



Douglas County Career & Technical Education

Board of Education End Statements:

Douglas County School District students acquire the knowledge, skills, and dispositions to be responsible citizens who contribute to our society.

- 1) Students are able to think critically, creatively, and reflectively.
- 2) Students apply what they have learned. They go beyond merely knowing to using their knowledge and skills productively.
- 3) Students explore chosen areas beyond the liberal arts foundation that may expand future opportunities, such as:
 - a) Career and technical education
 - b) Internships
 - c) Post-secondary options



2011-2012 Course Catalog

Registration Information

About Douglas County Career & Technical Education

Douglas County provides Career and Technical training to students from Cherry Creek, Douglas County, Englewood, Littleton and Sheridan school districts. The five school districts partner with Arapahoe Community College. Programs are located in a variety of locations.

High school juniors and seniors are eligible to attend. Students must have good attendance, the ability to get along with others, work in a group and independently. Strong academic ability is advantageous because college level work is often required.



Enrollment Process

Step 1 – Gather all relevant information via course catalogues, brochures, phone calls, emails and meetings.

Step 2 – Complete an application for admission. This application may be found at each high school's Counseling office or online at dcsdk12.org > Learning Services > Career and Technical Education.

Step 3 – Take completed application to your home high school counselor.

Step 4 – Counselors send in completed applications to the CTE Office* no later than February 18, 2011. All out of district applicants will be notified of acceptance no later than April 29, 2011. Submission of the application indicates intent to register. You must finalize the registration process in person by participating in a May 2011 orientation. You will be notified of this meeting date, and location. Classes are filled on a first come first serve basis.

Douglas County Schools Contact Information:

Steven Johnson

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303.387.0042



Transportation and Credits

Transportation availability and credit awarded per course will vary according to your district. Please check with your school district for more information. Douglas County does not provide any transportation.

Important Dates!

February 18, 2011

Application Due

April 29, 2011

Out-of-district students notified of acceptance

May 2011

Students finalize registration process by attending orientation

August 2011

Classes begin according to district calendar



College Ready Courses



Many of the courses Douglas County CTE offers are “College Ready” courses. The following answers many frequently asked questions about this program:

Q: What is COF (College Opportunity Fund)?

A. All students must apply for COF. The COF stipend pays a portion of a student’s tuition. All students must complete an application for the College Opportunity Fund (COF) at <https://cof.college-assist.org>

Q: What is the College Ready Program?

A. Juniors and seniors receive both high school credit and college credit for College Ready classes. Students begin building a college transcript while they complete their high school graduation requirements. Students must receive a grade of C or better to receive college credit.

Q: Am I eligible for the College Ready Program?

A. High school juniors and seniors can take College Ready classes.

Q: Is this right for me? Will my credits transfer?

A. The College Ready Program creates options for students still in high school. It prepares students for the rigor and culture of college. Students build a college transcript, while still in high school. Students may transfer their college credits to any two or four year college or university. Check with the accepting institution for credit acceptance.

Q: What’s the cost?

A. Tuition is paid by the participating district and the College Opportunity Fund (That’s over \$250 savings per class!). Books, fees, and/or uniform costs, if applicable, are the responsibility of the student.



Agricultural Education

Students can Co-Enroll with **Douglas County High School** to participate in the following courses. For more information, please contact Julia Caley @ DCHS at 303.387.1000.

This program of study is designed for students who are pursuing careers or have interest in agriculture and equine/animal sciences. This is a comprehensive elective study of up to four years requiring classroom and lab instruction, a supervised agricultural experience project (SAE) and membership in the FFA student vocational organization. Students begin with Agriscience during their first year, Advanced Agriscience the second year, and then select classes in animal/equine science, plant science, and agriculture business in the third and fourth year of study. Additional fees and costs are also involved throughout the program of study for field trips, FFA contests/leadership activities, and special equipment, as well as services needed during laboratory instruction • Students can co-enroll with DCHS to participate • Class size is limited • Student expenses are required for certain classes. Supervised Agricultural Experience (SAE) is offered.

Agriscience

Open To Grades: 9-12 Course Length: Semester
Prerequisites: None Credit: 0.5 Elective/Practical
Transportation: Own Fee: \$20.00

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

Equine Science

Open To: Grades: 11-12 Course Length: Semester
Prerequisites: Agriscience / Advanced Agriscience Rec.
Credit: 0.5 Science
Transportation: Own Fee: \$20.00

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

Advanced Agriscience

Open To: Grades: 10-12 Course Length: Semester
Prerequisites: Agriscience Credit: 0.5 Elective/Practical
Transportation: Own Fee: \$20.00

This is an intermediate course in agricultural education. It is a continuation of fundamentals involving animal and equine science, agricultural business, and plant science and leadership skills. Students will participate in FFA and SAE.

Supervised Agriculture Experience Release Hour

Open To: Grades: 11-12 Course Length: Semester
Prerequisites: Agriscience / Advanced Agriscience Rec.
Credit: 0.5 Practical/Elective
Transportation: Own Fee: TBD

This course involves occupation release time for students employed in and exploring a job in the agriculture industry. Students must have completed at least 2 years of previous agriculture classes, be concurrently enrolled in an agriculture course, and maintain the contract for the entire semester.

Animal Science

Open To: Grades: 11-12 Course Length: Semester
Prerequisites: Agriscience / Advanced Agriscience Rec.
Credit: 0.5 Science
Transportation: Own Fee: \$20.00

This course is an in-depth study of the livestock industry. Students will learn about the biological systems of livestock, current animal industry trends and livestock management practices. Students will participate in FFA and SAE.

Natural Resources

Open To Grades: 11-12 Course Length: Semester
Prerequisites: Agriscience & Advanced Agriscience
Credit: 0.5 Elective/Practical
Transportation: Own Fee: \$20.00

This course emphasizes the fundamentals of soils, plants and natural resources. Students will study agricultural and horticultural crops as well as management of our natural resources including forestry and wildlife.



Automotive Technology

Students can Co-Enroll with **Ponderosa High School** to participate in the following courses. For more information, please contact PHS at 303.387.4000. **This course is also available through Sheridan School District at Arapahoe Community College.**

This course sequence aligns with the Colorado Community College Automotive Technology course sequence. This course will earn both high school credit and community college credit towards a 2 year A.A.S. (Associate of Applied Science) and Certificate degree program.

Automotive Technology I

Open To Grades: 10 -12 Course Length: 1 year
Prerequisites: None Credit: 2.0 Elective
Fee: \$30.00 + project cost
Transportation: Own



This course is designed to give students knowledge of the basic systems required in the automotive repair industry. Within this course several automotive systems are covered with a strong emphasis on safety and participation. Students will receive theory-based classroom instruction and hands-on training with all of the required equipment for a career in the automotive industry. Coursework is designed to apply to several post-secondary automotive programs. This course includes, but is not limited to: shop safety and tools, basic electrical concepts, vehicle maintenance, automotive electrical system fundamentals, onboard vehicle diagnostics and repair, basic steering and suspension fundamentals and OSHA/EPA regulations and requirements. This class is designed to meet the course requirements for a secondary education NA-TEF certified program.

Automotive Technology II

Open To: Grades: 10 -12 Course Length: 1 year
Prerequisites: Automotive Tech I Credit: 2.0 Elective
Fee: \$30.00 + project cost
Transportation: Own

This course applies all knowledge from the Automotive Technology I class and expands on several systems of automotive repair. This course is made up of more than 60% hands-on training with emphasis on several automotive systems. This course includes shop safety and tools, advanced electrical concepts, precision measurement, advanced onboard computer diagnostics and troubleshooting, hydraulic and brake systems, vehicle drivability and performance. This class is designed to meet the course requirements for a secondary education NATEF certified program.

Automotive Technology III

Open To: Grades: 11 -12 Course Length: 1 year
Prerequisites: Automotive Tech I, II
Credit: 2.0 Elective
Fee: \$60.00 + project cost Transportation: Own

Automotive Technology III is a double blocked semester long class designed for students who are considering careers in the automotive technology and related fields. Students will learn advanced techniques including: brakes, vehicle suspension and steering systems, advanced wheel and tire concepts, vehicle wheel alignment, system diagnostic analysis, and electrical systems. Students will also review safety regulations and specialized tool and equipment use. Emphasis will be placed on career exploration throughout the industry and students will complete tasks preparing them to successfully pass ASE exams.

Automotive Technology IV

Open To: Grades: 11 -12
Course Length: 1 year
Prerequisites: Automotive Tech I, II, III
Credit: 2.0 Elective
Fee: \$60.00 + project cost
Transportation: Own

Automotive Technology IV is a double blocked semester long class designed for students who are considering careers in the automotive technology and related fields. Students will learn advanced techniques including: brakes, vehicle suspension and steering systems, advanced wheel and tire concepts, vehicle wheel alignment, system diagnostic analysis, and electrical systems. Students will also review safety regulations and specialized tool and equipment use. Emphasis will be placed on career exploration throughout the industry and students will complete tasks preparing them to successfully pass ASE exams.



Douglas County Career & Technical Education

Criminal Justice

Open to grades: 11, 12
Course Length: 1 year
Prerequisites: None
Transportation: Own
Credit: 1, 3 college credits



Offered at **Legend High School**- students can Co-Enroll with Danny Winsor @ Legend High School. For more information, please contact LHS at 303.387.4500.

This course aligns with the Colorado Community College Criminal Justice CRJ 125 course. This course may earn both high school credit and community college credit toward a 2 year A.A.S. (Associate of Applied Science) and Certificate degree program.

This Criminal Justice course will concentrate on potential careers in the criminal justice system and law enforcement in general. This course will have a heavy emphasis on law enforcement, crime scene investigation, and forensic science. The Criminal Justice program, in general, may be taken for either one or two years, as the courses offered alternate each year. This class is open to either juniors or seniors. It is highly recommended that students be able to read and write at the 10th-grade level in order to receive the community college credits in addition to the high school credits. This course is taught at a college level. As such, students will be expected to have the dedication and the motivation that they would apply to a college level course. This course is an academic course and is not an academy-based, hands-on, law enforcement course.

Field trips will be taken to the CELL Terrorism Museum, Arapahoe Community College's Firearms and Police Pursuit Training simulators, the Colorado Bureau of Investigation (CBI) criminal forensics laboratory, the Arapahoe County Jail, and the Arapahoe District Court to conduct a mock trial or trials. Students will need to arrange to carpool or independently drive to each of the field trips, as no buses will be provided.

Computer Information Systems and Technician (formerly ETA) Academy

Students can Co-Enroll with Danny Winsor @ **Legend High School** to participate in the following courses. For more information, please contact LHS at 303.387.4500.

This course aligns with the Colorado Community College System. This course will earn both high school credit and community college credit towards a 2-year A.A.S. (Associate of Applied Science) and/or a Certificate degree program.

Open To: Grades: 11, 12
Prerequisites: None
Transportation: Own
Course Length: 1 year
Credit: up to 3.0 Elective
Fee:

Legend High School Tech Center 1:15 to 3:00 pm M-F

This course provides students with an in-depth look at operating system support, maintenance, and troubleshooting, with an overview of hardware, security concepts, and basic maintenance and troubleshooting. It also provides students with the knowledge necessary to understand, identify, and perform necessary tasks involved in implementing and supporting a network.

Certifications: Comp TIA A+ and Comp TIA Network+

ACC courses to be concurrently enrolled in:
CNG 121, CNG 122, CNG 124, and CNG 125

ProStart (Culinary Arts)

Students can Co-Enroll with Katy Saville @ **Thunder Ridge High School** to participate in the following courses. For more information, please contact TRHS at 303.387.2000.

Open To: Grades: 11, 12
Prerequisites: None
Transportation: Own
Course Length: 1 year
Credit: 1.0 Elective
Fee: TBD

ProStart is a two year preparatory program specially designed for those students who are seriously interested in exploring career directions in the Hospitality/ Food Service industry. Interested students will learn customer relations and to prepare and serve safe, healthy food. Students will learn about preventing accidents and injuries, and develop basic kitchen skills. All business aspects of running a restaurant will be practiced. Students have the opportunity to do an internship with firsthand training room site mentors. ProStart has scholarship money available for qualified post high school students.





Douglas County Career & Technical Education

Health Sciences @ LHS

Students can Co-Enroll with Danny Winsor @ **Legend High School** to participate in the following courses. For more information, please contact LHS at 303.387.4500. **This course is also available through Littleton School District at the Ames Facility.**

Open To: Grades: 11, 12 Course Length: 1 year
Credit: 1.0 Elective Transportation: Own Fee: TBD
Prerequisites: Application Process/Instructor Approval

This program introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. It will include terms related to major body systems, oncology, psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting. This class will also introduce basic nursing skills, communication skills, restorative services, personal care skills, safety and emergency care issues are covered. Included is a knowledge and/or principles of asepsis, OSHA and HIPAA regulations. Ethical behaviors, cultural sensitivity and principles of mental health will be addressed, as well as patient/resident rights.

Teacher Cadet (Honors)

Students can Co-Enroll with Laura Alsdorf @ **Highlands Ranch High School** to participate in the following courses. **(Also available at the Ames Facility in Littleton Public Schools)** For more information, please contact HRHS at 303.387.2500.

Open To: Grades: 11, 12 Course Length: 1 year
Credit: 1.0 Elective Transportation: Own Fee: TBD
Prerequisites: Application Process/Instructor Approval

Ames Facility (Littleton School District)

(2 credits - CTE Coordinator signature required)
7:30-9:20 am M-F -or- 12:55-2:45 pm M-F

Interested in teaching as a possible profession? Get a head start on your college career! College credit for this honors introduction to teaching course is available. Students will be involved in a fast-paced, innovative, hands-on curriculum where they gain knowledge about teaching and learning. Teacher Cadets will develop skills that are helpful in college and beyond, such as presentation, public speaking, writing, communication and reasoning. Students experience the rewards of teaching through a "mini teaching" field experience as part of the course work. This is a year-long, sequential honors elective course with college credit options. Teacher Cadet is aligned with the Colorado Teacher Licensure Standards.

Aviation Technology

Open to grades: 11, 12
Course Length: 1 year
Prerequisites: None
Transportation: Own
Credit: 1 (This course is a College Ready course)



Offered at Grandview High School, the Career Technical Education Building, and Overland High School

This course aligns with the Colorado Community College Aviation course AVT 101. This course will earn both high school credit and community college credit toward a 2 year A.A.S. (Associate of Applied Science) and Certificate degree program.

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

Digital Media Technology

Students can Co-Enroll with Greg Sheehan @ **Rock Canyon High School** to participate in the following courses. For more information, please contact RCHS at 303.387.3000. Students can Co-Enroll with Danny Winsor @ **Legend High School** to participate in the following courses. For more information, please contact LHS at 303.387.4500.

The Digital Media Technology programs at RCHS or at LHS include courses that will earn both high school credit and community college credit towards a 2-year A.A.S. (Associate of Applied Science) and certificate degree program. In addition, many of the classes lead to an opportunity to sit for certificates that will enhance student employability in many technical fields. These programs are based on five distinct pathways within the world of Digital Media; Computer Graphics, Web Design, Digital Media, Game Design and Video Productions



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