidence.

## **ADVANCED PLACEMENT PROGRAM®**

The Advanced Placement Program® is a cooperative educational endeavor between secondary schools and colleges and universities. Since its inception in 1955, the Program has provided motivated high school students with the opportunity to take college-level courses in a high school setting. Students who participate in the Program not only gain college-level skills, but in many cases they also earn college credit while they are still in high school. AP courses are taught by dedicated and enthusiastic high school teachers who follow course guidelines developed and published by the College Board.

The Program's success is rooted in the collaborative efforts of motivated students, dedicated teachers, and committed schools. By participating in the Program, secondary schools make the commitment to organize and support at least one class that is equivalent to a first-year college course.

At Littleton High School, we offer many Advanced Placement courses and students can take any of the 33 Advanced Placement tests offered by College Board. Please see Mrs. Zerr, or go to <u>collegeboard.com</u> if you have questions regarding Advanced Placement.

## **ADVANCED PLACEMENT-HONORS**

Some classes at Littleton High School are grouped so that individual students may progress at a rate different from that of the regular classes. Decisions involving grouping in these classes are based on interest, standardized test results, teacher and counselor recommendations, and previous grades.

- **a. Honors Courses:** The methods and materials are designed to provide enrichment and depth to the courses. In some cases students may enroll in honors courses one or more years earlier than would be the normal period for instruction.
- **b. Advanced Placement Courses:** Littleton High School implemented the Advanced Placement Program in the fall of 1975. Some specific subject matter requirements for graduation may be waived. Students may cross-enroll in AP courses among the three high schools in the district. AP classes offered at LHS are English Literature, Calculus AB and BC, Biology, Chemistry, Environmental Science, Physics I, Spanish Language, US History, European History, Statistics, Music Theory, and Government.

## SUGGESTED SEQUENCE OF CORE COURSES

<u>Typical</u> 9 <sup>th</sup> Grade	<u>Honors</u>	<u>Typical</u> 10 <sup>th</sup> Grade	<u>Honors</u>
Language Arts 9	Language Arts 9 Honors	Language Arts 10	Language Arts 10 Honors
World History	World History Honors	U.S. History	AP U.S. History
Integrated Science I-II	Integrated Science I-II Honors	Integrated Sciences 3-4	Chemistry (if student exempted from Integrated Science 3-4)
Algebra I	Algebra I Honors Geometry Honors Algebra II Honors	Geometry	Geometry Honors Algebra II Honors
World Language I	Spanish I Spanish II Honors	World Language II	World Language II or III Honors

<u>Typical</u> <u>11<sup>th</sup> Grade</u>	<u>Honors</u>	<u>Typical</u> <u>12<sup>th</sup> Grade</u>	<u>Honors</u>
Language Arts Elective	Comparative World Lit	Language Arts Electives	AP English Literature
World History	AP European History	Civics	AP Government
Science Electives	Science Electives or AP Sciences*	Science Electives	AP Sciences*
Algebra II	Trig/Pre-Trig/Pre-Calculus Calculus Honors	Trig/Pre-Calc or Statistics or AP Statistics	AP Calculus AB or AP Calculus BC or IB Beyond Calc
World Language III	World Language III Honors. World Language IV IB	World Language IV	World Language IV IB AP World Language

<sup>\*</sup>AP Sciences: Chemistry, Physics, Biology or Environmental Science (offered alternate years)

## **STEM at LHS**

## Science, Technology, Engineering and Math

Littleton High School has many opportunities for students interested in the fields of science, technology, engineering, and math. We know that there is a high demand for graduates with these skills and we want students to be aware of the pathways that will prepare them for careers and advanced studies in this area. LHS is proud to offer students the opportunity to earn certification upon graduation in STEM.

### 21st Century Learning Environment

- In 2013, LHS partnered with the Littleton Public Schools Foundation to fund a new learning space, the "Center for Creativity and Collaboration." This \$67,000 retrofit allows students in computer science courses as well as students in other departments to solve problems on multiple platforms (PC and Apple) in a highly flexible environment.
- In 2015, the Littleton Public Schools bond project constructed a new space for high-tech learning and expanded our wood shop in the area adjacent to our current technology lab.

#### Science

- LHS offers a comprehensive science program.
- College-bound students should complete four years of science.
- Advanced Placement and International Baccalaureate classes which expose students to college-level coursework are an excellent preparation for college-bound students and will help them be "college-ready."
- Students have access to applied science experiences through our Area Career and Technical School (ACTS) program. Courses include Health Sciences, Fire Science, Agriscience, Equine Science and Alternative & Renewable Energy.

## **Technology and Engineering**

- LHS offers four years of Technology Studies onsite in our technology lab.
- LHS offered the first Animation course in the district through our art department in Fall 2015.
- Our thriving Technology Student Association has won the state TSA competition twelve of the last thirteen years.
- LHS students have access to applied technology and engineering courses through our ACTS program. Courses include Automotive Technology, Aviation Fundamentals, Cabinet and Furniture Construction, Digital Commercial/Comprehensive Commercial Photography, Basic/Comprehensive Graphic Design, and Architectural Design.

#### Math

- LHS offers a comprehensive mathematic program, including Computer Science I and II.
- College-bound students should complete four years of math.
- Advanced Placement and International Baccalaureate classes which expose students to college-level coursework are
  an excellent preparation for college-bound students and will help them be "college-ready."

## **Business and Community Partnerships**

- Since 2013, hundreds of Littleton Public Schools students have enrolled in free Saturday morning engineering workshops sponsored by LHS and offered by our community partner, Shades of Blue.
- In spring 2015, LHS sponsored a free nine-session, Saturday morning Aviation Ground School, in partnership with Shades of Blue.
- LHS partners with Lockheed Martin to offer free tutoring at school one three evenings per week.
- Starting in 2015-16, LHS will partner with Arapahoe Community College to offer students who have completed Computer Science I and II extended coursework in network management. Littleton Public Schools pays tuition for these courses.
- Additional strategic partners include the University of Colorado at Denver (UCD), School of Engineering & Applied Science, the UCD chapter of the Society of Women Engineers and the American Association of University Women, Denver Water and The Keystone Science School.

## STEM Certification at Littleton High School

LHS is pleased to offer students who complete an approved pathway of coursework and high school experiences in Science, Technology, Engineering, and Math (STEM) the opportunity to receive STEM certification upon graduation. Students will receive STEM certificates at Spring Convocation and will earn either a purple or a gold honor cord. Certification will be noted on transcripts (not diplomas). To receive certification, students will need to complete coursework well beyond minimum graduation requirements.

## **Additional STEM Certification Requirements**

To earn STEM Certification, students meet requirements in four areas: cumulative grade point average (GPA), extra-curricular participation, completion of a portfolio, and completion of math and science coursework beyond the minimum distribution requirements while completing a four semester-long STEM elective courses. Students may earn STEM Certification at two levels: purple or gold.

- **Area 1: Grade Point Average** the cumulative GPA from all LHS classes is required at the end of seven semesters. A GPA of 3.0 is required for purple certification. A GPA of 3.5 is required for gold certification.
- Area 2: Extra-curricular participation students complete 100 hours of STEM-oriented activities and participation by the time of graduation for both purple and gold certification. These hours complement and enhance their classroom experiences. Some of these activities may be structured and organized by LHS, while others will be developed by the individual student. Extra-curricular participation will be documented by students in their personal Hours Tracking Spreadsheet. We expect school-sponsored activities for 2016-2017 to include Technology Student Association, college campus visits, Shades of Blue Engineering Workshops (Saturday mornings), Lockheed Martin Tutoring, and the LHS "Hour of Code".
- **Area 3: Portfolio** STEM certificate students at both the purple and gold levels will complete a digital portfolio as part of participation in each STEM elective course. This portfolio will document their academic learning and their post-high school plans.
- **Area 4: STEM Coursework: Science and Math** STEM certificate students will complete additional math and science beyond our two-year graduation requirement. Purple level certification requires completion of 11<sup>th</sup> grade math and science. Gold certification requires completion of 11<sup>th</sup> and 12<sup>th</sup> grade math and science.

**STEM Coursework: Electives -** students will also complete four semester-long STEM courses beyond our current distribution requirements. Each meets a set of requirements established by the faculty, and all include a portfolio component. The following elective courses have been designated as STEM courses and more can be expected:

- Technology Studies (Courses 1-8)
- Woods
- Design Projects
- IB Design Technology
- Introduction to Computer Science
- Computer Science 2
- Creative and Collaborative Problem Solving
- Animation
- Psychology
- IB Psychology
- Computer networking courses through Arapahoe Community College
- Year-long courses through the Area & Career Tech Education (ACTS) program including:
  - o Automotive Technology
  - o Cabinet & Furniture Making
  - o Architectural Design
  - o Health Sciences

## **Purple and Gold STEM Certification Levels**



CERTIFICATION



## **PLANNING AND PREPARING POST-SECONDARY PLANS**

At Littleton High School, every student will be encouraged to create a post-secondary plan which could include attending a trade or technical school, enlisting in the military or attending a two or four-year college. Students and their families have access to a variety of resources as they collaborate to develop this plan.

## Littleton High School's Post Grad Center

The LHS Post Grad Center is a vibrant resource open to all students and their parents. Post Grad Center staff and trained volunteers begin working with students to develop each student's plan for his or her own "Life After Littleton." Each student meets with PGC staff members several times during their years at Littleton – in classroom-sized groups, in small groups with a student-to-instructor ratio of 2:1, and in one-on-one meetings.

The Post Grad Center is open during school hours every day except Wednesdays, and students are welcome to drop in or set up an appointment with a staff member. This adds up to an amazing resource for students to get the information, access to tools and resources, and the coaching they need to maximize their post-LHS opportunities.

Post Grad Services

- Junior meetings: One-on-one or very small group
- Senior meetings: One-on-one or very small group
- College and Career Information Night for sophomores, juniors, and parents

## On-line Resources

College in Colorado

**Naviance** 

## **High School Course Requirements for College Admissions**

All students who graduate from high school can be considered for college acceptance. However, the requirements for earning a high school diploma are not adequate preparation for college admissions or academic success in 4-year or selective colleges Admissions standards vary widely among colleges and are related to the purposes of the college, particular fields of study, and the degree of selectivity of the admissions process. General guidelines for college academic preparations and fulfilling admissions requirements include the following:

## MINIMUM REQUIREMENTS FOR 4-YEAR COLLEGE ADMISSIONS

160-200 academic credit hours in grades 9 through 12 including:

- 1. 40 credit hours of Language Arts (including literature and writing courses recommended for 11th/12th grade)
- 2. 30-40 credit hours of Social Studies (including 10 credit hours of U.S. History, 10 credit hours of World History, and 5 credits of World Geography)
- 3. 30-40 credit hours of laboratory Science (10 credit hours should be at the 11th or 12th grade level)
- 4. 20-40 credit hours of World Language for selective colleges or for specific majors
- 5. 40 credit hours of Mathematics (Algebra/Geometry and more advanced courses)

## \*\*STUDENTS WHO PLAN TO APPLY TO SELECTIVE COLLEGES NEED 4 YEARS OF ALL 5 ACADEMIC AREAS\*\*

Students are urged to consult college websites for recommendations and/or requirements of particular institutions and specific majors. Admissions requirements may range from just a high school diploma, such as for two-year community colleges, to four years of all five core subjects, such as for selective colleges or majors. Additionally, some colleges may require specific electives, such as schools in the University of California system, which require two electives in the arts.

Littleton High School highly recommends that students take core math and science classes beyond the two-year LHS requirement, regardless of their choice of community college, four-year college or selective schools. To meet college readiness standards and NOT test into remedial coursework\* at the college level, take as many core classes with rigor as possible.

\*Remedial coursework means a student tests into a level at college that is beneath the school's basic requirements. The student must take the remedial course(s) at cost, but these classes do not count towards an Associate's or Bachelor's degree.

## GENERAL REQUIREMENTS FOR COLLEGE ADMISSIONS

Requirements may vary according to the prospective college major as well as the degree of selectivity of the college.

TYPE OF COLLEGE:	Community & Junior College	4-year Colleges	Universities	Selective College or Competitive Majors
GRADES 9-12  BASIC ACADEMIC COURSES TO MEET COLLEGE REQUIREMENTS	Courses necessary to earn high school diploma	Language Arts - 4 yrs.  Social Studies - 3-4 yrs.  Math - 4 yrs.  Science -3 yrs.	Language Arts - 4 yrs.  Social Studies 3-4 yrs.  Math – 4 yrs.  Science – 3-4 yrs.	Language Arts - 4 yrs.  Social Studies - 3-4 yrs.  Math - 4 yrs.  Science - 4 yrs.
			World Language - 2-3 yrs. for some majors	World Language - 4-5 yrs.
CLASS RANK	Only requirement is graduation from high school or GED	Upper 2/3 - 1/2 of senior class. LHS GPA: 3.0+	Upper 1/2 - 1/4 of senior class. LHS GPA: 3.2+; higher for certain majors	Upper 1/4 - 1/10 of senior class. LHS GPA: 4.0 weighted GPA or higher
COLLEGE ENTRANCE TEST	ACT used for placement only	SAT I or ACT 50th percentile and higher	SAT I or ACT (usually with writing) - 70th percentile and higher	SAT I, SAT subject tests, ACT with writing - 90th percentile or higher
HONORS, ADVANCED PLACEMENT, AND/OR IB CURRICULUM	Not necessary for admission	Recommended	Recommended	Necessary in subject areas of strength
ACTIVITIES (extra-curricular sports, clubs, and community service, including leadership experience)	Not necessary for admission	Recommended	Recommended	Very important
LETTERS OF RECOMMENDATION (from academic teachers in Grades 11 or 12 and/or a school counselor)	Not necessary for admission	Recommended – consult college website	Recommended – consult college website	Required

## **GUIDE TO COURSES**

The following courses illustrate classes that would meet the expectations of a pre-collegiate curriculum as defined by the Colorado Commission on Higher Education. The CCHE's combination of courses represents those needed to qualify for admission to Colorado's 4-year public colleges and universities.

## **ENGLISH**: (4 units required)

To meet the pre-collegiate curriculum, at least two of the required four units must emphasize writing, grammar and composition skills. Examples of acceptable courses are:

- English
- Integrated English (such as English and social studies)
- Literature
- Literature/composition (in which freshman English is a core English credit)
- Speech
- Debate
- Courses that are part of a college-preparatory sequence with comparable content and academic rigor/level as those listed
- Honors, Advanced Placement, and/or International Baccalaureate courses
- Any college level English course

## Examples of unacceptable courses include:

- Pre-freshman level English
- Remedial and developmental English
- Business English
- School publications
- Yearbook
- Drama (Appropriate as academic elective)
- Journalism (Appropriate as academic elective)

Note: 2 units of ELA English may count for the pre-collegiate curriculum when combined with 2 units of successfully completed college preparatory English.

#### **MATHEMATICS**: (4 units required)

To meet the pre-collegiate curriculum, mathematics must be at the level of algebra I and higher. Pre-collegiate courses completed prior to 9th grade are acceptable. Examples of acceptable courses are:

- Algebra I
- Geometry
- Algebra II
- Trigonometry/Pre-Calculus
- Pre-calculus
- Trigonometry
- Probability and Statistics
- Discrete Mathematics
- Integrated mathematics which includes Algebra I and Geometry or higher and provides a foundation for higher level mathematics. Students are expected to complete the entire sequence whenever possible.
- Computer science courses that have a prerequisite of at least Algebra I and cover programming.
- Courses that are part of a college-preparatory sequence with comparable content and academic rigor/level as those listed: Honors, Advanced Placement, and/or International Baccalaureate courses. Including any college-level mathematics course.

## Examples of unacceptable courses include:

- Pre-algebra
- Remedial and developmental mathematics
- General math
- Business math
- Consumer math
- Accounting (Appropriate as academic elective)

Note 1: When Algebra I content is extended beyond one year, only one unit of the pre-collegiate curriculum is met.

Note 2: While the required three or four units of mathematics may be completed prior to the 12th grade, it is recommended that students take a mathematics course in 12th grade to retain student proficiencies.

Note 3: College-preparatory ELA mathematics courses that include content and academic rigor/level comparable to acceptable courses listed may satisfy the pre-collegiate curriculum.

## **NATURAL & PHYSICAL SCIENCE**: (3 units required)

To meet the pre-collegiate curriculum, at least two of the three required units must have laboratory work. Laboratory work may be in separate labs or embedded in classroom activities. Examples of acceptable courses are:

- Biology
- Chemistry
- Physics
- Earth, space, or geophysical science
- Physical Science that is a prerequisite course to higher level science courses, especially chemistry and/or physics
- Integrated science course sequences that provide a foundation for higher level science
- Students are expected to complete the entire sequence whenever possible
- Courses that are part of a college-preparatory sequence with comparable content and academic rigor/level as those listed. Honors, Advanced Placement, and/or International Baccalaureate courses. Any college level natural/physical science course

## Examples of unacceptable courses are:

- General science
- Remedial and developmental science
- Outdoor education
- Environmental studies, when not a standards-based science course

Note: College-preparatory ELA science courses that include content and academic rigor/level comparable to acceptable courses listed may satisfy the pre-collegiate curriculum.

## **SOCIAL SCIENCE**: (3 units required)

To meet the pre-collegiate curriculum, at least one of the three required units must be U.S. history or world civilization. Examples of acceptable courses are:

- U.S. history
- World history
- World civilization
- State history
- Civics/American Government
- Principles of democracy
- Geography
- Economics
- Psychology
- Sociology
- Courses that are part of a college-preparatory sequence with comparable content and academic rigor/level as those
  listed
- Honors, Advanced Placement, and/or International Baccalaureate Courses
- Any college level social sciences course

## Examples of unacceptable courses are:

- Family living
- Marriage and family
- Consumer education

## **ACADEMIC ELECTIVES:** (2 units of academic electives and 2 units of foreign language required)

Acceptable courses include additional courses in English, mathematics, natural/physical sciences and social sciences beyond the minimum units listed above, or foreign languages (two units of foreign languages must be from the same language), art, music, journalism, drama, computer science, honors, Advanced Placement, and International Baccalaureate courses.

Approved career and technical education courses with content comparable to courses meeting Colorado's Model Content Standards and industry specific/CTE standards are counted as academic electives.

Foreign language becomes a separate academic area and is included as part of academic electives only when a third or fourth year is completed (only two units of foreign languages need to be in the same language). Except for the special requirement pertaining to foreign languages, students may "mix and match" academic electives if they choose (e.g., 1 unit of music; ½ unit of art; ½ unit of journalism, etc).

## Other Considerations for Becoming College-Ready

Challenge yourself – Students who plan to further their studies at a 4-year college or university will not only need to take a pre-collegiate curriculum in high school, but also take the most rigorous courses they can, and do well in those courses. Most colleges give preference to students who challenge themselves throughout high school over those who take easier classes and get a higher grade point average. Explore whether you want to take Advanced Placement courses or pursue an International Baccalaureate diploma program. You also may want to enroll for dual credit classes that allow you to earn college credit while in high school through the Concurrent Enrollment Program. Your school counselor can provide you with details on each of these opportunities.

Become involved – Your involvement in activities such as clubs, music, sports, and/or volunteer work will show a prospective college that you pursue interests outside of class, too. When you have an opportunity, try some leadership roles in these activities. Colleges also consider working a paying job as a productive, responsible use of out-of-school time.

Plan ahead – Visit the Post Grad section under the Counseling tab on Littleton High School's website (<a href="www.littleton.littletonpublicschools.net">www.littleton.littletonpublicschools.net</a>) to find out everything you need to know to prepare for life after high school. Click on the different links to access information regarding:

- Junior and Senior college planning timeline
- College entrance exams
- How to utilize Naviance, the LHS online college planning program
- College admissions representatives visits to our school
- Writing a winning college essay
- Processes for applying for financial aid
- Tips on building your list of colleges
- Non-college options after high school

## **BUSINESS & MARKETING**

Available to grades 9, 10, 11, 12 Business Communications Business Principles Business Technology

Marketing I-II

Available to grades 10, 11, 12

Entrepreneurship

Sports & Entertainment Marketing

Advanced Marketing\*

Available to grades 11, 12

Personal Finance -Professional Employment Training Community Employment Experience (OJT)\*\*

## **COURSES BY GRADE**

9th

Business Communications

> Business Principles

Business Technology

Marketing I

10th

Business Communications

> Business Principles

Business Technology

Marketing I

Entrepreneurship

Sports/Entertainment Marketing

> Advance Marketing\*

11th

Business Communications

**Business Principles** 

Business Technology

Marketing I

Entrepreneurship

Sports/Entertainment Marketing

Advance Marketing\*

Personal Finance/PET\*\*

Community Employment Experience (OJT) 12th

Business Communications

**Business Principles** 

Business Technology

Marketing I

Entrepreneurship

Sports/Entertainment Marketing

Advance Marketing\*

Personal Finance/PET\*\*

Community Employment Experience (OJT)

<sup>\*</sup>Marketing I - II is a prerequisite for Advanced Marketing

<sup>\*\*</sup>Concurrent enrollment in Personal Finance/PET or Career Sucess is required

All Business and Marketing classes are based on the National Business Industry standards and are aligned with Colorado Academic Standards in Social Studies, Math and Reading, Writing and Communicating.

## **Business/Marketing Principles**

Semester Course / Credit: 5 per semester

\*Recommended Course for upper-level Business & Marketing Courses

Course Description: Do you have what it takes to run your own business, survive your next job, or climb the corporate ladder? Broaden your understanding of business inner-workings in this class! Play the Titan Business Simulation to crush your competition with your understanding of economies, the free enterprise system, business structures, supply and demand, human resources, operations, production, marketing, finance, management, and ethics. Once you catch your breath, try your hand at investing in the Stock Market Game where you will manage a \$100,000 portfolio! This class is highly recommended for students planning to take Marketing, Entrepreneurship or International Business.

\* Students have the opportunity to become members of Future Business Leaders of America (FBLA) and/or DECA.

## **Business Technology**

Semester Course / Credit: 5 per semester

\*Recommended Course for upper-level Business & Marketing Courses

Course Description: Do you have a love/hate relationship with your computer? Do you wish you could reduce the time you spend on homework and projects? High school and college students, as well as members of the workforce, are expected to not only operate a computer, but to be skilled in how to create professional looking documents and presentations. Business Technology will help you strengthen your knowledge of computer operations, sharpen your keyboarding skills, and broaden your skills in the Microsoft Office Applications - Word, Excel, and PowerPoint. This class is strongly recommended for freshmen and sophomores, as skills gained will support your other LHS academic coursework, and prepare you for college and future careers.

\* Students have the opportunity to become members of Future Business Leaders of America (FBLA) and compete.

## **Business Communications**

Semester Course / Credit: 5 per semester / Available for Business or English Credit

Course Description: Stand out from the crowd by learning to effectively communicate with others through speaking, writing and listening. Present yourself in a professional way so that you can achieve whatever goals you have in high school and beyond. Whether you are college bound or planning to work after graduation, if you plan on obtaining a career in your near or distant future, this class is for you! We will learn to: Effectively convey your skills and experience to others via resumes, LinkedIn and other online social profiles. Understand networking, interpersonal skills and the value of teamwork. Search, sort and curate information and practice presenting professionally on Google slides and PowerPoint. Write and format emails, business letters, requests for references and thank you letters. Craft appropriate language to use on job applications, during phone calls with prospective employers and at interviews. Become familiar with basic concepts in international business and business ethics.

\* Students have the opportunity to become members of Future Business Leaders of America (FBLA) and compete.

## **Personal Finance**

Semester Course / Credit: 3 per semester

Prerequisite: 11th or 12th Grade / Co-enrollment in Professional Employment Training Required

Course Description: Do you know what skills you will need to financially navigate the next five years of your life? Are you constantly wondering where your money went and why you don't have enough? This course is a MUST before you graduate and gain financial independence from your parents. 84 percent of 18 - 22 year-olds admit that they wish they had gotten more financial management education in high school before they were personally responsible for their own money management (Credit.com, 2013). In fact, 7.2 percent of students drop out of college because of debt or financial pressures before graduating, leaving them with all the debt and stress, but no college degree. Laying a strong financial foundation gives you the opportunity to someday have the home, cars and lifestyle you dream about. Personal Finance is designed to develop your knowledge of financial management through hands-on training in financial goals and budgeting. You will develop tools for financial success, saving, investment and credit. Highly recommended for seniors!

\* Students have the opportunity to become members of Future Business Leaders of America (FBLA) and compete.

## **Professional Employment Training (PET)**

Semester Course / Credit: 2 per semester

Prerequisite: 11th or 12th Grade / Co-enrollment in Personal Finance required

Course Description: Determine your career interests, develop your employment search skills and be prepared to be successful in this fast-paced professional development class. While learning to interact and communicate effectively with other professionals and co-workers, you'll also develop a professional resume, application letters, references, interview skills,

negotiating tactics, and networking competency. Become a prepared professional in your life beyond high school! Co-enrollment in Personal Finance is required; highly recommended for seniors!

\* Students have the opportunity to become members of Future Business Leaders of America (FBLA) and compete.

#### International Business

Semester Course / Credit: 5 per semester + 3 College Credits

\*Recommended prerequisite: Business Principles

Course Description: Develop your understanding of the interdisciplinary nature of international business. You will learn about the development of international business; theories and methods of international trade; financing mechanisms and terms used in export documentation and export finance; the effects of economics, political and cultural environment on international business and trade; impact of geography in business transactions; legal aspects of international business; and developing an effective international marketing strategy. This class is a concurrent enrollment class with Arapahoe Community College. The textbook is supplied for you. Earn a C or better and you will also earn 3 college credits in addition to the 5 credits at LHS.

\* Students have the opportunity to become members of Future Business Leaders of America (FBLA) and compete.

## **Marketing I-II**

Full-Year Course / Credit: 5 per semester

Course Description: When you come up with the next billion dollar idea or business plan, do you know how to convert your idea into sales and profit? Marketing I is designed to teach you to understand what drives customers and their buying habits. Using project based learning; you will explore sales, advertising, product development, pricing, entrepreneurship, management, communications and merchandising.

\*Students can become members in DECA, with the option to compete in DECA competition.

## **Advanced Marketing I-II**

Full-Year Course / Credit: 5 per semester - This course if offered every other year.

Prerequisite: Marketing I-II

Students who have completed Marketing I-II can further develop their skills of developing a successful business through the study of topics such as promotion, pricing, distribution, marketing information management, finance, interpersonal skills and career development. This class employs project based learning to develop skills in leadership, communication, ethics, goal setting and project implementation skills. Students will participate in the running of the DECA school store, where you will learn skills such as customer service, inventory and cash management, and on the job responsibilities.

\*Students will become members in DECA, with the option to compete in DECA competition.

## Sports & Entertainment Marketing NOT offered for 2017-2018 school year

Full-Year Course / Credit: 5 per semester

Course Description: Do you dream of one day being or working with professional athletes or entertainment superstars? In this class, you will develop a thorough understanding of marketing concepts and theories that apply specifically to the sports and entertainment industries. Emphasis is placed on different types of products and services, pricing, promotion, and the role of branding, image, licensing, and sponsorships. You will gain hands-on experience by planning and promoting a sports or entertainment event.

\* Students can become members in DECA, with the option to compete in DECA competition.

## Entrepreneurship

Semester Course / Credit: 5 per semester

Do you want to be your own boss? Are you ready to develop your best ideas into money-making ventures? Many of America's most successful companies started with one person who recognized an opportunity and did something about it. In Entrepreneurship, you will discover your entrepreneurial style, develop your business plan, learn how to bring your product or service ideas to market, and experience the excitement of developing your own company. Can you create a plan that will impress the Sharks (investors)? Topics include:

- Discovering Your Entrepreneurial Style explore ideas and opportunities, self-discovery
- Identifying and meeting a marketing need/want
- Developing your concept product creation, research the market and competition, SWOT analysis
- Writing a Business Plan and convincing the investors your business will work!

## **Community Employment Experience - OJT (on-the-job training)**

Full-Year/Semester Course / Credit: earn up to 10 per semester

\*Prerequisite or Concurrent Enrollment in: Professional Employment Training

<sup>\*</sup> Students have the opportunity to become members of DECA and/or FBLA and compete.

## **ENGLISH LANGUAGE DEVELOPMENT (ELD)**

## **Course Offerings and Descriptions**

English Language Development (ELD) is offered to students who are new to learning in an all-English environment. Teachers in this department are highly qualified in both ELD and core content areas to support student success in mainstream high school classrooms. Data from state-adopted WIDA (World-class Instructional Design and Assessment) assessments are used to determine appropriately leveled English language courses and a gradually staged transition into mainstream courses. It is the goal of the ELD department to ensure students acquire mastery of the four domains of language (reading, writing, speaking, and listening), as well as Colorado Academic Standards for English.

## **Language Arts Courses**

## **English Language Development 1**

Full Year Course / Credit: 15 per semester

Colorado Academic Standards: 1.1, 1.2, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: This course is designed for students who are new to learning in an English environment and score between 1.0 and 1.9 on the WIDA Access Rubric. Students will receive instruction in reading, writing, speaking, and listening in the English language. Lessons incorporate technology and promote the acquisition of 21st-century skills. Students are exposed to both fiction and nonfiction texts, which facilitate the development of grammatical structures and support the acquisition of Common Core vocabulary and literary skills. Students engage in text-based discussions, employ reading strategies to enhance comprehension and develop critical thinking skills. Regular oral presentations offer the opportunity to organize, prepare, and speak effectively in front of a variety of audiences. Units are designed to help students who are new to the U.S. adapt to and survive in their new school and the community as a whole.

## **ELD Transition Courses**

## Language Arts 9

Full Year Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: This course is taught by an instructor highly qualified in both Language Arts and ELD. The course parallels the mainstream course with similar content and goals, focusing on effective reading, writing, listening and speaking skills. Students receive additional supports and scaffolding to help them meet the rigorous expectations of academic English. Participation in both semesters is optional and at the discretion of the instructor, depending on the needs of the students.

## Language Arts 10

Full Year Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: This course is taught by an instructor highly qualified in both Language Arts and ELD. The course parallels the mainstream course with similar content and goals, focusing on effective reading, writing, listening and speaking skills. Students receive additional supports and scaffolding to help them meet the rigorous expectations of academic English. This course moves quickly through a variety of literature, skills, and knowledge, and provides students with the opportunity to refine and enhance their communications skills. In the first semester, students focus on their expository and persuasive writing skills, using a variety of literature as models. Editing and proofreading at this level emphasizes refinement of ideas as well as more sophisticated word choice and sentence structure. Students apply the research process to several course assignments.

## **Early Civilizations & World Geography**

Full Year Course / Credit: 5 per semester

Early Civilizations: Colorado Academic Standards: 1.1, 1.2, 1.3, 2.2, 2.3, 3.1, 3.2, 3.3, 4.2, 4.3

World Geography: Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3

Course Description: This course is taught by an instructor highly qualified in both Social Studies and ELD. It is a two-part course containing one semester of ancient history and one semester of world geography. Students learn about the development of early civilizations, early world empires and survey the five major world religions during the first semester. In the second semester, they examine elements of human and physical geography, emphasizing the themes of population, conflict, sustainable development and globalization. The course parallels the mainstream course, yet places greater emphasis upon language acquisition and literacy development while providing scaffolding to difficult concepts.

### **United States History (1870-Present)**

Full Year Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.2, 2.3, 3.1, 3.2, 3.3

Course Description: American History, (1870-Present), is taught by an instructor highly qualified in both Social Studies and English Language Development. It is an exciting, year-long course following the scope and sequence of LHS US History, which focuses primarily on the political, economic and social changes of the 20th century. The course includes an examination of the following questions:

- Economics: What has been the relationship between business, labor, natural resources and geography, politics, and international influences over the years?
- Politics: How have economic changes affected political decision making; how have political campaigns changed over the course of time; how have the three bodies of our federal government reacted to industrial, economic, and social changes?
- Foreign Diplomacy: What is war good for? How has America's foreign policy changed over the years; how are policies molded by national and international events and leaders?
- Social and Intellectual: Who are we as Americans? How has the past impacted today's society; what can be learned by examining our cultural heritage: art, music, film, TV, theatre, and literature?

This course parallels the mainstream US History course while placing greater emphasis upon language acquisition and literacy development to support English language learners.

## **ELD Content Support Courses**

## **ELD Content Support - Algebra 1**

Math Full Year Course / Credit: 5 per semester

Course Description: Taken in conjunction with Algebra 1 (freshman math), ELD students are directly instructed in foundational concepts that form a basis for success in mathematics. Students develop their skills in mathematical discourse, numeracy, problem solving and vocabulary usage.

## **ELD Content Support - Integrated Science 1-4**

Science Full Year Course / Credit: 5 per semester

Course Description: ELD students take this course in conjunction with Integrated Science 1, 2, 3, and 4. Students receive instruction in essential science concepts and vocabulary that is front-loaded and reviewed to strengthen their focus for successful integration in the mainstream class.

#### **ELD Reading/Writing Workshop**

Full Year Course / Credit: 3 per semester

Course Description: ELD students who score between 1.0 - 3.5 on the WIDA Access Rubric take this course in conjunction with Language Arts 9 and/or 10. The course prepares students for the research-based courses they will encounter in eleventh grade. Students build background knowledge, conduct research, utilize reading strategies, and develop composition skills. Students also develop oral presentation skills.

## **ELD Study Skills**

Full Year Course / Credit: 2 per semester

Course Description: In this course, English language learners receive assistance and tutoring for their mainstream classes, as well as language support for all areas of academic study.

## **FAMILY AND CONSUMER SCIENCES**

A quality comprehensive Family and Consumer Sciences curriculum includes:

- > Consumer and Resource Management
- ➤ Interior Design
- Culinary Arts
- ➤ Individual, Child/Adolescent and Family Development
- > Personal and Professional Development

## **Teen Choices**

Semester: I / Credit: 5 per semester Grades: 9, 10 / \*Opt-In Note is Required

Course Description: You can expect this course to be one of your favorite classes. Why? Because it is all about you, your struggles, your relationships and the decisions you are faced with daily. This course is designed to help you acquire academic knowledge and understanding necessary for critical thinking and healthy decision-making. Aligns with Colorado Academic Standards: Reading, Writing, & Communicating, and National Industry Standards.

## **Child Development**

Semester: I & II / Credit: 5 per semester

Grades: 9 - 12

Course Description: Do you want to be a pediatrician, teacher, child care provider or child psychologist? This course will explore theories of human development, history of parenting styles and responsibilities; advantages of family planning; identify and prevention of child abuse/neglect; and career opportunities. Aligns with Colorado Academic Standards: Reading, Writing, & Communicating, and National Industry Standards.

Textbook: Parents and Their Children

## **Relationships**

Semester: II / Credit: 5 per semester Grades: 11, 12 / \*Opt-In Note Is Required

Course Description: Do you like interactive classes? Communication is the most important key to success in all aspects of life. People who have a positive self-image and build healthy relationships experience success in their personal, family, and professional lives. Due to changing relationships and lifestyle trends within our society, there is an increasing need for developing healthy, stable, critical thinkers through personal and family life studies. Aligns with Colorado Academic Standards: Reading, Writing, & Communicating, and National Industry Standards.

Textbook: Families Today

#### Culinary Essentials I & II

Full-Year Course / Credit: 5 per semester

Grades: 9-12

\*Prerequisite: Must pass Culinary Essentials I with a 70 percent or better to take Culinary Essentials II

\*Fee: \$30 each semester

## **Culinary Essentials I**

This class is an introduction to the world of culinary arts. Classes are comprised of a combination of formal instruction, food preparation labs, demonstrations and observations. The focus for the semester will be on culinary cooking techniques, professional kitchen equipment, culinary nutrition, baking and pastry, career opportunities, planning a catered event, and basic dining service. Aligns with Colorado Content Standards: Reading, Writing and Communicating; Mathematics and National Industry Standards.

Textbooks: Culinary Essentials & Guide To Good Foods

## **Culinary Essentials II**

This class is a continuation of Culinary Essentials I. This semester-long course will serve as the foundation of techniques to produce all fine cuisine. The focus will be on: garde manger, seasonings and flavorings, international cuisine, American regional cuisine, dining service skills, culinary nutrition and sensory analysis, planning a catered event, and career

<sup>\*</sup> You will be required to participate in the Real Care Baby Simulation.

opportunities. Aligns with Colorado Content Standards: Reading, Writing and Communicating; Mathematics and National Industry Standards.

Textbooks: Culinary Essentials & Guide to Good Foods

## **Interior Design I & II**

Full-Year Course / Credit: 5 per semester

Grades: 10-12
\*Fee: \$30 for the year

Course Description: Are you interested in the interior design, architecture or other types of design? This year-long course will include the understanding of blueprints, basic construction of homes: elements and principles of design; color harmonies; furniture styles; construction and arrangement of furniture; textile coordination; computer drafting; architectural scales and career exploration. At the end of this course you will have many portfolio-ready projects. Aligns with CO Academic Standards: Reading, Writing & Communicating #1 & #2; Mathematics #4 and National Industry Standards.

Textbook: Homes & Interiors

## **LANGUAGE ARTS**

## **Language Arts Sequence of Courses**

## Regular Sequence:

Grade Level	Courses	Graduation Credit
9	Language Arts 9	10
10	Language Arts 10	10
11	Electives	10
12	Electives	10
	Total Language Arts Credits:	40

## **Honors/AP/IB Curriculum Sequence:**

Grade Level	Courses	Graduation Credit
9	Language Arts 9 Honors	10
10	Language Arts 10 Honors	10
11	Comp World Lit Honors / IB 11 <sup>th</sup>	10
12	AP English / IB 12 <sup>th</sup>	10
	Total Language Arts Credits:	40

NOTE: While LHS encourages students to challenge themselves by taking Honors courses, any transfer into a regular course MUST take place within the first six weeks of the semester.

## Colorado Academic Standards at a Glance

READING, WRITING, AND COMMUNICATING

Ninth Grade	Grade Level Expectation	
Oral Expression and     Listening	<ol> <li>Oral presentations require effective preparation strategies</li> <li>Listening critically to comprehend a speaker's message requires mental and physical strategies to direct and maintain attention</li> </ol>	
2. Reading for All Purposes	<ol> <li>Increasingly complex literary elements in traditional and contemporary works of literature require scrutiny and comparison</li> <li>Increasingly complex informational texts require mature interpretation and study</li> </ol>	
3. Writing and Composition	<ol> <li>Literary and narrative texts develop a controlling idea or theme with descriptive and expressive language</li> <li>Informational and persuasive texts develop a topic and establish a controlling idea or thesis with relevant support</li> <li>Writing for grammar, usage, mechanics, and clarity requires ongoing refinements and revisions</li> </ol>	
4. Research and Reasoning	<ol> <li>Informational materials, including electronic sources, need to be collected, evaluated, and analyzed for accuracy, relevance, and effectiveness for answering research questions</li> <li>Effective problem-solving strategies require high-quality reasoning</li> </ol>	
Tenth Grade	Grade Level Expectation	
Oral Expression and     Listening	<ol> <li>Content that is gathered carefully and organized well successfully influences an audience</li> <li>Effectively operating in small and large groups to accomplish a goal requires active listening</li> </ol>	
2. Reading for All Purposes	<ol> <li>Literary and historical influences determine the meaning of traditional and contemporary literary texts</li> <li>The development of new ideas and concepts within informational and persuasive manuscripts</li> <li>Context, parts of speech, grammar, and word choice influence the understanding of literary, persuasive, and informational texts</li> </ol>	
3. Writing and Composition	<ol> <li>Literary or narrative genres feature a variety of stylistic devices to engage or entertain an audience</li> <li>Organizational writing patterns inform or persuade an audience</li> <li>Grammar, language usage, mechanics, and clarity are the basis of ongoing refinements and revisions within the writing process</li> </ol>	
4. Research and Reasoning	<ol> <li>Collect, analyze, and evaluate information obtained from multiple sources to answer a question, propose solutions, or share findings and conclusions</li> <li>An author's reasoning is the essence of legitimate writing and requires evaluating text for validity and accuracy</li> </ol>	

## Language Arts 9

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: This course offers training in effective reading, writing, listening and speaking skills, all vital to success in high school. Students study literature as the primary, though not exclusive, basis for instruction in these skills. They read novels, short stories, poetry, drama, nonfiction, and essays. Students learn reading strategies and examine the elements of literature and literary techniques as the basis for analyzing, interpreting, and evaluating. Students write both expository and creative pieces which emphasize critical thinking, research skills, analysis, originality, and organization as well as editing and proofreading. They are accountable for using appropriate punctuation and grammar, correct spelling, and an expanded vocabulary. Students give informative and persuasive speeches which demonstrate effective organization, critical thinking, and presentation skills. Students learn listening strategies in order to analyze a speaker's purpose, gain information, and interpret meaning. Completion of this course prepares students for success in other classes.

## **Language Arts 9 Honors**

Full-Year course / Credit: 5 per semester

Prerequisite: Capability and desire to participate in high-level, advanced literary studies.

Colorado Academic Standards: 1.1, 1.2, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: This accelerated course offers students an opportunity to strengthen their reading, writing, listening, speaking, and critical thinking skills. Students learn reading strategies and examine the elements of literature and literary techniques as the basis for analyzing, interpreting, and evaluating. Students engage in critical analysis of texts in preparation for further advanced studies. Students write both expository and creative pieces, which emphasize critical thinking, research skills, analysis, originality, and organization as well as editing, and proofreading. They are accountable for using appropriate punctuation and grammar, correct spelling, and expanded vocabulary. Students give individual speeches, as well as group presentations which demonstrate effective organization, critical thinking, and presentation skills. They also focus on Socratic seminars as a means of demonstrating depth of knowledge and understanding.

## **Language Arts 10**

Full-Year Course / Credit: 5 per semester

Prerequisite - LA 9

Colorado Academic Standards: 1.1, 1.2, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: This course emphasizes further knowledge, practice, and application of the four basic areas of communication: reading, writing, speaking, and listening. This course moves quickly through a variety of literature, skills, and knowledge at a more sophisticated level than Language Arts 9, and provides students with the opportunity to refine and enhance their communications skills. In the first semester, students focus on their expository and persuasive writing skills, using a variety of literature as models. Editing and proofreading at this level emphasizes refinement of ideas as well as more sophisticated word choice and sentence structure. Students apply the research process to several course assignments. Successful completion of this program provides a foundation for both vocational and college preparatory classes.

## **Language Arts 10 Honors**

Full-Year Course / Credit: 5 per semester

Prerequisite - Successful completion of LA 9 or LA 9H

Colorado Academic Standards: 1.1, 1.2, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: This year-long course, designed for the above-average, hard-working student, serves as preparation for the higher-level I.B. and/or Honors/A.P. courses. This challenging course concentrates in depth on the literary analysis as well as the literary quality of classic and contemporary literature. Critical analysis of distinguished literature gives students practice comparing and contrasting the values, characteristics, problems, and pressures existing in a variety of cultures past and present.

## **Comparative World Literature Honors**

Full-Year Course / Credit: 5 per semester

\*11th Grade

Prerequisite - Students should have the approval of 10th grade Language Arts instructor, as well as the capability and desire to participate in high-level, advanced literary studies.

Course Description: This challenging course is an in-depth study of world literature designed to prepare honors students for A.P. English. Students analyze literary works for their literary excellence, social significance, and personal meaning. These works include selected novels, plays, poetry, and essays. Students compare literature that belongs to our common heritage and literature of other cultures.

## **IB Comparative World Literature**

Full-Year Course / Credit: 5 per semester

\*11th Grade

Prerequisite – The student must be admitted to the IB diploma program.

Course Description: This challenging course is the first level of a two-year, in-depth study of world literature designed to prepare IB candidates for the Language A-1 Higher Level assessments required of the International Baccalaureate program. Students analyze literary works for their literary excellence, social significance, and personal meaning. These works include selected novels, plays, poetry, and essays. Students compare literature that belongs to our common heritage and literature of other cultures. Students also begin the 1200-1500-word comparative world literature essay.

#### **IB Advanced Literature Studies**

Full-Year Course / Credit: 5 per semester

\*12th Grade

Prerequisite - The student must have completed Comparative World Literature IB.

NOTE: Non-IB students may take this course and earn an IB Certificate if seats are available.

Course Description: This challenging course is a continuation of Comparative World Literature IB and completes the two-year in-depth study of world literature designed to prepare IB candidates for the Language A1 Higher Level assessment required of the International Baccalaureate program. Students will complete essays and responses (timed and untimed), individual/group literary projects and group seminars and discussions. Students are expected to read in-depth, to write with practiced facility, and to initiate perceptive and articulate discussions.

Students will complete all IB assessments including the following:

- Oral Commentary which is scored by the teacher and moderated by an IB committee
- World Literature paper which is scored by an IB committee
- I.B. Exam which is scored by the IB committee and counts 45 percent of the total Language A1 IB score

## **Advanced Placement Literature and Composition**

Full-Year Course / Credit: 5 per semester

\*12th Grade

Prerequisite - Students should have the approval of 11th grade Language Arts instructor, as well as the capability and desire to participate in a high-level, advanced literature course. It is also required that students complete a summer reading assignment in order to gain enrollment in the course.

Course Description: The AP Literature and Composition course is open to a limited number of qualified and highly motivated seniors. The course builds on the analytical skills acquired in previous honors Language Arts courses and prepares college-bound seniors for the rigors of college writing. Preparation for the College Board Advanced Placement Literature exam is emphasized in the form of frequent in-class essays and grading scales that are based on College Board's numerical scale. Qualified students who enroll in the course are expected to read widely and in depth, to write with competence, and to initiate perceptive and articulate discussions. Discussions, presentations and written assignments will focus on the craft of writing, in other words the choices writers make and the effects those choices have on audiences. This course, as all courses in the Language Arts Department, emphasizes the four communication skills of writing, reading, speaking, and listening.

## LHS Language Arts Department Guide for Upper-level electives

To insure that all LHS students are exposed to the full district curriculum during each of their four years, the LA department has established the following structure for Junior and Senior elective courses. In the 11th and 12th grade, students may choose four semester-long electives, two from each category below:

"A" Electives

READING

Genres: novel, short story, poetry, drama Purposes: criticism, literary techniques

Comprehension strategies

**Reading Process** 

WRITING

Persuasive, critical (literary), argumentative, expository

**Writing Process** 

**SPEAKING** 

Formal speech—persuasive

Discussion (Socratic)

**VIEWING & LISTENING** 

Purposes: Process Acquire info Critique Appreciate

Current Courses: Science Fiction American Lit

Poetry

"B" Electives

READING

Genres: non-fiction, essay Purposes: gather information Comprehension Strategies

**Reading Process** 

WRITING

Personal, expressive, creative, practical and technical

Writing Process

SPEAKING

Speaking to express (oral interpretation)

Discussion

**VIEWING & LISTENING** 

Purposes: Process Acquire info Critique Appreciate

Current Courses: Expository Writing Debate & Discussion

Screenwriting & Video Production

Yearbook Newspaper Creative Writing

## **ELECTIVE COURSES 11TH & 12TH GRADE OPTIONS**

## **American Literature**

Semester Course / Credit: 5 per semester

\*Elective

Course Description: This survey course allows students to experience the range of American Literature in-depth, focusing or historical trends and cultural themes. Highly recommended for the college-bound student, this course focuses on literary techniques and analysis, as well as critical writing. Reading, analysis, and critical writing are the key focus areas of this course.

## **Creative Writing**

Semester Course / Credit: 5 per semester

\*Elective

Course Description: Creative Writing enables students to explore new realms of writing and thinking. Students craft work in the areas of poetry, autobiography, satire, character sketch, informal essay, humor, children's literature, short story, and drama. The primary virtue of this class will be regular writing practice. A variety of exercises will be employed to stimulate new insight and expression. This is a participatory class: lectures are limited, students do most of their work in class, including sharing their writing with others and critiquing peer work.

#### **Debate & Discussion**

Semester Course / Credit: 5 per semester

\*Elective

Course Description: In Debate and Discussion, students will learn argumentative theory and practice, from argument construction to use of evidence and case writing. Additionally, students will increase their comfort and aptitude in their public speaking skill set. Students will practice their debate skills in a variety of settings, from Congressional-style policy debate to Lincoln-Douglas philosophical debate.

## **Newspaper**

Full-Year Course / Credit: 5 per semester / Language Arts or Practical Arts credits

Prerequisite - Application completed and approved by advisor and some advertising selling is required

\*Elective: 10 - 12

Course Description: Students become integral, involved members of the staff of The Lions' Roar, the school newspaper, which is produced by the members of this class. As reporters, students become aware of and are directly involved in activities and events at LHS because assignments involve working with people in real circumstances. The opportunities to develop leadership abilities and to gain experiences in communication are unlimited. Students collaborate on every aspect of production, and work extensive hours, both in and out of class. Students enrolled in this course are required to pay an activity fee

\*Fee: \$25 for the year

## **Expository Writing**

Semester Course / Credit: 5 per semester

\*Elective

Course Description: In this intensive writing course, students have the opportunity to improve their expository writing skills. In class, students implement peer-editing techniques; students must be willing to critique others' writing in detail and share their own writing in small groups. Students use the writing process, and spend ample time revising their own drafts. Outside of class, students are expected to revise their writing and read supplemental materials on a variety of expository pieces used for modeling. This course is recommended for juniors and seniors interested in writing.

## **Poetry**

Semester Course / Credit: 5 per semester

\*Elective

Course Description: This course is designed to increase knowledge and enjoyment of poetry through the study of a variety of poems and poets. The course focus is on experiencing poetry as one means that people use to understand and express what it means to be human. Another underlying assumption of the class is that most poetry is meant to be heard, not read. Therefore, students can expect to participate in this class in three ways: finding poetry that fits the class assignment then presenting them in class, participating in the discussion of poems presented by other students, and writing their own poems. Modern American poets will be emphasized, with poetry from other cultures and other times used as comparative materials. Writing assignments involving poetic analysis and original poetic works will be required. This course examines poetic expression of experiences and emotions as its thematic emphasis.

## **Science Fiction**

Semester Course / Credit: 5 per semester

\*Elective

Course Description: Science Fiction provides an introductory survey of science fiction literature. Students will read, listen to, view and discuss science fiction, focusing on technology and change. Science fiction is studied as literature, as an artifact of culture, and for personal enjoyment. Critical reading, analysis, and argumentative and creative writing are the main focus points of the course.

## Yearbook

Full-Year Course / Credit: 5 per semester / Language Arts or Practical Arts credits

\*Elective: 10 - 12

Course Description: The yearbook expresses, through design, theme, color, typography, photography, and writing, the essence of the school year. For their peers and posterity, students produce a 300+ page book, including as much color as the program can afford, plus a spring magazine-type supplement. Students become knowledgeable in magazine-style journalism and collaborate on every aspect of production, working extensive hours both in and out of class. The teacher by title has purely an advisory role. Students enrolled in this course are required to pay an activity fee

\*Fee: \$25 for the year

## **Screenwriting/Video Production**

Semester Course / Credit: 5 per semester

\*Elective

Course Description: Screenwriting and Video Production is LHS's only course for the aspiring filmmaker. This course concerns itself with all aspects of film based communication. Students will receive a solid grounding in dramatic concepts (plot, character development, script format and theory) while crafting and developing their own professional scripts. Furthermore, students will experience hands-on filmmaking as they apply video technology and computer editing to the scripts they've written-both in dramatic and informative (documentary) styles. The primary work of the course is student-driven projects, with guidance from the instructor. All students should expect to work collaboratively throughout the semester.

(NOTE: this course does not fulfill NCAA Language Arts requirements)

## Rock 'n' Pop from A-Z

Semester Course / Credit: 5 per semester

\*Elective: 11-12

Course Description: Rock 'n' Roll and Pop music have been among the most significant contributors to modern American culture. Through articles and book passages, lyric studies, video recordings, and listening to songs, the course will focus on the rise of popular music, from 1955 through 1970. The course will examine many genres including folk music, rock music, blues, R&B, the "British Invasion" vs. the California sound, folk-rock and protest music, psychedelic music and acid rock, and progressive rock and the experimental music of the late 60's. In this course students will develop an understanding of the structure of various musical works, including blues and ballad forms, and the ways they were blended to create rock 'n' roll. Songs will be examined in the historical context of their place in a rapidly changing American culture. Among the artists whose works will be examined: The Animals, The Beatles and the Beach Boys, The Coasters, Bob Dylan, Elvis,... Led Zeppelin. (Get it? A to Z)(NOTE: this course does not fulfill NCAA Language Arts requirements)

## **MATHEMATICS**

## Philosophical Assumptions

Mathematics is a coherent and useful discipline used to develop problem-solving skills for real life applications.\* "All students should have the opportunity and the support necessary to learn significant mathematics with depth and understanding."\*\* The essential components of the Littleton Public Schools mathematics curriculum are taught through research-based instructional practices.

Components of the Littleton Public Schools comprehensive mathematics curriculum include the new Common Core State Standards and the Colorado Academic Standards for Mathematics:

- Number Sense, Properties, and Operations (State Standard 1)
- Patterns, Functions, and Algebraic Structures (*State Standard 2*)
- Data Analysis, Statistics and Probability (State Standard 3)
- Shape, Dimension, and Geometric Relationships (*State Standard 4*)

The Littleton Public Schools comprehensive mathematics curriculum integrates "Standards for Mathematical Practice".

#### Students will:

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.
- Use multiple representations (analytic, numerical, graphical, and verbal) of mathematical phenomena to develop models and solve problems. \*\*

<sup>\*\*</sup>NCTM Principles and Standard for School Mathematics: An Overview, pg 14

# **Mathematics Sequence of Courses**

For incoming students who have completed 8th grade mathematics equivalent.

### **Regular Sequence:**

Grade Level	Courses	Graduation Credit
9	Algebra	10
10	Geometry	10
11	Algebra II / Probability & Statistics	10
12	Trig/Pre-Calc	10
	Total Mathematics Credits:	40

### **Honors Sequence:**

Grade Level	Courses	Graduation Credit
9	Algebra Honors	10
10	Geometry Honors	10
11	Algebra II Honors	10
12	Trig/Pre-Calc Honors / IB Math Studies / AP Statistics	10* 10* 10*
	Total Mathematics Credits:	40

This program would allow students to attain an IB diploma by taking IB Mathematical Studies, a Pre-Calculus based IB math course. They would also be able to reach the AP level statistics class.

Students wanting to take an IB or AP Calculus course would need to take two math classes for at least one school year. We recommend that students do that during their 10th grade year, and take Geometry and Algebra II concurrently.

For incoming students who have completed  $9^{th}$  grade mathematics equivalent.

#### **Regular Sequence:**

Grade Level	Courses	Graduation Credit
9	Geometry	10
10	Algebra II	10
11	Trig/Pre-Calc	10
12	AP Calculus AB or Prob/Stat	10
	Total Mathematics Credits :	40

#### **Honors/AP/IB Curriculum Sequence:**

Grade Level	Courses	Graduation Credit
9	Geometry Honors	10
10	Algebra II Honors	10
11	Trig/Pre-Calc Honors / IB Math Studies / AP Statistics	10* 10* 10*
12	IB Math Studies / AP Statistics / IB Calculus / AP Calculus AB / AP Calculus BC	10* 10* 10* 10* 10*
	Total Mathematics Credits:	40

<sup>\*</sup> Choices of mathematics course for grade level

#### Algebra I

Full-Year Course / Credit: 5 per semester

Course Description: Algebra 1 incorporates the Colorado Common Core content standards of mathematics. The curricular areas deepen and extend the understanding of functions in linear, quadratic, and exponential situations. Students will engage in methods for analyzing, solving and using these families of functions. The mathematical practice standards, which include abstract and quantitative reasoning, constructing viable arguments, modeling, and attention to precision, applied throughout the course encourage students to experience mathematics as a coherent, useful, and logical subject. A TI-Nspire or TI-84 plus graphing calculator is highly recommended.

9th grade students taking this course will be co-enrolled in Math Methods.

Topics include:

- Functions and function notation
- Polynomial expressions
- Solving equations and inequalities
- Solving systems of equations
- Properties of linear, quadratic, and exponential functions
- Analyze, represent and interpret quantitative data

#### Algebra I Honors

Full-Year Course / Credit: 5 per semester

\*This course meets concurrently with Algebra I

Course Description: This course incorporates the same Colorado Common Core content standards of mathematics as Algebra 1. It is enriched with a more rigorous approach to all the topics and requires a more in-depth consideration of the content. A TI-Nspire or TI-84 plus graphing calculator is highly recommended.

9th grade students taking this course may be co-enrolled in Math Methods.

#### **Math Methods**

Full-Year Course / Credit: 1 per semester

\*Taken Concurrently with Algebra 1 or Geometry

Course Description: Math Methods is a class into which all 9th grade Algebra 1 and 10th grade Geometry students will be co-enrolled. It will focus on the skills and the basic mathematics concepts needed to be successful in the mathematics sequence. It will emphasize numeracy, computation, algebra and geometry. Exemption will be based on enrollment in other support classes (ELA or Special Educations), MAP score achievement (240 for 9<sup>th</sup> grade, 245 for 10<sup>th</sup> grade) or teacher recommendation.

#### Geometry

Full-Year Course / Credit: 5 per semester

Course Description: Geometry incorporates the Colorado Common Core content standards of mathematics.

Students will explore more complex geometric situations and deepen their explanations of geometric relationships. For example, transformations in the plane are addressed early in the course, and congruence is defined in terms of rigid motion. Students are moving towards formal mathematical arguments (proof). The mathematical practice standards, which also include constructing viable arguments, use appropriate tools strategically, and look for and make use of structure applied throughout the course encourage students to experience mathematics as a coherent, useful, and logical subject. A TI-Nspire or TI-84 plus graphing calculator is highly recommended.

10th grade students taking this course will be co-enrolled in Math Methods. Students will make use of interactive geometry software throughout the course.

Topics include:

- Congruence, proof, and constructions
- Similarity and trigonometry
- Transformations
- Extending to three dimensions
- Coordinate geometry
- Circle geometry
- Applications of probability

#### **Geometry Honors**

Full-Year Course / Credit: 5 per semester \*This Course meets concurrently with Geometry

Course Description: This course incorporates the same Colorado Common Core content standards of mathematics as Geometry. It is enriched with a more rigorous approach to all the topics and requires a more in-depth consideration of the content. A TI-Nspire or TI-84 plus graphing calculator is highly recommended.

#### Algebra II

Full-Year Course / Credit: 5 per semester

#### **Prerequisite - Geometry**

Course Description: Algebra II incorporates the Colorado Common Core content standards of mathematics. Based on previous work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions and continue to expand their abilities to model situations and solve equations. For example, students solve quadratic equations over the set of complex numbers and solve exponential equations using the properties of logarithms. The mathematical practice standards, which include abstract and quantitative reasoning, constructing viable arguments, modeling, and attention to precision, applied throughout the course encourage students to experience mathematics as a coherent, useful, and logical subject. A TI-Nspire or TI-84 plus graphing calculator is highly recommended.

Topics include:

- Polynomial, rational, and radical relationships
- Trigonometric functions
- Modeling with functions
- Inferences and conclusions from data
- Complex number system
- Fundamental theorem of algebra

#### Algebra II Honors \*This course may meet concurrently with Algebra II

Full-Year Course / Credit: 5 per semester

\*Prerequisite – Geometry or permission of instructor

Course Description: This course incorporates the same Colorado Common Core content standards of mathematics as Algebra II. It is enriched with a more rigorous approach to all the topics and requires a more in-depth consideration of the content. A TI-Nspire or TI-84 plus graphing calculator is required.

#### **Trigonometry/Pre-Calculus**

Full-Year Course / Credit: 5 per semester

\*Prerequisite - Algebra II or 11th grade math equivalent

Course Description: Trigonometry/Pre-Calculus integrates the four strands of secondary, college preparatory mathematics in problem-based units. Concepts covered include modeling real world situations with various mathematical representations and families of functions, geometric transformations, trigonometry, and composition of functions. The classroom focuses on maintaining a balance between mathematical skills and investigation, problem solving, technology and communication. Students demonstrate mastery of concepts through a variety of assessment techniques, including traditional tests of skills, written explanations of mathematical reasoning and oral presentations. A TI-Nspire or TI-84 plus graphing calculator is required

#### **Trigonometry/Pre-Calculus Honors**

Full-Year Course / Credit: 5 per semester

\*Prerequisite – Algebra II Honors or permission of instructor

Course Description: In addition to the material covered in Trigonometry/Pre-Calculus, students would be expected to demonstrate a deeper level of understanding of the concepts. Inductive and deductive reasoning is used to examine and develop proofs of mathematical theorems and properties. A TI-Nspire or TI-84 plus graphing calculator is required.

#### **Probability and Statistics**

Full-Year Course / Credit: 5 per semester

\*Prerequisite - Algebra II

Course Description: Statistics is the study of how to collect, organize, analyze and interpret information, specifically numerical data collected from sample populations. This course also covers elementary probability concepts—how and where it is used. The relationship between probability and statistics will be analyzed, and methods for communicating results will be explored.

#### **Advanced Placement Statistics**

Full-Year Course / Credit: 5 per semester

\*Prerequisite – Algebra II Honors or permission of instructor

Course Description: This study of statistics will introduce the student to the major concepts and tools for collecting, analyzing, and drawing conclusions about data. Emphasis will be placed on conceptual understanding of the fundamental principles of modern statistics, including descriptive and inferential statistics, correlation, probability, confidence intervals and hypothesis testing. Students will also be asked to design statistical experiments. Purchase of the textbook is recommended, though optional.

#### IB Mathematical Studies SL - (Formerly Functions, Statistics, and Trigonometry (FST))

Full-Year Course / Credit: 5 per semester

\*Prerequisite – Algebra II or permission of instructor

Course Description: This course is part of the IB Diploma Program and prepares students for the IB Math Studies Exam. This course is designed to integrate concepts related to geometry, trigonometry, probability, statistics, functions and the business application of sequences and linear programming. The course will include the topics of estimation, approximation and error, significant figures, sets, logic, vectors, matrices and various functions. During this course each student will complete a project based on research involving the collection, analysis and evaluation of data.

#### **IB Calculus IB Mathematics SL**

Full-Year Course / Credit: 5 per semester

\*Prerequisite - Trigonometry/Pre-Calculus honors or permission of instructor.

Course Description: This course is part of the IB Diploma Program and prepares students for the IB Mathematics SL Exam. The course covers the first semester of a typical Calculus course, a study of rates of change, applications of the derivative, and an introduction to Integral Calculus. Other topics covered include error analysis, coordinate geometry, the binomial theorem, trigonometry, vectors, matrices, probability, and statistics.

#### **Advanced Placement Calculus AB**

Full-Year Course / Credit: 5 per semester

\*Prerequisite - Trigonometry/Pre-Calculus honors or permission of instructor.

Course Description: Calculus is the study of the mathematics of change and motion. The course will include the properties and limits of algebraic and transcendental functions, and techniques of differentiation and integration. Special emphasis is given to applications of the derivative and the integral. The class will utilize computer software and graphing calculators.

The TI-Nspire or 84 plus calculator is required. Purchase of the textbook is recommended, though optional. AP study guides may be required. Students will be required to attend a minimum of three 9<sup>th</sup> period Calculus Discussion Groups per six weeks.

#### Advanced Placement Calculus BC

Full-Year Course / Credit: 5 per semester

\*Prerequisite - Trigonometry/Pre-Calculus honors or permission of instructor.

Course Description: Calculus is the study of the mathematics of change and motion. In addition to all the topics from AP Calculus AB, This course includes the study of differential equations, exponential and logistic growth, improper integrals, infinite sequences and series, parametric functions, and the calculus of vectors. Special emphasis is given to applications of the derivative and the integral. The class has a faster pace than Calculus AB, and is the equivalent of two semesters of college calculus. The class will utilize computer software and graphing calculators. The TI-Nspire or 84 plus calculator is required. This course also serves as the first year of the IB Higher Level Math sequence. Purchase of the textbook is recommended, though optional. AP study guides will be required. Students will be required to attend a minimum of three 9<sup>th</sup> period Calculus Discussion Groups per six weeks.

#### **Beyond Calculus IB Mathematics HL**

Full-Year Course / Credit: 5 per semester

\*Prerequisite - AP Calculus BC or permission of instructor

Course Description: This course is part of the IB Diploma Program and prepares students for the IB Mathematics HL Exam. This course will introduce students to a number of mathematical topics that are traditionally studied after the study of Calculus. Topics studied in this course will include three-dimensional vectors, matrices, probability, statistics, first order differential equations, and complex numbers.

#### **AP Calculus Discussion Group**

Full Year Course / Credit: 0.5 per semester

Course Description: To provide additional in-depth study and contact time, students will attend 9th period discussion groups for teacher facilitated discussion, questioning, and clarification of the topics covered in AP Calculus AB and AP Calculus BC. Students will be required to attend a minimum of three groups per six week grading period.

#### **Introduction to Computer Science**

Semester Course / Credits: 5 per semester

\*Prerequisite - Algebra I or equivalent

Course Description: This is a semester-long course that will introduce students to the fundamentals of computer science. Student will learn how to use the Processing language to create images and basic animations using variables, conditionals and loops. Students will also learn the basic of the object oriented programming paradigm. Topics of study include variables, conditionals, loops, and functions. The course will use project based assessments.

#### **Introduction to Computer Science 2**

Semester Course / Credits: 5 per semester

\*Prerequisite - Algebra I, Intro to CS 1 (recommended, but not required)

This is a semester long course that will allow students to apply the fundamentals of computer science. Students will learn to read and write Swift code to create apps using iOS software, iPhone and iPad apps. Students will also learn the basics of object oriented programming paradigm. Topics of study include the use of Xcode, construction of app interfaces, layout and position of user elements, handle user interaction, create apps with multiple screens, display images, perform animations, play sounds, use timers, parse data, use conditional logic, and how to debug and troubleshoot code. The course will use project based assessments.

### PERFORMING ARTS

### Performing Arts Philosophical Assumptions

The performing arts encompass the study of music, theatre and expressive movement. The curriculum prepares students for a greater appreciation of life through a variety of performance experiences and challenges. Students benefit from this curriculum because it develops the whole person in the areas of expression and communication, cultural diversity, cognitive, physical and social development, and self-confidence.

### Performing Arts 4-year Pathways

Performing Arts ensembles/classes are available to students throughout their four years at Littleton High School. There are many students who participate in one or more ensembles/classes each year.

Listed below are the pathways for Theatre, Vocal Music and Instrumental Music that are possible for students.

#### VOCAL MUSIC THEATRE INSTRUMENTAL MUSIC "Concert Choir" "Intro to Drama" "Women's "Lion Pride "Chamber Grades 9-12 Ensemble" Grades 9-12 Marching Orchestra" Semester Course Grades 9-12 Band" Auditioned Choir Grades 9-12 Non-Audition Choir Men and Women Grades 9-12 Year-long Course Brass, Woodwinds, Percussion, "Acting Study 1" Colorguard Grades 10-12 "Svrens" Semester "Jazz Bands" Year-long Course Grades 10-12 Course Grades 9-12 Auditioned Choir Year-long Women Only Course "IB/Acting Study "Troubadours" "Symphonic Grades 11-12 Grades 10-12 Band" "Chordially "Wind Year-long Course Auditioned Choir Grades 9-12 Yours" Ensemble" Men and Women Year-long Grades 10-12 Grades 9-12 Course **Auditioned Choir** Year-long "IB/Theatre Women Only Course Company" Grade 12 Year-long Course "Manwich" "Extra-curricular Instrumental "Vocal Jazz" Grades 10-12 Activities" Grades 10-12 Auditioned Choir "Extra-curricular Grades 9-12 Auditioned Choir Men Only Theatre Musical Pit Orchestra, Auditions Men and Women Activities" offered for All State Band, All State Grades 9-12 Jazz Band, All State Orchestra, Fall Play, Musical,

## "Extra-curricular Choir Activities" Grades 9-12

Spring Play,

Improv Club,

Improv Troupe,

Cabarets,

Thespians,

Thespian

Convention

Musical, Auditions offered for All State Choir. All State Jazz Choir, Continental League Honor Choir, National and Regional Honor Choirs, Troubadours caroling, major tour opportunities every three years.

Western States Honor Orchestra, CU Honor Band, CSU Honor Band, major tour opportunities every three years.

#### IB MUSIC

Grades 11-12 IB Music 1 and IB Music 2

# Colorado Academic Standards at a Glance

# DRAMA AND THEATRE

High School - Exter	High School - Extended Pathway		
1. Create	<ol> <li>Character development in improvised and scripted works</li> <li>Technical design and application of technical elements</li> <li>Ideas and creative concepts in improvisation and play building</li> <li>Creation, appreciation, and interpretation of scripted works</li> </ol>		
2. Perform	<ol> <li>Drama and theatre techniques, dramatic forms, performance styles, and theatrical conventions that engage audiences</li> <li>Technology reinforces, enhances, and/or alters a theatrical performance</li> <li>Direction or design of a theatrical performance for an intended audience</li> </ol>		
3. Critically Respond	<ol> <li>Contemporary and historical context of drama</li> <li>Elements of drama, dramatic forms, performance styles, dramatic techniques, and conventions</li> <li>Respect for theatre professions, cultural relationships, and legal responsibilities</li> </ol>		
High School - Fund	amental Pathway		
1. Create	<ol> <li>Creative process in character development and script improvisation</li> <li>Technical elements of theatre in improvised and scripted works</li> <li>Expression, imagination, and appreciation in group dynamics</li> <li>Interpretation of drama using scripted material</li> </ol>		
2. Perform	<ol> <li>Communicate meaning to engage an audience</li> <li>Technology reinforces, enhances, and/or alters a theatrical performance</li> <li>Directing as an art form</li> </ol>		
3. Critically Respond	<ol> <li>Analysis and evaluation of theatrical works</li> <li>Evaluation of elements of drama, dramatic techniques, and theatrical conventions</li> <li>Respect for theatre, its practitioners, and conventions</li> </ol>		

# Music

High School - Performance Pathway			
1. Expression of Music	<ol> <li>Perform accurately and expressively, demonstrating self-evaluation and personal interpretation at the minimal level of 3 on the difficulty rating scale</li> <li>Perform music accurately and expressively at the first reading at the minimal level of 2 on the difficulty rating scale</li> <li>Participate appropriately as an ensemble member while performing music at the minimal level of 3 on the difficulty rating scale</li> <li>Demonstrate requisite performance skill sets appropriate for postsecondary pursuits</li> </ol>		
2. Creation of Music	<ol> <li>Improvise a stylistically appropriate vocal or instrumental solo over a given harmonic progression</li> <li>Compose complex music in several distinct styles</li> <li>Arrange selections for voices and/or instruments other than those for which they were written in ways that preserve and enhance the expressive effect of the music</li> </ol>		
3. Theory of Music	<ol> <li>Interpretation of musical elements and ideas</li> <li>Classification by genre, style, historical period or culture</li> <li>Evaluation of music using critical, informed analysis</li> </ol>		
4. Aesthetic Valuation of Music	<ol> <li>Practice of appropriate behavior during cultural activities</li> <li>Evaluation of the quality and effectiveness of musical performances</li> <li>Development of criteria-based aesthetic judgment of artistic process and products in music</li> <li>Knowledge of available musical opportunities for continued musical growth and professional development</li> </ol>		
High School - Generalist Pathway			
1. Expression of Music	<ol> <li>Present music expressively using appropriate technology</li> <li>Demonstrate informed participation in music-making activities</li> </ol>		
2. Creation of Music	<ol> <li>Extended improvisation over varied harmonic progressions</li> <li>Create original music, or arrange the music of others, using appropriate technology</li> </ol>		
3. Theory of Music	<ol> <li>Discernment of musical elements</li> <li>Classification by genre, style, historical period, or culture</li> </ol>		
4. Aesthetic Valuation of Music	<ol> <li>Practice of appropriate behavior during cultural activities</li> <li>Knowledge of available musical opportunities for continued musical growth and professional development</li> <li>Development of criteria-based aesthetic judgment of artistic process and products in music</li> <li>Informed judgments through participation, performance, and the creative process</li> </ol>		

### **DRAMA & THEATRE**

#### Drama 1

Semester Course / Credit: 5 per semester

Colorado Academic Standards: Fundamental Pathway – 1.1-4, 2.1, 2.2, 3.2, 3.3

Colorado Academic Standards: Extended Pathway - 2.1, 3.2, 3.3

9th – 12th Grades Course Description:

This semester course is designed as a general introduction to all aspects of theatre production, with an emphasis on physical and vocal performance skills. Through a variety of small group projects, students will learn to use their voices and bodies in expressive and effective ways. They will also be introduced to the fundamentals of mime, improvisation, scene work, and technical theatre.

#### **Acting Study**

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: Fundamental Pathway – 1.1-4, 2.1-3, 3.1-3 Colorado Academic Standards: Extended Pathway – 1.1-4, 2.1-2, 3.1-3

10th - 12th Grades

Course Description: Focusing on scene and monologue work, the course includes several acting schools of thought including Constantin Stanislavsky, Tadashi Suzuki and Sanford Meisner. Students also read and analyze works of dramatic text in the context of theatre history. All students wishing to continue to Acting Study 2 must have successfully completed this course.

#### **IB Acting Study II**

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: Fundamental Pathway – 1.1-4, 2.1-3, 3.1-3 Colorado Academic Standards: Extended Pathway – 1.1-4, 2.1-3, 3.1-3

11th & 12th Grades

Prerequisite: Acting Study 1

NOTE: Non-IB students may take this course and earn an IB Certificate if seats are available.

Course Description: This course gives advanced acting students an opportunity to develop skills in period acting styles. In a context of theatre history, students will prepare and perform scenes from significant theatre periods, such as Greek, Elizabethan, Absurdism, and vaudeville. During second semester, class members, with instructor approval, may select a time period and script, and research, cast, design, costume, and produce a full-scale production. This is an honors level class and demands a level and quality of work not generally required of high school students.

#### **IB Senior Theatre Company**

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: Fundamental Pathway – 1.1-4, 2.1-3, 3.1-3 Colorado Academic Standards: Extended Pathway – 1.1-4, 2.1-3, 3.1-3

12th Grade / This class is REQUIRED for all HL IB students

NOTE: Non-IB students may take this course and earn an IB Certificate if seats are available.

Course Description: This Full-Year course is a full-scale production ensemble. Students will write, design and perform productions for stage and/or touring. Scripted plays may also be produced. Specific activities will vary from year to year with the interests, skills, and backgrounds of each year's students. IB students will have opportunities within this class to work on individual performance and/or design projects. This is an honors level class and demands a level and quality of work not generally required of high school students.

#### **MUSIC**

#### **Symphonic Band**

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: Performance Pathway - 1.1-4, 2.2, 2.3, 3.1, 3.3, 4.1-4

Course Description: This is the core ensemble of the LHS band program from which are derived all the other select ensembles. This is the largest ensemble with students from all grade levels (9-12). The literature for this ensemble can be challenging and focuses on improving the student's' musical skills and preparing them for participation in one of the other select ensembles. There is no limitation on instrumentation, and this is a good place for advanced students to learn and perform on a secondary instrument. This is a performance-oriented class with significant emphasis placed on developing a student's aesthetic awareness and musical evaluation skills. Students enrolled in this course are required to pay an activity fee.

\*Fee: \$25 for the year

#### Wind Ensemble

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: Performance Pathway - 1.1-4, 2.1-3, 3.1-3, 4.1, 4.2

Course Description: Wind Ensemble is the top select band ensemble of the LHS Band Program. Membership in this organization is by audition only. Instrumentation for the group will be limited to a true wind ensemble format, mostly one player per part with very little doubling. Because this ensemble is by audition, any student, grades 9-12, who exhibits a strong musical ability, is eligible to audition. Students will perform and explore a variety of very challenging music literature. While the course focus is on performance and improving musical skills, there will be significant emphasis on aesthetic awareness and musical evaluation. Students enrolled in this course are required to pay an activity fee.

NOTE: Being a 10, 11, or 12th grade student does not automatically qualify one for admission to Wind Ensemble.

#### Jazz Ensemble 1-2

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: Performance Pathway - 1.1-4, 2.1, 3.1, 3.2, 4.1-4

Course Description: This class is designed to be the feeder ensemble for the more advanced Jazz Ensemble 3-4. This performance-oriented course, like Jazz Ensemble 3-4, will introduce the student to a variety of jazz music but incorporates music of a less advanced nature. This is a select group chosen from students with demonstrated ability and strong desire to develop instrumental skills in a jazz context. While the focus of this course is on improving the musical skills of the student, emphasis will also be placed on developing his/her aesthetic awareness. Students enrolled in this course are required to pay an activity fee. Fee: \$25 for the year

#### Jazz Ensemble 3-4

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: Performance Pathway - 1.1-4, 2.1, 3.1, 3.2, 4.1-4

Course Description: Jazz is one of a few truly American musical art forms. Students in this select, performance-oriented ensemble will perform a variety of Jazz Ensemble music including big band swing, combo, Dixieland, blues, funk, fusion, and Latin jazz. This is an active, select ensemble and often serves as "Musical Ambassadors" for LHS. While the focus of this course is the performance of jazz, significant emphasis will be given to students' aesthetic awareness and musical evaluation. Students enrolled in this course are required to pay an activity fee. \*Fee: \$25 for the year

#### **Chamber Orchestra**

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: Performance Pathway - 1.1-4, 2.1-3, 3.1-3, 4.1-4

\*Prerequisite - knowledge of a string instrument, either through their middle school experience or private lessons. Course Description: Music is arguably the universal language of mankind. The skills and aesthetic awareness students develop in this performance-oriented class will remain with them throughout their lives. Students will have the opportunity to perform a variety of orchestral, symphonic, chamber, and quartet music throughout the year from all musical styles and periods. This course will include performances at the district and Continental League events and all scheduled school concerts. Students will also develop their string technique and the musical languages of rhythm and sight-reading through daily rehearsals. There will also be a significant emphasis on aesthetic awareness and musical evaluation.

#### **Chamber Orchestra (continued)**

The ensemble is made up of varying degrees of level and experience. It is expected that advanced students will spend time with less experienced students in the manner of short tutoring sessions to share their knowledge and leadership skills. Each student who is a sophomore, junior, or senior may also audition for the Colorado All-State Orchestra in the fall. Due to the nature of this course it is advised that individuals also supplement daily class work with private lessons as the level of music performed ranges from high school to college level literature. Students enrolled in this course are required to pay an activity fee. \*Fee: \$25 for the year

#### Advanced Placement Music Theory/ IB Music

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: Generalist Pathway - 2.2, 3.1, 3.2, 4.2, 4.3, 4.4

Colorado Academic Standards: Performance Pathway - 1.1, 1.2, 1.4, 2.2, 2.3, 3.1-3, 4.3, 4.4

Course Description: If you consider yourself a musician, can read music, and have a burning desire to learn how music is written, this course is for you. This course is structured for the serious music student that may be considering music as a possible major or minor in college. It also fulfills the International Baccalaureate Music I requirements (the first of two years of IB Music).

Students will learn the following:

- Define basic musical terms and theoretical concepts.
- Understand and construct major, minor, chromatic, whole tone and modal scales.
- Demonstrate the ability to construct and analyze major, minor, augmented and diminished intervals and triads.
- Recognize, sing, play and dictate scales, intervals, triads, rhythms and melodies.
- Sing simple conjunct and disjunct diatonic melodies at sight.
- Construct compositions in four-part chorale style using the techniques of the Common Practice Period, in major, harmonic minor and melodic minor.
- Analyze harmonic structure.
- Identify basic music forms and cadences.
- Identify pop and jazz chord structures and symbols.
- Demonstrate test taking skills required for year-ending AP Music Theory exam.

NOTE: Non-IB students may take this course along with IB Music II and earn an IB Certificate.

#### **IB Music Year II**

Full-Year Course / Credit: 2 per semester

Colorado Academic Standards: Generalist Pathway - 2.2, 3.1, 3.2, 4.2, 4.3, 4.4

Course Description: The International Baccalaureate music course is designed to encompass all the materials necessary for successful completion of the IB Music Exam. Students will learn the essential elements of traditional 18th century harmony, theory analysis of classical European literature, composition practices and experiences, world music designs and analysis. Students will work through various projects including literature analysis, theoretical analysis, composition of short pieces, performance of a variety of musical selections from different time periods and world traditions.

The course will be both practical and theoretical in nature. Thus, students will learn through the study of classroom and research materials and present a physical demonstration of compositional abilities or solo performance.

NOTE: Non-IB students may take this course along with IB Music Year I and earn an IB Certificate.

#### Women's Ensemble

Semester or Full-Year Course / Credit: 5 per semester

\*This is a NON-AUDITION course

Colorado Academic Standards: Performance Pathway – 1.1, 1.3, 3.1-3, 4.1-3

Course Description: Women's Ensemble is a NON-AUDITION choir open to all young women, grades 9-12, at LHS; simply sign-up for the class. This course will focus on the development of the voice and the "language" of music. Students will participate in several school concerts. There will also be a significant emphasis on learning and recognizing aesthetic awareness through musical evaluation, sight singing, ear training and theory. Students enrolled in this course are required to pay an activity fee \*Fee: \$25 for the year

#### **Concert Choir**

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: Performance Pathway – 1.1-3, 3.1-3, 4.1-3

\*Prerequisite - Students in grades 9-12 must audition in the spring of each year

Course Description: Concert Choir is an AUDITION-ONLY choir and the first of several select choirs in the LHS Choir Department. The choir is open to all young men and women, grades 9-12, at LHS. Auditions take place in the spring of each school year for the following year, or by appointment with the choir director. Audition criteria can be found on the school

website, <u>www.littleton.littletonpublicschools.net</u>. Look for Vocal Music under the Academics pull-down menu. This course will focus on the development of the voice and the "language" of music. Students will participate in several school concerts. There will also be a significant emphasis on learning and recognizing aesthetic awareness through musical evaluation, sight singing, ear training and theory. Students enrolled in this course are required to pay an activity fee. \*Fee: \$25 for the year

#### Women's Select Choir - Syrens

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: Performance Pathway - 1.1-3, 2.1, 3.1-3, 4.1-4

Course Description: Women's Select Choir (Syrens) is an AUDITION-ONLY choir and the second level of several select choirs in the LHS Choir Department. The choir is open to all young women, grades 10-12, at LHS. Auditions take place in the spring of each school year for the following year, or by appointment with the choir director. Audition criteria can be found on the school website, <a href="www.littleton.littletonpublicschools.net">www.littleton.littletonpublicschools.net</a>. Look for Vocal Music under the Academics pull-down menu. This course will focus on the development of the voice and the "language" of music. Students will participate in several school concerts. There will also be a significant emphasis on learning and recognizing aesthetic awareness through musical evaluation, sight singing, ear training and theory. Students enrolled in this course are required to pay an activity fee and to purchase a performance outfit. \*Fee: \$25; plus additional performance outfit fees.

#### **Troubadours**

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: Performance Pathway - 1.1-4, 2.1, 3.1-3, 4.1-4

Course Description: Troubadours is an AUDITION-ONLY choir and the most advanced of several select choirs in the LHS Choir Department. The choir is open to all young men and women, grades 10-12, at LHS. Auditions take place in the spring of each school year for the following year, or by appointment with the choir director. Audition criteria can be found on the school website, <a href="www.littleton.littletonpublicschools.net">www.littleton.littletonpublicschools.net</a>. Look for Vocal Music under the Academics pull-down menu. This course will focus on the development of the voice and the "language" of music. Students will participate in several school concerts. There will also be a significant emphasis on learning and recognizing aesthetic awareness through musical evaluation, sight singing, ear training and theory. Students enrolled in this course are required to pay an activity fee and to purchase a performance outfit. \*Fee: \$25; plus additional performance outfit fees.

#### Men's Select Choir - Manwich

Full-Year Course / Credit: 2 per semester

Colorado Academic Standards: Performance Pathway – 1.1-4, 2.1, 2.3, 3.1-3, 4.1-4

Course Description: Manwich is an AUDITION-ONLY choir and one of several small ensemble select choirs in the LHS Choir Department. The choir is open to all young men, grades 10-12. The sound of an outstanding male choir is truly a wonderful experience. Manwich is a select performance oriented ensemble that performs a variety of genres, from contemporary to pop to light jazz. This is an active ensemble and requires a deep commitment by the members involved. Auditions take place in the spring of each school year for the following year, or by appointment with the choir director. Audition criteria can be found on the school website, <a href="www.littleton.littletonpublicschools.net">www.littleton.littletonpublicschools.net</a>. Look for Vocal Music under the Academics pull-down menu. This course will focus on the development of the voice and the "language" of music. Students will participate in several school concerts and extra-curricular performances. Students enrolled in this course are required to pay an activity fee and to purchase a performance outfit. \*Fee: \$25; plus additional performance outfit fees.

#### **Vocal Jazz Ensemble**

Full-Year Course / Credit: 3 per semester

Colorado Academic Standards: Performance Pathway – 1.1-4, 2.1, 2.3, 3.1-3, 4.1-4

Course Description: The Vocal Jazz Ensemble is an AUDITION-ONLY choir and the most advanced of several small ensemble select choirs in the LHS Choir Department. The choir is open to all young men and women, grades 10-12. Jazz is one of a few truly American musical art forms, having its roots in vocal music. Students in this select performance-oriented ensemble will perform a variety of music from the genre of jazz, from the blues to fusion, with a bit of pop music mixed in. This is an active ensemble and requires a deep commitment by the members involved. Members of this ensemble will be of the highest musical talent available in the school, since nearly all of the music requires independent singing. Auditions take place in the spring of each school year for the following year, or by appointment with the choir director. Audition criteria can be found on the school website, www.littleton.littletonpublicschools.net. Look for Vocal Music under the Academics pull-down menu. This course will focus on the development of the voice and the "language" of music. Students will participate in several school concerts and extra-curricular performances. Students enrolled in this course are required to pay an activity fee and to purchase a performance outfit. \*Fee: \$25; plus additional performance outfit fees.

# **PHYSICAL EDUCATION & HEALTH**

# Philosophical Assumptions

- To participate successfully in a variety of agility movements, fitness activities, and sports.
- To value and understand the importance of physical activity as it contributes to a lifetime of being active.
- To demonstrate the knowledge and understanding of health-related and skill-related fitness components.
- To achieve and maintain physical fitness.
- To develop and apply the knowledge of rules, strategies, teamwork, and sportsmanship for selected physical activities.
- To show proficiency in swimming skills, strokes, and survival skills.

# Health

The LHS Health Curriculum is essential for high school students to acquire the knowledge and skills necessary to make informed decisions and become responsible members of society.

- 1. Develop the knowledge and the skills to choose healthy options and avoid health-impairing behaviors in the following areas:
  - community health
  - consumer health
  - environmental health
  - family life
  - mental and emotional health

- injury prevention and safety
- nutrition
- personal health
- disease prevention
- substance use and abuse
- 2. Acquire a focused balance of the physical, mental, emotional, and social dimensions of health and its constantly changing issues.
- 3. Assess, interpret, and apply basic health information and services in ways that are health enhancing.
- 4. Choose abstinence and self protection from high-risk behaviors.

# Swimming

# Littleton Public Schools Physical Education Swimming & Stroke Proficiency Test

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Demonstrate proficiency in four of the five following strokes (one length of 25 yards) in this order:
Front crawl with flutter kick
Back Crawl with flutter kick
Elementary Back Stroke with whip kick
Breast Stroke with whip kick
Sidestroke with scissor kick
Deep Water Survival Skills
Swim 10 laps (20 lengths, 500 yards) continuously, with no time limit, using any combination of the strokes listed above.
Jump in and tread water/float for 15 continuous minutes
<ul> <li>Tread legs only with hands out of the water for 2 minutes.</li> </ul>
<ul> <li>Tread water with hands in the water for 5 minutes.</li> </ul>
<ul> <li>Survival float/back float for 8 additional minutes.</li> </ul>

#### **Deep Water Diving**

- Dive proficiently from the edge of the pool into deep water.
  - Arms extended over head
  - Hands together
  - Chin tucked to chest
  - Legs together
  - Toes pointed

# Colorado Academic Standards at a Glance

# PHYSICAL EDUCATION

Standa	ard	Grade Level Expectation	
1. Movement Competen Understan	ce and	<ol> <li>Participate at a competent level in a variety of lifelong physical activities</li> <li>Understand the cognitive impact of movement</li> <li>Apply rules, principles, problem-solving skills, and concepts to traditional and nontraditional movement settings</li> </ol>	
2. Physical at Wellness	nd Personal	<ol> <li>Establish goals based on fitness assessment data, and develop, implement, achieve, and monitor an individual health and fitness plan</li> <li>Identify community resources to maintain lifelong physical activity</li> <li>Participate regularly in health-enhancing and personally rewarding physical activity outside of physical education</li> </ol>	
3. Emotional Wellness	l and Social	<ol> <li>Demonstrate respect for individual differences in physical activity settings</li> <li>Demonstrate collaboration, cooperation, and leadership skills</li> <li>Demonstrate responsible behavior in group settings</li> </ol>	
4. Prevention Manageme		<ol> <li>Understand the risks and safety factors that may affect participation in physical activity</li> <li>Demonstrate knowledge of safety and emergency response procedures</li> </ol>	

### **H**EALTH

	Standard	Grade Level Expectation
1.	Movement Competence and Understanding	None
2.	Physical and Personal Wellness	<ol> <li>Analyze the benefits of a healthy diet and the consequences of an unhealthy diet</li> <li>Analyze how family, peers, media, culture, and technology influence healthy eating choices</li> <li>Demonstrate ways to take responsibility for healthy eating</li> <li>Use a decision-making process to make healthy decisions about relationships and sexual health</li> <li>Support others in making positive and healthful choices about sexual activity</li> <li>Develop and maintain the ongoing evaluation of factors that impact health, and modify lifestyle accordingly</li> </ol>
3.	Emotional and Social Wellness	<ol> <li>Analyze the interrelationship of physical, mental, emotional, and social health</li> <li>Set goals, and monitor progress on attaining goals for future success</li> <li>Advocate to improve or maintain positive mental and emotional health for self and others</li> </ol>

4. Prevention and Risk Management

- 1. Comprehend concepts that impact of individuals' use or nonuse of alcohol or other drugs
- 2. Analyze the factors that influence a person's decision to use or not use alcohol, tobacco, and other drugs
- 3. Develop interpersonal communication skills to refuse or avoid alcohol, tobacco, or other drugs
- 4. Develop self-management skills to improving health by staying tobacco, alcohol, and drug-free
- 5. Analyze the factors that influence community and societal beliefs that underlie violence, and describe relationships, attitudes, behavior, and vulnerability to violence
- 6. Analyze the underlying causes of self-harming behavior, harming others and steps involved in seeking help Identify the emotional and physical consequences of violence, and find strategies to deal with, prevent, and report them
- 7. Access valid information and resources that provide information about sexual assault and violence
- 8. Demonstrate verbal and nonverbal communication skills and strategies to prevent violence
- 9. Advocate for changes in the home, school, or community that would increase safety

#### **Beginning Swimming**

Semester Course / Credit: 4 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: Beginning Swimming is designed for students who have no swimming skills or have very limited swimming ability. The non-swimmer will have an enjoyable introduction and orientation to swimming and water safety skills as well as the opportunity to improve cardiovascular conditioning. The student will learn the front crawl stroke, sidestroke, back crawl, and elementary backstroke with emphasis on correct body position, coordination, breathing, arm action, and kicking. For those who have limited swimming abilities, the course adds to those skills already learned. This course also provides the student with a basic orientation for survival in the water.

#### Strength and Conditioning I

Semester Course / Credit: 4 or 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: Strength and Conditioning I is designed for students who want to learn weight training skills and techniques, as well as conditioning the students' overall fitness level. The beginning weight lifter will learn basic lifts and techniques. Weight room safety concerning proper lifting mechanics and spotting techniques will be emphasized. Testing will include anatomy and safety/spotting techniques with an emphasis in kinesiology.

• The conditioning aspect of this course will consist of aerobic and anaerobic training. Aerobic exercise will concentrate on the heart rate working in the appropriate target zone for an extended duration. An example of aerobic activity is distance running. Anaerobic exercise will apply intense or maximum muscle contraction for short frequency. An example of an anaerobic activity is the vertical jump test.

#### Strength and Conditioning II or III

Semester Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: Strength and Conditioning II - III are designed for the serious and accomplished lifter. The course requires advanced free weight, resistant lifting, exercises, Olympic lifts and polymeric. Weight room safety concerning proper lifting mechanics and spotting techniques must be mastered. Testing will include anatomy and with an emphasis on strength development and advanced lifting techniques.

• The conditioning aspect of this course will consist of aerobic and anaerobic training. Aerobic exercise will concentrate on the heart rate working in the appropriate target zone for an extended duration. An example of aerobic activity is distance running. Anaerobic exercise will apply intense or maximum muscle contraction for short frequency. An example of an anaerobic activity is the vertical jump test.

#### Life Sports I: Swimming, Tennis, Volleyball, Badminton, Ultimate Frisbee/Disc Golf

Semester Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: Life Sports I is designed for students to have the opportunity to earn their swimming requirement, as well as participate in several other lifetime activities. In order to earn the swimming requirement, students MUST pass the Swim Proficiency Test. Students should be average swimmers or above with a high comfort level in shallow and deep water. A variety of cardiovascular fitness training methods will also be incorporated.

#### Life Sports II: Swimming, Tennis, Volleyball, Basketball, Badminton

Semester Course / Credit: 4 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: Life Sports II is designed for students who can earn their swimming requirement, as well as participate in several other lifetime activities. In order to earn the swimming requirement, students MUST pass the Swim Proficiency Test. Students must be average swimmers or above with a high comfort level in shallow and deep water. A variety of cardiovascular fitness training methods will also be incorporated.

#### **Innovative Fitness**

Semester Course / Credit: 4 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: This course is designed as an interactive class to combine general education students with students with special needs. A variety of training activities will be incorporated. Gross motor movement, muscle strength, flexibility, eye-hand coordination, and cardiovascular fitness will be emphasized in the class. Team building will be a major focus of the class. The students will work in pairs and on teams to assist in building social skills in students with special needs. The class will modify activities to meet the needs of all students. This course is highly recommended for anyone who has worked with, or is interested in working with students with special needs.

#### Girls' Soccer & Leadership

Activities include: Soccer activities, women and leadership roles

Semester Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: This course is designed to help develop advanced skills and concentrated experiences including the study of game strategy, rules, skills and drills in soccer. Weekly classroom sessions will focus on women as leaders in life and in the sporting environment. Students will also be required to organize and implement a soccer coaching session or a team building activity.

#### **Advanced Volleyball**

Activities include: Volleyball, Strength Training, Cardio Fitness and Agility

Semester Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Prerequisite - student must have intermediate to advanced athletic and volleyball skills

Course Description: This course is designed to help develop advanced skills and concentrated experiences including the study of game strategy, rules, skills and drills in volleyball. The students will experience and develop leadership skills including the study of game strategy and tactics of the game. Tournament games will be emphasized along with advanced skills and strategies. Students will be required to organize and implement coaching sessions that includes warm-ups, drills, skill development, and competitive experiences.

#### Court Sports: Tennis, Volleyball, Badminton, Pickle ball, Basketball, Team Handball

Semester Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: This class is designed for students who have no skills or limited skills in the above activities. The student will learn the beginning skills and playing strategies of each game.

#### Team Sports: Soccer, Basketball, Ultimate Frisbee, Team Handball, Volleyball, Flag Football, Badminton

Semester Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: This activity class introduces skills, technique, and game strategy of the above team sports. Drills, with an emphasis in individual skill development, will be taught along with group and team strategies.

#### Health

Semester Course / Credit: 4 per semester

Colorado Academic Standards: 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: Students enrolled in this class will have a variety of experiences relating to their physical, mental, emotional, and social well-being. The course aims to influence the attitudes and behavior of the student so he/she will gradually take more responsibility for his/her own health, and the health of family and community. Activities include group work, class discussion, videos, written work, and guest speakers from the health community. Drug education awareness, Human Sexuality, as well as First Aid and CPR will be taught within the course.

#### **Introduction to Sports Medicine**

Semester Course / Credit: 5 per semester

Course will meet for 4 credit hours during the school week and 1 credit hour from field experience with the instructor/trainer. Course Description: This course explores the world of athletic training. Students will be exposed to Anatomical Kinesiology, Biology, First Aid and CPR with an emphasis placed on the treatment and care of athletic injuries. Each student will gain hands-on experience in the field of athletic training as they work with the instructor and LHS athletic trainer throughout the course of the semester. Students will be able to diagnose basic injuries, the mechanisms and treatments of those injuries.

Entry Level Skills, Knowledge and Content:

- Completed the equivalent to I.S. 3-4
- Letter of recommendation from the LHS Trainer, LHS PE Teacher or LHS Head Coach
- Demonstrate an interest in the field of Athletics or Sports Medicine
- \$50 Course Fee for training supplies

#### Junior and Senior Leadership in Physical Education (Independent Study)

Semester Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2

Course Description: This course is offered to juniors and seniors who are interested in Physical Education that takes on the leadership role in the Physical Education arena. This course is designed as an experiential-based learning process where students are encouraged to take on an active role in their education. This atmosphere will emphasize cooperation as well as competition, and teamwork, while developing their leadership skills. The course will be available to a maximum of two students per section, per semester.

- Course Enrollment:
  - The student will register for his/her chosen Physical Education course and meet with the instructor four times a month for instructor guidance and to discuss student progress throughout the course of the semester.
- Course Objectives and Expectations:

The student leaders will be responsible to:

- Demonstrate individual responsibility through use of various team-building strategies in a physical education setting while facilitating and teaching skills. Examples include: organizing group activities, while incorporating team drills; encouraging teamwork, fair play; officiating.
- o Demonstrate leadership skills while supporting the development of group goals.
- o Demonstrate knowledge and skills in individual and team sports, weight training techniques, and swimming skills development.
- o Develop rules and safety procedures for physical activities.
- o Analyze and apply offensive, defensive, and cooperative strategies in selected activities, games, and sports.
- o Select components (i.e. equipment, boundaries, number of players, and rules), that promote participation and innovative or original physical activities.
- o Ensuring the overall safety of all persons involved within the physical education program. Examples include: securing the locker room areas; ensuring that all facilities are safe so it that minimizes the risk of injury; officiating while promoting teamwork and fair play.

# **SCIENCES**

# Colorado Academic Standards at a Glance

Standard	Grade Level Expectation	
1. Physical Science	<ol> <li>Newton's laws of motion and gravitation describe the relationships among forces acting on and between objects, their masses, and changes in their motion – but have limitations</li> <li>Matter has definite structure that determines characteristic physical and chemical properties</li> <li>Matter can change form through chemical or nuclear reactions abiding by the laws of conservation of mass and energy</li> <li>Atoms bond in different ways to form molecules and compounds that have definite properties</li> <li>Energy exists in many forms such as mechanical, chemical, electrical, radiant, thermal, and nuclear, that can be quantified and experimentally determined</li> <li>When energy changes form, it is neither created nor destroyed; however, because some is necessarily lost as heat, the amount of energy available to do work decreases</li> </ol>	
2. Life Science	<ol> <li>Matter tends to be cycled within an ecosystem, while energy is transformed and eventually exits an ecosystem</li> <li>The size and persistence of populations depend on their interactions with each other and on the abiotic factors in an ecosystem</li> <li>Cellular metabolic activities are carried out by biomolecules produced by organisms</li> <li>The energy for life primarily derives from the interrelated processes of photosynthesis and cellular respiration. Photosynthesis transforms the sun's light energy into the chemical energy of molecular bonds.</li> <li>Cellular respiration allows cells to utilize chemical energy when these bonds are broken.</li> <li>Cells use the passive and active transport of substances across membranes to maintain relatively stable intracellular environments.</li> <li>Cells, tissues, organs, and organ systems maintain relatively stable internal environments, even in the face of changing external environments</li> <li>Physical and behavioral characteristics of an organism are influenced to varying degrees by heritable genes, many of which encode instructions for the production of proteins</li> <li>Multicellularity makes possible a division of labor at the cellular level through the expression of select genes, but not the entire genome. Evolution occurs as the heritable characteristics of populations change across generations and can lead populations to become better adapted to their environment</li> </ol>	
3. Earth Systems Science	<ol> <li>The history of the universe, solar system and Earth can be inferred from evidence left from past events</li> <li>As part of the solar system, Earth interacts with various extraterrestrial forces and energies such as gravity, solar phenomena, electromagnetic radiation, and impact events that influence the planet's geosphere, atmosphere, and biosphere in a variety of ways</li> <li>The theory of plate tectonics helps to explain geological, physical, and geographical features of Earth</li> <li>Climate is the result of energy transfer among interactions of the atmosphere, hydrosphere, geosphere, and biosphere</li> <li>There are costs, benefits, and consequences of exploration, development, and consumption of renewable and nonrenewable resources</li> <li>The interaction of Earth's surface with water, air, gravity, and biological activity causes physical and chemical changes</li> </ol>	

7. Natural hazards have local, national and global impacts such as volcanoes, earthquakes, tsunamis, hurricanes, and thunderstorms

Advanced students may select Honors Integrated Science 1-2, which may qualify the student for exemption from Integrated Science 3-4. Students who choose Honors Integrated Science 1-2 will be in the same class as non-Honors Integrated Science 1-2, but will complete challenging extension assignments. Honors Integrated Science is recommended in order to accelerate progression through the introductory science curriculum in preparation for college level course work during high school years (AP or IB Science courses). For students to earn Honors credit they must successfully complete extension assignments, keep a year-long portfolio and have an overall grade of an A or B for each semester. Students can choose Honors Integrated Science either one or both semesters, however a student hoping to exempt Integrated Science 3-4 must take and pass Honors Science both semesters with an A or B.

Students planning on enrolling in the International Baccalaureate (IB) Diploma Program are required to complete the Honors Course and Exemption process during their entire freshman year in order to complete their IB Science requirement by the end of their senior year

Integrated Science / Honors Integrated Science I: Colorado Academic Standards: 2.1, 2.2, 2.9, 3.1, 3.2 Integrated Science / Honors Integrated Science II: Colorado Academic Standards 1.2, 1.4, 2.7, 2.8, 3.3, 3.5, 3.6, 3.7 Full-Year Course / Credit: 5 per semester

Course Description: Integrated Science I-II is the first year of a two-year course which combines biology, earth science, and physical science in a comprehensive, laboratory-based program. Each unit focuses on specific essential content and skills, including Colorado State Standards. The content is then investigated as an integrated whole, combining aspects of biology, the earth sciences, and physical science. Students who complete the Integrated Science course sequence should have the content and skills necessary to be successful in an introductory college science course.

Honors Integrated Science I-II is recommended for 9th grade students who:

- are above grade level in math and language arts
- are planning on enrolling in the International Baccalaureate Diploma Program their junior year
- have grades of A or B in Algebra and their current science courses
- are highly motivated

Integrated Science III: Colorado Academic Standards: 1.1, 1.3, 1.6, 3.4 Integrated Science IV: Colorado Academic Standards: 2.3, 2.4, 2.5, 2.6

Full-Year Course / Credit: 5 per semester

Course Description: Integrated Science III-IV is the second year of a two-year course, which combines biology, earth science, and physical science in a comprehensive, laboratory-based program. The basic themes investigated focus on forces and motion, properties and behavior of matter, chemical and biological reactions and processes, and energy of biological, chemical and physical processes. An integral part of the course is designing, implementing, and evaluating experimental investigations. Each unit focuses on specific essential content and skills, including Colorado State Standards. The content is then investigated as an integrated whole, combining aspects of biology, the earth sciences, and physical science.

#### \*Semester Electives

# Students must be a junior or senior to enroll, and have passed Integrated Science 3-4

**Biology: Botany** 

Semester Course / Credit: 5 per semester

Course Description: Without green plants, the Earth would be uninhabitable for humans. Not only are green plants the primary food source for almost all organisms, they also modify our climate, provide us with clothing and shelter, are a source of raw materials for industry and pharmaceuticals, and make our world an aesthetically pleasing place to live. Botany students will study plant uses, plant growth and structure, plant tropisms, plant symbioses, the chemistry of photosynthesis, plant propagation, greenhouse practices and maintenance, and identification of Colorado plants.

#### **Biology: Genetics**

Semester Course / Credit: 5 per semester

Course Description: Genetics is one of the most dominant sciences in the modern era. Applications of the principles and ideas of genetics can be found in the medical field, agricultural industry, law enforcement, and many other fields. Genetics is a subject that is in its infancy but already has helped change and shape the world we live in. During the course of our daily lives, we are constantly being exposed to the results and products of this area of study. Genetics incorporates topics from the areas of math, chemistry, biology, and psychology as well as exploring the social ramifications of the field's discoveries. Genetics has its roots in both the macro and micro world in which we live.

During the course of this semester we will cover a wide range of topics. We will discover the role of probability in inheritance. We will investigate, on the molecular level, the world of the gene and its ramifications on the individual and society. We will research mutations and their significance to populations. Each of these topics will be followed by an in-depth case study of a particular disorder and the completion of genetic counseling report based on your findings.

#### **Marine Ecology**

Semester Course / Credit: 5 per semester

Course Description: This course combines concepts from both the physical sciences and the biological sciences to explore the interrelatedness between components of the physical and chemical environment as well as the observed life forms found in a variety of marine ecosystems. For example, students will examine how such factors as turbulence, waves and currents in the sandy beach marine ecosystem affect the type and diversity of the organisms that live there. Special emphasis will be placed on the adaptations that populations have made to the physical components of their ecosystems.

Throughout the semester, students will research and prepare species reports on a wide range of marine organisms from a variety of phyla. Hands-on labs as well as long-term research studies will be significant components of this course. Students will design labs to investigate and better understand a variety of behaviors of sea anemones, damselfish, and a variety of other marine organisms.

#### **Biology: Microbiology**

Semester Course / Credit: 5 per semester

Course Description: Microbiology is a course that surveys the comparative biology of microorganisms including the bacteria, viruses and fungi. The course is directed toward students interested in diverse fields of health such as nursing, dental hygiene, and surgical technology, and the biological sciences, such as botany and the animal sciences. Microbiology is divided into six major fields of study: Introduction to Microbiology, Microbial Metabolism, Growth and Reproduction, Genetics, Medical Microbiology, and Environmental Microbiology. Microorganisms are part of our lives in more ways than most of us understand. They have shaped our present environment, and their activities will greatly influence our future. Our goal should be to understand the environment and to stabilize it for the benefit of all.

#### **Biology: Physiology**

Semester Course / Credit: 5 per semester

Course Description: Physiology is a course that explores the functions of the human body's organ systems. Concepts gained in labs will be applied to current medical trends and technologies. Students will begin with an overview of cell and tissue functions. The emphasis will be on understanding the relationships between various body structures and their corresponding functions. Students will continue their study with an in-depth look at the body systems including, but not limited to, digestive, respiratory, cardiovascular, reproductive, nervous, and excretory systems.

#### **Biology: Vertebrate Zoology**

Semester Course / Credit: 5 per semester

Course Description: Historically, animals provided man with basic necessities such as food, shelter, and clothing, and more recently animals provided the inspiration for designing the shapes of airplanes, jets, and submarines. Today, animals have proven valuable in many other ways, such as in scientific research on human medicines, aesthetic enjoyment, companionship, ecological stability, and in offering us insights into how to live successfully within our environments. Students in Zoology will study the importance of animals to man and the environment in general, and the importance of specific animal groups in particular. While studying and observing animals (involving some dissection), students will discover how animals in aquatic and terrestrial environments are adapted to overcome five major problems of survival: getting nutrition, removing waste, obtaining oxygen, maintaining proper water balance, and reproducing. Students will also design and conduct a study of animal behavior. Other class topics will include animal classification, adaptations, ecology, evolution, and zoology-related professions.

#### Crime Lab Science - Forensics

Semester Course / Credit: 5 per semester

Course Description: This laboratory based course will introduce students to a variety of forensic techniques that are used in conjunction with inductive and deductive reasoning to unravel crime based mysteries. Students will use observations, research and scientific knowledge to solve problems relative to the work performed in the study of forensics and in crime labs. Throughout the semester students will learn how to collect evidence from a crime scene without contaminating the evidence, about different scientific instrumentation used and how the data collected is used to analyze the evidence collected from crime scenes, and will integrate mathematics, technology, and a variety of areas within life and physical sciences. The student must have a basic knowledge of the scientific process.

#### **Earth Science: Astronomy**

Semester Course / Credit: 5 per semester

Course Description: Have you ever wondered about all the stars in the sky; where the universe begins or ends; why the planets are in different places in the sky at different times; how the ancient sailors navigated around the world? These questions are some we study in this astronomy course. We will also learn about the history of astronomy, the historical figures that were important in the development of space study, and some of the tools used in astronomy. Space is one of the last frontiers of science; why not take the opportunity to learn more about this frontier and the universe outside of our planet?

#### Earth Science: Meteorology

Semester Course / Credit: 5 per semester

Course Description: Our daily lives are impacted by the patterns and inconsistencies of weather. This course investigates all aspects of the Earth's atmosphere, climate, and various weather phenomena. Atmospheric processes are explored to understand weather development and forecasting.

#### **Earth Science: Physical Geology**

Semester Course / Credit: 5 per semester

Course Description: The Earth, while massive, is constantly changing. Physical, chemical, and biological factors have shaped the earth into the majestic features we can see all around the world. This course studies all aspects of the Earth. All processes that operate beneath and on the surface will be explored as a way to understand physical composition, modification, and historical evolution of the structure and chronology of the Earth's history.

#### **Advanced Placement Environmental Science**

Full -Year Course / Credit: 5 per semester

The AP Environmental Science course is the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. Students are strongly encouraged to take the College Board Advanced Placement Environmental Science Exam given in the spring of each year. College credit may be awarded by college registrars depending upon the colleges' program requirements and achievement on the exam.

#### **General Chemistry**

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: 1.2, 1.3, 1.4, 1.5, 1.7

Course Description: General Chemistry, a lab-based course, is intended to familiarize students with basic chemical concepts leading to a better understanding of their environment and preparing them for advanced or collegiate level science courses. It is an important part of pre-collegiate curriculum and essential for a student interested in continuing to study one of the sciences in college. Students will learn the basic concepts and principles of chemistry and use these concepts and principles to investigate complex scientific problems. Students will also use critical thinking and problem solving skills to apply these concepts to their world. While various methods of investigation and problem solving focus instruction in General Chemistry, information literacy and written and oral communication are also emphasized. Some of the major topics that will be studied are: atomic structure and chemical behavior; chemical formulae, equations, and reactions; phases of matter; bonding; energy, rate, and equilibrium of chemical reactions; and acid-base reactions.

#### **Physics**

Full-Year Course / Credit: 5 per semester

Course Description: This course is recommended for students who are interested in science, mathematics, engineering and the natural world around them. We use a "flipped classroom" model. In this model, the amount of lecture time is significantly reduced because new content is introduced in the form of short videos assigned as homework. When students are in class, concepts learned in the videos are applied in labs, activities and other hands-on challenges. We learn about motion, gravity, forces, energy, momentum, circular motion, electricity, simple harmonic motion and waves. Take physics and you'll learn how fast you can drive your car around a corner and still stay on the road, how a guitar works, and why you can stick your tongue in one side of the wall plug and not get shocked. You will also learn why carrying a suitcase is not work, why the moon stays in orbit around the earth, why astronauts feel weightless in orbit but really aren't, and why you can shoot a bullet horizontally and drop a rock at the same time and they will both hit the earth at the same time.

Pre-Requisite Skills

- The student should be able to solve basic algebraic equations with ease.
- The student should be able to use basic trigonometry (such as soh-cah-toa and the Pythagorean theorem) with ease.
- The student should have very good problem solving skills, a high degree of internal motivation and the ability to work in a self-reliant and self-directed way.

#### **Advanced Placement Physics I**

Full-Year Course / Credit: 5 per semester

Prerequisite: Algebra II or Trig/Pre-Calc (may be concurrently enrolled in Trig/Pre-Calc with teacher permission) Course Description: This course covers all the topics in a first semester college course in trigonometry-based physics. The focus is on big ideas in physics, and scientific inquiry through experimentation, analyzing, and solving problems. Students learn about Newtonian mechanics (including rotational dynamics and angular momentum) as well as work, energy, power, mechanical waves and sound, and simple electric circuits. Lab work is significant and at least 60 percent of class time will be spent on student-led inquiry based labs that come with few, if any, directions. College credit may be awarded by colleges depending on the colleges' program requirements and student performance on the exam. Pre-Requisite Skills

- The student should be able to solve basic and advanced algebraic equations with ease.
- The student should be able to use basic trigonometry (such as soh-cah-toa and the Pythagorean theorem) with ease.
- The student should have excellent problem solving skills, a high degree of internal motivation and the ability to work in a self-reliant and self-directed way.
- The student should have a desire to figure things out without being given answers, to creatively find ways to test ideas, to think deeply and intellectually, and to explore how the natural world works using the tools and strategies of science.

#### **Advanced Placement Physics II**

Full-Year Course / Credit: 5 per semester

Prerequisites: Physics, Trigonometry and Analytic Geometry

Course Description: This course covers all the topics in a second semester college course in algebra and basic trigonometry level physics. The course covers fluid mechanics, thermodynamics, electricity and magnetism, optics and atomic and nuclear physics. This course focuses on big ideas in physics and scientific inquiry through experimentation, analyzing, and solving problems. Lab work is a significant part and at least 25 percent of class time will be spent on student-led inquiry-based labs. College credit may be awarded by colleges depending on the colleges' program requirements and student performance on the exam.

#### IB Higher Level Biology Year 1

Full-Year Course / Credit: 5 per semester

Prerequisite – Students must have earned a C or better in high school Chemistry

Course Description: This International Baccalaureate Diploma Program Biology course is the first year of a comprehensive two-year curriculum. This rigorous course of study is designed to meet the needs of highly motivated high school students. This course includes those topics regularly covered in a college biology course; emphasizing biochemistry, cells, energy transformations, molecular genetics, heredity, evolution, taxonomy, organisms (diversity and physiology), and ecology. Unifying these topics and tying the curriculum together are four major themes that include Structure and Function, Universality versus Diversity, Equilibrium within Systems, and Evolution. This course differs significantly from an introductory biology course with respect to the textbook used, the range and depth of topics covered, the kind of laboratory work done by students, and the time and effort required of students. Students may participate in the College Board Advanced

Placement Biology exam given in the spring of each year, though it is recommended to wait until completion of Year 2 of the IB Higher Level Biology.

#### **IB Higher Level Biology Year 2**

Full-Year Course / Credit: 5 per semester

Course Description: Continue exploration of concepts and options studied in IB High Level Biology Year 1. This course will include more in-depth material as well as additional concepts. The IB Group 4 Project will be conducted in collaboration with IB Standard Level Chemistry. In addition, one option topic selected by the instructor will be studied. The three-part final assessment is administered in spring at the conclusion of Year 2.

#### **Advanced Placement Chemistry**

Full-Year Course / Credits: 5 per semester

Course Description: Advanced Placement Chemistry is designed to provide students with a course equivalent to an introductory college-level, general chemistry course taken by science majors in college. The topics studied are much the same as those in General Chemistry but are explored in far greater depth. Students will perform laboratory experiments and solve chemistry-related problems in which they will apply their knowledge of chemical concepts and use algebraic functions to manipulate data. Students will participate in the College Board Advanced Placement Chemistry exam given in the spring. College credit may be awarded by college registrars depending on the colleges' program requirements and student performance on the exam.

#### **Advanced Placement Biology**

Full-Year Course / Credit: 5 per semester

Prerequisite – Students must have earned a C or better in high school Chemistry

Course Description: This Biology course is designed to be the equivalent of an introductory college-level biology course taken by biology majors during their freshman year. This course includes those topics regularly covered in a college biology course; emphasizing biochemistry, cells, energy transformations, molecular genetics, heredity, evolution, taxonomy, organisms (diversity and physiology), and ecology. Unifying these topics and tying the whole curriculum together are major themes that include Science as a Process, Structure and Function, Continuity and Change, energy transfer, regulation, interdependence in nature, and Evolution. A college course in biology differs significantly from the introductory biology courses with respect to the kind of textbook used, the range and depth of topics covered, the kind of laboratory work done by students, and the time and effort required of students. Students are encouraged to take the College Board Advanced Placement Biology exam given in the spring of each year. College credit may be awarded by college registrars depending on the colleges' program requirements and performance on the exam.

#### **IB Standard Level Chemistry**

Full-Year Course / Credit: 5 per semester

Prerequisite – It is recommended a student earned a C or better in high school Chemistry

Course Description: IB Standard Level Chemistry is designed to provide the student with in-depth knowledge of chemistry. The IB diploma candidate must have three subsidiary level subjects of study; IB chemistry would be appropriate for anyone interested in continuing his/her education in a science-related field. The topics covered are similar to those in General Chemistry but will be explored in greater depth. In addition, the topic of Organic Chemistry, not usually addressed in a high school chemistry course, will be covered extensively. Students will perform laboratory exercises and solve chemistry-related problems in which they will apply their knowledge of chemical concepts and use algebraic functions to manipulate data. College credit may be given depending on the college or university and student performance on the full set of IB exams given in the spring of the final year of study. Students enrolling in this course will take the IB chemistry exam at the end of this one-year course.

#### Medicine

Semester Course / Credit: 3 per semester

Course Description: Students enrolled in the Pre-Med course will be exposed to the field of medicine and related allied health careers to stimulate qualified students to pursue those professions. Students will be realistically presented the demands of time, scholarship, and educational requirements. Recognizing that perhaps the most difficult aspect of medical professions is gaining admission, students will be given positive advice about qualifications other than scholarship that will be meaningful to admission committees.

Meets M-W-F BEFORE SCHOOL AT ARAPAHOE HIGH SCHOOL

Elective: 12

Prerequisite: Interest in the medical field

# **SOCIAL STUDIES**

# Social Studies Sequence of Courses (Class of 2018, 2019 & 2020)

# **Regular Sequence:**

Grade Level	Courses	Graduation Credit
9	Early Civilization World Geography	5 5
10	U.S. History	10
11	World History	10
12	Civics	5
	Total Social Studies Credits:	35

# **Sequence for IB Curriculum:**

Grade Level	Courses	Graduation Credit
9	Early Civilization Honors World Geography Honors	5 5
10	AP U.S. History	10
11	IB History of Europe/Mid East (HL)	10
12	IB World History (HL)	10
	Total Social Studies Credits:	40

# Honors/AP Sequence:

Grade Level	Courses	Graduation Credit
9	Early Civilization Honors World Geography Honors	5 5
10	AP U.S. History	10
11	AP World History	10
12	AP Government	10
	Total Social Studies Credits:	40

# Social Studies Sequence of Courses (Class of 2021 and beyond)

### **Regular Sequence:**

Grade Level	Courses	Graduation Credit
9	World History	10
10	U.S. History	
11	Geography Economics	5 5
12	Civics	5
	Total Social Studies Credits:	35

# **Sequence for IB Curriculum:**

Grade Level	Courses	Graduation Credit
9	World History Honors	10
10	AP U.S. History	10
11	IB History of Europe/Mid East (HL)	10
12	IB World History (HL)	10
	Total Social Studies Credits:	40

# Honors/AP Sequence:

Grade Level	Courses	Graduation Credit
9	World History Honors	10
10	AP U.S. History	10
11	AP European History	10
12	AP Government	10
	Total Social Studies Credits:	40

#### **Electives:**

Grade Level	Courses	Graduation Credit
10, 11, 12	Philosophy/Religion	5
10, 11, 12	Psychology	5
10, 11, 12	Film History	5
0, 11, 12 Anthropology		5

# Colorado Academic Standards at a Glance

### SOCIAL STUDIES

Standard	Grade Level Expectation		
1. History	1.	The historical method of inquiry to ask questions, evaluate primary	
		and secondary sources, critically analyze and interpret data, and	
		develop interpretations defended by evidence from a variety of	
		primary and secondary sources	
	2.	Analyze the key concepts of continuity and change, cause and effect,	
	_	complexity, unity and diversity over time	
		The significance of ideas as powerful forces throughout history	
2. Geography	1.	Use different types of maps and geographic tools to analyze features	
		on Earth to investigate and solve geographic questions	
	2.	Explain and interpret geographic variables that influence the	
		interaction of people, places, and environments	
	3. The interconnected nature of the world, its people and places		
		Productive resources - natural, human, capital - are scarce; therefore, choices are made about	
		how individuals, businesses, governments, and societies allocate these resources	
	2.	Economic policies impact markets	
	<ul><li>3. Government and competition impact markets</li><li>4. Design, analyze, and apply a financial plan based on short- and long-term financ</li></ul>		
	5.	Analyze strategic spending, saving, and investment options to achieve the objectives of	
	diversification, liquidity, income, and growth (PFL)		
	6. The components of personal credit to manage credit and debt (PFL)		
	7.	Identify, develop, and evaluate risk-management strategies (PFL)	
4. Civics	1.	Research, formulate positions, and engage in appropriate civic	
participat		participation to address local, state, or national issues or policies	
	2.	Purposes of and limitations on the foundations, structures and	
		functions of government	
	3.	Analyze how public policy - domestic and foreign - is developed at	
		the local, state, and national levels and compare how policy-making	
		occurs in other forms of government	

#### 9th Grade World History

#### Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 4.2

Course Description: This course provides students with a survey of world history from the classical empires of Greece and Rome to the present. While it exposes them to a broad view of world events, the focus of this course is to provide students with an understanding of the events, people, ideas and institutions which have contributed to the modern world. Students will be required to investigate the political, intellectual, economic, and social roots of the modern world, as well as to study the interactions and conflicts which arose as the West came into contact with the other cultures and civilizations of the world. Emphasis will be given to the coverage of world history vs. western civilization.

#### **United States History (1870-Present)**

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.2, 2.3, 3.1, 3.2, 3.3

Course Description: American History, (1870-Present), is an exciting course that focuses primarily on the political, economic and social changes of the 20th century. The course includes an examination of the following questions:

- Economics: What has been the relationship between business, labor, natural resources and geography, politics, and international influences over the years?
- Politics: How have economic changes affected political decision-making; how have political campaigns changed over the course of time; how have the three bodies of our federal government reacted to industrial, economic, and social changes?
- Foreign Diplomacy: What is war good for? How has America's foreign policy changed over the years? How are policies molded by national and international events and leaders?
- Social and Intellectual: Who are we as Americans? How has the past impacted today's society? What can be learned by examining our cultural heritage: art, music, film, TV, theatre, and literature?

#### **Advanced Placement United States History**

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.2, 2.3, 3.1, 3.2, 3.3

Course Description: The AP U.S. History course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in U.S. history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students will be required to take the AP exam. For additional information on the AP U.S. History course please see the College Board website page for AP course descriptions (https://apstudent.collegeboard.org/apcourse).

# 11th Grade World History (Will be required for 2017 and 2018, but will be replaced in 2019 with 11th Grade Economics (Semester Course) and 11th Grade Economics (Semester Course)

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 4.2

Course Description: This course provides students with a survey of world history from classical empires of Greece and Rome to the present. While it exposes them to a broad view of world events, the focus of this course is to provide students with an understanding of the events, people, ideas and institutions which have contributed to the modern world. Students will be required to investigate the political, intellectual, economic, and social roots of the modern world, as well as to study the interactions and conflicts which arose as the West came into contact with the other cultures and civilizations of the world. Emphasis will be given to the coverage of world history vs. western civilization.

#### **Advanced Placement European History**

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.2, 2.3, 3.1, 3.2, 3.3

Course Description: AP European History focuses on developing students' abilities to think conceptually about European history from approximately 1450 to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance-Interaction of Europe and the World, Poverty and Prosperity, Objective Knowledge and Subjective Visions, States and Other Institutions of Power, and Individual and Society-provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places. For additional information on the AP European History course please see the College Board website page for AP course descriptions (<a href="https://apstudent.collegeboard.org/apcourse">https://apstudent.collegeboard.org/apcourse</a>).

#### **IB European History**

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3

Course Description: This option covers major trends in Europe in the period from the mid-17th century to the end of the 20th century. Major developments that are studied include revolutions; the decline of empires and the establishment of nation states; political, social and economic reforms; and the emergence of dictatorships and the re-emergence of democracy. The course includes the completion of an internally guided writing assignment, as well as the extensive study and evaluation of historical documents associated with the topics listed above. There is a strong emphasis on encouraging students to develop intercultural understanding, open-mindedness, and the attitudes necessary for them to respect and evaluate a range of points of view. In addition, all students are required to study case studies and examples from different regions of the world, with comparison of such examples helping to ensure that the course adopts a transnational perspective. Throughout course, students have the opportunity to explore historical events that have played a key role in shaping the world today, deepening their understanding of the complex and interconnected nature of past and present events. This helps to meet one of the central aims of the course—to increase students' understanding of themselves and of contemporary society by encouraging reflection on the past.

This course is for 11th grade students in the IB Diploma Program.

#### **IB 20th Century History**

Full-Year Course / Credit: 5 per semester

Prerequisite – IB European History

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3 12th Grade

Course Description: Students will complete an in-depth study of 20th century World History topics including origins, development and impact of industrialization; independence movements; evolution and development of democratic states; authoritarian states; causes and effects of 20th-century wars; and the Cold War. The course includes the completion of an internally guided writing assignment, as well as the extensive study and evaluation of historical documents associated with the topics listed above. There is a strong emphasis on encouraging students to develop intercultural understanding, open-mindedness, and the attitudes necessary for them to respect and evaluate a range of points of view. In addition, all students are required to study case studies and examples from different regions of the world, with comparison of such examples helping to ensure that the course adopts a transnational perspective. Throughout the course, students have the opportunity to explore historical events that have played a key role in shaping the world today, deepening their understanding of the complex and interconnected nature of past and present events. This helps to meet one of the central aims of the course—to increase students' understanding of themselves and of contemporary society by encouraging reflection on the past.

This course is for 12th grade students in the IB Diploma Program.

#### **Civics**

Semester Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 3.2, 3.3, 4.1, 4.2, 4.3

Course Description: An in-depth study of U.S. and Colorado state governments. This course follows state standards for civics as well as current issues and topics presented in the National Close-Up Program. Students will not only study government but participate in specified civic activities at the county, state or federal level.

#### **Advanced Placement United States Government & Politics**

Full-Year Course / Credit: 5 per semester

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.2, 2.3, 3.2, 4.2, 4.3

Course Description: AP U.S. Government/Politics is designed to provide the student with an analytical perspective in government and politics in the United States today. The course will include a study of the various institutions, groups, beliefs, and ideas that constitute American politics. This course is taught at a college level and is designed to prepare students for the college experience as well as for the AP exam in May. Additional (outside-of-class time) study sessions may also take place in an effort to prepare for the AP exam. Students will be required to take the AP exam.

#### **Psychology**

Semester Course / Credit: 5 per semester

11th & 12th Grade

Colorado Academic Standards: 1.2, 1.3

Course Description: This course explores the dilemma of human behavior. Three of the major perspectives in psychology are presented and discussed: Biological, Cognitive and Sociocultural. Each psychological perspective will place an emphasis on the methods through which psychological knowledge is created as well as ethical considerations at each level of research. Students will complete a project demonstrating their understanding of the scientific method to the study of psychology.

#### Philosophy/Religion

Semester Course / Credit: 5 per semester

10th-12th Grade

Course Description: Students will examine the five basic world religions: Judaism, Christianity, Islam, Hinduism, and Buddhism. There will be a cursory investigation of some of the world's smaller, yet influential religions as well. Additionally, the students will consider the basic ideas surrounding major philosophical theories having significant impact on societies. Students will investigate both the historical and current influences these religions and philosophies have on societies. A desire to share ideas, debate issues, and respect everyone's opinions is essential. There will be a field trip to various religious centers in the Denver metro area.

#### **Film History**

Semester Course / Credit: 5 per semester Colorado Academic Standards: 1.1, 1.2, 1.3

Course Description: This semester course is designed to familiarize the student with the history of filmmaking, different types of genres of films, and how history has been portrayed through films. A major goal of this course is to help students become more discerning film viewers. Students will be expected to view, discuss, and write about films inside and outside of class. The course will be split into three parts: history of the film making industry, history through film, and influential people of film; where we will study Alfred Hitchcock and one other director or producer.

#### **IB Psychology**

Full-Year Course / Credit: 5 per semester

11th or 12th Grade

NOTE: Non-IB students may take this course and earn an IB Certificate if seats are available.

Colorado Academic Standards: 1.2, 1.3

Course Description: The IB Diploma Program psychology course is the systematic study of behavior and mental processes. Students undertaking the course can expect to develop an understanding of how psychological knowledge is generated, developed and applied. This will allow them to have a greater understanding of themselves and appreciate the diversity of human behavior. The holistic approach reflected in the curriculum, which sees biological, cognitive and sociocultural analysis being taught in an integrated way ensures that students are able to develop an understanding of what all humans share, as well as the immense diversity of influences on human behavior and mental processes. Ethical concerns which are raised by the methodology and application of psychological research are also key considerations of the IB psychology course. Students will demonstrate the application of their skills and knowledge in a partial replication of an experiment for the internal assessment.

#### **Advanced Placement Macroeconomics**

Semester Course / Credit: 5 per semester

Colorado Academic Standards: 1.3, 3.1, 3.2, 3.3, 4.3

Course Description: The purpose of AP Macroeconomics is to give students a thorough understanding of the principles of economics that apply to an economic system as a whole. Particular emphasis will be placed upon the study of national income, price determination, economic performance measures, economic growth and policy, and international economics. This course will be taught at the college level and is designed to prepare students for the college experience as well as for the AP exam. Students will be required to take the AP exam.

#### **Anthropology**

Semester Course / Credit: 5 per semester

Course Description: What does it mean to be human? This course is an exploration of human nature and human variation across time and space. The many questions that we will discuss include: How did humans evolve? How have societies changed over time? What is culture? How is language different from non-human communication? What are the connections between language, culture, and thought? What is race? How do different societies understand gender and age? Is morality relative to cultural context? What is the influence of globalization on people and culture? This class is designed to pique your interest in the study of humans as cultural beings and show the importance of anthropology to everyday life while also introducing the

four fields of anthropology: physical anthropology, archaeology, linguistic anthropology, and cultural anthropology. We will focus not on thinking of these subfields as four separate disciplines but rather as four perspectives that, when combined, provide a holistic understanding of human life.

#### World Geography-World Affairs Challenge (WAC)

Independent Study

Semester Course / Credit: 2-5 per semester-determined by teacher

Elective for 10, 11, 12

Course Description: World Affairs Challenge is a competitive program sponsored by the University of Denver Graduate School of International Studies and the Center for Teaching International Relations. This is an independent study program but the students who enroll will work together in a team. The Challenge is similar to Odyssey of the Mind program. Students will produce a presentation that addresses a global issue (defined by WAC directors). Students will present before a panel of judges-college professors and international business leaders. Past topics include "Borders: Boundaries or Barriers", "Making and Keeping World Peace", and "Global Wealth". Competition is usually the first Saturday in May. This is an exciting program for students who enjoy academic challenges and have an interest in world affairs.

#### **IB Philosophy**

Full-Year Course / Credit: 5 per semester

11th or 12th Grades

NOTE: Non-IB students may take this course and earn an IB Certificate if seats are available.

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.3, 4.1, 4.2, 4.3

Course Description: Students will explore the fundamental questions that people have asked since the beginning of time and confront new problems arising within contemporary society. What is it to be a human being? Are we self-conscious beings? What can we know? How do we know what is the right thing to do? How do we combine reason, emotions and experiences in our understanding of ourselves, others and the environment? These questions are explored through an examination of themes and texts. The core themes include: what is a human being, what are the major political philosophies, and what are the theories and problems of ethics? Students will be required to submit a critical analysis of non-philosophical material and a philosophical material. They will also complete an in depth study of a prescribed philosophical text.

#### **IB Psychology**

Full-Year Course / Credit: 5 per semester

11th or 12th Grade

NOTE: Non-IB students may take this course and earn an IB Certificate if seats are available.

Colorado Academic Standards: 1.2, 1.3

Course Description: The IB Diploma Program psychology course is the systematic study of behavior and mental processes. Students undertaking the course can expect to develop an understanding of how psychological knowledge is generated, developed and applied. This will allow them to have a greater understanding of themselves and appreciate the diversity of human behavior. The holistic approach reflected in the curriculum, which sees biological, cognitive and sociocultural analysis being taught in an integrated way ensures that students are able to develop an understanding of what all humans share, as well as the immense diversity of influences on human behavior and mental processes. Ethical concerns which are raised by the methodology and application of psychological research are also key considerations of the IB psychology course. **Students will demonstrate the application of their skills and knowledge in a partial replication of an experiment for the internal assessment.** 

#### **IB Global Politics**

Full-Year Course / Credit: 5 per semester

11th or 12th Grade

NOTE: Non-IB students may take this course and earn an IB Certificate if seats are available.

Colorado Academic Standards: 1.1, 1.2, 1.3, 2.3, 4.1, 4.2, 4.3

Course Description: The global politics course explores fundamental political concepts such as power, equality, sustainability and peace in a range of contexts. It allows students to develop an understanding of the local, national, international and global dimensions of political activity and processes, as well as to explore political issues affecting their own lives. The core units of the course together make up a central unifying theme of "people, power and politics". Throughout the course, issues such as conflict, migration or climate change are explored through an explicitly political lens: "politics" provide a uniquely rich context in which to explore the relationship between people and power. All SL students are also required to undertake an engagement activity prescribed by IB.

# **SPECIAL EDUCATION**

Learning Support Services focuses on empowering students to perform to their greatest potential by setting clear student-centered learning objectives to guide each student's learning and work. This includes the establishment of timelines that accommodate learner objectives through the design of instructional units and lessons that engage student interest so that students are able to persist with tasks, even when they are difficult. Each student identified as eligible for special education support is afforded an individualized program that monitors learning through a variety of methods and adjusts instruction in order to maximize understanding and retention of the curriculum.

Learning Support Services supports and enables students to:

- Access curriculum at levels which best suit their identified learning needs
- Maintain focus on instructional tasks
- Review relevant concepts and receive additional instruction as necessary
- Advocate as active participants and be accountable for their learning
- Demonstrate a positive attitude toward goal setting, time management and life-long learning skills

### Resource Courses

#### **Current Events Fundamentals**

Full-Year Course / Credit: 5 per semester

Course Description: Designed for 11th and 12th grade students, the primary purpose of this course is to encourage students to increase their knowledge of world history, current events, cultural diversity and tolerance. This course provides skill development based on the locations of cultures throughout the world. This class uses a modified curriculum and does not meet grade-level content standards.

#### World of Work

Full-Year Course / Credit: 5 per semester

Course Description: Designed for 11th and 12th grade students, this course gives students exposure to the real-life decisions they will face as they exit high school. The topics covered include: career exploration, team/career skills, employment acquisition, money management, budgeting, real estate & automobile financing, credit, consumer purchases, investments, and other important life skills involving personal finance. This class uses a modified curriculum and does not meet grade-level content standards.

#### **Consumer Math Fundamentals**

Full-Year Course / Credit: 5 per semester

Course Description: This math class covers various topics that correlate with the state standards in the area of math. Number relations, basic operations, statistics, fractions and measurement are some of the units that will be covered during the course of the year. There is an emphasis on word problems and the applications of math to everyday life. This class uses a modified curriculum and does not meet grade-level content standards.

#### **Reading Fundamentals I**

Full-Year Course / Credit: 5 per semester

Course Description: Reading Fundamentals is a class that focuses on the students' needs for developing decoding skills, improving vocabulary, increasing fluency, and gaining reading comprehension strategies. Students receive direct instruction in these areas, have the opportunity to apply these skills in their reading, and are involved in the Fast ForWord program for 40 minutes of the class. This class uses a modified curriculum and does not meet grade-level content standards.

#### **Living Skills**

Full-Year Course

Course Description: This support service provides social/emotional skill instruction by the school psychologist in areas designated by goals within a student's Individual Education Plan.

#### **Speech Communication Skills**

Full-Year Course / Credit: 1 per semester

Course Description: This course is offered to students who require improvement in communication skills. Enrollment must be approved by the speech/language therapist.

#### **Study Center**

Full-Year Course / Credit: 3 per semester

Course Description: This comprehensive study support program provides support for students based on their Individual Education Plan. Support may include academic assistance, instruction in organizational skills, study skills, and independent work time for completing work from other classes.

#### **Fundamentals of Science**

Full-Year Course / Credit: 5 per semester

Course Description: Designed for 10th-12th grade students, this course combines biology, earth science, and physical science in a comprehensive program. Materials and instructional techniques are tailored to students' needs and levels. Upon successful completion of this course, students will have gained the skills necessary for subsequent science courses. This class uses a modified curriculum and does not meet grade level content standards.

#### **Academic Workshop**

Semester Course / Credit: 4 per semester

Course Description: This course is designed to provide support for 9th and 10th grade students in Math, Science, Social Studies and Language Arts to pre-teach vocabulary, organization and concepts needed for that day's core academic classes within general education. One section is designated for Math and Science and the other section is for Language Arts and Social Studies. Depending on individual student need, one or both section may be taken in a semester. Each section is 4 credits.

# Learning Support Services (LSS) Courses

#### **Learning Support Services (LSS) Courses**

Adaptive/Motor Skills

Full-Year Course / Credit: 1-2 per semester

Course Description: This course is offered to students who require improvement of adaptive motor skills.

#### **Community Essentials**

Full-Year Course / Credit: 2-5 per semester

Course Description: This course emphasizes pedestrian/safety skills, RTD training, and shopping skills. This class utilizes community facilities and resources.

#### **Math Essentials**

Full-Year Course / Credit: 2-5 per semester

Course Description: Offered for students who need to learn functional mathematics: money, time, calculator usage, one-to-one correspondence, counting, basic addition, and subtraction. This is a class which can also include multiplication, division, and fractions. This class uses a modified curriculum and does not meet grade-level content standards.

#### **Reading Essentials**

Full-Year Course / Credit: 2-5 per semester

Course Description: This class emphasizes various reading strategies. This class gives students skills to improve their comprehension and decoding ability. Strategies to improve word recognition and vocabulary may include journal writing, reading various selections, and vocabulary building. This class uses a modified curriculum and does not meet grade level content standards.

#### **Speech & Communication Skills**

Full-Year Course / Credit: 1-2 per semester

Course Description: This course is offered to students who require improvement in communication skills. Enrollment must be approved by the speech/language therapist.

#### **Vocational Skills**

Full-Year Course / Credit: 2-5 per semester

Course Description: Students will receive practical on-the-job training in a community setting. Students will develop their vocational skills and improve their adaptability skills in the area of work, social and personal growth. Students will learn skills that will help them gain independence in the workplace.

#### **Living Independently**

Full-Year Course / Credit: 2-5 per semester

Course Description: Students will gain daily living skills through a variety of activities to include meal planning, grocery shopping, cooking, budgeting and learning life-long healthy habits.

# **TECHNOLOGY & ENGINEERING**

## Philosophical Assumptions

Technology & Engineering is the application of technology, innovation, and design through the integration of STEM (the concepts of science, technology, engineering, and mathematics) in order to solve real-world problems.

The Littleton Public Schools Technology & Engineering curriculum provides students with concrete, hands-on learning experiences in a laboratory environment. These experiences will involve critical and creative thinking activities that require planning, designing, building, and testing.

The Technology & Engineering curriculum will develop independent, self-directed and life-long learners who will:

- apply tools, machines, materials, and processes safely and efficiently
- gain knowledge and skills related to diverse technological systems, including functions and applications
- understand the nature and impact of technology
- solve problems using a systems approach, higher-level thinking skills, collaboration, ingenuity, and resources
- apply and integrate concepts and skills learned in other curricular areas
- discover and develop personal interests, talents, and abilities related to technology
- explore post-secondary opportunities and careers related to science, technology, engineering and math

#### **Technology Studies I- VIII**

Semester Course / Credit: 5 per semester

Note: This class may be taken up to eight semesters for credit.

Technology Fee: \$15

Course Description: Come and join us in our beautiful Technology Facilities. After all, technology is in everything we do. Whether you think you are a techie or not, Technology Studies has something to offer everyone. What area would you like to learn more about? After a brief introduction to the areas, students choose what topics they want to study. Each module area has levels 1-4, each level builds on the previous.

Topics include:

- 1. Animation Students will learn how to animate existing models and create their own.
- 2. Architecture Learn about architectural design and drawing through drawing actual house floor plans, complete with multiple floors, electrical, windows/doors roofing plans and elevations.
- 3. Computer Aided Design (CAD) Mechanical engineering designs Draw mechanical parts and print on a 3-D printer. College credit may be on option; see class instructor for details.
- 4. Communications- Design and edit digital video and audio clips or create animated titles.
- 5. Manufacturing- Operate Computer Numerically Controlled (CNC) machines. Design and manufacture using CNC lathes, routers and mills.

- 6. Web Design Learn how to design web pages, understand links and create using Dreamweaver and Flash.
- 7. Graphic Design Through the use of software, the students will create logos, signs and many more areas related to graphic design. The students will then learn to use a laser engraver or a vinyl printer/cutter to create a product.
- 8. Robotics- Through the use of Lego Mindstorms®, robotic arms, pneumatics and electrical control, students will learn to program and control robots along with automated devices.
- 9. Industrial Design Take a product from an idea to a real-life prototype.

#### **Design Projects**

Semester Course / Credit: 5 per semester

Project Fee: \$25

Course Description: This class will design and build six projects per semester. Projects <u>may</u> include engraving, wood projects, rat trap racecars, catapults, skate/long boards, vinyl, sublimation and more. Each semester builds a different set of projects. We will be using woodworking type machines; this is a very hands-on class. Do you like to build? This class is for you! This class may be taken twice for credit.

#### IB Design Technology I- II & III-IV

Full-Year Course / Credit: 5 per semester

Project Fee: \$25

Prerequisite: Technology Studies 1 & Design Technology IB I-II (respectively)

Course Description: Diploma Program design technology is based on a model of learning that incorporates knowledge, skills and design principles in problem-solving contexts, while at the same time maximizing the use of local and readily available resources. It assumes no previous experience in either technology or design. The intent is not solely the acquisition of knowledge about design and technology, which may change or become outdated, but is about learning how to adapt to new experiences and to approach problems with the appropriate skills and the relevant techniques to identify the important elements and, crucially develop the optimum solutions. The **design cycle** is at the core of the course, and it is expected that students will use this process in the practical investigative work as well as in the theory. Each element in the design cycle represents an aspect of design technology, which, when viewed together, constitutes a holistic approach. Any given element is therefore only to be seen in the context of the whole process. **NOTE: Non-IB Diploma Program students may take this course and earn an IB Certificate.** 

To design with technology is to use human ingenuity in selected activities in order to meet needs and find solutions. This can be achieved through existing or new technologies. Design consists of gathering information about the problem or opportunity, processing that information, and planning for some kind of intervention either by modifying what is already there or by introducing something new. The designer is interested not just in the material environment but also in the social, technological, economic, environmental, political, legislative and ethical considerations that affect people's priorities.

#### **Construction Technology (Woods)**

Semester Course / Credit: 5 per semester

Project Fee: \$30

Course Description: This class will build approximately six projects per semester. Safety is a priority so safety tests are given and must be passed to use the equipment. Projects <u>may</u> include routed bowls, turned wood pens, wooden scoops, wood bending, wood carving, inlay and large machines projects. We will be using woodworking type machines. This is a very hands-on class. Do you like to build? Then this class is for you!

#### **Advanced Construction Technology (Woods)**

Semester Course / Credit: 5 per semester - only offered every other year.

Project Fee: Varies (depending on project(s) they choose to build)

Prerequisite: <u>MUST</u> have passed Construction Technology with a C or better. Course Description: This class will build a project(s) of the student choice.

#### **Creative and Collaborative Problem Solving**

Semester Course / Credit: 5 per semester

Technology Fee: \$25 Course Description:

- Do you dream of solving the world's problems?
- Are you interested in earning a STEM certificate upon graduation from Littleton High School?
- Do you think you might be interested in a career in the STEM fields (Science, Technology, Engineering and Math)?

Students in this course will use group processes to tackle a series of design challenges. The challenges will be drawn from the world of structural engineering, robotics, environmental design, alternative energy, etc., and will vary each semester. This is a multidisciplinary, hands-on class that will require students to work in groups, to write, to complete a portfolio, to design and build things, to present, and to reflect.

This class addresses the components of the 21<sup>st</sup> Century Skills that the Colorado Department of Education and Littleton Public Schools believes should be integrated at each grade level and in every content area, including critical thinking and reasoning, information literacy, collaboration, self-direction, and invention.

While this course is open to all students, it is an "entryway course" for students who would like to complete a STEM certificate upon graduation and should be used as one of the four required STEM courses for that certification. At registration, priority will be given to students in the STEM certificate program.

# **VISUAL ARTS**

# Visual Art Department

Early High School	IB Progression (IB Studio Art is a 6 <sup>th</sup> Subject, testing during Senior year)  • Art Foundations or Drawing	Studio Progression (For students interested in art and/or considering a career in any creative industry)  • Art Foundations or Drawing	General Progression (Graduation requirement is 5-10 credits, 1-2 classes of Fine Arts)  • Art Foundations or Drawing
Freshman	<ul> <li>Art Foundations or Drawing AND</li> <li>Art History (Choose one per semester)</li> </ul>	<ul> <li>Art Foundations or Drawing         AND     </li> <li>Art History         (Choose one per semester)     </li> </ul>	Art Foundations or     Drawing
Sophomore	<ul> <li>Art History</li> <li>Drawing</li> <li>Ceramics</li> <li>Photo</li> <li>Sculpture</li> <li>Painting*</li> <li>Animation*</li> </ul> (Choose one or two per semester)	<ul> <li>Art History</li> <li>Drawing</li> <li>Ceramics</li> <li>Photo</li> <li>Sculpture</li> <li>Painting*</li> <li>Animation*</li> </ul> (Choose one or two per semester)	If an art class was not taken during freshman year:  Art Foundations Drawing Ceramics Photo Sculpture Art History Painting* Animation*
Junior	IB Studio Art*** (two year-long courses)	<ul> <li>Drawing</li> <li>Drawing II**</li> <li>Ceramics</li> <li>Ceramics II**</li> <li>Photo</li> <li>Sculpture</li> <li>Painting*</li> <li>Animation*</li> <li>Animation II**</li> <li>Studio Art*** (semester course, can be repeated for credit, recommend year-long)</li> <li>(Choose one or two per semester)</li> </ul>	Allimation
Senior	IB Studio Art*** (two year-long course) At the end of two years, students can test either SL or HL)	Studio Art*** (semester course, can be repeated for credit, recommend year-long)	

Prerequisite - Drawing

Students are advised to take <u>no more</u> than two art classes per semester!

 <sup>\*\*</sup> Prerequisite - Level I class (Drawing, Ceramics or Animation)
 \*\*\* Prerequisite - Art Foundations or Drawing AND Art History AND at least one other art class

# Colorado Academic Standards at a Glance

# VISUAL ARTS

Standard	Grade Level Expectation
1. Observe	1. Visual art has inherent characteristics and expressive features
and Learn to	2. Historical and cultural context are found in visual art
Comprehend	3. Art and design have purpose and function
2. Envision and	1. Reflective strategies are used to understand the creative process
Critique to Reflect	2. A personal philosophy of art is accomplished through use of sophisticated language
	and studio art processes
	3. Interpretation is a means for understanding and evaluating works of art
3. Invent and	1. Demonstrate competency in traditional and new art media, and apply appropriate
Discover to	and available technology for the expression of ideas
Create	2. Assess and produce art with various materials and methods
	3. Make judgments from visual messages
4. Relate and	1. The work of art scholars impacts how art is viewed today
Connect to	2. Communication through advanced visual methods is a necessary skill in everyday
Transfer	life
	3. Art is a lifelong endeavor

# All LHS Visual Arts classes embrace the philosophy of the Colorado State Standards 21st Century Skills. An excerpt of these skills follows:

Making art is the patient and dedicated quest for originality through exploration, experimentation, risk-taking and problem solving. Patience, perseverance and self-discipline provide the focus of art-making without a fear of failure. This process involves a commitment to openness, creative thought and vision.

#### **Art Foundations**

Open to Grades 8-12

Semester Course / Credit: 5 per semester

Material Fee: \$15 / Includes sketchbook and all class materials

Prerequisite: None

Course Description: This beginning class will introduce art in a fun, experiential way. Artists of all levels and backgrounds will create projects in a variety of media including drawing, painting, ceramics, printmaking and photography.

#### **Art History**

Open to Grades 10-12

Semester Course / Credit: 5 per semester

Material Fee: \$5 Prerequisite: None

Course Description: This class offers a survey of contemporary art and architecture from the mid 1900s to the present. Students will learn through lecture, analysis, discussion, and research and leave with an understanding of the connections between art and culture throughout history.

#### Animation I

Open to Grades 10-12

Semester Course / Credit: 5 per semester

Material Fee: \$30 / Includes sketchbook and all class materials

Prerequisite: Drawing I

Course Description: This intermediate course will be an introduction to various aspects of the animation industry. Students will create concept art, storyboards, and develop skills and techniques of 2D and 3D computer animation.

#### Animation II

Open to Grades 11-12

Semester Course / Credit: 5 per semester

Material Fee: \$30 / Includes sketchbook and all class materials

Prerequisite: Animation I

Course Description: Students will expand on their knowledge from Animation I by picking a specialization (digital, traditional, stop motion, concept design) and create a cohesive body of work showcasing deeper thinking and refined technique.

#### **Art Photography**

Open to Grades 10-12

Semester Course / Credit: 5 per semester

Material fee: \$30 / Includes sketchbook and all class materials / Students will need their own digital camera; see instructor for

details

Prerequisite: None

Course Description: This course explores the skill and purpose of digital photography in contemporary art. Students will learn basic Photoshop, lighting, composition, and other photography concepts and apply their skills to other forms of media.

#### **Ceramics I**

Open to Grades 10-12

Semester Course / Credit: 5 per semester Material Fee: \$30 / Includes all class materials

Prerequisite: None

Course Description: This creative, all-clay class, explores hand building, throwing on a potter's wheel, decorating, glazing, and firing. Both the functional and sculptural aspects of clay will be investigated, along with historical/cultural references and contemporary trends.

#### **Ceramics II**

Open to Grades 10-12

Semester Course / Credit: 5 per semester Material Fee: \$30 / Includes all class materials

Prerequisite: Ceramics I

Course Description: This advanced course covers more complex throwing and sculptural techniques including plates, double-walled vessels, mixed media sculptures and other sophisticated designs. Each artist will become involved in preparing and mixing glazes, stacking and firing kilns and self-curation for showing and selling their work.

#### Drawing I

Open to Grades 8-12

Semester Course / Credit: 5 per semester

Material Fee: \$20 / Includes sketchbook and all class materials

Prerequisite: None

Course Description: Learning to draw is essential for greater understanding in all areas of art. In this beginning class, artists will improve their skills and techniques using a variety of drawing materials including graphite, pastels, charcoal and ink.

# **Drawing II**

Open to Grades 11-12

Semester Course / Credit: 5 per semester

Material Fee: \$20 / Includes sketchbook and all class materials

Prerequisite: Drawing I

Course Description: Drawing is an essential skill to have in all areas of art. In this advanced class, artists will build upon the skills and techniques learned in Drawing I to create more elaborate drawings, try more advanced skills, and work on building their creative voice through their drawings.

# **Painting**

Open to Grades 10-12

Semester Course / Credit: 5 per semester Material Fee: \$20 / Includes all class materials

Prerequisite: Drawing I

Course Description: In this intermediate class, artists will learn essential skill and painting techniques while painting from life, imagination and other sources. Exploratory exercises as well as in-depth study will be included.

#### Sculpture

Open to Grades 10-12

Semester Course / Credit: 5 per semester Material Fee: \$30 / Includes all class materials

Prerequisite: None

Course Description: Artists in this creative course will be encouraged to express their ideas and in a variety of 3-D art media.

Projects may include glass fusing, paper sculpture, plaster, casting, assemblage and wire and installation art.

# Studio Art

Open to Grades 11-12

Semester Course / Credit: 5 per semester / Course may be repeated for credit

Prerequisite: Art Foundations or Drawing I AND Art History AND at least one other art class

Material Fee: \$20 / Includes sketchbook, field trips, and most class materials / Students may need to provide additional materials, depending on the nature of their work

Course Description: This advanced course provides an opportunity for the serious artist to explore his/her chosen art media and concepts. Students will build a portfolio of their artwork suitable for college applications, research contemporary and historical art theories, and understand the contextual motives of artists, including themselves. Students are encouraged to familiarize themselves with Denver's diverse art community through field trips, gallery visits, guest speakers and artist interviews.

#### **IB Studio Art**

Open to Grades 11-12

Full Year Course / Credit: 5 per semester / Weighted Course / Course may be repeated for credit

Prerequisite: Art Foundations or Drawing I AND Art History AND at least one other art class

NOTE: Non-IB students may take this course, prepare for the exam and earn an IB Certificate if seats are available. Material Fee: \$20 / / Includes sketchbook, field trips, and most class materials / Students may need to provide additional materials, depending on the nature of their work. additional fees required for the exam

Course Description: This advanced course challenges ideas, builds skills and encourages growth as an artist and as an imaginative thinker. Students will build a portfolio of their artwork, research contemporary and historical art theories, and understand the contextual motives of artists, including themselves. Students are encouraged to familiarize themselves with Denver's diverse art community through field trips, gallery visits, guest speakers and artist interviews. These activities will allow students to synthesize their ideas and create thoughtful and thought-provoking works of art. Students explore curatorial practices to help them prepare a cohesive body of work to show in a professional gallery setting. Completion of the course will result in an academic understanding of visual culture and a working knowledge of communicating their ideas effectively.

# **Independent Study in Visual Art**

Open to Grades 11-12

Semester Course / Credit: 2-5 per semester

Prerequisite: Art Foundations or Drawing I AND Art History AND at least two intermediate classes with grades of B or above AND approval of instructor

Material Fee: None / Student must provide all materials

Course Description: See general Independent Study Description. An independent study is not intended for just anyone who needs a course to fill his/her schedule, but for the serious artist with unusual circumstances or desiring a class not offered in a given semester.

# **WORLD LANGUAGES**

# Colorado Academic Standards at a Glance

Range Level Expectations: Intermediate-Mid			
1. Communication in Languages Other Than English	<ol> <li>Initiate, sustain, and conclude conversations (written or oral) in a variety of situations based on familiar and unfamiliar vocabulary and learned grammatical structures (interpersonal mode)</li> <li>Comprehend spoken or written language in a variety of situations based on familiar and unfamiliar vocabulary and learned grammatical structures (interpretive mode)</li> <li>Present (written or oral) in a variety of situations based on familiar and unfamiliar vocabulary and learned grammatical structures (presentational mode)</li> </ol>		
2. Knowledge and Understanding of Other Cultures	<ol> <li>Analyze how the perspectives of people who speak the target language are reflected in their practices</li> <li>Analyze how products reflect practices and perspectives of the cultures studied</li> </ol>		
3. Connections with Other Disciplines and Information Acquisition	<ol> <li>Analyze information gathered from target language resources connected to other content areas</li> <li>Evaluate information and viewpoints present in authentic resources</li> </ol>		
4. Comparisons to Develop Insight into the Nature of Language and Culture	<ol> <li>Analyze the significance of the similarities and differences between the target language and the student's own language</li> <li>Analyze the significance of the similarities and differences between the target culture(s) and the student's own culture</li> </ol>		
Range Level Expectations: Intermediate-Low			
1. Communication in Languages Other Than English	<ol> <li>Initiate, sustain, and conclude conversations (written or oral) in a variety of situations based on familiar and unfamiliar vocabulary and learned grammatical structures (interpersonal mode)</li> <li>Comprehend spoken or written language in a variety of situations based on familiar and unfamiliar vocabulary and learned grammatical structures (interpretive mode)</li> </ol>		
	3. Present (written or oral) on a variety of familiar topics, using familiar vocabulary and learned grammatical structures (presentational mode)		
2. Knowledge and Understanding of Other Cultures	<ol> <li>Draw conclusions using a personal understanding of the perspectives and practices of the cultures studied</li> <li>Examine how the perspectives of people who speak the target language are reflected in their products</li> </ol>		
3. Connections with Other Disciplines and Information Acquisition	<ol> <li>Assess the usefulness of information gathered from target language resources for application in other content areas</li> <li>Examine information and viewpoints presented in authentic resources</li> </ol>		
4. Comparisons to Develop Insight into the Nature of Language and Culture	1. Recognize how the significance of the similarities and differences between the target language and the student's own language provides insight into the structures of their own language		

2. Compare the similarities and differences between the target culture(s) and the student's own culture

Range Level Expectations: Novice-High			
1. Communication in Languages Other Than English	Participate in exchanges (written or oral) on a variety of familiar topics using familiar vocabulary and learned grammatical structures (interpersonal mode)		
	2. Comprehend exchanges (written or oral) on a variety of familiar topics using both high-frequency vocabulary, new vocabulary, and learned grammatical structures (interpretive mode)		
	3. Present (written or oral) on a variety of familiar topics using both high-frequency vocabulary, new vocabulary, and learned grammatical structures (Presentational mode)		
2. Knowledge and Understanding of Other Cultures	Examine common practices and perspectives within the cultures studied		
	2. Examine familiar products of the cultures studied		
3. Connections with Other Disciplines and Information Acquisition	Examine information gathered from target language resources connected to other content areas		
	2. Relate information acquired from authentic resources to individual perspectives and experiences		
4. Comparisons to Develop Insight into the Nature of Language and Culture	Describe similarities and differences between structural patterns of the target language through comparisons of the student's own language and the language studied		
	2. Describe the nature of culture through comparisons of the target culture(s) and the student's own culture and how the two cultures interact		
Range Level Expectations: Novice-Mid			
1. Communication in Languages Other Than English	Participate in basic conversations (written or oral) on a variety of familiar and predictable topics using isolated words and learned phrases (interpersonal mode)		
	2. Comprehend short learned exchanges (written or oral) on learned topics that use learned vocabulary and grammatical structures (interpretive mode)		
	3. Present using learned and simple phrases or expressions (written or oral) on very familiar topics (presentational mode)		
2. Knowledge and	Reproduce common practices of the cultures studied		
Understanding of Other Cultures	2. Describe familiar products of the cultures studied		
3. Connections with Other Disciplines and Information Acquisition	Summarize information gathered from target language resources connected to other content areas		
	2. Organize information acquired from authentic resources		
4. Comparisons to Develop Insight into the Nature of Language and Culture	Expand knowledge of similarities and differences of basic structural patterns of language through comparisons of the student's own language and the language studied		
	2. Investigate the nature of culture through comparisons of the target culture(s) and the student's own culture and how the two cultures interact		
Range Level Expectations: Novice-Low			

1. Communication in Languages Other Than English	<ol> <li>Communicate about very familiar topics (written or oral) using isolated words and high frequency phrases (interpersonal mode)</li> <li>Comprehend isolated learned words and high-frequency phrases (written or oral) on very familiar topics (interpretive mode)</li> <li>Present on very familiar topics (written or oral) using isolated words, and high-frequency phrases (presentational mode)</li> </ol>
2. Knowledge and Understanding of Other Cultures	<ol> <li>Identify common practices within the target cultures studied</li> <li>Identify common products of the target cultures studied</li> </ol>
3. Connections with Other Disciplines and Information Acquisition	<ol> <li>Identify information that can be gathered from target language resources connected to other content areas</li> <li>Locate and use basic information from target language resources.</li> </ol>
4. Comparisons to Develop Insight into the Nature of Language and Culture	<ol> <li>Identify similarities and differences of the most basic vocabulary through comparisons of the student's own language and the language studied</li> <li>Identify and recognize the nature of culture through comparisons of the target culture(s) and the student's own culture</li> </ol>

The essential parts of learning a world language are reading, listening, speaking, and writing. All of these are evaluated in each of the levels of study.

World language is a sequential course. Students who have not mastered the previous material are not able to succeed in the next level. For this reason, students who do not have a 70 percent grade minimum in a world language course will not continue to the next semester or level. Students are encouraged to retake the previous level.

Students who are IB-bound are required to complete the honors track at all levels.

# French I, Spanish I

Full-Year Course / Credits: 5 per semester

Colorado Academic Standards: Novice-Low – 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 4.1, 4.2

Course Description: Students will develop a basic foundation in Spanish and French through structured practice in speaking, writing, reading, and listening. The course emphasizes daily participation and regular demonstration of both oral and written proficiency. Students will master the appropriate verbs, grammar structures, idioms, vocabulary, and cultural information necessary to carry out basic communicative functions.

# French II, Spanish II

Full-Year Course / Credit: 5 per semester

Prerequisite: Students should have completed one whole year in the previous level and have acquired the basic knowledge, as described in the district curriculum that will enable them to pursue in level II. Students need a 70 percent grade minimum at the end of the level I class to pursue in the level II

Colorado Academic Standards: Novice-Mid – 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 4.1, 4.2

Course Description: The second level of world language study builds on what students studied in the level 1. Students will learn to use appropriate language in a variety of situations. A greater emphasis will be placed on grammar. The course also focuses on the four basic skills: reading, writing, listening and speaking.

# French II Honors, Spanish II Honors

Full-Year Course / Credits: 5 per semester

Prerequisite: Students should have completed one whole year in the previous level and gained a minimum of 80 percent grade in that level. Upon entering this level, students should have acquired an excellent command of the four basic skills.

Colorado Academic Standards: Novice-Mid – 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 4.1, 4.2

Course Description: Students will continue to build a sound foundation in the targeted language through structured practice in listening, speaking, reading, and writing activities. The course emphasizes daily participation and regular demonstration of

oral, written, and auditory proficiency. Students will master the appropriate verb tenses, grammar structures, idioms, vocabulary, and cultural information pertaining to that level.

# French III, Spanish III

Full-Year Course / Credits: 5 per semester

Prerequisite: Students should have completed one whole year in the previous level and have acquired the basic knowledge, as described in the district curriculum that will enable them to pursue in level 3. Students need a 70 percent grade minimum at the end of the level II class to be admitted to level III.

Colorado Academic Standards: Novice-High – 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 4.1, 4.2

Course Description: Students will continue to improve the four skills in this course. More advanced conversation and composition will be stressed along with more complex grammar. Students will be expected to show a greater knowledge and understanding of the culture of the language they study.

# French III Honors, Spanish III Honors

Full-Year Course / Credit: 5 per semester

Prerequisite: Students should have completed one whole year in the previous level (II Honors) and have acquired an 80 percent grade minimum to pursue in this level.

Colorado Academic Standards: Intermediate-Low – 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 4.1, 4.2

Course Description: This course will be primarily taught in the target language. Students will continue to practice the four skills. Advanced conversation and composition will be stressed along with more complex grammar. The student will be expected to show a greater knowledge and understanding of the culture of the language they study. This is also a prerequisite course for students who plan on taking French IV IB or Spanish IV IB.

# Spanish IV

Full-Year Course / Credit: 5 per semester

Prerequisite: Students must have completed a whole year in the previous level and have a 70 percent grade minimum to pursue in this level.

Colorado Academic Standards: Intermediate-Low – 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 4.1, 4.2

Course Description: This course is taught primarily in the target language. There is an emphasis on personalized and creative use of language in various situations. Vocabulary, grammar, and language functions are consistently reviewed and are expected to be mastered at a more advanced level. Students study a variety of material in the targeted language. (Literature extracts, poetry, newspaper articles, songs, movies, etc...)

\*Fee: \$25 Includes all class materials

# French IV IB, Spanish IV IB

Full-Year Course / Credit: 5 per semester

Prerequisite: Students must have completed one whole year in Spanish 3 Honors or French 3 Honors. Students transferring into the district may be assessed by the department as to proper placement. (Grade the previous year should be 80 percent or better). Colorado Academic Standards: Intermediate-Mid – 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 4.1, 4.2

Course Description: This course is an Honors class that primarily focuses on preparation for the International Baccalaureate exam that students may take at the end of the school year. The course will be taught in the target language. Students will continue to improve the four skills. Advanced reading comprehension, conversation and composition will be stressed along with more complex grammar. Students will be expected to show a greater knowledge and understanding of the culture of the language studied. Students will develop intercultural understanding through focused study of issues of global significance.

# Advanced Placement French V, AP Spanish V

Full-Year Course / Credit: 5 per semester

Prerequisite: Students must have completed four whole years of Spanish or French. They need to have an 80 percent grade minimum at the end of the level IV/IV IB class to be able to pursue at this level.

Colorado Academic Standards: Intermediate-Mid – 1.1, 1.2,1.3, 2.1, 2.2, 3.1, 3.2, 4.1, 4.2

Course Description: This course prepares students who want to take the Advanced Placement Examination in Spanish Language or French Language. In accordance with the AP Central College Board requirements, this course emphasizes the four basic skills at a very advanced level. The class is entirely carried out in Spanish or French and also focuses on grammar, literature, reading the press in the target language, writing structured essays, and making oral presentations. Students who score a three or higher on the AP exam may be eligible for college credit.

# **UNIQUE COURSE OFFERINGS**

# **Academic Study Center**

Academic Study Center is a 5 credit class.

Students meet Monday, Wednesday, and Thursday, or Tuesday, Wednesday, and Friday. Students meet for a full 90 minute block and 45 minutes on Wednesdays. The course is in their schedule, attendance is taken daily. Students work on the PLATO program in a specified course, assigned by their counselor. Most students are working on credit recovery for a class they previously failed.

Students earn 5 credits per class.

Credits earned apply toward graduation.

#### **Career Connections**

Semester Course / Credit: 5 per semester

Part of the Alternative Cooperative Education (ACE) Program

Course Description: Students identify personal aptitudes and interests, participate in various career exploration activities, and investigate future career options through a variety of community "job" experiences and community informational interviews. A portfolio is created to highlight academic skills, critical thinking skills, personal management and career planning. Enrollment is by recommendation from a teacher or counselor for 10th graders.

#### **Career Success**

Full-Year Course / Credit: 5 per semester

Part of the Alternative Cooperative Education (ACE) Program

Course Description: Students research how interests, aptitudes, abilities and personalities affect career choices. They gain employability skills by creating a resume, become skilled in job search and pre-job interview preparation, and participate in mock job interviews. In addition, students increase their personal financial skills. Students develop an understanding for the relationship between education and employability. Students are encouraged to have a job and additional credit is available for this employment. Enrollment is by recommendation from a teacher or counselor for 11th or 12th graders.

# **Community Employment Experience - OJT (on the job training)**

Full-Year/ Semester Course / Credit: Earn up to 10 per semester

\* See a Business teacher for more information.

Course Description: The Community Employment Experience - OJT offers the opportunity to explore possible career interests by participation in actual work settings. This includes job shadowing, internship/mentorship, and cooperative employment. The student will be credited a maximum of 300 hours (10 credits) per semester as part of the community/employment experience.

#### **Connections**

Semester Course / Credit: 3 per semester

Course Description: This class is a semester class for the responsible and empathetic student that offers an opportunity to provide peer support to a student with a disability. Some students may take this class for a full year, with special permission from the teacher. It is designed to facilitate awareness of individuals with special needs and the benefits of peer support in the least restrictive environment. The focus is on developing peer relationships, modeling appropriate behavior, and academic support when needed. This class is offered as an elective for 10th-12th graders. An application and teacher recommendations are required. Grades are based on a term paper and class participation. Class size is determined by the amount of special needs students per semester.

# **Independent Study**

Semester Course / Credit: 1 to 5 per semester

Course Description: When a student has demonstrated the ability and maturity necessary to work under supervision on a program of his/her own creation independent of a class setting, an independent study contract is devised with the teacher of the designated area of study. Having agreed on the number of semester hours (1 to 5 semester hours) that the study will merit, the student then seeks signed approval from the department chairperson of the area of study, from his/her counselor, from a parent, and from the assistant principal in charge of instruction. Once the semester begins, the semester hours are no longer negotiable. Further guidelines and instructional policies are outlined on the Independent Study contract obtainable from a counselor.

#### The NET College Access Program

1 or 2 Semester Course / Credit: 1 per semester

Course Description: The NET class is a college access program for students who are the first generation in their families to go to college. A student is considered first generation if neither one of his or her parents graduated from college. (Students who have older siblings attending college, but whose parents did not graduate, are also considered first generation.) This hands-on program is designed to help seniors develop a realistic plan for their future. The class meets weekly and provides support as students work through the college application process. Students learn about finding colleges that could be a good fit, college application components, essay writing, interview skills, financial aid, and scholarships. Students will apply to colleges during the first semester, and apply for financial aid by filling out the Free Application for Federal Student Aid (FAFSA) during the second semester. The class includes two field trips to college campuses.

# **Seminar -** Required for all students

Grade: 9-12 / Credit: 1 per year / Semester: 1 and 2

Note: Students do not need to register for Seminar the counseling office will assign a Seminar class for each student. Course Description: Seminar is a course designed to support and monitor students in a variety of areas including graduation requirements, post-secondary planning, growth mindset, etc. Students will complete the identified elements of the Individualized Career and Academic Plan(ICAP) process in their Seminar class. Seminar is a pass/fail class and attendance is required to pass.

#### Senior Plan 12

Senior year: Full-Year Course / Credits: 1 per semester

Course Description: Students meet as a group or individually with their senior advisor to discuss many different issues including but not limited to: reflection on high school experiences, future plans, academic progress toward graduation and personal growth. Students also receive their grades from their advisor at the end of the grading periods.

# **Independent Study Senior Plan**

Semester Course / Credit: 1 to 15 depending on individual experiential program

Course Description: Internship Classes at ACC/ Metro Job shadowing for future employment. Job shadowing can be done on the job if the student is seeking employment for the future in that area of interest. For example, if a student works in a small business and answers the phones but wants to own a business someday, he/she needs to shadow the business owner in order to learn about the business from "behind the scene."

#### **Student Assistant**

Semester Course / Credit: 1, 2 or 3 per semester; 3 credits max per semester

Course Description: The student will assist staff and our programs in a variety of situations working in one of the offices or with a teacher. Credit will be granted for no more than 3 semester hours of student assistants per semester. Student Assisting can be done for no credit in order to serve as community service. Student Assistant credits do not count toward the minimum credit requirement.

Note: Students must personally contact the staff member they wish to work with to explore what opportunities are available.

# LSS Student Assistant

Student assistants for the LSS program help fellow students who have significant challenges to learning. Various assistantships include individual tutoring, assisting a LSS student in the regular education classroom, assisting in a special class, and being a friend/helper in the cafeteria, library, or community.

# CTE: Career & Technical Education Classes (Off-site courses) ACTS Course Descriptions and Information

Students must obtain an application for enrollment from the counseling office or online at <a href="www.lps2.it/ACTS/">www.lps2.it/ACTS/</a>. Please review attendance and transportation procedures prior to the enrollment period. Student will be enrolled on a first-come, first-served basis. Articulation Agreements currently exist for both high school and college credit. This course list is subject to change. Students should contact their counselor for more information.

# INTRO TO AGRISCIENCE

Open to grades: 10-12 Course Length: 1 year Prerequisites: None

Fees: \$20

Location: Douglas County High School

Time: TBD

This course is a study of the fundamentals of agriculture including animal and equine science, record keeping, soil and crop science and horticulture. The class also emphasizes personal development and leadership skills. Students will be members of FFA and develop a supervised agricultural experience project outside of school hours.

# ALTERNATIVE AND RENEWABLE ENERGY

Open to grades: 11-12 Course Length: 1 year Prerequisites: None

Fees: \$15

Location: Sheridan High School

Time: TBD

This course prepares students for careers in a fast-growing job market by studying solar energy, wind power, hydrogen fuel cells, and other emerging alternative energy sources. Students will also investigate the scientific, economic, environmental, political, and social implications of each energy source in order to be prepared for the real-world expectations of employers in these fields.

#### **ANIMAL SCIENCE**

Open to grades: 11-12 Course Length: 1 Semester Prerequisites: None

Fees: \$20

Location: Douglas County High School

Time: TBD

This course is an in-depth study of the livestock industry. Students will learn about the biological systems of livestock, current animal industry trends, and livestock management practices. Students will participate in FFA (Future Farmers of America) and SAE (Society of Automotive Engineers).

# ARCHITECTURAL DRAFTING

Open to grades: 11, 12 Course Length: 1 Year Prerequisites: None

Fees: \$10

Location: Sheridan High School

Time: 12:00 -1:06 pm M; 1:04 -1:54 pm T-F

This course is designed to allow students to use their knowledge of CAD (computer-aided drafting) to create a set of house plans that meets city code requirements for a city. Students will use Auto CAD Lite and draw a floor plan, plot plan, electrical plan, foundation plan, and elevation for their house as well as construct a model frame house. Students will present their house plan to a panel of judges.

#### AUTOMOTIVE TECHNOLOGY 1

Open to grades: 11, 12

Course Length: 1 year; possible second year

Prerequisites: None

Location: Arapahoe Community College

Fees: Uniform, including shoes, shirt, and safety glasses - \$50 (includes Skills USA Registration)

Students must purchase ACC parking pass

Time: 7:15-9:10 am M-Th, or 9: 25-11:10 am M-Th, or 12:20 - 2:15 pm M-Th

The purpose of the Automotive Technology I course is to prepare students with the basic theory and skills required for a position within the automotive industry. Students will spend more than half of their time in the active lab. Students will become familiar with the automobile and the numerous job opportunities within today's job market. An active Skills USA chapter is sponsored by the class. Students are expected to join and participate in Skills USA activities. Internships are available through the AYES program for students interested in making automotive a career. The areas covered within this course are as follows: introduction to shop, tire and wheel service, tool usage, preventative maintenance, auto transmission / transaxle service, electrical fundamentals, battery, starting & charging, u-joint and axle shaft service, introduction to brakes, intro to heating & air conditioning, steering and suspension, wheel alignment, specialized scan tools, automotive computers, drivability diagnosis, engine repair & rebuild, and welding.

#### **AVIATION**

Open to grades: 11-12 Course Length: 1 year Prerequisites: None

Fees: TBD

Location: Cherry Creek Career and Technical Building

Time: 11:10-12:00 M - F

This program helps students understand and appreciate all facets of the aviation careers and aerospace industries of today. Topics range from how to achieve a private pilot license to careers at NASA. Additionally, students will prepare for the FAA private pilot knowledge exam; the first step for a flying career. Former students are employed in careers such as air traffic controllers, airline and military pilots, and aircraft mechanics. Instruction includes lecture, discussion, and computer-based flight simulator programs. The class also participates in various field trips to places such as Peterson Air Force Base, Centennial Airport, NORAD, and the United Airlines Training flight simulator. An aviation club is also associated with the class.

# **BROADCAST JOURNALISM**

Open to grades: 11-12 Course Length: 1 year Prerequisites: None

Fees: TBD

Location: Englewood High School

Time: 8:30 – 9:20 Tuesday – Friday (Mondays have an alternative schedule, so out-of-district students will be excused from Monday classes). Students completing this course will demonstrate the journalistic skill of broadcast reporting (writing, editing, and on-camera presence), while also developing the technological skills involved in creating digital productions, including digital video, digital photography and film editing. Students will understand, accept, and apply the legal and ethical responsibilities inherent in a free press. Students involved in this course will write, produce, edit, and broadcast video for classroom use, and ultimately for school and district distribution.

#### **CABINET AND FURNITURE MAKING**

Open to grades: 11-12 Course Length: 1 year Prerequisites: None

Fees: Depends on student project chosen; not to exceed \$50

Location: Sheridan High School

Time: TBD

This course designed for the student who is interested in the areas of engineering, architecture, or construction work. It offers students the opportunity to improve their knowledge of materials, tools, and machines used in woodworking. Students will experience: building cabinets and furniture, higher level of joinery and craftsmanship, use of machine techniques, working as a team, and leadership skills.

# **CRIMINAL JUSTICE**

Open to grades: 11-12 Course Length: 1 year Prerequisites: None

Location: Cherry Creek Career and Technical Building

Time: M-F 11:10-12:00 pm; 1:45pm – 3:15pm Alternating Block

This course aligns with the Colorado Community College Criminal Justice CRJ 127 course. This course may earn both high school credit and community college credit toward a 2 year A.A.S. (Associate of Applied Science) and certificate degree program. This course will have a heavy emphasis on law enforcement, crime scene investigation, and forensics science. The Criminal Justice program may be taken for either one or two years, as the courses offered alternate each year. It is highly recommended that students be able to read and write at the 10th grade level in order to receive the community college credit in addition to high school credit. This course is taught at a college level. As such, students will be expected to have the dedication and the motivation that they would apply to a college level course. This course is academic and is not an academy based, hands-on, law enforcement course. Field trips will be taken to the CELL Terrorism Museum, Arapahoe Community College's Firearm's and Police Pursuit Training simulators, Aurora Municipal Court to conduct mock trials. Students will need to arrange to carpool or independently drive to each of the field trips, as no buses will be provided.

# **COMPREHENSIVE COMMERCIAL PHOTOGRAPHY**

Open to grades: 11, 12 Course Length: 1 year Prerequisites: None

Location: Cherry Creek Career and Technical Building

Time: 1:45 - 3:15 M-F

This course aligns with the Colorado Community College Digital Photography 1 course MGD 111. This course will earn both high school credit and community college credit toward a 2 year A.A.S. (Associate of Applied Science) and certificate degree program. This course is designed to teach students 35mm black/white and color film technology and theory while using the darkroom as well as medium and large format cameras. Digital photography is explored in the second semester with Photoshop. Students will research the career possibilities of professional photography, develop a resume, meet professional photographers, and prepare for college and industry.

#### **COMPREHENSIVE GRAPHIC DESIGN**

Open to grades: 11, 12 Course Length: 1 year Prerequisites: None

Location: Cherry Creek Career and Technical Building

Time: 8:15 - 9:45 M-F and 1:45 - 3:15 M-F

This course aligns with the Colorado Community College Multimedia Graphic Design course MGD 112, Adobe Illustrator 1. This course will earn both high school credit and community college credit toward a 2 year A.A.S. (Associate of Applied Science) and certificate degree program.

This class provides talented artists an opportunity to explore a career in graphic design. Students will learn how to work for a client and produce creative solutions for a variety of commercial needs. Activities include creating promotional materials such as logos, brochures, posters, cards, and advertising. Students will employ hand drawing, and Adobe® programs such as Photoshop® and Illustrator® to complete their assignments. Students will develop professional portfolios and may submit work to contests and for college scholarships. Students may receive concurrent enrollment credit for this program.

#### **COSMETOLOGY**

Open to grades: 11-12 Course Length: 2 years

Prerequisites: Attend parent meeting and orientation

Fees: Students will be responsible for the purchase of their own kit (approximately \$500) and payment of program fees yet to

be determined.

Location: Cosmetology Facility at Englewood Middle School

Time: TBD – morning or afternoon sessions approximately 4 hours long.

The Cosmetology Program will prepare students to provide beauty services such as shampooing, cutting, coloring, styling, facials, manicures, and pedicures. Students may take a comprehensive cosmetology program or may specialize as a hairstylist, nail technician, or esthetician. This program will prepare students to pass the state-licensing exam given by the Colorado Barber/Cosmetology Board.

# **EQUINE SCIENCE**

Open to grades: 11-12 Course Length: 1 Semester

Prerequisites: None

Fees: \$20

Location: Douglas County High School

Time: Mon 1:13-2:03 pm, Tues and Thurs 1:25 – 3:00 pm

This course is an in-depth study of the equine (horse) industry and equine husbandry. Students will learn about the management of horses and horse facilities in a hands-on environment. Prior experience with horses is not necessary. Students will participate in FFA (Future Farmers of America) and SAE (Society of Automotive Engineers).

#### **FASHION DESIGN**

Open to grades: 11-12 Course Length: 1 year Prerequisites: None Fees: Approximately \$50

Location: Ames Facility – Littleton Public Schools

Time: 7:30-9:30 am TR and 12:30-2:30 TR (afternoon class contingent upon enrollment)

Fashion Design is a year-long career pathway program introducing students to the many facets of the fashion design industry. Students begin the semester looking at the history of American fashion starting in the 1920s. The elements and principles of design as they relate to fashion are explored along with fashion drawing, basic garment silhouettes, and construction details. Basic garment construction is integrated with a sewing project. During second semester, students will explore the marketing and merchandising side of fashion. The fashion capitals of the world are examined revealing the global perspective of the industry. Next, students take a fashion garment from concept to consumer, prototyping their product, and creating a design portfolio representing their knowledge of the design process. The fashion cycle and green design are explored. Students will participate in FCCLA (Family Career and Community Leaders of America) a nationally-affiliated student leadership organization. This fun organization focuses on leadership, community service, and student recognition. Each student will select a STAR event project related to fashion. This project can be presented at state conference in April if desired.

#### **FIRE SCIENCE**

Open to grades: 11-12 Course Length: 1 year

Prerequisites: Accuplacer score of 98 or ACT of 19 or higher

Must be currently enrolled in Algebra 11 or higher Fees: \$67 per class for a total of \$201 plus cost of books

Location: Rock Canyon High School Time: Morning session - time TBD

If you are interested in a career in the fire service or emergency medical systems, this program is for you. The career path in public safety can now be started in high school by completing the following three-course program: Fire Science/Principles of Emergency Service, CPAT and First Responder. During this program, students will learn about fire extinguishing methods and equipment, special extinguishing agents, special hazard considerations and principles of emergency service. Today, firefighters respond to a vast assortment of emergency situations involving technical expertise in many fields; the old job of a firefighter only battling fires is long gone. In fact, whenever any emergency exists in a community, the fire department will be called to mitigate the situation. Upon completion of this program, students will be trained in all facets of basic fire/rescue operations, as well as First Medical Responder emergency medical training, including CPR certification for the healthcare provider. They will receive additional instruction in other areas of public safety such as fire prevention and instructional techniques for teaching the public important safety information. The CPAT prep course teaches prospective public servants the strategies and tactics needed to prepare for the extremely demanding physical agility tests required by virtually all fire jurisdictions. Students who successfully complete all three classes with a grade of "C" or better will earn nine hours of college credit at Red Rocks Community College.

#### HEALTH SCIENCES PROGRAM

Open to grades: 11-12 (priority given to seniors)

Course Length: 1 year

Prerequisites: Biology recommended

Fees: Approximately \$175 for scrubs, textbooks and HOSA dues

Location: Ames Facility – Littleton Public Schools Time: 1st Sem: 7:30-9:30 am – or – 12:30-2:30 pm M-F 2nd Sem: 7:00-9:45 am – or – 12:00-2:45 pm M-F

The Littleton Health Sciences Program is a comprehensive two-semester course based on the National Consortium for Health Sciences Education standards. During the first semester students explore the healthcare industry and begin to lay the foundation for an entry level career. The rigorous curriculum includes: basic anatomy and physiology, medical terminology, health care systems, medical legal and ethical issues, and health career exploration. Students will be exposed to experts in the industry through guest speakers and field trips. Individual career pathways are developed during the second semester. Students may participate in the Nurse Aide Program or an Internship program. Professional portfolio development, employment skills and leadership training through the Health Occupations Students of America (HOSA) are emphasized during the second semester. College credit may be available. A visit is required as part of the application process.

#### INTRODUCTION TO VETERINARY SCIENCE

Open to grades: 11, 12 Course Length: 1 semester Prerequisites: None

Fees: \$20

Location: Douglas County High School

This course is designed for students to explore the field of veterinary medicine. Students will apply the role of a veterinary technician in the diagnosis and treatment of animal diseases. Topics to be discussed include: veterinary terminology, anatomy, physiology, pathology, genetics, handling, and restraint, and physical examinations along with common surgical skills. Students will engage in a variety of laboratory activities.

#### MECHANICAL DRAFTING

Open to grades: 11, 12 Course Length: 1 Year Prerequisites: None

Fees: \$10

Location: Sheridan High School Time: M 1:10-1:56; T-F 1:58-2:48

The objective of this course is to draw mechanical objects by using geometric construction. Students will learn how to draw in the following styles: sketching, isometric, oblique, surface development, orthographic auxiliary, sectional and geometry. There will be an introduction to surveying and using a transit to survey the location of points out in the field. Also included: architectural design, and building a tower structure.

# **NATURAL RESOURCES**

Open to grades: 11, 12 Course Length: 1 Semester Prerequisites: None

Fees: \$20

Location: Douglas County High School

Time: TBD

This course emphasizes the fundamentals of natural resources. Students will study wildlife, water usage and other natural resource management practices including forestry and open space. Students are to continue participation in FFA and SAE.

# **PROSTART 1 AND 2** (Each a year-long course)

Open to grades: 11, 12 Course Length: 1 Year Prerequisites: None

Fees: \$45

Location: ThunderRidge High School

Time: TBD

ProStart is an academically rigorous 2-year career-building program for high school students which involve taking ProStart 1 and ProStart 2. Whether students are looking to enter the job market directly after graduating, or if they plan to attend college, a ProStart graduate makes a solid candidate for future success! The course includes blended coverage of culinary and management topics including relevant and timely topics from global cuisines to sustainability. Content is aligned to certificate opportunities. The student must pass Year 1 & 2 exams with a 70 percent or better and work a minimum of 400 hours in industry (up to 200 possible through the school site), complete a Student Work Experience Checklist, and follow agreed-upon guidelines for conduct and attendance.

# **TEACHER CADET**

Open to grades: 11-12 Course Length: 1 year

Prerequisites: Strong reading and writing skills

Fees: Approximately \$50

Location: Ames Facility – Littleton Public Schools Time: 7:30-9:20 am M-F – or – 12:40-2:30 pm M-F

The Teacher Cadet program is an innovative program that introduces high school students to the teaching profession. Students will explore the learner, the school, and the role of the teacher through exciting hands on activities, guest speakers, field trips, 15 hours of classroom and other school observations, classroom observations, job shadowing and cooperative learning situations. During second semester, students will participate in an extended field experience in which the cadets work closely with a cooperating teacher for 12 weeks. The cadets will be immersed in the classroom experience by helping students one-on-one or in large groups, plan lessons, grade, create and teach. The rewarding experience will also help cadets earn both high school and college credit. Each Cadet will create a portfolio throughout the year. College credit for course may be available with a B or better in the class. Students will participate in FCCLA, a national student leadership organization, with the opportunity to compete at the state and national level.