Centaurus High School

The Pre-Engineering Focus School
International Baccalaureate Diploma School

Course Description Book

2007 - 2008

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ADMINISTRATION		COUNSELORS
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This Course Description Guide describes the educational opportunities, which have been developed by Centaurus High School staff and other Boulder Valley personnel to provide learning experiences for ALL students. It is our aim to provide rigorous curricula. Planning a program of educational coursework is the student's responsibility with assistance from parents, teachers, counselors, and other resource personnel.

STATE OF COLORADO 4-YEAR COLLEGE ENTRANCE REQUIREMENTS: We encourage every Centaurus student to begin planning for post high school training. To assist students and parents, we have outlined admission criteria representing colleges on a continuum from the most selective private institutions to less selective state colleges. Additional information will be provided at information seminars presented by the Counseling Department.

Academic Area Core Class Requirements	Class of 2008 – Phase 1	Class of 2010 – Phase 2
English	40 credits	40 credits
Math (Algebra 1 level & higher)	30	40
Natural/Physical Sciences (20 credits must be lab based)	30	30
Social Sciences (at least 10 credits of U.S. or World History)	30	30
Foreign Language (must be same language)	--	20
Academic Electives	20	20
TOTAL	150	180

CREDIT: Credits are indicators that a student has fulfilled a requirement leading to high school graduation. Five credits are awarded when a student has successfully completed a semester of course work in an individual class.

CUMULATIVE GRADE POINT AVERAGE: The average obtained by dividing the total number of grade points earned in high school by the total number of credits matriculated during the current grading period.

RANK IN CLASS: Class rank for the Class of 2010 and beyond will not be placed on report cards or transcripts. Class Rank will continue to be calculated for the Classes of 2008 and 2009 per BVSD Board Policies IKC and IKC-R.

CLASS LOAD: Freshmen are required to take 7 classes per semester. Sophomores must take a minimum of six classes per semester. It is recommended that sophomores take seven classes. Juniors and seniors must register for a required load of 5 classes per semester or a recommended load of 6 classes per semester. Juniors and seniors may register for 7 classes per semester if they choose. Students are required to maintain minimum class loads until graduation. Students may graduate early with principal approval. Contact a counselor for details. A minimum of 100 credits must be earned at Centaurus High School in grades 11-12 to earn a BVSD diploma.

ATHLETIC ELIGIBILITY: The Colorado High School Activities Association requires that students carry and maintain a passing grade in a minimum of five classes (25 credits) at the time of participation to be eligible for athletics. Students must remain eligible on a weekly basis. During the semester preceding participation, students must have carried a minimum load of 5 classes and must pass a total of 25 credits. Students who have any questions about their academic or general eligibility should direct any questions to the Athletic Director. It is recommended that athletes enroll in at least six classes.

TRANSCRIPTS: Transcripts can be requested through our Registrar. There is a charge of $2.00 for each transcript.

CONCURRENT COLLEGE ENROLLMENT: Students who exceed the academic classes available at Centaurus may earn college credits through concurrent enrollment in college courses. Information packets and forms are available in the Counseling Office. The student must return a completed application to the Counseling Office no later than 60 days prior to the expected enrollment in an institution of higher learning.

GRADUATION REQUIREMENTS (*beginning with Class of 2010) **The Boulder Valley School District requires that a minimum of 220 credits be earned in grades 9 – 12. The following credits must be earned in the areas listed below.**		
Credits	Grade	
Language Arts - 40 credits		Recommended sequence
10	9th	Freshman Language Arts
10	10th	World Literature and Composition
10	11th	American Literature and Composition
5	12th	Communications
5	12th	Language Arts Electives
Social Studies – 30 Credits		Recommended sequence
5	9th	U.S. Government
5	9th	World Geography
10	10th	World History
10	11th	U.S. History
Math – 20 credits		See math requirements for college entrance. (Recommended minimum: Algebra I or higher Math level is required for graduation)
Science – 20 credits 10 Life 10 Physical/Earth		See science requirements for college entrance. (Recommended minimum sequence through Chemistry). All students must have 10 credits in the Physical Sciences (Physical, Chemistry, Physics, Astronomy, Geology) & 10 credits in the Life Sciences (Biology, Intro to Biology, Intro to Earth-after Physical & Intro to Bio, Anatomy & Physiology).
***World Languages** – 10 credits		10 credits must be in Level 2 or higher*
Physical Education – 15 credits		
5	9th	Comprehensive P.E.
10	9th – 12th	P.E. Elective
Health – 5 credits		
5	10th	Issues in Health or
10	11th – 12th	Living On Your Own: 1st sem. – 5 credits in Practical Arts & 2nd sem. – 5 credits in Health (must pass both semesters to get health credits)
Humanities - 10 credits		
Music, Art, or World Languages (at level 3 or above)		
Personal Money Management – 12 hours (Through a qualified district course)		
Practical Arts – 5 credits		
Computer, Business, Family and Consumer Science or Boulder Tech		
***Class of 2010** – All students must demonstrate evidence of completion of a 12-hour course in Money Management & Personal Finance in grades 7-12 or through a qualified district course.		
Approved Electives – 75 credits		
Total Credits 220 credits		

SCHEDULE CHANGES

The master schedule is created from the course selections students make during registration time in the spring. It is explained and impressed upon students that schedule changes are very difficult to make. Consideration of course selection is a very important and serious process. All students are encouraged to create and maintain a four-year academic plan.

Schedule changes are made for the following reasons:

- A student has already taken the course
- Too many classes on the student's schedule
- Imbalance of class size
- Error on student's schedule

Procedure to change schedule:

- Students must first review their four-year plan with a counselor to see how the class change affects the student's plan.
- All schedule changes and drop forms must have student, parent, teacher, and counselor signatures. In most cases an administrator's signature is also required.
- Course changes should be completed within fifteen school days after the start of a new semester.

- Students may drop a class during the first fifteen days with no penalty. The course will not appear on student's cumulative transcript. (Reminder: freshmen must have 7 classes or 35 credits; sophomores must have 6 classes or 30 credits; juniors and seniors must have 5 classes or 25 credits.)
- Students who drop a class in the sixteenth day through the thirtieth day of the semester will be issued a grade of "WP" (withdrawal passing) or "WF" (withdrawal failing) that will be recorded on the cumulative transcript. This grade does not impact the student's cumulative grade point average.
- Students who drop a class or discontinue attending after the thirtieth day of the semester will receive a grade of "F" that will be recorded on the transcript and will be averaged into the student's cumulative grade point average.
- When extenuating circumstances exist, the building administrator or designee may exempt certain students from this practice based on consultation with personnel from Special Education, English as a Second Language or other appropriate staff.
- Class sizes must maintain a balance. A class will not be overloaded to make a schedule change.
- Schedule changes will occur through the first week of school.
- After the first week of school, a parent/teacher conference must occur prior to any schedule change.

FOUR-YEAR PLANNING

The master schedule is built from student requests. If students do not select a class now, it may not be offered and thus can not be a choice later. This is especially true for electives. Students and parents should choose courses very carefully. Students and parents should consider the following:

Graduation requirements and 4-year plan	Career preparation
College entrance requirements	NCAA athletic requirements
Boulder Tech. requirements	College major

FOUR-YEAR PLANNING WORKSHEET

Freshman Year: Language Arts 9 U.S. Government/Geography Math Science Comprehensive P.E. Foreign Language (Recommended) _____ Total Credits Earned = _____ Credits Required = 70	Sophomore Year: World Literature and Composition World History/World Studies Math Science Health Foreign Language (Recommended) _____ Total Credits Earned = _____ Minimum Credits Required = 60
Junior Year: American Literature and Composition U.S. History _____ _____ _____ _____ Total Credits Earned = ____ Minimum Credits Required = 50	Senior Year: Language Arts Communication/Elective _____ _____ _____ _____ _____ Total Credits Earned = _____ Minimum Credits Required = 50

Students should consider the following when designing their four-year plan:

1. **High school scholastic record as reflected in grade point average, and the rigor of courses taken.**
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2. **The design of the high school transcript in preparation for college.**
3. **The results of scholastic aptitude and achievement tests.**
4. **Personal recommendations of counselors and teachers.**
5. **Activities, both in and out of school.**
6. **Consider the courses as they apply to career and college interests.**

COLLEGE ADMISSIONS TESTS/ASSESSMENT TESTS available are: PLAN (pre-ACT), PSAT/NMSQT (pre-SAT), American College Test (ACT), and College Board Scholastic Aptitude Test (SAT). Contact the Counseling Office for more details.

Transcripts for college may have two calculations for grade point average. Every transcript will have the weighted GPA calculated on a 5-point system. Students have the option of including an unweighted GPA. The unweighted information is calculated by decreasing the points for the grades earned in courses; A=4 points, B=3 points, C=2 points, D = 1 point and F = 0 points. Weighted grades are calculated as: A = 5, B = 4, C = 3, D = 2 and F = 0
(W denotes a weighted class).

INTERNATIONAL BACCALAUREATE PROGRAM

Crs #:	Title:	Level:	Credits:	Prerequisite:	Fee:
I80 A&B	IB LA Grade 11 (W)	11	10	World Lit & Comp. Advanced (W)	
I81 A&B	IB LA Grade 12 (W)	12	10	IB LA Grade 11th (W)	
I47 A&B	IB Spanish 4 (W)	10-12	10	Spanish 3.	
I73 A&B	IB Spanish 5 (W)	11-12	10	IB Spanish 4	
I51 A&B	IB French 4 (W)	10-12	10	French 3	
I71 A&B	IB French 5 (W)	11-12	10	IB French 4	
I67 A&B	IB German 4 (W)	10-12	10	German 3	
I72 A&B	IB German 5 (W)	11-12	10	IB German 4	
I30 A&B	IB World History (W)	11	10	None	
I32 A&B	IB European History (W)	12	10	IB World History	
I43 A&B	IB Biology I (W)	11	10	Physical Science, Chemistry	
I39 A&B	IB Biology II (W)	12	10	IB Biology I	
I94 A&B	IB Math Studies Level I (W)	11-12	10	Algebra 2	
I93 A&B	IB Math Studies Level II (W)	11-12	10	IB Math Studies Level I	
I96 A&B	IB Math Higher Level I (W)	11	10	Algebra 2 or Pre-Calculus	
I100 A&B	IB Math Higher Level II (W)	12	10	IB Math Higher Level I	
I64 A&B	IB Visual Arts SL/HL (W)	11-12	10	Fdtn. in Art; Draw/Paint 1; teacher recommend	
I99	IB Knowledge (W) (Theory of Knowledge)	11-12	5	Full participation in IB Program (1 sem. ea. year)	
I60 A&B	IB Design Technology/Pre-Engineering	12	10	Minimum of 1 Pre-Engineering Course	

GROUP 1 – IB LANGUAGE ARTS

IB LA Grade 11 (W):
This course develops the skills used in literary analysis based on close reading of selected IB works incorporating a world literature component. Frequent writing projects are assigned. Intensive practice is given in oral presentation, especially formal commentary. The curriculum not only answers to the particularities of IB goals, but also equips students for the AP Exam in English Literature and Composition. Summer reading required. This course satisfies the American Literature requirement. (Weighted class)

IB LA Grade 12 (W):
This course completes the two-year curriculum begun in IB English 11th grade: the detailed study of Shakespearean drama, non-fiction (essays and autobiography), modern poetry, and modern fiction. Close reading of works in a variety of cultural contexts and the writing of analytic essays are emphasized. A variety of oral work continues. Thorough preparation for the HL or SL IB examination is provided. The two-year curriculum not only answers the particularities of IB goals, but also equips students for the AP Exam in English Literature and Composition. This course imparts advanced college reading and writing skills. Summer reading required. (Weighted class)

GROUP 2 – IB WORLD LANGUAGES

IB Spanish 4 (W):
This course, taught exclusively in Spanish, explores advanced topics in composition and conversation, with an emphasis on refining and integrating advanced grammar into daily communication. Social and cultural topics will be explored through the study of literature. (Weighted class)

IB Spanish 5 (W):
This course is a rigorous continuation of IB Spanish 4 and is designed for the disciplined student who plans to take the IB standard level and/or the AP Spanish test. The focus of this program is language acquisition and development through the study of literary texts and other readings. Oral and written proficiency will be evaluated frequently. (Weighted class)

IB French 4 (W):
This course, taught exclusively in French, explores advanced topics in advanced composition and conversation, with an emphasis on refining and integrating advanced grammar into daily communication. Students will develop an appreciation of prose and poetry. Emphasis will be placed on comprehension of French as spoken by educated native speakers. Students will develop appropriate verbs, structures, vocabulary, idioms, and cultural understanding necessary to perform basic communicative functions at an advanced level. (Weighted class)

IB French 5 (W):
This course is a continuation of IB French 4 designed for students who plan to take the IB French Language exam and the AP French exam. This course, taught exclusively in French explores advanced topics in composition, grammar, and in-depth analysis of challenging literary works and readings from contemporary sources such as magazines, newspapers and articles. Students will be expected to understand a variety of listening materials taken from French television and radio programs. Students will develop a portfolio of readings and reports, both oral and written, to develop understanding of a particular aspect of French culture. A major outside project will be required for each semester. Oral proficiency will be evaluated throughout the year as a part of the international assessment for the IB Language B SL (standard level) French exam and the AP French exam. (Weighted class)

IB German 4 (W):
This course, taught exclusively in German, explores more advanced topics in advanced composition and conversation, with an emphasis on refining and integrating advanced grammar into daily communication. Students will develop an appreciation of prose and poetry. Emphasis will be placed on comprehension of German as spoken by educated native speakers. Students will develop appropriate verbs, structures, vocabulary, idioms, and cultural understanding necessary to perform basic communicative functions at an advanced level. (Weighted class)

IB German 5 (W):
This course is taught in German and addresses the requirements of the IB program by using the thematic approach to the curriculum. The readings will support the themes to be addressed on a yearly basis. Some of the readings will be classical literature and others will consist of modern writings, magazine articles, and more current information and issues. Grammar is expected to be used correctly. Oral proficiency will be monitored carefully and increased by continued participation. (Weighted class)

GROUP 3 – IB SOCIAL STUDIES

IB World History (W):
IB World History (20th Century Topics) is a year long course that meets half of the IB higher level requirements. This class focuses on the rise of single party states, causes, effects and practices of war, and the Cold War. This class is open to IB candidates. (Weighted class)

IB European History (W):
IB European History is a year long course that meets half of the IB higher level requirements. This class focuses on the rise of European single party states, causes, effects, and practices of war, and in depth study of Europe as a region in the early modern and modern historical periods. (Weighted class)

GROUP 4 – IB EXPERIMENTAL SCIENCES

IB Biology I (W):
IB Biology I is the first year of a two-year sequence. It will focus on cells, chemistry, genetics, evolution human health and physiology and an interdisciplinary research project. This lab-oriented course is required for all IB candidates to establish fundamental biology concepts in preparation for IB Biology II. (Weighted class)

IB Biology II (W):
IB Biology II is an in-depth study of selected topics. An emphasis is put on cell structures, membranes, genetics, botany, evolution, human anatomy and physiology, and ecology and conservation. Laboratory activities reinforce concepts and are used to improve scientific writing skills. Students are also expected to design some labs. Completion of IB Biology II will prepare a student for the High Level IB Biology Exam. (Weighted class)

GROUP 5 – IB MATH

IB Math Studies Level I (W):
Course content includes algebra, sets and logic, geometry, trigonometry, statistics and probability, functions, financial mathematics and three options including: matrices and graph theory, further statistics and probability, and introductory differential calculus.. (Weighted class)

IB Math Studies Level (II W):
This course is a combination of Math Studies I and will prepare students for the Math Studies SL exam. (Weighted class)

IB Math Higher Level I (W):
This course prepares students for the IB-HL math exam. The course will introduce some modern algebra, the binomial theorem, math induction and transformations. It will also further applications in statistics, analytic geometry and calculus. (Weighted class)

IB Math Higher Level II (W):
This course is a continuation of Math HL I96. The calculus studies finish AB Calculus and continue through BC Calculus with students prepared for the IB Math HL exam. (Weighted class)

GROUP 6 – IB VISUAL ARTS

IB Visual Arts SL/HL (W):
IB art is for the serious student who is willing to generate a minimum of 12 quality pieces of art in a year. The student will also develop a sketchbook/journal that includes sketches and art history topics. The final portfolio and sketchbook project are evaluated by an outside examiner. This class will earn a weighted grade and, as with all art classes, there is a lab fee requirement. Students will complete approximately 6 pieces per semester and several workbook/sketchbook per year. (Weighted class)

IB Knowledge (Theory of Knowledge) (W):
How do we know what we know, and can we prove it? These questions are the domain of Theory of Knowledge, the required core class for all IB Diploma candidates. Part philosophy, and part cultural anthropology, the class will examine issues of knowledge and knowledge claims in all of the subject areas of the IB Diploma Program. Through journals, presentations and papers students will come to a critical understanding of the claims of knowledge in the world around us. (Weighted class)

IB Design Technology/Pre-Engineering (W):
There is no better way to understand the world of product design and development than to do it! Students will be immersed in laboratory investigations, manufacturing, and project management in this course. *Previous Engineering course are required. (Weighted class)

ART

Crs #:	Title:	Level:	Credits:	Prerequisite:	Fees:
A35	Foundations in Art	9-12	5	None	$30
A41	Drawing and Painting 1	9-12	5	Foundations In Art	$30
A42	Drawing and Painting 2	9-12	5	Drawing and Painting 1	$30
A43	Drawing and Painting 3	10-12	5	Drawing and Painting 2	$30
A44	Drawing and Painting 4	10-12	5	Drawing and Painting 3	$30
A61	Pottery/Sculpture 1	9-12	5	None	$30
A62	Pottery/Sculpture 2	9-12	5	Pottery/Sculpture 1	$30
A63	Pottery/Sculpture 3	10-12	5	Pottery/Sculpture 2	$30
A64	Pottery/Sculpture 4	10-12	5	Pottery/Sculpture 3	$30
A71	Photography 1	10-12	5	None	$35 (+$10 camera rental)
A72	Photography 2	10-12	5	Photography 1	$35 (+$10 camera rental)
A73	Photography 3	11-12	5	Photography 2	$35 (+$10 camera rental)
A74	Photography 4	11-12	5	Photography 3	$35 (+$10 camera rental)

Independent Study is available after 4 semesters. It is called Portfolio Review. Student will build a portfolio of work.

Foundations in Art:
Students can expect a wide variety of two-dimensional and three-dimensional experiences in this survey course. Students will be encouraged to think creatively as they develop drawing and painting skills and discover their personal preference for creating two and three-dimensional art. The elements and principles will be stressed and art history will be an informal component. Some media possibilities could be pencil, watercolor, clay, acrylic, wax casting, pen and ink, mixed media and others.

Drawing and Painting 1,2,3,4:
Drawing and Painting 1 is a foundation course that emphasizes basic design concepts using two-dimensional media. Students will study concepts in art history. In Drawing and Painting 2, 3 and 4, students will use advanced techniques to produce works for a portfolio. In addition, students will further exercise critical art skills through a study of aesthetics to become knowledgeable consumers and producers of art. Sketchbooks are required weekly.

Photography 1:
This introductory course deals with controlling light to produce an aesthetically pleasing image on light sensitive film and paper. Students will learn camera use, film processing darkroom procedures, visual literacy and the principles and elements of art in composition.

Photography 2:
This course deals with improving the student's ability to see, take and create a photographic image. Students may experiment with creative darkroom techniques such as sepia toning, hand coloring and multiple images.

Photography 3:
In this course students are encouraged to work in depth to initiate and carry out photographic ideas on a more independent basis. Medium format, digital and color photography may be introduced.

Photography 4:
This is an advanced level course designed to give students expanded skills and increased confidence in their ability to create photographs. Proficiency in basic skills will be expected. Students may be expected to make decisions about what the subject matter of their artwork will be. Some instruction may be given on an individual basis with the student's particular career goals in mind. Students may be expected to set their own goals and deadlines.

Pottery/Sculpture 1,2,3,4:
Pottery/Sculpture 1 is a foundation course that emphasizes basic design concepts using three-dimensional media. In addition to studio production, students will study concepts in aesthetics and art criticism. Studio assignments will relate to historical art models. In Pottery/Sculpture 2, 3, and 4, students will explore functional and nonfunctional art forms. In the advanced levels, students will refine skills and experiment with a wider range of materials, tools, and equipment, including the potter's wheel. Advanced students may choose either pottery or sculpture as an area of emphasis.

AVID (Advancement Via Individual Determination)

Crs #:	Title:	Level:	Credits:	Prerequisite:
X51 A&B	H.S. AVID 9	9	10	Teacher Placement, Concurrent or passed Algebra 1
X52 A&B	H.S. AVID 10	10	10	Teacher Placement, at least 1 honors/AP course
X53 A&B	H.S. AVID 11	11	10	Teacher Placement, at least 1 honors/AP course
X54 A&B	H.S. AVID 12	12	10	Teacher Placement, at least 1 honors/AP course

AVID (Advancement Via Individual Determination):
AVID is a college preparatory program that focuses on students who are academically proficient yet need support in reaching and succeeding in advanced academic courses. AVID bridges student gaps in the skills, language, habits and resources of the college-bound student. Additionally, students in AVID receive academic and motivational support. Other aspects of the program include: Field trips to places of educational and cultural interest, tutoring by college students, partnerships with Naropa and the University Colorado-Boulder.

BUSINESS EDUCATION

Crs #:	Title:	Level:	Credits:	Prerequisite:	Fees:
B11	Word Processing 1	9-12	5	None	$10
B12	Word Processing 2	9-12	5	Word Processing 1	$10
B13	Desktop Publishing & Computer Graphics	9-12	5	Word Processing 1	$10
B41	Business Foundations	10-12	5	None	
B42	Finance	9-12	5	None	
B44	Business Law	11-12	5	None	
B52	Accounting 1/Semester 1	10-12	5	None	$15
B53	Accounting 2/Semester 2	10-12	5	Accounting 1	$15
B60	Business Management	10-12	5	None	
B81 A&B	Marketing 1	10-12	10	None	
B82 A&B	Marketing Advanced	11-12	10	Marketing 1	
B83 A&B	Marketing Internship	11-12	10-30	Marketing 1 or Advanced Marketing & approved by Teacher-Coordinator	

Word Processing 1:
This course stresses mastery of the computer keyboard by the touch method. Emphasis is placed on developing correct typing techniques and achieving useable levels of speed and accuracy. Students will type short reports, personal and business letters, and simple tabulations. (Keyboarding at the middle school is not the same course as Word Processing 1.)

Word Processing 2:
This is a course in which emphasis is placed on improving speed and accuracy on the computer keyboard. Word Processing applications include reports with title page, table of contents, footnotes, bibliography, business letters, tabulations and business forms. This class includes an introduction to microcomputers and provides an understanding of how computers affect our daily lives. Also included in the course are the history of computers, computer technology, computer hardware, data communications, programming, word processing and the use of electronic spreadsheets, data bases, desktop publishing and presentation graphics.

Desktop Publishing & Computer Graphics:
Learn how to use desktop publishing, graphics and presentation software to create newsletters, books, magazines, newspapers, multimedia presentations and movies. Use basic concepts of design, layout, topography and graphics to create professional looking documents and presentations.

Business Foundations:
This is an introductory course designed for students who desire to learn about the business world and how small businesses are formed and operated. Units of instruction may include: Forms of business ownership, factors in locating a business, marketing, finance, obtaining and training employees, financial statements, and small business management. It also includes personal business interviews and creating your own business.

Finance:
This course is designed to help students make wise consumer decisions by recognizing, understanding and comparing the alternatives facing them as consumers. Practical math skills related to consumerism will be applied throughout the course. Course content may include: the consumer's role in a capitalist economy; budgeting, purchasing decisions, and consumer credit; banking services; checking accounts and checkbook reconciliation; investing; life, auto and property insurance; and housing for individual and family units.

Business Law:
This course is for students interested in acquiring basic knowledge of the legal framework of our society. The content includes: history, development, and classification of laws; personal and business law related to everyday life; contract law; the court system and courtroom procedures; legal terminology and crime classification.

Accounting 1 (Semester 1) /Accounting 2 (Semester 2):
This is an introductory course in double entry accounting procedures. Students will learn to keep financial records for a service or retail business. Principles covered include: The bookkeeping cycle; debit and credit theory; financial statements; use of various journals and ledgers; worksheets; accounts receivable and payable, and payroll systems. Business practice sets are used to provide simulated experience in keeping the records of typical small businesses.

Business Management:
Students apply the management principles of planning, organizing, directing and controlling by forming and managing their own companies through a computerized management simulation. Computers are used to produce business letters, spreadsheets, database, desktop publishing, graphs and promotional flyers.

Marketing 1:
This is a one-year introductory course for students interested in Marketing. The course explores the fundamentals of marketing including: economics, sales, product/service planning, promotion/advertising, market research, logistics, human relations, and communications and marketing career development. Membership in the student marketing organization, DECA, is an integral part of the Marketing Program.

Marketing Advanced:
Marketing Advanced is the second or third year course in the Marketing Program for students interested in careers in the field of marketing and management, global marketing and entrepreneurship. The content emphasizes strategic marketing, marketing management, business operation and the global marketing environment. The course challenges students to apply their classroom instruction through business simulations and interaction with the business community. Students will develop a business plan and demonstrate the application of marketing skills and concepts within the business environment. Membership in the student marketing organization, DECA, is an integral part of the Marketing Program.

Marketing Internship:
BE A SUCCESS in the business world! Marketing Internship gives students the opportunity for practical application of the concepts learned from the marketing classroom to a real world paid experience. Marketing Internship is available as an option to students who are enrolled in the Marketing Program and have received the instructor's permission to enroll. Students must be at least 16 years old and able to work at least 15 hours per week in positions approved by the teacher-coordinator in the field of marketing.

COMPUTER EDUCATION

Crs #:	Title:	Level:	Credits:	Prerequisite:
D77	Java	10-12	5	None
D86	Computer C++ Programming (W)	10-12	5	None
D87	Internet/Web Page Applications	10-12	5	None

Java
This is an introductory course in the Java Programming Language. This course will include System I/O, methods, classes, flow control, applications and applets.

Computer C++ Programming: (W)
This course deals with the C++ language. Students taking this course will write a variety of programs that will allow them to experience all of the data types and data structures (arrays, structs, classes) that are used in modern programming, in addition to the discussion and the applications of object-related programming. (Weighted class)

Internet/Web Page Applications:
This course is designed for students who are interested in the further exploration of computer applications. It will concentrate on the software topics of technical writing, desktop publishing, electronic publishing, presentation graphics, and communication. It will include the use of computers, digital photography, video equipment and the Internet.

ENGLISH AS A SECOND LANGUAGE/SHELTERED CLASSES

Crs #:	Title:	Level:	Credits:	Prerequisite:
LA2 A&B	English as a Second Language 2 (2 Periods)	9-12	20	LA1 or Teacher Placement
LA3 A&B	ESL 3 Language Development	9-12	10	Teacher Placement
L06 A&B	Freshman Language Arts/ Sheltered	9	10	Placement in ALA Program & Teacher Recom.
L49 A&B	World Literature & Composition/ Sheltered	10	10	Placement in ALA Program (ESL)
L65 A&B	American Literature & Composition/Sheltered	11	10	Placement in ALA Program & Teacher Recom.

ESL Programs
In order to meet the needs of English Language Learners, a variety of ESL and sheltered instruction courses are offered. Sheltered instruction is a method of delivering content instruction to students to make content more comprehensible. Both language and content objectives are planned into the curriculum. The content objectives are based upon the standards, benchmarks, and curriculum for the academic content area being taught. Sheltered instruction incorporates the use of a variety of techniques including modeling, demonstrations, graphic organizers, visual aids, vocabulary previews, predictions, cooperative learning, peer tutoring, multicultural content, and other high-quality teaching techniques. There is a focus on student engagement and interaction with the teacher, with other students, and with text as well as the frequent use of supplementary materials to support the core academic text.

Some courses that are identified as ESL and sheltered are for English Language Learners (ESL students) only. These courses include:

L06 Freshman Language Arts (Sheltered)
L49 World Lit & Comp (Sheltered)
L65 American Lit & Comp (Sheltered)
LA2 ESL 2
LA3 ESL Language Development

Sheltered instruction strategies may be provided in many other courses that are not identified as sheltered when the needs of the students who are enrolled in them require it. Students should work with their ESL teacher and counselors to discuss enrollment, especially in courses beyond those required for graduation.

English As A Second Language 2:
ESL 2 emphasizes listening, speaking, reading, and writing. In **a two-hour block** of time, students study grammar, idioms, pronunciation, and cultural awareness. In addition, they will learn skills applicable to content area classes. This class emphasizes reading comprehension and writing improvement. Credit in this course will count towards credit required in Language Arts.

ESL 3 Language Development:
ESL Language Development emphasizes a variety of communication skills: listening, speaking, reading and writing. This class will provide a necessary bridge for students between ESL 2 and Sheltered World Literature and Composition. Students will develop reading and writing skills integral to their success in subsequent literature courses.

Freshman Language Arts - Sheltered:
In this course, students are exposed to various literary genres with a focus on short story, drama, and novel. Paragraph writing skills are maintained and further developed, as are grammar, usage, and spelling. Literary and poetic devices are used and developed to enhance students' enjoyment of reading and to sharpen their skills in written and oral communication. An ongoing use of research skills in emphasized. In addition, students develop an awareness of critical analysis.

World Literature & Composition - Sheltered:
ALA (ESL) program World Literature and Composition is a year-long course for sophomores. The course will be organized in chronological, regional, or thematic order. It will be complemented by the sophomore study of World History. Critical reading any analysis of world literature from 3500BC to the present will be the core of the course. Various modes of comprehension will be taught. Grammar, mechanics, vocabulary building and spelling will be emphasized throughout the course to improve and enhance the quality of student writing.

American Literature & Composition - Sheltered:
ALA (ESL) program American Literature and Composition is a year-long course for juniors. The course builds skills learned in World Literature and Composition. The course will include the study of classic American literature to current American literature in chronological order. In addition, instruction in writing techniques will be a continued integral part of the instruction. Students will build their composition skills to increase their abilities to write clearly, correctly, and logically for a variety of purposes and audiences. Grammar, vocabulary, and literature terminology will be included. Literary analysis and critical thinking will be emphasized in class discussions and writing assignments.

FAMILY & CONSUMER SCIENCE

Crs #:	Title:	Level:	Credits:	Prerequisite:	Lab Fee:
H20	Catering 1	10-12	5	None	$30.00
H30	Fashion Production	9-12	5	None	$15.00
H50 A&B	Living On Your Own	11-12	10	None	$10.00
H61	Child Development 1	10-12	5	None	None
H81 A&B	Wage Earning	12	10	None	None

Catering 1:
Broaden your understanding and appreciation of food! Learn about nutrition and food preparation while applying new skills in a lab experience and catering events. Projects reflect worldwide culinary traditions, while respecting current diet and nutrition guidelines. Class format includes hands-on instruction, cooperative activities, individual and group projects and guest speakers.

Fashion Production:
Students will develop career and technical skills in the areas of fashion merchandising, design and apparel production. Practical experiences will be provided through labs and projects. Units include fashion theory, elements and principles of design, merchandising, pattern alterations, apparel production and clothing care. Students will provide their own materials for apparel production projects.

Living On Your Own:
This year-long course is designed to help sharpen your focus on your own life. It is to help you gain a clear picture of who you are and how you got that way. It is designed to help you gain a measure of control over your future. Topics include: relationships, housing, personal finance, parenting, communications, healthy lifestyle, food and nutrition and preparing for "life after high school." This course is taught as a year long, two-semester sequence. *Two semesters of Living On Your Own fulfills CHS Health graduation requirement.*

Child Development 1:
This class offers the opportunity to develop a positive understanding of the growth and development of children and parenting skills. Class activities will emphasize the responsibilities and challenges of parenting. Also, the class may include a play school whereby students apply techniques for working with children.

Wage Earning:
Expand your career horizons and earn while you learn in this year-long course. Identify your strengths, interests and skills in the world of work. Become a knowledgeable entrepreneur by creating your own business in the classroom. Emphasis is on personal leadership development, balancing work and family, development of job portfolios, and interviewing skills. Students will successfully complete class requirements and work 15 hours per week in positions approved by the instructor. Students are evaluated by their employer each quarter to assess their reliability and quality of work.

LANGUAGE ARTS

Crs #:	Title:	Level:	Credits:	Prerequisite:
L08 A&B	Freshmen Language Arts	9	10	None
L11 A&B	Freshmen Language Arts Advanced (W)	9	10	Teacher Placement
L14	Advanced Composition	11-12	5	Teacher Placement
L16 A&B	World Literature & Comp. Advanced (W)	10	10	Teacher Placement
L19	Creative Writing	10-12	5	None
L20 A&B	American Literature & Composition	11	10	None
L27 A&B	World Literature & Composition	10	10	None
L31	Communication in Society	10-12	5	None
L33	Discussion & Debate	9-12	5	None
L34	Public Speaking	10-12	5	None
L35	Introduction to Theatre	9-12	5	None
L36	Acting (Theatre 2)	10-12	5	Introduction to Theatre
L39 A&B	Competitive Forensics	9-12	10	Teacher Placement
L47 A&B	American Literature & Comp. Advanced (W)	11	10	Teacher Placement
L50	Reading Workshop – 1st Semester *	9-10	5	Teacher Placement
L51	Reading Workshop – 2nd Semester *	9-10	5	Teacher Placement
L54	Short Fiction	10-12	5	None
L75	Shakespeare	10-12	5	None
L77 A&B	AP Language & Comp. (W)	11	10	Application & Teacher Placement
L88 A&B	AP Literature & Comp. (W)	12	10	Adv. Language Arts Coursework, App. Required
LE0	Film Literature	11-12	5	None
LE1	Journalism: Reporting I	9-12	5	None
LE6 A&B	Advanced Journalism (School Newspaper)	10-12	10	Journalism: Reporting I
LE7 A&B	Yearbook	10-12	10	Teacher Placement
LE8	Play Production (Theatre 3)	11-12	5	Acting (Theatre 2) or Intro to Theatre

* Reading Workshop only counts for LA Elective credits (L50 & L51)

Freshmen Language Arts:
In this course, students study various authors to enhance students' enjoyment of reading and to sharpen their skills in writing and speaking. Paragraph writing skills are maintained and further developed, as are all mechanics. Vocabulary enrichment provides more succinct expression. Preliminary research skills are introduced to develop critical analysis and distinction between fact and opinion.

Freshmen Language Arts Advanced: (W)
This class is designed for students who have demonstrated strong skills in LA. This accelerated course introduces additional grammatical and literary concepts, refines composition skills, expands research skills, and offers opportunities for creative expression and critical thinking. This course is more demanding and the expectations are higher than Freshmen Language Arts. Summer reading required. (Weighted class)

Advanced Composition:
This course emphasizes critical reading and writing to prepare students for college. Assignments emphasize techniques of rhetoric, such as extended definition, analysis, argumentation, and persuasion. Students expand vocabulary and practice precise word choice. They investigate techniques in locating source materials, note taking, thesis writing and organizing information. These skills are demonstrated through writing assignments, including major research. This course is highly recommended for college bound students. (Not weighted)

World Literature and Composition Advanced: (W)
World Literature and Composition Advanced is a demanding year-long course for sophomores seeking a greater challenge in the Language Arts. Students should be able to read, comprehend, analyze and write at an accelerated rate and demonstrate a facility with and an enthusiasm for language. The course will be organized in chronological, regional, or thematic order. Critical reading and sophisticated analysis of world literature from 3500 BC to the present will be the core of the course. Various modes of composition will be taught. Grammar, mechanics, and vocabulary building will be emphasized to improve and enhance the quality of student writing. Summer reading required. (Weighted class)

Creative Writing:
This course introduces the student to the writing of fiction, poetry, the personal narrative, drama, screenplay, and creative essay. Students analyze peer and published authors for particular artistic devices in order to understand the writer's skill in narration, dialogue, description and specific detail. This course provides activities and projects to stimulate latent talent and ideas, to encourage appropriate freedom of expression, and to develop sensitivity to the power of words in the written medium. Students may be required to read their work aloud for class critique. The course may introduce students to appropriate markets for publication.

American Literature and Composition:
American Literature and Composition is a year-long course for juniors. The course will include the study of classic American literature through current American literature. In addition, instruction in writing techniques will be an integral part of the course. Students will increase their ability to write clearly, formally, and logically for a variety of purposes and audiences. Grammar, vocabulary, and literary terms will be included. Literary analysis and critical thinking will be emphasized in class discussions and writing assignments.

World Literature and Composition:
World Literature and Composition is a year-long course for sophomores. The course will be organized in chronological, regional or thematic order. Critical reading and analysis of world literature from 3500 BC to the present will be the core of the course. Various modes of composition will be taught. Grammar, mechanics, and vocabulary building will be emphasized throughout the course to improve and enhance the quality of student writing.

Communication in Society:
This course is designed to assist students in learning to improve self-confidence and effectiveness in a wide variety of communication situations. Opportunities are provided to learn about interpersonal and intrapersonal communication. Attention focuses on learning speech fundamentals, breaking down the barriers to communication, becoming aware of and expressing ideas and feelings, problem solving, and decision making.

Discussion & Debate:
This course is designed to teach the student the methods of problem-solving through formal discussion and debate. John Dewey's problem-solving sequence serves as a basis for a panel discussion and a parliamentary procedure, Student Congress session. The bulk of the semester focuses on a policy debate, using the National Forensic League's annual topic, and a Lincoln-Douglas values debate. The students need good reading, writing, researching, listening, and note taking skills so as to present and flowchart a formal debate.

Public Speaking:
This course cultivates technique and polish in public speaking. Public Speaking allows students to develop skills in preparation, organization, and presentation of speeches. Students practice and deliver prepared extemporaneous and impromptu speeches in order to inform, persuade, or entertain. Students also enhance their reading skills through the oral interpretation of literature.

Introduction to Theatre:
The course provides a foundation in all phases of theatre: theatre history, play analysis, terminology, basic state movement, vocal mastery, memorization, character interpretation, basic production principles, selection and evaluation of plays.

Acting (Theatre 2):
This advanced course concentrates on specialized acting skills. Areas of study include physical and vocal exercises and techniques; reading, viewing, and analyzing plays; psychology of stage movement; research in makeup and costume design as applied to characterization; investigation of acting theories and styles; and actual performance situations.

Competitive Forensics:
This course prepares the student for advanced studies in all areas of forensics: CX Debate, L/D Debate, Extemporaneous Speaking, Duo Interpretation, Student Congress, Original Oratory, Duet Acting and interpretation of drama, poetry and humor. Members of this class are also members of the CHS Debate Team and will compete at tournaments. The class serves as a laboratory for competitive situations. This course may be repeated for credit with prior permission. (This course meets the communication requirement for graduation.)

American Literature & Composition Advanced: (W)
This course is a demanding year-long course for juniors. The course will have detailed studies of American literature from the 17th century to the present. Students will read and respond to a large variety of literature about the American experience. A strong writing component will be integral to the class. Students will develop critical reading skills, literary analysis and critical thinking. Students will conduct and report on extensive research with documentation to defend a position. Continued emphasis will be placed on formal use of English grammar and mechanics including correct spelling. Summer reading required. (Weighted class)

Readers Workshop I:
This course is designed primarily to support readers. Students are involved in a variety of instructor-directed, individual and group activities that focus on increasing reading comprehension, learning strategies to assist with various types of reading, and developing a lifelong appreciation of reading. Self-assessments and individual conferences help determine the needs of each student, and activities are designed to meet those needs. The course emphasizes individual progress and reading enjoyment.

Readers Workshop II:
This course is designed primarily to support readers. Students are involved in a variety of instructor-directed, individual and group activities that focus on increasing reading comprehension, learning strategies to assist with various types of reading, and developing a lifelong appreciation of reading. Self-assessments and individual conferences help determine the needs of each student, and activities are designed to meet those needs. The course emphasizes individual progress and reading enjoyment.

Short Fiction:
This course covers elements of short fiction from a broad range of authors. Literature is used as a basis for discussions, writings, and presentations. Students will develop skills to interpret and analyze literature. This course may involve outside reading and research of the authors.

Shakespeare:
This course introduces students to the works of Shakespeare and the Elizabethan period in which he lived. Students will investigate his continuing appeal as a playwright by exploring his ability to use characterization, dramatic language, and universal themes. Students will analyze representative examples of tragedies, comedies and/or histories. Student performance of selected Shakespearean scenes enhances understanding of all aspects of Shakespeare's work. Shakespeare's status as the preeminent master of the English language enables his work to serve as an ideal model for the study of literature in general

AP Language & Composition: (W)
Students may earn college credit for this one-year college-level course. The course develops the writing and language skills required for critical and stylistic analysis. Students explore the ideas of noted philosophers and major American writers while perfecting their own writing skills. Each student must fill out an application before being admitted to this class. *This course fulfills the American Literature and Composition 10 credit requirement.* A summer reading list and writing assignment are required preparation for the class. (Weighted class)

AP Literature & Composition: (W)
This course will engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students will deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students should consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism and tone. This course will prepare students for the AP English examinations. Summer reading required. (Weighted Class)

Film Literature:
Film Literature examines literary and artistic forms as interpreted through film. Students develop literary, verbal, and visual analysis skills through discussion and written critiques. This course promotes an understanding of film's historical progression, its language, its techniques, and its conscious and subliminal effects upon personal and public opinion.

Journalism: Reporting I:
This course offers an in-depth survey of journalism, including news writing, interviewing, and writing stories (news, features, sports, editorials and columns). It also covers the history of journalism, newspaper terminology, headline writing, copy and proofreading, advertising, page layout and photojournalism.

Advanced Journalism:
Students in this two-semester course are responsible for publishing the school newspaper or newsmagazine and for refining journalistic skills previously acquired. To meet the regular, predetermined production schedule, students are obliged to write stories, to sell and collect advertising, to keep the financial records, and to work for several hours each week outside class on some phase of the publication's production. Students fill top positions in editing, news assigning, accounting, advertising, copy reading, page design, and photography. Students may continue in this course for elective credit.

Yearbook:
This elective class produces the yearbook and possibly a literary magazine. Work includes writing copy, taking pictures, preparing layouts and working within the budget with the assistance of the yearbook company, its salesperson, and professional photographers. Since meeting deadlines is a primary concern, students must be willing to make the commitment to spend hours outside of class to achieve its goals and objectives. Students may re-enroll in this class.

Play Production (Theatre 3):
This course is designed to provide advanced study in the field of theatre arts. It gives students interested in drama an opportunity to develop their skills in theatre and practice them in actual production. The specific goal of the course is to acquaint the students with all major phases of play production necessary for the successful staging of a play. Students actively participate in a theatrical production while enrolled in the course. Students may enroll for a second semester for credit.

MATHEMATICS

Crs #:	Title:	Level:	Credits:	Prerequisite:
M16 A&B	Math-Standards 1	9	10	Teacher Placement
M23 A&B	Basic Algebra 1	9-12	10	Teacher Placement
M31 A&B	Algebra 1	9-12	10	Teacher Placement
M39	Problem Solving in Math	10-12	5	Algebra 1
M40 A&B	Basic Geometry	10-12	10	Algebra 1 or Basic Algebra 1
M41 A&B	Geometry	9-12	10	Algebra 1 or Basic Algebra 1
M43 A&B	Geometry Advanced (W)	9-12	10	Teacher Placement
M50 A&B	Basic Algebra 2	11-12	10	Basic Geometry or Geometry
M51 A&B	Algebra 2	9-12	10	Algebra 1 & Geometry
M55 A&B	Algebra 2 Advanced (W)	9-12	10	Teacher Placement
M61	Pre-Calculus 1	10-12	5	Algebra 2 or Basic Algebra 2; Teacher Placement
M62	Pre-Calculus 1 Advanced(W)	10-12	5	Algebra 2 Hon. or Teacher Placement
M63	Pre-Calculus 2 Advanced (W)	10-12	5	Honors Pre-Calculus 1
M64	Pre-Calculus 2	10-12	5	Pre-Calculus 1
M65 A&B	AP Calculus AB (W)	11-12	10	Honors Pre-Calculus 2 or Pre-Calculus 2
M67	Statistics	11-12	5	Algebra 2, Algebra 2 Honors, Pre-Calculus 1 or Honors Pre-Calculus 1

M69 A&B	AP Statistics	11-12	10	Algebra 2 and Teacher Placement

Recommended calculator: TI-83 Plus Graphing Calculator

Math-Standards 1:
This course is offered to help students who are not yet ready for algebra meet state and district math standards. It is designed as an entry-level high school math course for students who need to strengthen math skills and build algebraic and geometric concepts. Additional topics covered include number relationships; data analysis, probability and statistics; measurement tools, and, using mathematical reasoning in solving problems.

Basic Algebra 1:
Basic Algebra 1 is an introduction to algebraic symbolism, systems of equations, graphing, problems solving, and probability and statistics. The students will build upon their previous knowledge to further understand the characteristics and representations of various functions and relations, including first degree equations and inequalities, polynomials, exponential and radical expressions, and quadratic equations. This course will move more slowly with less abstraction than Algebra 1.

Algebra 1:
Algebra 1 is the study of algebraic symbolism, systems of equations, graphing, problem solving, and probability and statistics. The students will build upon their previous knowledge to further understand the characteristics and representations of various functions and relations, including first degree equations and inequalities, polynomials, exponential and radical expressions, and quadratic equations.

Problem Solving in Math:
This course is designed around the concept of problem solving, critical thinking, written and oral communication. Upon successful completion of this course, students will be proficient in many strategies of problem solving including, but not restricted to, diagram techniques, systematic lists, matrix logic, and use of patterns.

Basic Geometry:
Geometry Basic covers the same topics as Geometry in a less rigorous manor. There is an emphasis on developing understandings that the students can apply to practical applications. The students will study the topics of congruence, similarity, parallelism, perpendicularity, properties of polygons, transformations and circles. The maintenance of algebraic skills will be emphasized.

Geometry:
Geometry presents a thorough study of the structure of the postulation system and the development of formal synthetic proof. It considers the topics of congruence, parallelism, perpendicularity, properties of polygons, similarity, and the relationships of circles, spheres, lines, and planes with respect to space as well as the plane. The maintenance of algebraic skills will be emphasized.

Geometry Advanced: (W)
Geometry Advanced presents a thorough study of the structure of the postulation system and the development of formal synthetic proof with an emphasis on logic. It teats the topic of congruence, parallelism, perpendicularity, properties of polygons, similarity, and the interrelations of circles, spheres, lines and planes. This course is designed for highly motivated mathematically talented students.
(Weighted class)

Basic Algebra 2:
Algebra 2 Basic parallels Algebra 2 with less rigor. The students will study number sets, relations and functions, solutions of first and second degree equations, graphing, exponential and logarithmic functions, right triangle trigonometry, and probability. Statistics and rational functions may be covered.

Algebra 2:
Algebra 2 emphasizes the structure of algebra. The students will study number sets, relations and functions, solutions to first and second degree equations, graphing, exponential and logarithmic functions. Counting principle, probability, statistics, matrices, and right triangle trigonometry are also covered. They will apply their studies to develop understandings of how these topics relate to one another. Conic sections, logic and matrices may be included. Conic sections, sequences and series and advanced trigonometric topics may be included.

Algebra 2 Advanced: (W)
Algebra 2 Advanced will cover the concepts of Algebra 2 with more emphasis on theory and structure and applications. The students will study number sets, relations and functions, solutions to first and second degree equations, graphing, exponential and logarithmic functions, probability, statistics, and trigonometry. The students will make and text conjectures to deepen their understandings of these topics. Conic sections, sequences and series, and advanced trigonometric topics will also be covered. (Weighted class)

Pre-Calculus 1:
This course includes the study of polynomial functions, equations, rational functions, matrix algebra, logarithmic and exponential functions, conic sections, binomial theorem, counting probability-statistics, math induction, and the three dimensional coordinate system.

Pre-Calculus 1 Advanced: (W)
Pre-Calculus 1 Advanced is designed for highly motivated and mathematically talented students. It covers algebraic and transcendental function, higher degree polynomials, logarithms, and trigonometry in depth.
(Weighted class)

Pre-Calculus 2 Advanced: (W)

This course will study topics of vectors and parametric, conics, polar functions and parametric, surfaces, cylinders, ellipsoids and parabolas. It will also cover sequences, limits and series. (Weighted class)

Pre-Calculus 2:
This course includes the study of circular functions, special angles, graphs, identities, inverse trigonometry functions, solutions of right and oblique triangles, polar coordinate systems and their applications and vectors and their applications in two and three dimensions.

AP Calculus AB: (W)
This course is for students with superior motivation and ability in mathematics. AP Calculus AB examines the theory of limits, differentiation, functional analysis, and integration. Students develop problem solving skills through application. Successful students may take the advanced placement exam and receive college credit. (Weighted class)

Statistics:
This course will explore the analysis of data and make use of graphical and numerical techniques to study patterns and departure from patterns. An emphasis will be placed on interpreting information from graphical and numerical displays and summaries.

AP Statistics: (W)
This course is designed to be equivalent to a one-semester, introductory, non-calculus based college course in statistics. The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual theses. These are 1) exploring data: observing patterns and departures from patterns, 2) planning a study: deciding what and how to measure, 3) anticipating patterns: producing models using probability and simulation, 4) statistical inference: confirming models. Students who successfully complete the course and AO exam may receive college credit and/or advanced placement for a one-semester college statistics course. (Weighted class)

PHYSICAL EDUCATION/HEALTH

Crs #:	Title:	Level:	Credits:	Prerequisite:	Fees:
G50	Issues in Health	10	5	None	
P20	Comprehensive Physical Education	9	5	None	
P24	Weight Training 1	9-12	5	None	
P25	Weight Training 2	10-12	5	Weight Training 1	
P30	Bowling	10-12	5	None	$30.00
P45	Aerobics	9-12	5	None	
P54	Racquet Sports	9-12	5	None	
P70	Team Sports	9-12	5	None	
P90	Advanced Physical Education	10-12	5	Comp. PE & teacher approval	

Issues in Health:
The primary focus of this course will be current issues in the health field. This course is designed to present the student with the latest information in the rapidly growing science of health, including a unit on human sexuality. This course will also place a high emphasis on skill development in the areas of decision-making, life-style assessment, and communication. Instruction and activities will be designed to motivate students to choose health behaviors that will allow them to build or maintain the best health status possible throughout their lives. This course is required for graduation and is required at the 10^{th} grade level.

Comprehensive Physical Education:
This is a required course for all freshmen students. This course provides basic orientation to the high school P.E. curriculum. Students in this course are given the opportunity to explore the variety of elective physical education courses available to them during the remainder of their high school program. Emphasis is placed on skill development and fitness. The five fitness components of cardiovascular endurance, flexibility, muscular endurance, muscular strength, and body composition will be addressed.

Weight Training 1:
This course is designed to make students aware of various lifetime physical activities. Students will improve their fitness level through a variety of activities including weight training, cardiovascular conditioning, and circuit training. Information will be given concerning diet, sports, and muscle groups. The five fitness components of cardiovascular endurance, flexibility, muscular strength, muscular endurance, and body composition will be addressed. This course may vary depending upon the interest of the students.

Weight Training 2:
This course is designed to go beyond the general levels and objectives of Weight Training 1. Specific work out programs (including cardiovascular workouts) will be developed to meet the needs of students toward sports participation and also toward competition in power-lift contests. All programs will include the principles of specificity and progression. Weight room etiquette and workout ethics will also be included in this course.

Bowling:
Bowling develops basic techniques and form to safely enjoy the activity. Students learn how to score and prepare individual weekly averages. Students will have an opportunity to bowl doubles and league play within the class. Students do not bowl everyday. Instruction in other recreational games is included in this course such as: horseshoes, golf, walking, floor hockey, ultimate Frisbee. **A $30.00 fee is assessed for this class.**

Aerobics:
This class focuses on aerobic exercise and utilizes many techniques to achieve the aerobic state. Choreography and dance routines are emphasized in this course. Yoga, Tae Bo, step, circuit, and a variety of dance styles are also introduced. Aerobic routines will be supplemented with proper stretching techniques, relaxation exercises, and general body fitness.

Racquet Sports:
The primary goal of this course is to assist students in developing fundamental skill in playing individual and dual activities such as tennis, badminton, table tennis, golf, bocce, and pickleball. Along with beginning skill development, rules, etiquette, and playing strategies will also be emphasized. Students will have the opportunity to apply and improve skills through match play and challenge ladders.

Team Sports:
The primary goal of this course is to assist students in developing fundamental skills in various team sports. Students will also learn the history of the sport, rules, etiquette, scoring, strategies, and develop fitness needed for success. Sport areas may include: lacrosse, ultimate Frisbee, handball, flag football, volleyball, baseball, softball, speedball, soccer, floor hockey, track and field, and team handball.

Advanced Physical Education:
This course is designed to go beyond the general levels of various lifetime physical activities and fitness. Students will improve their fitness level through a variety of activities including weight training, cardiovascular conditioning, flexibility training and circuit training. Information will be given concerning diet, sports and muscle groups. The five health related components of fitness: cardiovascular fitness, muscular endurance, muscular strength, flexibility and body composition will be addressed.

Pre-Engineering Academy
The Pre-Engineering Academy is focused on developing high school students for rigorous coursework at major engineering universities. Student work is collaborative, hands-on, and project based. Students connect with leaders from various industries, agencies and universities to prepare students with the most relevant technologies. Students participate in activities at the University of Colorado-Boulder's engineering facilities. All engineering courses maintain the level and pace of advanced courses and are weighted. *(Students in pre-engineering courses are required to take college preparatory mathematics as indicated. An application is required.)*

PRE-ENGINEERING

Crs:	Title:	Level:	Credits:	Prerequisite:	Fees:
PA1 A&B	Engineering in a Global Society (W)	9-10	10	Concurrent enrollment in Algebra 1 minimum	$10.00
PA3 A&B	Robotics & Manufacturing (W)	10-11	10	Concurrent enrollment in Geometry minimum	$10.00
PA4 A&B	BioMedical & BioTechnical Engineering (W)	11-12	10	Concurrent enrollment in Algebra 2 minimum	$10.00
PA5 A&B	Civil & Architectural Engineering (W)	11-12	10	Concurrent enrollment in Algebra 2 minimum	$10.00
PA6 A&B	Senior Design Project (W)	12	10	Concurrent enrollment in Pre-Cal, previous Engineering course	$10.00

*Though not a pre-requisite, PA1 is highly recommended.

Engineering in a Global Society: (W)
This is an introductory course which develops student problem solving, project planning, and analytical skills. Student work is completed in both individual and team settings. Students will use state-of-the-art computer hardware to create 3D models using AutoDesk Inventor. Students will also explore career opportunities in engineering fields. Projects include: designing and building a model tower and "smashing" it to understand stress analysis; re-engineering Legos to produce a new toy. (Weighted class)

Robotics & Manufacturing: (W)
Robotics is a part of everyday life – shouldn't everyone be getting to know them? Students will use design skills and software to program robots. Students will explore the use of machinery to mass produce a product and explore the world of Animatronics. (Weighted class)

BioMedical & BioTechnical Engineering: (W)
Is there a doctor in the house? Interested in CSI forensic science (Crime Scene Investigations)? This course explores the vast and growing field of Bio-Engineering. In it students will combine aspects of human anatomy and biology with engineering to explore genetic engineering and biomedical advances such as artificial joints and artificial organs, criminal science investigations (CSI) and forensics. Students will also tackle the moral, ethical, and legal questions surrounding this field as well as exploring career options. (Weighted class)

Civil & Architectural Engineering: (W)
This course is available to juniors and seniors who are ready to explore an engineering specialty. The work will focus on creating designs of buildings and structures using 3D architectural software: Autodesk Revit. Students will evaluate various structures to ensure they support intended loads, maximize energy efficiency, and meet the proper legal requirements for construction. Students will survey building sites and explore the effects of terrain on structure design. (Weighted class)

Senior Design Project: (W)
In this capstone course, students will work in teams of three to four to design and construct the solution to an engineering problem, applying the principles developed in the preceding courses. The problems will involve a wide range of engineering applications (e.g., a school robot-mascot, automated solar water heater, remote control hover craft). Each team will be responsible for delivering progress reports and making final presentations of their project for an outside review panel of practicing engineers and at the University of Colorado-Boulder. Previous Engineering course work is required. (Weighted class)

SCIENCE

Crs #:	Title:	Level:	Credits:	Prerequisite:	Fees:
S10 A&B	Physical Science	9-12	10		$ 5.00
S31 A&B	Biology	9-12	10		$10.00
S33 A&B	Anatomy & Physiology	11-12	10	Biology or Biology Advanced	$22.00
S37 A&B	Biology Advanced (W)	9-12	10	Teacher Placement	$10.00
S42	Astronomy	10-12	5		$ 5.00
S44	Science Topics: Intro. to Biology	10-12	5	Physical Science Recommended	$ 5.00
S47	Science Topics: Intro to Earth Science	10-12	5	Physical Science Recommended	$ 5.00
S50 A&B	Chemistry	10-12	10	Biology & at least one, preferably two, years of Algebra	$10.00
S51 A&B	Chemistry Advanced (W)	10-12	10	At least one, preferably two, years of Algebra & Teacher Placement	$10.00
S61 A&B	Physics	10-12	10	M31 Algebra 1 & M41 Geometry	$10.00
S65 A&B	AP Physics B (W)	11-12	10	Pre-calculus	$20.00
S66 A&B	AP Chemistry (W)	11-12	10		
S68 A&B	AP Biology (W)	11-12	10	Biology & Chemistry	$22.00
S81	Geology	10-12	5		$ 5.00

Physical Science:
Physical Science is a laboratory-based course involving principles and concepts concerning the physical world. Content areas explored include chemistry and behavior of matter, electricity, magnetism, light and sound, laws of motion and forces, and energy transformation.

Biology:
This lecture/laboratory-based class explores structure and function among living things. Units of study include: the characteristics of living things, biochemistry, photosynthesis and cell respiration, cell structure and function, DNA and protein synthesis, genetics, evolution, animal and plant biology, human anatomy and physiology and ecology.

Anatomy and Physiology:
Anatomy and Physiology is designed for students interested in investigating mammalian structure and function through the dissection of a cat. Students relate structure and function of the animal dissected to human anatomy and physiology. Emphasis is placed on topics related to health careers.

Biology Advanced: (W)
This course includes all the topics covered in Biology. However, each topic is covered in greater detail and at an accelerated pace. Emphasis is placed on energy relationships, molecular genetics, evolution, and ecology. This course is for students who have an above average interest and aptitude in science. Pre-requisite: teacher placement. (Weighted class)

Astronomy:
Astronomy is the study of the universe. The course includes observation of the night sky, a study of the solar system, stars and galaxies. Current space exploration is emphasized. Evening telescope viewing sessions are a recommended part of the course.

Science Topics: Introduction to Biology:
This laboratory-based course is designed for students who would like to extend their knowledge about the structure and function of living things. The curriculum is guided by the state and district standards in Earth Science.

Science Topics: Introduction to Earth Science:
This laboratory-based course is designed for students who would like to extend their knowledge in the areas of geology, astronomy and meteorology. The curriculum is guided by the state and district standards in Earth Science.

Chemistry:
Chemistry is the study of properties of matter and the changes that materials undergo in chemical reactions. This is a rigorous course, which offers a composite of laboratory, mathematical, and scientific content appropriate for the college bound student.

Chemistry Advanced: (W)
Chemistry Advanced is a more rigorous, faster paced class than chemistry. It presents the same topics as chemistry, but in a greater depth and expanded in areas not ordinarily treated in the general course including an independent project in chemistry. (Weighted Class)

Physics:
This course helps students understand the basic physical laws of our world. The course includes scientific methods and measurements, forces, motion, energy, light, waves, electricity, magnetism and atomic physics. Laboratory work serves to promote understanding and to illustrate the experimental nature of physics. This course is designed for college bound students.

AP Physics B: (W)
Students with a high level of motivation and interest in science should take AP Physics. Typical candidates for this course are students seriously intending to pursue careers in science, engineering, mathematics or medicine. A superior capability in math is required to succeed in AP Physics. Students working toward the AP exam will need to spend additional preparation time beyond regular assignments. (Weighted Class)

AP Chemistry: (W)
AP Chemistry is designed to be the equivalent of the general chemistry course usually taken during the first college year. The curriculum for this course is the College Board Advanced Placement College Board Advanced Placement Chemistry curriculum. This course differs qualitatively from the usual first secondary school course in chemistry with respect to the kid of textbook used, the topics covered, the emphasis on chemical calculations and the mathematical formulation of principles, and the kind of laboratory work done by the students. The AP Chemistry Exam may be taken at the end of this course.
NCAA Clearinghouse approved Course

AP Biology: (W)
AP Biology is a challenging lecture and laboratory-based, college-level course. It is for students who have successfully completed Biology and Chemistry. Students who pass the AP Biology Exam may receive college credit. Concurrent enrollment in the CU Extension Program is an option. (Weighted Class)

Geology:
Geology acquaints students with basic scientific principles that apply to the earth and the natural environment. Laboratory work includes activities with maps, rock structure, minerals, fossils and energy resources. New discoveries and environmental issues are discussed. Field experiences are an integral part of the course.

SOCIAL STUDIES

Crs #:	Title:	Level:	Credits:	Prerequisite:
C72	Understanding Diversity in the U.S.	10-12	5	None
T21 A&B	U.S. History	11	10	None
T37	U.S. Government	9	5	None
T38 A&B	AP U.S. History (W)	10-11	10	Application
T41 A&B	World History	10	10	None
T54 A&B	AP World History (W)	10	10	Application
T60	World Geography	9	5	None
T80	Psychology	11-12	5	None
T84	Sociology	11-12	5	None
T85 A&B	AP European History (W)	12	10	Application

Understanding Diversity in the U.S.:
This course provides students the opportunity to explore the concepts of race, ethnicity, culture, oppression, privilege, community and leadership in order to simultaneously de-construct barriers that alienate youth from each other while building bridges of understanding in their place. The course will be highly interactive and experiential. Students will meet with a variety of members from many communities of color and other cultural groups, analyze literary works, art and the media, and share their learning through classroom presentations, discussions and written reports.

U.S. History:
This is a chronological course focusing on political, social economic and geographical concepts of United States history. During the first semester, students will study pre-colonial times to the Gilded Age. During the second semester, students will study American culture in the twentieth century.

U.S. Government:
This course presents the basic concepts of American government from pre-Revolutionary days to the present time. The functions of national, state, and local governments and their relationships to the citizens of the United States are covered. The responsibilities and obligations of both the citizen and the government to each other are an integral part of this course. A comparison of other important political systems and philosophies is considered.

AP U.S. History: (W)
AP US History is an intensive study of history designed for above average students. Included in the course are college level reading, research, writing, critical thinking, and historiography. Many colleges will grant college credit in American History if a student earns "3" or better on the Advanced Placement Test given in the spring. This class meets the requirements of one year of United States History. Application is required. (Weighted class)

World History:
This is a chronological course, which focuses on the major developments in world history. Students will study the historical and cultural development of major civilizations in order to become more globally literate. The final unit of the course will emphasize the interdependence of the modern world since 1945.

AP World History: (W)
AP World History is a year long, chronological and thematic university level course. Major course themes include: interaction among major societies; impact of technology and demography on peoples and the environment; comparative systems of social and gender structure; comparative cultural and intellectual developments and changes in function and structures of states. College level readings, critical analysis, discussion, problem solving, debates, essays historiography and research are integral components of this course. Many colleges grant one year of college credit for World History if a student earns a 4 or better on the AP Exam given in May. Application is required. (Weighted class)

World Geography:
This course is a study of basic geography concepts. Topics of study include population distribution, migration, map reading, location analysis, and natural physical phenomena. Patterns and relationships of world regions are emphasized.

Psychology:
Psychology is designed to provide students with a fundamental understanding of the science of psychology. This class will present students with a basic view of the field of study and will cover theories of personality, mental, emotional and physical development as they relate to the understanding of behavior.

Sociology:
Sociology examines human groups and their behavior with emphasis on societies values institutions and organizations. Students study culture, groups, socialization, social change, social problems, and contemporary issues such as crime, aging, environment and terrorism.

AP European History: (W)
AP European History is an intensive study of European history designed for academically above average students. In addition to providing a basic narrative of events and movements, the goals of this class are to develop an understanding of some of the principal themes in modern European history, an ability to analyze and to express historical understanding in writing. The chronology will cover 1450 to the present. Application is required. (Weighted Class)

WORLD LANGUAGES

Crs #:	Title:	Level:	Credits:	Prerequisite:
F11 A&B	French 1	9-12	10	None
F71 A&B	Spanish 1	9-12	10	None
F12 A&B	French 2	9-12	10	Passing Level 1 with a grade of C or better is strongly recommended
F72 A&B	Spanish 2	9-12	10	Passing Level 1 with a grade of C or better is strongly recommended
F13 A&B	French 3	9-12	10	Passing Level 2 with a grade of C or better is strongly recommended
F73 A&B	Spanish 3	9-12	10	Passing Level 2 with a grade of C or better is strongly recommended
F75 A&B	Spanish 310	9-10	10	Teacher Placement required.
F19 A&B	French 4 (W)	10-12	10	Level 3 or equivalent
F39 A&B	German 4 (W)	10-12	10	Level 3 or equivalent
F79 A&B	Spanish 4 (W)	10-12	10	Level 3 or equivalent
F26 A&B	AP French 5 (W)	10-12	10	Level 4 or equivalent
F46 A&B	AP German 5 (W)	10-12	10	Level 4 or equivalent
F85 A&B	AP Spanish 5 (W)	10-12	10	Level 4 or equivalent

French 1/ Spanish 1:
Level 1 introduces students to the specific foreign culture and to the four basic language skills: listening comprehension, speaking, reading and writing. Students acquire skills through oral repetition, dialogues, short compositions, dictations, reading, and written exercises.

French 2/ Spanish 2:
Level 2 furthers the study of grammar, vocabulary and an understanding of the foreign cultures though movies, videos and magazines. Students improve listening, speaking, reading and writing skills. Students begin to develop reading comprehension skills through short stories, plays and poetry.

French 3/ Spanish 3:
Level 3 reviews basic grammatical structures and continues the study of grammar, vocabulary, and culture. Students further develop skills in understanding reading, speaking, and writing through short stories, poetry, articles, oral presentations, and written exercises when applicable.

Spanish 310:
Spanish 310 is provided for students with advanced skills in speaking, reading and writing. There will be a review of grammatical structures in order to explore a variety of written and oral expression. There will be readings, written work, projects and group presentations for the student who is ready to advance with an academic focus. It will move at a faster pace and cover more material in-depth than Spanish 3. Permission of an instructor is required.

French 4/German 4/Spanish 4: (W)
Level 4 is taught primarily in the specific World Language. It explores more advanced topics in advanced composition and conversation, with an emphasis on refining and integrating advanced grammar into daily communication. Emphasis will be placed on comprehension as it is spoken by educated native speakers. Students will develop appropriate verbs, structure, vocabulary, idioms and cultural understanding necessary to perform basic communicative functions at the advanced level. (Weighted class)

AP French 5/German 5/Spanish 5: (W)
Level 5 teaches mastery in reading, writing, and speaking the language. Students read short stories, plays and novels. They may participate in extracurricular activities using the foreign language. The Advanced Placement Language Exam is optional, but students who perform well on the test earn college credit for this one-year college-level course. (Weighted Class)

VOCAL & INSTRUMENTAL MUSIC

Crs #:	Title:	Level:	Credits:	Prerequisite:
N31 A&B	Music Theory	2-12	10	None
N41	Guitar 1 (1st semester)	9-12	5	Student required to provide acoustical guitar
N42	Guitar 2 (2nd semester)	9-12	5	Guitar 1 & teacher approval
N60 A&B	Concert Choir (Mixed)	9-12	10	None
N64 A&B	Festival Choir	10-12	10	Audition Only
N67 A&B	Women's Show Choir	9-12	10	Audition Only
N68 A&B	Show Choir (Fermata the Blue)	10-12	10	Audition Only
N71 A&B	Band	9-12	10	Previous experience or demonstrated ability
N72 A&B	Percussion Ensemble	9-12	10	Concurrent enrollment in Band
N75 A&B	Jazz Band	9-12	10	Previous experience or demonstrated ability
N81 A&B	Orchestra	9-12	10	Previous experience on any stringed orchestral instrument

Music Theory 1:
Music Theory 1 is a course that presents students with an opportunity to broaden their knowledge of the fundamental elements of music. Included in the study are rhythm, melodic line, harmonic structure, ear-training and sight-singing.

Guitar 1:
Guitar 1 is an introductory-level class to help students start down the road to become a guitarist and more importantly to becoming a musician. The course will cover a variety of subjects such as reading standard music, tablature, and chord chart, playing techniques and styles, and classroom performances. Whether students are learning the guitar for the first time or have been playing for years, the structure of this class allows students to learn at a level that is right for them.

Guitar 2:
Guitar 2 is an intermediate-level class to help students continue down the road to become a guitarist and more importantly to becoming a musician. The course will cover a variety of subjects such as reading standard music, tablature, and chord chart, playing techniques and styles, and classroom performances. The structure of this class allows students to learn at a level that is right for them. Prerequisite is Guitar 1.

Concert Choir (Mixed):
Concert Choir elaborates on concepts and techniques explored in Choir. A wide variety of vocal techniques will be presented and utilized. Culminating performances are meaningful and mandatory component of this class.

Festival Choir:
Festival Choir is a choir for men and women is a more advanced ensemble focusing on more difficult choral works. Emphasis will be placed on developing more advanced musicianship and professionalism. A wide variety of advanced vocal and choral techniques will be explored in-depth. Culminating performances are a meaningful and mandatory component of this class.

Women's Show Choir:
Show Choir focuses on the performance of vocal music in popular idiom. Emphasis will be placed on developing appropriate vocal techniques and stage presence to create effective overall performance. Culminating performances are a meaningful and mandatory component of this class.

Show Choir (Fermata the Blue):
Fermata the Blue focuses on the highest level of music performance over a wide-range of musical styles which include classical and traditional repertoire in the fall, the annual Madrigal Dinner in the winter, and Jazz and contemporary *a cappella* in the spring. Strong sight-reading skills are required and a commitment to excellence is essential.

Band:
Prerequisite: previous band experience or an audition. This course enables students to participate in marching and concert band. Marching band takes place during the first three months of school, and offers students a chance to learn the fundamental skills of marching used for parades, as well as a halftime show for football games and various competitions. Concert band studies the musical skills and the technical and artistic interaction necessary for performance in large and small ensemble settings.

Jazz Band:
The Centaurus Jazz Band is a traditional big band consisting of saxophones, trombones, trumpets, guitar, piano, bass guitar, and drums. The jazz band performs several different styles of music including swing, Latin, funk, rock and others. Students will also be taught and explore jazz improvisation. Students in the jazz band are expected to have previous musical experience and be able to read and perform music on a high school level. Students who wish to be in the jazz band must arrange an audition with Mrs. Mullen. Acceptance into the jazz band will be dependent on student ability and instrument availability.

Percussion Ensemble:
Percussion Ensemble is for all percussionists who are interested in being a part of both marching band and concert band. From August to October, students will be involved in marching band, and from November to June students will be involved in concert band. Topics will include reading music, percussion techniques, care and maintenance of instruments, and a wide variety of techniques including mallets, drums and other percussion instruments. In addition to being a part of the concert band, percussionists will be working separately on percussion ensemble literature. Although not recommended, students may join percussion ensemble spring semester. Opportunities include CHSAA solo/ensemble festivals, RMPA competitions, parades, CBA marching competitions and community performances.

Orchestra:
Prerequisite: previous orchestral experience or an audition. Orchestra provides technical and musical training for musicians using compositions from various musical time periods including pop music. The study of how an orchestra functions as well as foundational training in string instrument technique is coupled with the study of music theory, music history and composition. Experiences in Orchestra range from formal concerts to performances of solo and small ensemble pieces. Opportunities are provided to participate in the school musical in the spring semester. Winds and percussion may be incorporated during the school year.

SPECIAL EDUCATION
Students who have Individualized Education Plans (IEP) will register for courses with the assistance of their special education case manager so that their educational program is consistent with the goals and objectives of their IEP. This program may consist of regular education courses with some instructional accommodations, co-taught, classes, courses provided in the regular education class with a modified curriculum, and/or courses provided by the special education teacher. There is also collaboration with other district programs to provide appropriate services to meet the needs of the individual student. Students and parents should work with their special education case manager to complete the course registration form.

Boulder Technical Education Center (TEC)
6600 Arapahoe Road, Boulder, CO 80303 Phone 303-447-5220 Fax 303-447-5258
http://www.bvsd.org/schools/bouldertec/default.aspx

Boulder Technical Education Center (TEC) programs are available to all BVSD high school students as elective credits in career and technical educational areas. In small classes, students follow a sequence of courses that provide hands-on technical skills and academic knowledge needed to prepare for an immediate career and/or further education. Students also use the Career Pathways Center to learn career search techniques to explore Career Pathways and post-secondary options.

Certifications in TEC programs may be earned after course completions ranging from one semester to two years. TEC students with transcripted certifications are eligible to receive articulated credit at Front Range Community College, Aims Community College, and/or escrow TEC credit with the Colorado Community Colleges System.

By agreement with the Career Development Center of St. Vrain Valley School District and under certain circumstances, BVSD students have the opportunity to enroll in CTE programs at CDC if those programs are not available at Boulder TEC. For more information, contact the TEC Counselor, and check CDC's website at http://www.stvrain.k12.co.us/academicsPrograms/cdc/

Interested students should discuss TEC programs with parents and a home school counselor, complete a TEC enrollment form, meet with the TEC counselor, and shadow programs of interest. Generally, students must be 16 years old and junior status is preferred; however, some program may accept 15 year old students. Students can enroll in either a morning or afternoon 80 or 160 minute block at TEC, while concurrently enrolled in a home high school.

V66 CTE Internship (one semester, up to 15 credits)
Career & Technical Education internship gives students the opportunity to apply concepts learned in the classroom/shop in a real-world work experience. Course is available by instructor permission to students who are already enrolled at Boulder TEC; students must be at least 16 years old and able to work at least 17 hours per week in positions approved by the instructor. Students receive variable high school credits for paid or unpaid work experience verified through time sheets and/or paychecks, and site visits. May be taken more than once.

AUTOMOTIVE COLLISION REPAIR PROGRAM This is a one semester, one and/or two-year certificate program in which students learn state-of-the-art auto body repair technologies such as detailing, damage repair, paint refinishing, shop management skills and customer service.

V01 Collision Repair 1 (30 credits)
Overview and instruction in the use of air, electric, and hydraulic tools and equipment; paint spray equipment and techniques; parts alignment and replacement; and frame repair, detailing, and shop management. Students learn basic skills and techniques in welding, structural and non-structural repair, plastic and adhesive repairs and prep for refinishing.

V02 Collision Repair 2 (30 credits)
Advanced instruction in the use of air, electric and hydraulic tools and equipment; paint spray equipment and techniques; parts alignment and replacement; and frame repair. Students learn advanced skills and techniques in welding, structural and non-structural and major-damage repair, plastic repair, and refinishing. Students continue studies and practice in shop management skills, customer service and repair cost estimating, specializing in a specific area of interest. Prereq.: V01.

AUTOMOTIVE TECHNOLOGY PROGRAM This is a one semester, one and/or two-year certificate program in which students learn state-of-the-art technologies and practices related to testing, diagnosing and repairing of automotive equipment.

***New!* V04 Motor Sport Repair and Maintenance** (1 semester – 15 credits) *Pilot course for SY07-08*
Introduction to motor sports technology. Students will understand and demonstrate basic skills in the maintenance and upkeep of motor sport vehicles. Lessons cover principles associated with racing systems, engine systems, suspension, driveline systems, brakes systems, chassis design, engine repair and rebuild. The focus will be directed to the enthusiast (hobbyist) but allows for continuation into an automotive field for employment or further education or training.

V86 Tire & Wheel Technician (1 semester - 15 credits)
This is a beginning class specific of automotive field. Students learn to test, diagnose, and repair complex automotive systems. Lessons cover principles associated with shop tools, procedures and safety, basic operation of automotive braking systems, tire & wheel balancing, and steering & suspension systems. Tire & Wheel Technician Certification is available upon successful completion of course.

V87 Lube Technician (1 semester -15 credits)
Further instruction in specifics of automotive field. Students learn to test, diagnose, and repair complex automotive systems. Coursework covers shop safety, tool management, basic electricity, battery/charging/starting systems, fluids maintenance, and diagnosis and corrective actions for vehicle drive-ability. Lube Technician Certification available upon successful completion of course. Prerequisite: V86

V88 Automotive Internship (1 semester – up to 15 credits)
Advanced students in TEC's Automotive Technology Program may receive high school credit for internships or paid-work experience in the automotive industry. Boulder TEC Automotive Technology Program is in association with the nationwide Automotive Youth Educational Systems. AYES partners successful students with local automotive manufacturers and dealers for on-the-job experience, as a means of preparing students for entry-level positions or challenging academic options. Course may be taken more than once. Prerequisite: instructor permission

V93 Automotive Heating & Air Conditioning (1 quarter – 7.5 credits)
The Automotive Heating & Air Conditioning Certification requires successful completion of both V93 (Automotive Heating & Air Conditioning) and V96 (Automotive Electrical: Advanced). In V93, advanced skills are learned in testing, diagnosing and repairing automotive heating and air conditioning systems. Prerequisite: V86 & 87 or instructor permission

V94 Automotive Engine Repair (1 quarter – 7.5 credits)
The Automotive Engine Repair Certification Pathway includes successful completion of both V94 (Automotive Engine Repair) and V95 (Automotive Electrical: Basic). In V94, advanced skills are learned in testing, diagnosing and repairing / rebuilding automotive engines. Prerequisite: V86 & 87 or instructor permission

V95 Automotive Electrical: Basic (1 quarter – 7.5 credits)
In this quarter, basic skills are developed in testing, diagnosing and repairing automotive electrical systems and components. Two certifications are available upon completion of V95: the Automotive Engine Repair Certification Pathway (completion of V94 and V95), and the Automotive Electrical Certification Pathway (completion of V95 and V96). Prerequisite: V86 & 87 or instructor permission

V96 Automotive Electrical: Advanced (1 quarter – 7.5 credits)
The Automotive Electrical Certification Pathway includes successful completion of V95 (Automotive Electrical: Basic) and V96 (Automotive Electrical: Advanced). In V96, advanced skills are developed in testing, diagnosing and repairing automotive electrical systems and components. Prerequisite: V86 & 87 or instructor permission

BANKING / ACCOUNTING PROGRAM This is a one-semester, one and/or two year certificate program including theory/practices of monetary systems, accounting practices, teller skills, and financial products/services.

***New!* V53 Applications in Banking and Service Accounting** (15 credits)
Curriculum for this one-semester course may include history, terminology and principles of banking; bank teller principles; debits/credits, the accounting cycle, finance accounting, customer service skills, credit application processing, and banking protocol

and procedures. Compliance and terminology concepts that pertain to the duties and skill needed in banking and accounting practices may also be discussed. Students engage in a variety of simulations relative to these areas.

V51 Banking and Service Accounting 1 (30 credits)
Introductory course provides instruction in the history, theory and practices of the Banking and Financial Systems. Students focus on mastering bank teller skills, accounting skills and customer service. Career exploration, leadership skills, keyboard and 10-key skills practice are included in program activities.

V52 Banking and Service Accounting 2 (30 credits)
Advanced training in the areas of new accounts, personal credit, and financial services such as lending, investments, and insurance. Career exploration, leadership skills, keyboard and 10-key skills, and internships at local banks are included as part of program activities. Prerequisite: V51

CAREER EXPERIENCE PROGRAM This program offers high school credit for work experience.

V90 Community Based Career Experience (up to 15 credits)
Offered on a semester basis through Boulder TEC, students receive variable high school credit for work experience which is verified through time sheets, paychecks, and site visits. Student must be 16 and successfully work a 17-hour work week for 18 weeks at an agreed upon compensation rate. Students also attend a three-hour workshop and participate in individualized lessons covering work-related topics such as resume writing, job interviewing, safety/health/OSHA, liability, sexual harassment/discrimination, work ethics, and personal finance. Special needs students will receive work experience relevant to their established IEP.
COMPUTER INFORMATION SYSTEMS The CIS Department offers one-semester, one and/or two year certifications in computer applications, including Microsoft certifications.

V56 Computer Forensics (15 credits each semester)
Curriculum for this two semester course includes instruction in current security software applications, forensics, troubleshooting techniques, and basic computer repair. Coursework is provided through lecture, interactive online lessons, texts, videos and extensive hands-on applications. Prerequisite: V61 or V62 or instructor permission.

V61 Computer Information Systems 1 (15 credits)
Introduction to microcomputer applications, minor computer set ups and installations, the internet, web pages, and operating systems. Students may take Microsoft exams for applications certifications. Students with computer experience may test-out of the introductory series and obtain advanced placement in the CIS department.

New focus! **V62 Computer Hardware Essentials** (15 credits per semester; enroll either Spring or Fall)
This one semester or two semester course is designed to lead students through the hardware and software installation for various computer systems. It will include a customer service component working to refurbish, repair and install required hardware and software onto computer systems to be dispersed to other organizations. Students will master skills in hardware repair and maintenance, software installation, help desk and computer support along with leadership skills in all areas. Advance software utilization will also be included. Prerequisite: V61, or instructor permission.

New! **V65 Software Applications for Professional Services Billing** (15 credits) *Pilot course for SY07-08*
This is a one semester course that will prepare students for entry level jobs in client billing in the professional services such as medical, legal, contracting, consulting, and other service industries. Coursework provided through extensive hands-on skill development in software applications, lecture, interactive online lessons, texts, and/or videos.

CONSTRUCTION TRADES PROGRAM This is a one and/or two-year certificate program that prepares students for entry or higher-level jobs in construction and related trades. Students work to learn basics of the construction trade with an emphasis on safety, leadership and team work.

V31 Construction Trades 1 (30 credits)
Course enables students to develop basic skills through the beginning stages of building construction and development of fine woodworking skills and wood lathe techniques. Students learn floor and wall construction, window and door framing, exterior and interior finishing, sheetrock and finishing. Instruction is provided in reading blueprints and building plans, understanding and interpreting building specifications and codes, as well as safe and proper use of hand and power tools. The course emphasizes the importance of work ethics, communication skills, problem solving, and teamwork.

V32 Construction Trades 2 (30 credits)
Advanced techniques in framing, interior and exterior finishing, cabinet installation, constructing and installing counters, and installation of ceramic tile are covered on the construction site as well as in the classroom. Students may also observe other installations involved with residential construction, such as electrical and plumbing work. Students continue advanced studies in

blueprints, building plans, specs and codes, and practice safe and proper use of hand and power tools. Also continue development of fine woodworking skills and wood lathe techniques. Focus continues on teamwork, problem solving and communication skills. Prerequisite: V31.

COSMETOLOGY PROGRAM Certificates offered in Hairstyling, Nail Technology and/or Esthetician coursework. Students learn theory and practice in hair cuts, tinting, perms, setting and styling, nail technology and skin care.

V79 Nail Technician (30+ credits, including summer enrollment)
This one year course is 600 hours of training in manicure technology. Successful students may sit for the Colorado State Board examination; students who pass the exam become licensed in Nail Technology. Coursework includes theory and practice in nail anatomy and health, manicures, pedicures and foot massages, application of artificial nails including acrylic, tips and wraps, nail artistry, safety and customer service.

V81 Esthetician (30+ credits, including summer enrollment)
This is a one-year course of 600 hours of instruction in skin care. Successful students may sit for the Colorado State Board examination; students who pass the exam become licensed estheticians. The course is an intense mix of academic studies and hands-on application of skin care concepts. Instruction is by lecture, demonstration and practice skin care techniques using tools of the trade such as lotions, scrubs, masks, and wax. Students work on models and clients, and learn business etiquette and customer service.

V82 Hairstyling 1 (30+ credits including summer enrollment)
Hairstyling is a two year (including a month each summer) program of 1200 instructional hours. The program prepares students to sit for the Colorado State Board Examination. Hairstylists are licensed by the State of Colorado to provide customers with a variety of personal services related to hair care. Students must complete the required hours of training and pass the required State Board Examination if they wish to become licensed hairstylists. Beginning coursework includes cutting, shampooing, scalp treatments, permanent waves, tinting, styling, iron curling, blow drying, and wig styling. Theory and practice makes use of cosmetology tools, supplies, text books, videos, and lectures. Students work on models and learn business etiquette and customer service.

V83 Hairstyling 2 (30+ credits including summer enrollment)
V83 is the second year of the Hairstyling Program (see V82). The program prepares students to sit for the Colorado State Board Examination. Hairstylists are licensed by the State of Colorado to provide customers with a variety of personal services related to hair care. Students must complete the required hours of training and pass the required State Board Examination if they wish to become licensed hairstylists. Advanced coursework includes cutting, shampooing, scalp treatments, permanent waves, tinting, styling, iron curling, blow drying, and wig styling. Theory and practice makes use of cosmetology tools, supplies, text books, videos, and lectures. Students work on models and clients, and learn business etiquette and customer service. Prerequisite: V82.

GREENHOUSE/LANDSCAPE MANAGEMENT PROGRAM This is a one and/or two-year certificate program in which students learn the basics of landscape development, maintenance and management, plant and soil care, and nursery and greenhouse management.

V07 Landscape Management 1 (30 credits)
Course focuses on small engines, equipment safety and usage, and landscape management. Students gain knowledge in turf and grass management and maintenance, plant identification, soils, landscape design, small and large equipment operations, irrigation parts and installation, and landscape design.

V08 Landscape Management 2 (30 credits)
Advanced instruction in landscape irrigation field practices, landscape drafting and design, landscape construction with grading and drainage concepts, and operation of small and large equipment such as tractor, skid steer, and reel master usage. Students will participate in the design and installation of planting beds, walls, and walkways. Prerequisite: V07.

V09 Greenhouse Management 1 (30 credits)
Course teaches practices in greenhouse management and greenhouse crops, and nursery garden center management. Classroom lectures and practices are combined with hands-on applications in the greenhouse and in the field. Students gain knowledge in greenhouse crops & production, greenhouse industry & history, soils, plant propagation, growth regulators, classification & identification, pest management, and horticultural business management.

V10 Greenhouse Management 2 (30 credits)
Instruction emphasizes work in floral design, interior plants, annuals, bulbs, grasses and perennials, including experimental design of plants. Students will propagate, manage, and sell greenhouse plants. Prerequisite: V09.

GRAPHIC COMMUNICATIONS PROGRAM This is a one-semester, one and/or two-year certificate program where students learn state-of-the-art technologies and practices related to graphic arts and printing.

***New!* V44 Applications in Graphic Communications** (15 credits)
This one-semester course presents basic information about the graphic arts industry and related fields. The emphasis in Section 1 (Introduction to Graphic Communications with Basic Safety and Layout Procedures) is on copy preparation, safety, and the importance of producing a quality product. Section 2 (Intro to Camera, Offset Press and Digital Copier Operation) covers the use of the process camera, manual image assembly and metal plate making. Students are introduced to operation of the direct feed duplicator press, digital output of negatives, plates and printing.

V45 Graphic Communications 1 (30 credits)
This one year course provides instruction in design and layout, negative output, plating, pressing and finishing of printed work. This is project-based coursework in a highly interactive learning environment. Hands-on instruction and practice in offset printing press operations, multicolor press operations, desktop publishing, and job estimation.

V46 Graphic Communications 2 (30 credits)
Advanced instruction in offset printing press operations, multicolor press operations, desktop publishing, job estimation and customer service. Students have the opportunity to participate in production work in the Boulder Valley School District Print Shop and practice advanced techniques on actual print jobs. Instruction is hands-on and project-based in a highly interactive learning environment. Prerequisite: V45.

HEALTH OCCUPATIONS PROGRAM Offers a one semester certificate program in Certified Nursing Assistant, Veterinary Assistant or Pet Grooming. Students learn the basics of assisting in the health care field through classroom instruction and practice and work in clinical setting.

V70 Nursing Assistant (15 credits)
This one semester course is approved by the Colorado State Board of Nursing, and successful students may sit for the Certified Nursing Assistants examination. In this course, students develop skills in patient assessment, helping patients with personal hygiene, assisting patients with transfer and mobility, and assessing patients' vital signs. Clinical experiences are required in a nursing home or hospital and the work-study program is a critical part of the program. Classroom theory related to patient care is also required. BVSD Health Curriculum included in course of study. This course fulfills the 5 credits in Health required for graduation.

V72 Veterinary Assistant (15 credits)
This one semester course presents basic knowledge and procedures related to veterinary aide skills including examination and care of animals in a veterinary clinic or animal shelter. Skills taught include caring for animals before and after surgery, assisting with exams and treatments, holding and restraining animals during treatment, sterilizing surgical and other instruments and clinic sanitation. Coursework also covers safety, grooming, nutrition, vital signs and other related veterinary aide tasks. Students may intern or work at various instructor-approved veterinary environments.

V73 Pet Grooming (15 credits)
This one semester course teaches essential skills including holding and restraining animals, cleansing of ears, teeth and eyes, brushing and bathing of most companion pets, and specific hair cuts for particular breeds. Coursework also covers customer service, business telephone etiquette, reception skills, knowledge of temperament of different breeds, and care of house pets, such as dogs, cats, ferrets, and birds.

V74 Clinical Internship (variable)
Clinical Internship option is available to students who are 16 years of age and have successfully completed all aspects of the Health Occupations Program, work a 16 hour work week for 16 weeks at a school approved health care facility at an agreed upon compensation rate. Students receive variable high school credits for work experience verified through time sheets, paychecks, and site visits. Prerequisite: completion of V70, V72, or V73.

MULTIMEDIA TECHNOLOGY PROGRAM This is a one and/or two-year certificate program incorporating state-of-the-art software and hardware used to produce multimedia products that may include animation, video, music, 3D and other effects. Products include concept presentations, artwork, photography, video clips, portfolios, stationery, posters, flyers and other marketing and advertising tools.

V37 Multimedia 1 (30 credits)
Students learn software applications to produce animation, video, music, digital imaging, 3D effects, and other special-effects creations. Collaborative projects, presentation skills, and work-based competencies are stressed. Development of computer skills in network accounts and file management is also taught. Instruction is self-paced and project-based.

V38 Multimedia 2 (30 credits)
Advanced coursework in software applications that produce animation, video, music, digital imaging, 3D effects, and other special-effects creations. Computer skill in network accounts and file management is strengthened. Students continue focus on project collaboration, presentation skills, and work-based competencies. Instruction is self-paced and project-based. Prerequisite: V37.