

Nichols Career Center
AUTO COLLISION TECHNOLOGY
Course Syllabus

Instructor: Dennis Bruemmer

Conference Times: 7:30-7:50 a.m., 10:55-11:50 am or after 3:00 pm

Nichols Career Center Number: 573-659-3100

Auto Collision Office Number 573-659-3119

Email: dennis.bruemmer@jcschools.us

Website: www.nicholscareercenter.org

COURSE DESCRIPTION:

Grades 11-12

Prerequisite: Intro to Collision Repair - This course contains 14 online units that will take approximately one to two hours to complete each unit. Students must complete these units during the summer months prior to their first year of Auto Collision.

The Auto Collision Program is a two-year course rotating the curriculum every other year. However, some portions of the curriculum are repeated every year to stress their importance and to improve student ability.

School years ending with even numbers will focus on I-CARs Pro-level 1 Refinishing.

HAP01 Hazardous Airborne Pollutant Reduction, HWD01 Hazardous Material Storage and Disposal, SP2 online safety course, or WKR01 safety, STS01 Straightening Steel, CPS01 Corrosion Protection, REF01 Refinishing Program 1, REF02 Refinishing Program 2, REF04 Refinishing Program 4, REF07 Waterborne Products, (if time allows), NEW 16 Technology And Trend, TRM03 Removing and Installing Exterior Trim, Pinstripes and Decals, GLA01 Movable Glass, LSC04e Automotive Lighting, PLA03 Plastic and Composite Repair and WCS01 Welding.

School years ending with odd numbers will focus on I-CARs Pro-level 1 Non-Structural Repair.

SP2 online safety course, or WKR01 safety, GEO1OEO1e Vehicle Construction Material Types, STS01 Straightening Steel Program 1 and parts of EDS01 Non-Structural Repair, CPS01 Corrosion Protection, REF01 Refinishing Program, REF02 Refinishing Program 2, REF04 Detailing, EXT03 & EXT04 Bolted On Exterior Panels, TRM02 Removing and Installing Hardware and Interior Trim, FOM01 Automotive Foams, PLA03 Plastic Repair Program and WCS01 GMA MIG Welding.

Although the Curriculum is computer based, paper copies are available upon request. Skills are achieved through classroom studies and hands on activities in a well-equipped shop area. Both courses are based on an approximate 25% class time and 75% shop or lab time.

Attendance and effort are major factors of the student's grade.

EMBEDDED MATH FOR AUTO COLLISION: Grades: 11-12 Credit: 0.5

This course presents informational methods of contextual mathematical instruction directly related to Auto Collision. Students will review pre-existing concepts and learn new concepts that are specific to the automotive industry. Relative mathematics will prepare students for higher education or provide them with the knowledge necessary to enter directly into the trade. Students will complete various assignments but not limited to projects and problem solving activities. Additionally, students will practice Accuplacer-prep objectives.

EMBEDDED COMMUNICATION ARTS: Grades: 11-12 Credit: 0.5

The Nichols Career Center Technical English program will capitalize on student interest in collision technology and practical experience in the collision shop. Students will be encouraged to choose topics related to collision technology and the workplace when conducting research and presenting information. (Please see additional information in the Technical English syllabus)

PROGRAM GOAL: All students will have a positive placement. Each student will complete the program prepared to advance to an entry-level position in the automotive industry, enlist with the military, or attend college or technical school.

TEXTBOOKS, RESOURCE MATERIALS, MEDIA SUPPORT, ETC:

Online I-CAR curriculum, Industry Professionals, paint and supply manufactures, auto-related magazines, industry-related videos, computer software, guest speakers, and a strong advisory committee.

GRADING SYSTEM:

Categories:

- 10% Quizzes ,Work Ethic, Classroom & Shop Performance
- 65% Post Tests, Projects
- 10% Embedded Math
- 5% Embedded Communication Arts
- 10% Term Exam

Grade reports will be sent to students and parent(s)/guardian/(s) of secondary students at the end of each nine-week period. The following grading scale is used.

93-100 A (Excellent Work)	80-82 B- (Superior Work)	67-69 D+ (Inferior Work)
90-92 A- (Excellent Work)	77-79 C+ (Average Work)	63-66 D (Inferior Work)
87-89 B+ (Superior Work)	73-76 C (Average Work)	60-62 D- (Inferior Work)
83-86 B (Superior Work)	70-72 C- (Average Work)	0-59 F (Failure)

INIncomplete work, no credit given until requirements are completed, which automatically becomes an “F” at the end of a semester, unless arrangements are made with the office.

WWithdrawn, passing work being done in a course dropped either by withdrawal from school or by permission of the director.

WFWithdrawn failing, failing work being done at the time of withdrawal OR course is dropped after the deadline for schedule changes.

RETURN POLICY FOR SECOND SEMESTER:

Students who are performing below average, or who are failing the semester are subject to removal from the program at semester. A student/parent conference will be held prior to the end of the semester with the appropriate individuals present and alternatives will be discussed.

CLASSROOM/LABORATORY EXPECTATIONS/GUIDELINES:

Students learn good work habits by performing daily tasks on vehicles or components. Students are expected to learn how to become a professional in the automotive field, and practice this trait while learning their profession. Students work from online courses, worksheets and receive grades from task, quizzes and test. Competences are graded by the instructor's professional judgment, student's work habits and professionalism. Mistakes have no bearing on grade unless students do not finish, or do not correct mistakes.

COMMUNICATION PLAN:

Nichols Career Center has many opportunities for both students and guardians to stay up-to-date on the grades and assessment expectations of the course. My primary source is Infinite Campus, our grading system. You may log into Infinite Campus at any time to see the progress on assessments and assignments of the course. If ever there is a concern, please contact me by email dennis.bruemmer@jcschools.us or phone (573) 659-3100.

MAKE-UP POLICY FOR AUTO COLLISION:

Regular attendance, coursework, and class participation is critical to the success of a student. As a training facility, the faculty of Nichols Career Center places a great deal of importance on daily attendance, coursework, and class participation. Many of the activities that occur within the programs offered at Nichols cannot be duplicated. To reflect the importance of regular daily attendance and class participation, the following grading procedure becomes effective on the first day of school.

1. Students will be able to "make-up" the class participation grade for absences in the following manner. Within 2 school days from the absence, turn in a paper (one page per block period missed) relevant to the subject being taught on the day of the students absence.
2. The paper must be legible and use correct grammar, spelling, and sentence structure. The cover page should include:
 - a. Name of student
 - b. Class missed and number of blocks
 - c. Date of absence
 - d. Parent/Guardian signature and daytime phone number
3. If the instructor deems the paper unacceptable based on the above conditions, the instructor has the discretion whether to allow the student the opportunity to revise the assignment.
4. School activities are not considered an absence for the student.
5. It is up to the student to seek out the instructor for make-up work. The instructor will not in any way be responsible for making sure the student is making up the work.

6. The paper will be a standard size (8 ½ x 11). The type should be no larger than 12 point. The paper should be double spaced. If the paper is written by hand, each line of the page must be written on.
7. As with all guidelines and procedures, there will be extenuating circumstances concerning make-up work. If the student finds themselves in this position they must have a conference with the instructor.

TECHNOLOGY EXPECTATIONS: Cell Phones

Cell Phones are allowed in my class for instructional purposes only. Many of our projects require our students to research information. There are computers available for this purpose however at times it is much more convenient for the student to use their personal device.

This is privilege can and will be removed if a student or students abuse this privilege. One of the biggest complaints in industry is employees on their phone during working hours. However, our trade requires us to access repair procedures on a regular basis. So please don't abuse this privilege for personal usage.

DRESS CODE/STUDENT EXPECTATIONS:

1. Hair, which is considered long by the instructor, will have to be tied back to prevent injury.
2. Jewelry, of any kind, attached to the hands and arms or piercings that are loose fitting this includes watches, rings, bracelets or any other item considered as dangerous in the lab by the instructor may not be worn in the shop.
3. Loose fitting clothing including shirt tails, loose sleeves, oversized blouses and/or skirts or dangling clothing including belts and shoelaces may not be worn in the shop.
4. The student will come to class prepared to work in the lab or take notes during lecture/demonstration. Everyone should be in his/her seat and ready to go when the bell rings.
5. Any student deemed by the instructor to be unfit due to a health reason, drugs, alcohol, or any other reason, will not be allowed to enter the lab or use any of the equipment, tools or material in the lab or classroom. The student is responsible for his/her actions and is responsible for the information regardless of his/her condition.
6. No beverages will be allowed in the lab area. Students will be allowed to bring snacks back to the classroom after break; however, this privilege can be taken away.
7. The proper procedures will be followed when operating all equipment and working on assignments. Remember, *safety always comes first!*
8. All students will be tested on the proper safety procedures to follow when using chemicals, operating equipment and general lab use. All students must pass the safety test before being allowed any lab privileges. .
9. All students will be taught and tested on how to access and read the Safety Data Sheets explaining the chemicals used in the class.
10. All incidences where students need to be corrected for any misconduct, horseplay, lack of consideration or disrespect for any reason will be documented in Infinite Campus.

11. All homework assignments will be due at the beginning of the class period unless otherwise stated.
12. All students will be treated with respect as an “employee” of the course. The instructor is the “employer”. If the employer deems the employee as unacceptable, proper action will be taken according to course/school policy.
13. Internship students are required to call the school or instructor before 8:00 a.m. if they are not going to be in attendance. Students must make arrangements with the instructor to make up assignments.
14. All students will meet in the classroom on time and be properly dressed according to course/school policy. **NO OPEN TOED SHOES OR SHORTS ARE ALLOWED IN THE SHOP.**
15. It is the student’s responsibility to get make-up assignments from the instructor. The student is allowed the same number of days to make up work as was missed. Lab assignments, projects and activities may be extended due to the availability of equipment.
16. All students are required to have a pair of safety glasses in order to be allowed in the lab area.
17. **Driving Privileges:** In order to move or drive class project vehicles you must make a copy of your license and proof of insurance card and give to the instructor. If you don’t have a driver’s license you cannot move or drive any vehicles. If you have an auto accident of any kind you must be able to accept financial responsibility. Jefferson City Public Schools or Nichols Career Center do not furnish insurance for students

STUDENT SERVICES:

Student services are available to help students succeed in their classes. Students in technical programs are eligible for extra assistance by asking for help from their teacher or by having their teacher refer them to the Vocational Resource Educator. Career Planning is available to students who are looking for part-time or full-time jobs or need help with writing a resume. In addition, persons knowledgeable about financial aid for post high school training/education are available, as well as persons who can help students assess their vocational strengths and preferences in order to make more informed career choices.

STUDENT YOUTH ORGANIZATIONS:

Skills/USA is the youth organization designed to develop the student's leadership abilities, in addition to his/her particular skill or trade, which will aid him/her in becoming a successful employee. It is also designed to create a common bond among all students. The Skills/USA organization is used to help the student learn about their community and the automotive field.

CERTIFICATION:

The Auto Collision program has been certified to teach the I-Car education edition Pro-level One Non-Structural Repairs, I-Car education edition Pro-level One Refinishing, and Intro to Collision Repair. Curriculum available through their website: www.i-car.com.

ESSENTIAL SKILLS:

- Incorporate basic procedures for safety and preventive measures in a shop environment
- Identify and understand considerations when working with bolted-on exterior panels
- Demonstrate welding techniques
- Identify characteristics and considerations for steel repairs
- Recognize causes of corrosion and understand the corrosion protection processes of the manufacture
- Analyze Collision Damage
- Make a repair plan
- Identify various vehicle designs
- Identify uses for a hammer and dolly and other basic hand tools
- Identify the two sides of a vehicle
- Identifying various types of steel used in vehicle construction
- Identify eye, body, respirator, and hearing protection requirements
- Identify the different types of collision damage

COURSE OUTLINE: School years ending with even numbers will focus on I-CARs Pro-level 1 Refinishing. (Fender Project)

Summer Prerequisite: Intro to Collision Repair, 14 online units, completed before school begins.

Day 1-2	Introduction -- Icebreakers, School Rules and Regulations, Class Rules and Regulations, Shop Layout
Week 1	Tool Identification and safety, Review of intro classes completed during summer, HAP01 Hazardous Airborne Pollutant Reduction and HWD01 Hazardous Material Storage and Disposal,
Week 2	SP2 online safety course, or WKR01 safety
Week 3-5	STS01 Straightening Steel Program 1 and parts of EDS01 Non-Structural Repair
Weeks 5-9	CPS01 Corrosion Protection
Weeks 10-11	REF01 Refinishing Program 1
Weeks 12-16	REF02 Refinishing Program 2
Weeks 17-18	REF04 Detailing and REF07 Waterborne Products (when time allows)

2nd Year Student that qualify may choose to participate in an Internship, Job Shadowing or School-to-Work program anytime during the second semester.

Week 19	NEW16 Technology and Trends
Week 20	TRM03e Removing and Installing Exterior Trim, Pinstripes and Decals
Week 21 - 22	GLA01 Moveable Glass
Weeks 23	LCS04e Automotive Lighting
Week 24-27	PLA03 Plastic and Composite Repair
Weeks 27-28	WCS01 Welding
Weeks 28-30	WCS01 Welding
Weeks 31 - 36	The remainder of the year will be live work and finishing up projects

COURSE OUTLINE: School years ending with odd numbers will focus on I-CARs Pro-level 1 Non-Structural Repair. (Door Project)

Summer Prerequisite: Intro to Collision Repair, 14 online units, completed before school begins.

Day 1-2 Introduction -- Icebreakers, School Rules and Regulations, Class Rules and Regulations, Shop Layout

Week1 Tool Identification and safety, & Review of intro classes completed during summer, SP2 online safety course, or WKR01 safety

Week 2 GEO1OEO1e Vehicle Construction Material / Basics of welding

Weeks 3-6 STS01 or EDS01 Non-Structural Supplement

Week 7-11 CPS01 Corrosion Protection

Weeks 12-13 REF01 Refinishing Program 1

Week 14 REF02 Refinishing Program 2

Week 15-18 REF04 Detailing and REF07 Waterborne Products (when time allows)

2nd Year Student that qualify may choose to participate in an Internship, Job Shadowing or School-to-Work program anytime during the second semester.

Week 19- 20 /EXT03 and EXT04 Bolted On Exterior Panels, REF04 Detailing

Week 21 - 22 TRM02 Removing and Installing Hardware,& Interior Trim

Week 24 FOM01 Automotive Foams

Weeks 25-26 PLA03 Plastic and Composite Repair

Weeks 27-30 WCS01 GMA MIG welding

Weeks 31-36 The remainder of the year will be spent working on competencies related to lab projects with short lecture and helping individual students improve their skills