AUTOMOTIVE TECHNOLOGY BELLEVUE

WANIC Skill Center Consortium
Course Syllabus and Outline

Dustin McIalwain, Instructor
Co-Instructor Period 2 and 7 Colin James
Bellevue High School | 10416 SE Wolverine Way | Bellevue, WA 98004

WELCOME / COURSE DESCRIPTION

Welcome to Automotive Technology Bellevue, 1–2. The class combines advanced and beginning automotive students in a three-hour morning or three-hour afternoon class. Every competency or task studied and performed is connected to academic learning through State Standards in science, technology, engineering, and mathematics. Though primarily a hands-on class, students are also expected to read informational text and technical manuals, complete homework, participate fully in classroom learning and discussions, complete Electude assignments, and complete daily informational/work-order style writing.

CREDIT EQUIVALENCY

Students successfully completing this three-period (540 hour) course will receive 2.0 CTE credits and 1.0 Lab Science credit.
CTE credit emphasizes automotive technical knowledge, practical skills, workplace readiness, and professional behaviors. Lab Science credit emphasizes the application of science concepts through automotive systems, measurement, testing, physics, chemistry, and engineering practices.

ARTICULATION / COLLEGE CREDITS

This program has an Articulation Agreement in place with Lake Washington Institute of Technology, Shoreline Community College, and Renton Technical College. See the Bellevue School District CTE Dual Credit page for current information about eligibility and requirements.

STUDENT LEARNING OUTCOMES

Demonstrate safe and appropriate use of automotive tools, equipment, materials, and shop facilities.
Perform automotive service procedures using industry-approved practices and available technical information.
Use a systematic diagnostic process to evaluate automotive systems and identify possible causes of faults.
Interpret technical service information, specifications, wiring diagrams, and repair procedures.
Apply mathematics, physics, chemistry, and engineering concepts to automotive systems.
Document automotive work using professional work-order practices.
Communicate effectively with instructors, team members, and others in a professional technical environment.
Demonstrate professional workplace behaviors, including accountability, teamwork, initiative, preparation, and safe work practices.

TOPICS OF STUDY

Instructions will focus on the following ASE areas:

Primary ASE Focus Areas

A1 – Engine Repair
A4 – Steering & Suspension
A5 – Brakes
A6 – Electrical/Electronic Systems
A8 – Engine Performance/Drivability

Additional ASE Focus Areas

A2 – Automatic Transmission/Transaxle
A3 – Manual Drivetrain & Axles

A7 – Heating & Air Conditioning

Leadership, interpersonal skills, and other 21st-century skills are embedded throughout the course, along with connections to science, physics, and chemistry. These areas are cross-referenced to the Next Generation Science Standards.

YEAR 1 AND YEAR 2

The program is designed as a two-year sequence. Students interested in applying for a second year must demonstrate consistent participation, initiative, regular on-time attendance, safe and professional shop behavior, and competency in the Year 1 skills and content. Students must demonstrate competency of the ASE skills and content taught in Auto 1 at an 80% (B) or higher. Final placement and approval for advancement into year two is at the discretion of the instructor.

SAFETY REQUIREMENTS

Automotive Technology is a professional training environment. Safety is a condition of participation in the shop, not an optional part of the course.

Before entering the shop, students must pass the SP2 Safety and Pollution Prevention final exams with a minimum score of 90%. Testing will take place during the first few weeks of school.

All students must submit a signed acknowledgement of safety and classroom expectations. Parent/guardian acknowledgement will be collected as required by Bellevue School District/WANIC procedures.

Approved safety glasses must ALWAYS be worn when required in designated shop areas, including the outdoor workspace. This is not optional. Non-compliance may result in removal from the shop and additional consequences.

An initial pair of safety glasses will be provided. Students are responsible for maintaining their assigned safety equipment. Replacement equipment will be handled according to current Bellevue School District/WANIC procedures.

Only clear lenses are permitted unless otherwise approved by the instructor. Instructor approval is required for safety glasses not provided by BSD/WANIC.

Closed-toed, well-fitting shoes are required in the shop. Crocs, sandals, and similar footwear are not permitted.

Students must follow instructor directions and use tools and equipment only after receiving appropriate instruction and authorization.

Students must report injuries, spills, damaged equipment, unsafe conditions, and other safety concerns immediately.

Students must never bypass, disable, or defeat a safety device.

SHOP NORMS & PROFESSIONAL EXPECTATIONS

All students are making a three-hour daily commitment to this program. Automotive Technology is a rigorous technical education program, not a hobby shop or social hangout. Serious learning, daily participation, and professional behavior are expected.

Students can expect to have fun and to become frustrated while working on and learning about advanced automotive technologies. I expect a high level of maturity, self-motivation, and a desire for success. Trust in students to learn and in the instructor to teach is critical.

Attend class on time every day.

Be prepared to participate in lectures, study, laboratory work, and discussions.

Use class time productively.

Treat classmates, staff, customers, vehicles, tools, and equipment with respect.

Return the shop to the instructor's standards before leaving each day.

Ask for assistance when a task, tool, procedure, or diagnostic step is unclear.

Demonstrate initiative while staying within instructor-authorized procedures.

TOOLS, EQUIPMENT & VEHICLE WORK

Students are responsible for using shop tools and equipment safely and appropriately.
Tools must be returned to their designated locations after use.
Damage, loss, malfunction, or unsafe operation must be reported immediately.
Students **may not** remove shop tools or equipment from the facility.
Students may work only on vehicles, systems, components, and tasks authorized by the instructor.
Students **may not** operate, move, disassemble, diagnose, modify, or repair a vehicle without appropriate instructor authorization and supervision.

CLOTHING

Automotive shops are messy and clothing may become dirty. The auto program is not responsible for damaged or soiled clothing. Uniform shirts are available for use whenever students are in the shop.

FEES

The state, Bellevue School District, and grant funders have invested in providing an industry-standard program and shop space. The only fee passed on to students this school year is for optional participation in the Career and Technical Student Organization, SkillsUSA, as described below.

AUTO CLUB / SKILLSUSA

Students interested in continuing to work on vehicles or talk about vehicles are invited to join the Auto Club. This is also an opportunity to develop leadership skills. Club meeting dates will be communicated to students.
Competition Opportunity: The Auto Club is affiliated with SkillsUSA, a national organization serving technical education programs.
If students choose to compete in the regional competition, they will be responsible for the $30 registration cost. Additional costs may apply if they qualify for and attend state or national competition.

Automotive Technology – CTE Grade (2.0)

50% – Hands-on / Shop Performance: Point Sheet and demonstrated technical competencies
30% – Theory, Assignments, and Electude online training
20% – Professionalism / Safety

What goes where:

- 50% Technical Skills & Shop Performance — hands-on competencies, service procedures, diagnostics, tool/equipment use, quality of work, staying on task and being productive, etc.
- 30% Automotive Knowledge & Work-Order Documentation — tests, quizzes, Electude, assignments, technical information, and Point Sheets.
- 20% Professionalism & Safety— safety, PPE, attendance, punctuality, preparation, teamwork, initiative, cleanliness, and workplace behavior.

Applied Science – Lab Science Grade (1.0)

35% – Hands-on investigations, measurements, data collection, and laboratory activities.
30% – Theory, assignments, Electude online training, and understanding the scientific principles behind automotive systems.
35% – Applying knowledge through automotive problem-solving, analyzing results, and clearly explaining how and why systems work.

What goes where:

- 35% Scientific Investigation & Labs – conducting investigations, taking measurements, and collecting data.

- 30% Science Knowledge & Concepts – understanding the scientific principles behind automotive systems.
- 35% Application, Analysis & Communication – using evidence and scientific reasoning to analyze results and explain how and why automotive systems work.

A single hands-on activity may contribute to both grades, but students are evaluated on different learning outcomes.

Professionalism/Safety may include attendance and punctuality, PPE use, safe tool and equipment operation, following shop procedures, preparedness, work ethic, initiative, respectful communication, teamwork, work-area cleanliness, accurate documentation, and following instructor directions.

DAILY JOURNAL POINT SHEET / WORK-ORDER DOCUMENTATION

The Point Sheet is the daily proof of attendance, description of classroom learning, record of competencies each student completes. It is a daily write-up designed to resemble a professional work order and prepare students for automotive and other skilled technical careers.
Informational-text style writing must be neat and legible. Students must explain in detail what was done each day in both classroom and lab, with all required lines completed.
Students will punch in and out daily on their Point Sheets using the time clock.
Present the completed Point Sheet to the instructor daily for review, initials, and points.
A new Point Sheet will be picked up every Monday. Completed sheets must be turned in on Friday of the same week.

ATTENDANCE

Regular attendance is essential in a three-hour, hands-on technical course. A significant portion of learning occurs through demonstrations, laboratory work, vehicle service, diagnostic procedures, and supervised equipment operation. Some learning experiences cannot be fully replicated through make-up assignments.
Students are expected to attend class on time every day.
If you miss class, check in with the instructor on the day you return to determine how to get caught up.
Students who miss a required safety demonstration or equipment orientation may need to complete the required instruction before participating in the related shop activity.
Make-up work and lab opportunities will be handled according to instructor and Bellevue School District/WANIC procedures.

MISSED OR LATE WORK

If you miss a class, check in with the teacher on the day you return to get caught up.
The teacher will clearly communicate due dates.
If you need an extension on a due date, you must talk to the teacher prior to the due date unless you have specified accommodation.

AUTOMOTIVE TECHNOLOGY BELLEVUE

STUDENT & PARENT/GUARDIAN ACKNOWLEDGMENT

I have received and reviewed the Automotive Technology Bellevue course syllabus. I understand that this is a rigorous, hands-on technical education program and that students are expected to follow all safety, attendance, grading, classroom, and shop procedures.

I understand that students will receive instruction and demonstration on the safe and proper use of industry-standard tools, equipment, and materials used in the Automotive Technology Bellevue training facility.

I understand that students are expected to read, understand, and follow all safety rules pertaining to tools and equipment and the proper handling and storage of hazardous materials found in the shop, including lubricants, brake fluid, solvents, antifreeze, oil-soaked rags, and absorbents.

Safety Data Sheets (SDS) for materials used in the shop are available on request.

I understand that students may work only on vehicles, systems, components, and tasks authorized by the instructor and that safe, professional conduct is always required.

I understand the grading, attendance, safety, and general shop expectations described in the syllabus and agree to support the student in following them.

Student Name (printed): _____

Student Signature: _____

Date: _____

Parent/Guardian Name (printed): _____

Parent/Guardian Signature: _____

Date: _____