

Intermediate Automotive Technology Services

2026-2027

Instructor	Zach Frank	Phone	360-630-1812
Email	zfrank@nwtech.k12.wa.us	Course Hours	M-F 3:00 PM - 5:30 PM
Location	CTE Department, Sedro Woolley High School (1235 3rd Street)	Website	https://www.nwtech.k12.wa.us
CIP Code / Framework	47.0604 - Automobile/Automotive Mechanics Technology/Technician		

DUAL CREDIT / ARTICULATION INFORMATION

Institution	College Course & Number	Credits	Registration / Enrollment Process	Deadline / Notes
Skagit Valley College (SVC)	Automotive Technology 101: Industrial Safety and Fundamentals	3	Register for the articulated CTE Dual Credit course through SERS during the same academic year.	Same-year registration required; earn B (3.0) or better and complete required skills.

Dual-credit eligibility: Students must earn a final grade of B (3.0) or higher in all courses required by the articulation agreement and complete all required skills/competencies identified on the applicable competency profile.

COURSE DESCRIPTION & LEARNING OUTCOMES

High School Course Description

This course will provide students the intermediate skills and knowledge to make minor and intermediate repairs to automotive systems to a trade-accepted standard. The course includes shop safety, shop organization and operation, engine theory, electrical systems, brakes, fuel systems, cooling systems, powertrains, and suspension/alignment. Students may supply their own projects or will be furnished a project to work on. Students are required to supply all parts for projects they bring in for repair.

College Core / Course Learning Outcomes

Learning objectives from the current Automotive Technology syllabus:

- Demonstrate understanding of safe practices while working in an industrial lab by correctly identifying safe and unsafe examples.
- Demonstrate understanding of basic lab equipment maintenance by correctly performing maintenance and service on a variety of lab equipment.
- Demonstrate safe use of power and hand tools.
- Correctly identify and measure metric and standard hardware.
- Perform a basic vehicle safety inspection.
- Perform basic vehicle maintenance and efficiently navigate online service tools to locate diagnostic and repair information.

Instructional Competencies of the Course

Program outcome: Develop the skills and knowledge to work safely in the lab/shop environment.

- *Shop safety requirements and occupational/shop orientation.*
- *Tool identification, selection, safe use, and maintenance.*
- *Automotive engines, fuel systems, ignition systems, and engine cooling systems.*
- *Vehicle brake systems.*
- *Transmissions, differentials, rear axles, suspension, steering, wheel balancing, and hybrid technology.*
- *Leadership activities, career information, and job opportunities.*

BOOKS, MATERIALS & COURSE RESOURCES

Resource / Material	Required?	Provided by	Notes / Link
Shop Shirt	Required	Student	Required material for shop participation.
Safety Glasses / PPE	Required	NCTA / Student	Safety glasses must be worn in the shop and parking lot outside the shop; face shield required for specified operations.
Hand & Power Tools	Required for labs	NCTA	Students must receive proper instruction before using shop equipment.
Online Service Information	Required	NCTA	Used to locate diagnostic and repair information.
Student Project Parts	As applicable	Student	Students supply parts for projects they bring in for repair.
CTE Shop Safety Manual for Automotive	Required	NCTA	Must be successfully completed before entering the classroom shop.

CTE DUAL CREDIT - BENEFITS, RESPONSIBILITIES & REGISTRATION

CTE Dual Credit allows eligible students in approved high school Career and Technical Education courses to earn college credit upon completion of the applicable partner college requirements. **Students must complete the registration/enrollment process during the required timeline; retroactive credit is not available.**

Use the applicable college block(s) below; delete non-applicable blocks before publishing

SKAGIT VALLEY COLLEGE (SVC)

This class is a CTE Dual Credit class. Students seeking to earn college credit must follow the CTE Dual Credit application and enrollment process. Students must enroll at SVC within the specified timelines to earn credit; credit cannot be awarded retroactively. Earning SVC dual credit is free, and there is no cost to the student or family.

Current SVC application/enrollment link: [\[Insert current "Apply for Dual Credit" link\]](#)

EVALUATION & GRADING

NCTA courses use a grading system that measures technical skill development, employability habits, and academic learning. Grades are based on the work students complete, the skills they demonstrate, and the program's professional expectations.

Program Grading Categories

Template note: Keep only the course-credit columns that apply to this program.

Automotive Technology	Course Grade Components	Weight
Projects / Labs / Work Orders	Hands-on projects, labs, and work orders	45%
Tests / Quizzes / Assignments	Tests, quizzes, and class assignments	45%

Professionalism / Participation Class professionalism, participation, work skills, and leadership 10%

NCTA Course Grade Scale

A	93% or above	C	73-77.9%
A-	90-92.9%	C-	70-72.9%
B+	88-89.9%	D+	68-69.9%
B	83-87.9%	D	60-67.9%
B-	80-82.9%	NC	59.9% and below
C+	78-79.9%		

CTE Dual Credit Minimum Grade & GPA Conversion

Students must earn a B or higher to earn CTE Dual Credit. The partner-college templates use the following percentage-to-GPA conversion:

Letter Grade	% of Points	GPA
A	94-100	4.0
A-	90-93	3.7
B+	87-89	3.3
B	83-86	3.0
B-	80-82	2.7
C+	77-79	2.3
C	73-76	2.0
C-	70-72	1.7
D+	67-69	1.3
D	65-66	1.0
F	0-64	0.0

MAJOR UNITS, ASSIGNMENTS & ASSESSMENTS

Major units from the current Automotive Technology syllabus are listed below. Assessments include projects/labs/work orders, tests, quizzes, class assignments, professionalism/participation, work skills, and leadership.

Unit	Assessment	Leadership	Other Information
Shop Safety Requirements	Projects/Labs/Work Orders; tests/quizzes/class assignments	Professional work habits	Trade-accepted standards and safe shop practices

Unit	Assessment	Leadership	Other Information
Occupational and Shop Orientation	Projects/Labs/Work Orders; tests/quizzes/class assignments	Professional work habits	Trade-accepted standards and safe shop practices
Tool Identification, Selection, Use, and Maintenance	Projects/Labs/Work Orders; tests/quizzes/class assignments	Professional work habits	Trade-accepted standards and safe shop practices
Automotive Engines / Fuel / Ignition / Cooling	Projects/Labs/Work Orders; tests/quizzes/class assignments	Professional work habits	Trade-accepted standards and safe shop practices
Vehicle Brake Systems	Projects/Labs/Work Orders; tests/quizzes/class assignments	Professional work habits	Trade-accepted standards and safe shop practices
Transmission, Differentials, and Rear Axle	Projects/Labs/Work Orders; tests/quizzes/class assignments	Professional work habits	Trade-accepted standards and safe shop practices
Suspension, Steering, Wheel Balancing, and Hybrid Technology	Projects/Labs/Work Orders; tests/quizzes/class assignments	Professional work habits	Trade-accepted standards and safe shop practices
Leadership Activities / Career Information and Job Opportunities	Projects/Labs/Work Orders; tests/quizzes/class assignments	Leadership activities	Trade-accepted standards and safe shop practices

ATTENDANCE & PROFESSIONAL EXPECTATIONS

Attendance Policy

The Northwest Career & Technical Academy (NCTA) views attendance much like business and industry: students are considered professionals-in-training and are expected to attend each day fully to maximize learning and productivity. While occasional absences are inevitable, please prioritize regular attendance. Please see the student handbook. If a problem arises with health, food, transportation, housing, or any other barrier, please contact the school or district so that support can be provided.

Professional Expectations (Behavioral)

Students are expected to follow applicable laws and the behavior expectations of the school district, NCTA, and the specific program. NCTA students are professionals-in-training and are expected to demonstrate habits that prepare them for success in school and industry.

Communicative	Stay in touch, ask for help, and use professional language.
Motivated	Put in your best effort, participate, and meet deadlines.
Reliable	Attend regularly, be on time, and engage in all class activities.
Responsible	Keep spaces tidy, stay focused, and dress appropriately for the program.
Team Member	Work well with others, show a positive attitude, and follow procedures.
Trustworthy	Care for equipment, use technology appropriately, and act with integrity.
Feedback / Coachable	Receive feedback professionally and use it to improve performance.

Late Work Policy

Students may submit late work until the instructor's final deadline. Work submitted by that date will be graded for credit based on the assignment's quality and the program's standards. After the final deadline, assignments will not be accepted unless the instructor has approved an extension due to documented circumstances. Instructors will clearly communicate deadlines, including the final submission date. Students are responsible for checking timelines, staying on track, and reaching out for help when needed.

Industry/Course Specific Items

Safety / PPE Requirements	Shop safety glasses are required in the shop and parking lot outside the shop. A full face shield is required when grinding, pressure washing, drilling, or machining. Closed-toe shoes and appropriate shop apparel are required. Long hair must be tied back or tucked into a cap; dangling jewelry, watches, and rings are safety hazards. Students must complete the CTE Shop Safety Manual before entering the shop.
Field Trips / Clinical / Worksite Learning Expectations	Students must follow NCTA and instructor expectations for any field trip, worksite, or off-campus learning activity.
Technology / Device Expectations	Electronic devices are not to be seen, heard, or used during class except for emergencies or when authorized by the instructor for class work.
Communication / Office Hours / Help	Instructor: Zach Frank 360-630-1812 zfrank@nwtech.k12.wa.us
Additional Program-Specific Policies	Shop policies include: no running or horseplay; use exhaust hoses on running vehicles; use jack stands on jacked vehicles; yell "CLEAR" before starting a vehicle; clean spills immediately; return clean tools to their proper place; participate in daily shop cleanup; 5 mph parking-lot speed limit; instructor approval is required for incoming work and before projects leave the shop; a permission slip must be on file.

ACADEMIC INTEGRITY & GENERATIVE AI

Students are expected to submit only their own work and avoid cheating, plagiarism, fabrication, or other academic dishonesty. This includes submitting answers that are not your own on quizzes or exams, using unauthorized devices or materials, unauthorized communication during testing, or helping another person engage in academic dishonesty. Accidental or intentional use of another person's work, ideas, research, or writing without attribution may result in a failing grade on the assignment or, depending on the nature and extent of the violation, a failing grade in the course.

Generative AI tools (for example, ChatGPT, DALL-E, Gemini, or Claude) may be used to generate ideas and organize thoughts when permitted by the instructor, but they should not replace student work. Students are responsible for analyzing and fact-checking AI-generated results. AI use should be minimal, appropriate to the assignment, and cited when used. Using AI to replace student work, using it for the majority of an assignment without permission, or failing to cite AI use when required will be treated as plagiarism.

Course-specific AI expectations: Follow instructor directions for each assignment. AI may be used only when permitted and may not replace required student work.

ACCESSIBILITY, SYLLABUS CHANGES & NONDISCRIMINATION

Accessibility

Students should communicate with the instructor or school when support is needed so appropriate assistance can be provided.

SVC-ARTICULATED COURSES - REQUIRED ACCESSIBILITY LANGUAGE

Students with an IEP or 504 Plan who wish to earn college credit in this class through SVC should note that approved high school accommodations may not always apply to a class that also offers college credit. While both high schools and colleges must ensure that students with disabilities have equal access to educational opportunities, they are governed by different disability laws. Please reach out to the SVC Disability Access Services for more info.

[SVC Disability Access Services](#)

Changes to the Syllabus

I have attempted to make this syllabus as comprehensive and accurate as possible, and I may occasionally need to make small adjustments during the term. I will announce any changes in class or notify students in writing with an updated syllabus posted to the NCTA website.

Equal Opportunity and Title IX Nondiscrimination - SVC

Template note: Required for SVC-articulated courses. Delete this block if the course is not articulated with SVC, unless local policy directs otherwise.

Skagit Valley College does not discriminate based on, but not limited to, race, color, national origin, citizenship, ethnicity, language, culture, age, sex, gender identity or expression, sexual orientation, pregnancy or parental status, marital status, actual or perceived disability, use of service animal, economic status, military or veteran status, spirituality or religion, or genetic information in its programs, activities, or employment.