



Construction Careers Center Charter High School Course Guide 2009-2010

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Introduction

The St. Louis Board of Education, at the November 14, 2000 meeting, approved the Associated General Contractors of St. Louis' application to start a charter high school for the construction industry. The Missouri State Board of Education approved the Charter on January 11, 2001. This was the first charter school approved by the St. Louis Board of Education and the first charter high school approved for the St. Louis area.

A Board of Education appointed by the AGC of St. Louis independently operates the Construction Careers Center Charter High School according to Missouri Department of Elementary and Secondary Education guidelines. The board first focused on identifying an educational facility, securing adequate start-up funding, and employing a school administrator.

The Construction Careers Center Charter High School (CCC) began with 100 freshmen students in the fall of 2001 and added a new class each year. The school's mission is to prepare students in grades nine through twelve for the future by providing an excellent foundation in academics, broad exposure to the construction industry, and relevant vocational education preparation. The school's curriculum is specifically designed by the construction industry to prepare students for entry into direct employment, a construction apprentice program, a community college, or a four-year institution.

The Construction Careers Center Charter High School is housed in the Richard A. Grebel Memorial School on Grattan Street in St. Louis, Missouri. The building was purchased from the St. Louis Public Schools in December 2004. The Associated General Contractors of St. Louis (AGC) and the construction industry spent approximately five million dollars renovating, restoring, and creating the additional space needed to house the CCC.

Teachers use a curriculum that is integrated across disciplines to teach students. The curriculum is project based and allows students the opportunity to connect the classroom to real-life applications in the construction industry. During the junior and senior years students can be involved in off-site projects that will provide them the opportunity to integrate their school-based learning with work-based applications.

The AGC of St. Louis was founded in 1950 to build valuable partnerships between its members and strategic government and private sector groups and be the key legislative advocate addressing construction issues at the local, state, and national levels. The AGC seeks funds for facility improvements from sources outside the education community and represents over 400 construction firms employing more than 30,000 people.

Please visit the CCC website: www.constructioncareerscenter.org



Construction Careers Center Charter High School Mission Statement

The mission of the Construction Careers Center Charter High School is to prepare students in grades nine through twelve for the future by providing an excellent foundation in academics, broad exposure to the construction industry, and relevant career and technical education preparation.



Graduation Requirements

<u>Subject</u>	<u>Units</u>
Communication Arts	4
Mathematics	4
Science	3
Social Studies (* 0.5 unit of Personal Finance)	3*
Practical Arts	6
Physical Education	1.5
Health	0.5
Fine Arts	1
Electives	5
Total Graduation Units	28



Expectations for May Graduates

Core Academic Learning

- Meet minimum credit requirements for graduation
- Score at Level 6 on **Work Keys** Applied Mathematics
- Score at Level 6 on **Work Keys** Reading for Information

Student Engagement

- 2nd semester ADA > 90%
- Enrolled in dual-credit course or approved internship
- Registered to vote (if eligible)

Enrichment Learning

- Completed a minimum of OSHA 10 Certification
- Completed basic/user scaffolding certification parts I and II
- Completed Hilti power tools training/orientation
- Demonstrate ability to make accurate measurements with a 25' tape measure within 1/16" in at least 9 of 10 attempts
- Register to vote (if eligible)

Personal Skills

- Construction course personal skills grade > 90%

➤ **Any student not meeting these expectations will be required to attend 5th term and focus on the specific deficiencies.**

- **Work Keys** deficiencies will be addressed through a ½ day WIN-intensive course
- Students not enrolled in a dual credit course or approved internship will be required to show proof of construction related employment or acceptance to a 2 or 4 year college
- Students who do not meet the enrichment learning components will be required to complete them during a ½ day course
- Students who do not meet the personal skills components will be required to complete a course in first aid/CPR or construction related project



Expectations Checklist for May Graduates

Name _____

Met?	Expectation	Remediation Assignment
	Minimum credit requirements (28)	
	Level 6 on Work Keys Applied Mathematics	
	Level 6 on Work Keys Reading for Information	
	2 nd Semester ADA > 90%	
	Enrolled in dual-credit course or internship	
	OSHA 10 Certification	
	Basic/User Scaffolding Certification (pts. I & II)	
	Hilti power tools training/orientation	
	25' tape measure proficiency	
	Construction course personal skills grade > 90%	
	Registered to Vote (if eligible)	

Approved by _____

Date _____



End of Course Exams

Beginning in the spring of 2009 high school students will no longer be required to take MAP tests. The Missouri Department of Elementary and Secondary Education (DESE) is now requiring high school students take end of course (EOC) exams. A series of exams will be introduced over a period of two years. The sequence of the introduction of these exams is as follows:

2009:	Biology	Algebra I	English II
2010:	Algebra II	Geometry	English I
	Am. Government	American History	

All students will be required to take the exams near the completion of the course. This may be at the end of the regular school year or during 5th term depending upon when the student completes the requirements of the course.

DESE is also requiring that school districts make each end-of-course exam part of the student's final grade. The EOC exam will comprise of a minimum of 10% of the student's final grade in that course.



8 Block Schedule for a 4-Year Curriculum Plan

The CCC schedule is designed so that each student is assigned to 8 classes over a 2-day period. Every other day a student attends his A classes or his B classes. Each class is scheduled for approximately 90 minutes. The curriculum is rigorous and is designed to prepare students to enter apprenticeship programs or to enter a two or four-year college.

In the freshmen and sophomore years additional coursework in mathematics and English are available to provide CCC students with a stronger foundation for future class work and for remediation in those areas if necessary.

The CCC schedule includes a non-credit Seminar assignment every other day to provide students with an opportunity for:

- enrichment in difficult coursework,
- make-up in the case of absences
- completing homework assignments
- advanced work if excelling in a course

The CCC school year consists of 5 terms. Semester 1 courses are taken during Term 1 and Term 2 and a student should earn 3.5 credits (1/2 credit for each of 7 classes) during Semester 1. Semester 2 courses are taken during Term 3 and Term 4 and a student should earn 3.5 credits (1/2 credit for each of 7 classes) during Semester 2.

Term 5 is an abbreviated semester during which each student will be assigned to two classes. These classes are 3 hours in length and a student should earn 1 credit (1/2 credit for each of 2 classes) during Term 5. Term 5 provides an opportunity for a student to supplement his/her high school curriculum by taking required or elective classes. This term also provides an opportunity for students who have failed a class to make up the work and earn the credit for the course.



Career Pathways

The instructional program at Construction Careers Center Charter High School provides students with the opportunity to pursue multiple career pathways within the construction industry. Successful completion of their coursework coupled with qualifying standardized test scores will provide students with the means to enter directly into a construction apprenticeship or pursue a 2- or 4-year college degree. In addition to academic course work, all students are required to complete OSHA Safety Training, First Aid & CPR Certification, and community service before graduation. Although a formal character education program is not currently in place, the ideals of Respect, Responsibility, and Safety are reinforced in all classrooms, hallways, and the shop area at all times.

The sample 4 Year Plans provided on the following pages are designed to be viewed as possible 4 year plans for most students. We realize that not all students will follow these plans exactly as written depending on choice of electives and successful completion of prerequisite courses.



Architecture & Construction Pathway

	9 th	10 th	11 th	12 th
Communication Arts	Applied Com I / Lit & Comp	Applied Com II / Lit Lab	Applied Com III	CA Elective
Mathematics	Pre-Algebra	Algebra I (2)	Geometry	MA Elective
Science	Physical Science	Biology	Prin. Tech. I	
Social Studies	American Government	American History	Soc. St. Elective (1/2)/ Personal Finance (1/2)	
Construction	Const. Pathways	Intro. To Engineering	Const. Systems	Const. Gateway
Physical Education	Health/PE		PE (1/2)	
Business			Computer Applications	
Fine Arts				Art
Elective		1 Elective	Elective (1/2)	Electives (5)
CREDITS	7	7	7	7

* 4 year plan does not include elective courses taken during 5th term



STEM Pathway

Science, Technology, Engineering, & Math

	9 th	10 th	11 th	12 th
Communication Arts	Applied Com I	Applied Com II	Applied Com III	Amer. Lit
Mathematics	Algebra I (2)	Geometry	Algebra II	Algebra III
Science		Biology	Prin. Tech I	Chemistry
Social Studies	American Government	American History	World History/ Personal Finance (1/2)	
Construction	Const. Pathways			PLTW Capstone
Physical Education	Health/PE		PE (1/2)	
Business		Computer Applications		
Fine Art		Art	Spanish I	Spanish II
Project Lead The Way	Intro. To Engineering	Princ. of Engineering	Digital Electronics	Civil Engineering
Elective	1 Elective			1 Elective
CREDITS	7	7	7	7

* 4 year plan does not include elective courses taken during 5th term



Education & Training Pathway

	9 th	10 th	11 th	12 th
Communication Arts	Applied Com I	Applied Com II	Applied Com III	Amer. Lit
Mathematics	Algebra I (2)	Geometry	Algebra II	Algebra III
Science	Physical Science	Biology	Prin. Tech I	Chemistry
Social Studies	American Government	American History	World History/ Personal Finance (1/2)	
Construction	Const. Pathways			Career Development
Physical Education	Health/PE		PE (1/2)	
Business		Computer Applications		
Fine Art		Art	Spanish I	Spanish II
Project Lead The Way		Intro. To Engineering		
Elective	1 Elective		1 Elective	2 Electives
CREDITS	7	7	7	7

* 4 year plan does not include elective courses taken during 5th term



Construction

CONSTRUCTION PATHWAYS

Course #:
Prerequisite: None
Credit: 1.0 unit

The freshman level course designed to allow students to explore all aspects of the construction industry and the various pathways leading to a career in construction.

BLUEPRINT READING & ESTIMATING

Course #:
Prerequisite: Construction Pathways
Credit: 0.5 unit

An elective construction course designed to introduce students to the language common to all members of the construction industry.

CONSTRUCTION DRAFTING

Course #:
Prerequisite: Construction Pathways
Credit: 0.5 unit

An elective construction course designed to introduce students to basic construction drafting techniques.

CONSTRUCTION SYSTEMS

Course #:
Prerequisite: Construction Pathways
Credit: 1.0 unit

A junior level construction course designed to provide in-depth hands-on activities, to gain concentrated practical experiences, and narrow the focus on individual opportunities available in the construction industry.

CONSTRUCTION GATEWAY

Course #:
Prerequisite: Construction Systems
Credit: 1.0 unit

A senior level construction course designed to transition students from high school into a construction apprenticeship program or connect them to post-secondary educational institutions.



CAREER DEVELOPMENT

Course #:

Prerequisite: Construction Systems

Credit: 0.5 unit

A senior level construction course designed to guide students in the process of getting a job and keeping it. Students will learn and practice the various roles on a construction team along with job related soft skills. Students will work towards earning a Workforce Readiness Certificate (WRC) at the conclusion of this course.

COMPUTER AIDED DRAFTING (CAD)

Course #:

Prerequisite: Construction Pathways

Credit: 0.5 unit

A construction elective course in which students will study computer terminology, history, components, applications and design functions. They will also create graphic designs with computers.

INTRODUCTION TO ENGINEERING DESIGN (IED)

Course #:

Prerequisite: Passed or concurrently taking Algebra 1

Credit: 1.0 unit

The initial course in the Project Lead the Way series. This course teaches problem-solving skills using a design development process. Models of product solutions are created, analyzed, and communicated using solid modeling computer design software. It is the first in the pre-engineering course sequence.

PRINCIPLES OF ENGINEERING (POE)

Course #:

Prerequisite: Introduction to Engineering Design

Credit: 1.0 unit

The second course in the Project Lead the Way series. This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes helps students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change.

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CONSTRUCTION TECHNOLOGY & BUILDING MECHANICS

Course #:

Prerequisite: None

Credit: 0.5 unit – 5TH Term Only

This course will focus on construction tools, their usage, and the building concepts associated with them. In addition to the basic study of tools, general construction building concepts from 11 major construction trades will be covered. Students will apply concepts through hands-on projects and activities.

WOODWORKING I

Course #:

Prerequisite: Construction Pathways or Instructor Approval

Credit: 0.5 unit – 5TH Term Only

Safety and basic use of woodworking equipment are emphasized. Included are selection and reading of patterns, selection of appropriate wood, tool safety and usage, construction and finishing techniques. Projects include the construction of small stool, tool box, pieces of furniture or other wood items. (1 lecture hour, 2 lab hours)

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Communication Arts

LITERACY COMPREHENSION

Course #:

Prerequisite: None

Credit: 1.0 unit

Students enrolled in Lit/Comp will take part in READ 180, an intensive reading intervention program. READ 180 is proven to meet the needs of struggling readers, or students whose reading achievement is below proficient level. The program directly addresses individual needs in the following ways: differentiated instruction; adaptive and instructional software; high-interest literature; and direct instruction in reading, writing, and vocabulary skills.

ADVANCED LIT/COMP

Course #:

Prerequisite: Advanced SRI score and teacher recommendation

Credit: 1.0 unit

Proficient and advanced level readers are placed in Advanced Lit/Comp. This rigorous course involves the reading of classic short stories, novels and plays; the dissection of nonfiction articles and manuals; and the composition of a variety of papers, including a research paper, literary analysis papers, fiction writing, and more. Students also will be expected to take part in a number of discussions on many current issues and other ideas. Major works to be studied include *To Kill a Mockingbird*, *A Raisin in the Sun*, and *Lord of the Flies*.

APPLIED COMMUNICATIONS I

Course #:

Prerequisite: None

Credit: 1.0 unit

This comprehensive language arts course will introduce students to various genre of literature and the writing process. Emphasis on reading strategies, a review of grammar and mechanics, and understanding literary devices are included. Short stories are the primary focus of the first semester, and the second semester will involve the examination of longer texts, such as *The Tragedy of Romeo and Juliet*, *Scorpions*, and *The Odyssey*.

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APPLIED COMMUNICATIONS II

Course #:

Prerequisite: Applied Comm. I

Credit: 1.0 unit

Students build on skills introduced in Applied Communications 1 in this sophomore-level course. Focus is placed on longer, more in-depth writing, such as five-paragraph essays with thesis statements and involved examinations of literary elements in texts. Proper punctuation, spelling, and idea development are further reinforced, as well. Students also will continue to apply reading strategies to shorter and longer texts. Major works covered in this course include *Monster* and *Night*.

APPLIED COMMUNICATIONS III

Course #:

Prerequisite: Applied Comm. II

Credit: 1.0 unit

This course emphasizes competence in reading and writing. Students will explore a variety of themes and concepts presented in the novels, plays, essays, poetry and short stories of major American writers. Emphasis is placed on the understanding of literature and reader response to literature. Major works covered in English 3 include *Black Boy*, *Our Town*, *Member of the Wedding*, and *Catcher in the Rye*. Additionally, business and technical writing skills will be developed.

LITERACY LAB

Course #:

Prerequisite: Non-proficient SRI score

Credit: 1.0 unit

A continuation of Lit/Comp, Lit Lab meets the needs of non-proficient readers in a variety of ways. Students will work with fiction and nonfiction texts as they learn reading strategies, decoding strategies, and comprehension strategies. Timed readings also are an important part of this class. In addition, students will work in the WIN for **Work Keys** computer software, which prepares them for the **Work Keys** test.

AMERICAN LITERATURE

Course #:

Prerequisite: Applied Comm. II

Credit: 0.5 unit

This course uses a variety of themes presented in the novels and short stories of major American writers to challenge students in their reading and writing. Emphasis is placed on the understanding of literature and literary devices as a means of communication. Reading materials include *Brave New World*, *A Streetcar Named Desire*, and an anthology of short stories that should help develop composition and rhetorical skills, research skills, and critical thinking skills.



ADVANCED AMERICAN LITERATURE

Course #:

Prerequisite: Applied Comm. III

Credit: 0.5 unit

This course uses a variety of themes presented in novels, essays, poetry and short stories written at higher lexiles by major American writers to challenge students in their reading and writing. Emphasis is placed on the understanding of literature and on the use of language, both oral and written, as a means of communication. The course further develops composition and rhetorical, research and critical thinking skills. Two major literary works include *Song of Solomon* and *Invisible Man*.

JOURNALISM

Course #:

Prerequisite: Applied Comm. II and Instructor Approval

Credit: 0.5 unit

Print, radio, and broadcast media will be studied and produced in this course. It will cover media ethics, media law, and history of media. In addition, students will have the opportunity to create their own stories and multimedia presentations that will be produced in a variety of ways for the student body.

CREATIVE WRITING

Course #:

Prerequisite: Applied Comm. II and Instructor Approval

Credit: 0.5 unit

This course focuses on the creation of prose and poetry from various forms and genres. Well-known literary works will serve as models. Composition exercises will reflect an understanding of studied forms and an application of creative techniques.

WORK KEYS ENGLISH PREP

Course #:

Prerequisite: Applied Communications 1

Credit: 0.5 unit

This course is intended to prepare students for achieving success on the *Reading for Information* section of the **Work Keys** test. Strategies for reading complex text include identifying implied details, understanding jargon and technical terms, using context clues, applying complicated information in new situations, and analysis of policies and communications. Students will practice for the **Work Keys** test using computer software, examining employee manuals, and using correct formats for business writing and practical English applications.

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ACT PREP

Course #:

Prerequisite: Instructor Approval

Credit: 0.5 unit

This one semester course is designed to provide students with the test taking skills needed to obtain acceptable scores on the ACT, SAT, and the Accuplacer tests. The students in this class are planning to continue their education beyond high school.

MYTHOLOGY

Course #:

Prerequisite: Applied Communications 1

Credit: 0.5 unit – 5TH Term Only

Students will explore the mythology of a variety of cultures, including Greek, Norse, and Egyptian. The stories, poems, and plays of the various gods and goddesses will be covered in a variety of ways. In addition, classes will create their own myths.

INTRODUCTION TO SHORT STORIES

Course #:

Prerequisite: Applied Communications 2 or Instructor Approval

Credit: 0.5 unit – 5TH Term Only

Students in this course will study and analyze selected literary works, namely short stories, which will be used to examine how cultural traditions and history can enrich and challenge adolescent culture. The course will also introduce students to the pleasures of reading literature, to the interpretative approaches to literature, and to some of the specialized terms that will help them articulate their thoughts and observations.

COMMUNICATION SKILLS

Course #:

Prerequisite: Instructor Approval

Credit: 0.5 unit – 5TH Term Only

This course is designed for remediation purposes for students that fail both semesters of Applied Communications I. Students will work with fiction and nonfiction texts as they learn reading strategies, decoding strategies, and comprehension strategies. Timed readings also are an important part of this class.



Mathematics

PRE-ALGEBRA

Course #:
Prerequisite: None
Credit: 1.0 unit

This course is designed to prepare the student for algebra. The content of the course covers a review of the fundamental operations of arithmetic and the basic concepts of rational numbers in both fractional and decimal form. The use of variables in formulae and algebraic statements will help prepare the student for solving problem situations in general, and for future work in algebra.

ALGEBRA I

Course #:
Prerequisite: Pre-Algebra or Instructor Approval
Credit: 1.0 unit

This course is designed to prepare students to succeed in geometry and algebra II. The content of this course covers patterns and sequences, solving equations and inequalities, graphing, systems of equations, polynomials, and quadratics. This is a college preparatory course.

GEOMETRY

Course #:
Prerequisite: Algebra I
Credit: 1.0 unit

This course is designed to prepare students to succeed in algebra II and trigonometry. The content of this course covers finding area and volume of geometric shapes and solids, geometric proof, the Pythagorean Theorem, the distance formula, and angular measure. This is a college preparatory course.

ALGEBRA II

Course #:
Prerequisite: Geometry
Credit: 1.0 unit

Algebra I is the gateway to college preparatory mathematics; Algebra II is its watershed. Algebra I emphasizes variable; Algebra II emphasizes function. Emphasis on problem solving is stressed through out the course and students will be expected to express mathematical ideas both orally and in writing. The following topics will be reviewed or introduced: Linear equations and inequalities, Absolute value equations and inequalities, Relations Functions and Graphs, Rational Expressions, Irrational and Complex numbers, Radical Equations, Quadratic Equations and Functions, Polynomial Functions, Exponential and Logarithmic Functions, Conics and Trigonometric Functions



ALGEBRA III

Course #:

Prerequisite: Algebra II

Credit: 1.0 unit

This course will combine algebra, geometry, number theory, probability, rational numbers, irrational numbers, real numbers and conic sections and apply these skills to the real world. It will prepare students for college placement tests that are used to determine where students are placed in math courses.

CONSTRUCTION MATH

Course #:

Prerequisite: None

Credit: 1.0 unit

This course is designed to provide students with the basic mathematical skills needed in the construction industry. The content of this course is reinforced with practical construction applications. Each topic will be related to the career pathways in project form. Students will be required to learn the skills, apply them to an industry, and then transfer the information to a project in the classroom.

ADVANCED CONSTRUCTION MATH

Course #:

Prerequisite: Construction Math

Credit: 0.5 unit

This course is designed to provide students with the mathematical skills needed in the construction industry. The content of this course is reinforced with practical construction applications with computer tutorial to enhance understanding. A collaborative learning environment will be established to promote individual work. Students will be required to learn the skills necessary and apply them. The content of this course is estimation, rounding, perimeter, area, volume, best deals, ratios and proportions, production rates, averages, multiple unknowns, troubleshooting, and nonlinear functions.

WORK KEYS MATH PREP

Course #:

Prerequisite: Algebra I

Credit: 0.5 unit

This course is designed to provide students with the mathematical skills needed to obtain acceptable scores on the **Work Keys** Applied Mathematics test. The students in this class are planning to apply for internships in the construction field. The content includes percents, fractions, word problems, elapsed time, rate problems, area, and volume.

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ACT PREP

Course #:

Prerequisite: Instructor Approval

Credit: 0.5 unit

This one semester course is designed to provide students with the test taking skills needed to obtain acceptable scores on the ACT, SAT, and the Accuplacer tests. The students in this class are planning to continue their education beyond high school.

ALGEBRA SKILLS

Course #:

Prerequisite: Instructor Approval

Credit: 0.5 unit – 5TH Term Only

This course is designed for remediation purposes for students that fail both semesters of Algebra I. Students will review of the fundamental operations of arithmetic and the basic concepts of rational numbers in both fractional and decimal form.

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Social Studies

AMERICAN GOVERNMENT (CIVICS)

Course #:

Prerequisite: None

Credit: 1.0 unit

American Government is the freshman level course designed to help our students become responsible citizens and assume the responsibilities to make informed and reasoned decisions for the public good as members of a democratic society in an interdependent world.

AMERICAN HISTORY

Course #:

Prerequisite: American Government

Credit: 1.0 unit

Understanding the events, trends, individuals and movements shaping the history of the United States is the goal of this sophomore level class. George Santayana said “those who cannot remember the past are condemned to repeat it.” In a broader sense, students who can examine and analyze the events of the past have a powerful tool for understanding the events of today and the future. They develop an understanding of how people, nations, actions and interactions have led to today’s realities.

WORLD HISTORY

Course #:

Prerequisite: American History

Credit: 1.0 unit

This is a thorough survey course covering from pre-historic to modern times, both western and non-western worlds. Students from grades 10 through 12 will be able to participate in this course. Topics include: the rise of civilization; political, social and economic developments of the Middle Ages; the Renaissance and era of discovery; the growth of democracy and nationalism; the industrial revolution; and the two world wars. Postwar problems and recent developments are also studied.

GEOGRAPHY

Course #:

Prerequisite: American History

Credit: 0.5 unit

This course will provide a comprehensive and wide-ranging overview of the discipline of geography. It will consider the basic concepts and skills necessary to begin the study of both individual places and regions in the world. Considerable attention will be paid to the holistic nature of geography and the need to understand the importance of physical processes as they relate to human occupancy and activity in a world regions context.



CONTEMPORARY ISSUES

Course #:

Prerequisite: American History

Credit: 0.5 unit

This is the all-encompassing compilation of the social studies disciplines emphasizing the development and structure of society and societal relationships.

PERSONAL FINANCE

Course #:

Prerequisite: None

Credit: 0.5 unit

This is a one semester course that is required for graduation. This course will inform students how individual choices directly influence occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as savings and investment. Students will design personal and household budgets utilizing checking and savings accounts, gain knowledge in finance, debt and credit management, and evaluate and understand insurance and taxes. This course will provide a foundational understanding for making informed personal financial decisions leading to financial independence.

HISTORY OF AMERICAN CINEMA

Course #:

Prerequisite: American History or Instructor Approval

Credit: 0.5 unit– 5th Term Only

The course will only be offered exclusively during fifth term when the class periods are longer than the first two semesters. Students will explore the relationships of individuals and groups to institutions and cultural traditions. Students will also gain knowledge of continuity and change in the history of the United States. We will explore how movies reflect and influence changes in American mores, values and culture. We will discuss how Hollywood has shaped Americans' image of the world, and the world's view of Americans. Furthermore, the course will investigate the role of film in American life today. In attempting to discover these relationships, this course will trace the history of the American film industry by screening representative films from different genres. Students will also be exposed to screenplay writing and in small groups, produce a short movie of their own.

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MISSOURI HISTORY

Course #:

Prerequisite: American Government or Instructor Approval

Credit: 0.5 unit – 5th Term Only

Emphasis on events in Missouri as way to understand larger context of American national experience. Missouri was established as the nation was still in the process of establishing itself. Covers national trends and problems such as immigration, industrialization, and racial problems. Incorporates geography, civics, economics, anthropology, and sociology with history to give students an opportunity to learn about their world on several levels: the community (the origin and subsequent growth of towns), the region (the occupation and settlement of the Mississippi River Valley), the nation (the struggle for statehood, the westward movement, the Civil War, and the depression of the 1930s) and the world (exploration, world wars, the global economy, and the worldwide communications network).

UNITED STATES LABOR HISTORY

Course #:

Prerequisite: American Government or Instructor Approval

Credit: 0.5 unit – 5th Term Only

Critical thinking and decision making skills are engaged in this look at the relationship between employer and employee. United States history will be divided into different time frames and in each of these periods the main events and issues of U.S. labor history are introduced with an emphasis on the field of construction. Using these ideas, students will increase their understanding of the American economic system and the important issues we all face as workers today.

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Science

PHYSICAL SCIENCE

Course #:
Prerequisite: None
Credit: 1.0 unit

Physical Science is an introduction to the study of the natural sciences. Topics include the solar system, simple machines, light and sound, matter and mass, and earth's geology. The class involves the integration of theory and practice with many hands-on activities.

BIOLOGY

Course #:
Prerequisite: Physical Science or Instructor Approval
Credit: 1.0 unit

Biology is the study of earth's living organisms and their interactions with other organisms and their surrounding environment. The course focuses on plant and animal cell biology, DNA and RNA, genetics, reproduction, and the classifications of plants and animals.

CHEMISTRY

Course #:
Prerequisite: Physical Science or Instructor Approval
Credit: 1.0 unit

Chemistry is the study of what matter is, how it reacts and changes, and how it governs the realities of the known universe. Topics of study include atomic structure, chemical nomenclature, chemical quantities, balancing equations, stoichiometry, phases of matter, bonding, solutions, and acids and bases.

PRINCIPLES OF TECHNOLOGY I

Course #:
Prerequisite: Physical Science or Instructor Approval
Credit: 1.0 unit

Principles of Technology I is an introduction to physics. The objective of this course is to introduce the basic concepts of Newtonian physics and study the physical nature of the world around us. Students will be introduced to the following concepts: Scientific method, Linear Motion, Projectile Motion, Rotational mechanics, Energy and "work", Momentum, Newton's Laws of Motion, Gravity, Solids, liquids, gases, Atomic theory, Satellite motion.



PRINCIPLES OF TECHNOLOGY II

Course #:

Prerequisite: Principles of Technology I

Credit: 1.0 unit

A continuation of Principles of Technology I. The objective of this course is to build upon prior knowledge and delve further into the following concepts: Scientific method, Thermodynamics and Heat Transfer, Change of Phase, Wave mechanics, Sound, Light, and Color, Electromagnetic Induction, Atomic Nucleus, Radioactivity, and Quantum Mechanics.

LIFE SCIENCE

Course #:

Prerequisite: Biology or Instructor Approval

Credit: 1.0 unit

Life Science focuses on living creatures inhabiting a living environment. Concepts include biomes, ecosystems, ecology, and climate change with special attention paid to the effect of living organisms on their surroundings.

The Science of Controversy

Course #:

Prerequisite: Physical Science or Instructor Approval

Credit: 0.5 unit – 5th Term Only

Course will include in-depth coverage, analysis, and research into such controversial topics as Global Warming, Evolution vs. Creationism, Ozone Depletion theory, the math behind the JFK Assassination and the “magic bullet” theory, including forensic evidence gathered from the crime science, along with other interesting topics. Students will be required to provide research papers in APA format for each topic discussed, including team presentations at the end of each unit. Appropriate debating methods will also be introduced, and much of the work will be done independently using the computer labs at CCC. Students will ultimately learn to formulate their own opinions based on the scientific evidence that they’ve gathered and to defend those opinions to other classmates.

Earth Science

Course #:

Prerequisite: None

Credit: 0.5 unit – 5th Term Only

This course introduces students to Earth’s materials, the sculpturing of Earth’s surfaces, forces within, oceanography, meteorology and astronomy.

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Introduction to Forensic Science

Course #:

Prerequisite: Physical Science or Instructor Approval

Credit: 0.5 unit – 5th Term Only

This course will offer students a hands-on look at the world of forensic science. Students will be able to conduct several dissections that will serve as an introduction to the science of autopsy. Laboratory and problem solving skills would be developed through fingerprint sampling, testing for unknown substances, identifying appropriate chemical tests and many others.

Anatomy and Physiology

Course #:

Prerequisite: Biology or Instructor Approval

Credit: 0.5 unit – 5th Term Only

Students will participate in a 5 week investigation of the major organ systems and how they interact. A comprehensive survey of tissues, organs and organ systems will be conducted. Special emphasis will be placed on medical terminology and dissection technique and skills. This rigorous course will require learning significant numbers of names of animal structures as well as identifying their location inside actual specimens.



Health and Physical Education

HEALTH – PERSONAL CHOICES

Course #:

Prerequisite: None

Credit: 0.5 unit

This course is a graduation requirement. It provides an exposure to a variety of health topics for the purpose of developing good health attitudes and practices. The topics covered are: Structure and Functions of the Body, Social, Emotional and Mental Health, Personal and Family Health, Nutrition, Consumer Health and Safety, Life Management Skills, Disease Prevention and Control, Injury Prevention and Safety, Substance Education and Environmental Health.

PERSONAL FITNESS

Course #:

Prerequisite: None

Credit: 0.5 unit

This course emphasizes the importance of being involved in physical activity and how fitness can be the key to longevity and good health. It uses a combination of a classroom setting and physical activities to introduce several components of fitness that will help students to look and feel better about themselves.

TEAM SPORTS

Course #:

Prerequisite: None

Credit: 0.5 unit

This class will emphasize the development and improvement of skills, rules, strategies and knowledge of various team sports.

LIFETIME SPORTS

Course #:

Prerequisite: None

Credit: 0.5 unit

Students will participate in a variety of sports, games and activities that they can perform for health and enjoyment for the rest of their lives. Students enrolled in Lifetime Sports/Net games may take field trips to enhance class instruction and off campus facilities may be used for enrichment activities.



Practical Arts

COMPUTER APPLICATIONS

Course #:

Prerequisite: None

Credit: 1.0 unit

This course is designed to develop hands-on keyboard skills in addition to the ability to read and follow directions. Skill areas include keyboarding, word processing, spreadsheets and computer graphics using Microsoft Office.

JOBS FOR AMERICAN GRADUATES (JAG)

Course #:

Prerequisite: 11TH OR 12TH Grade Status

Credit: 1.0 unit

This course is designed to provide students with working knowledge in job readiness, employability skills and job survival skills. The JAG curriculum is designed to equip students with competencies that will prepare them to secure a quality job and /or pursue postsecondary education or advance training upon graduating from high school.



Fine Arts and Foreign Language

ART I

Course #:

Prerequisite: None

Credit: 1.0 unit

Students will learn how to use the elements and principles of design to create well designed works of art in various 2-dimensional media, which may include drawing, painting and calligraphy. Students will begin learning the process of problem solving issues that arise in their work. During the second semester, students will learn how to use the elements and principles of design to create well designed works of art in various 3-dimensional media, which may include ceramics and sculpture. Students will develop problem solving skills as related to their artwork.

ART II

Course #:

Prerequisite: Art I

Credit: 0.5 unit – 5th Term Only

Students will take part in a student-centered, student-directed, in-depth study of one aspect of art that is of interest to them as an individual, or as a class. This could include a study of media, techniques, specific periods or artists. It might also include a group-project that focuses on inter-personal skill building, problem-solving, decision making within a group and media and skill building on a larger scale.

SPANISH I

Course #:

Prerequisite: None

Credit: 1.0 unit

This course is a basic introduction to the Spanish language including simple nouns and verbs, basic conversational vocabulary, the present and preterite tenses, and a broad overview of Spanish culture.

SPANISH II

Course #:

Prerequisite: Spanish I

Credit: 1.0 unit

Spanish II continues the study of the structure of the Spanish language. Students will communicate about themselves, their surroundings, and the Spanish-speaking world by speaking, writing, and reading. They will develop cultural awareness and understanding as they compare their culture with those of the Spanish-speaking world.

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