



GRIMSHAW JR. /SR. HIGH  
PUBLIC SCHOOL

*"inspiring our students today for tomorrow's future"*

Course Outline  
2021-2022



**TEACHER:** Mr. Connell

**Telephone:** (780-332-4075)

**Email:** [connellc@prsd.ab.ca](mailto:connellc@prsd.ab.ca)

**SUCCESS MESSAGE:** Regular attendance and consistent work habits are the keys to your success. IF you come to class, participate and complete the modules you should be very successful in this course. Extra help is available and it is your responsibility to ask. Your success depends on YOU! Have a great semester and let's have some fun!

**COURSE RATIONALE:** Career and Technology Studies (CTS) is a complementary program designed for Alberta's secondary school students. As a program of choice, CTS offers all students important learning opportunities to:

- ~ develop skills that can be applied in their daily lives, now and in the future
- ~ refine career-planning skills
- ~ develop technology-related skills
- ~ enhance employability skills
- ~ apply and reinforce learning developed in other subject areas
- ~ prepare for transition into adult roles in the family, community, workplace and/or further education

**TEACHING METHODOLOGY:** Students will be taught through a variety of instruction methods and strategies including but not limited to; direct teaching, cooperative learning, independent learning, brainstorming, small group work, and reflections. A large portion of the modules will be "hands on" learning.

**COURSE EVALUATION:**

<b>CATEGORIES/ CRITERIA</b>	<b>LEVEL 4 (80-100%)</b>	<b>LEVEL 3 (70-79%)</b>	<b>LEVEL 2 (60-69%)</b>	<b>LEVEL 1 (50-59%)</b>	<b>WEIGHT Marks</b>
<b>Technical Knowledge</b> Knowledge of facts, technical knowledge, procedures, and standards	Demonstrate thorough knowledge of facts, technical terminology, procedures and standards	Demonstrate considerable knowledge of facts, technical terminology, procedures and standards	Demonstrate some knowledge of facts, technical terminology, procedures, and standards	Demonstrate limited knowledge of facts, technical terminology, procedures and standards	20%
Assignments/Tests					20%
<b>Thinking Skills</b> Applies problem solving methods	Uses thinking skills with thorough effectiveness	Uses thinking skills with considerable effectiveness	Uses thinking skills with some effectiveness	Uses thinking skills with limited effectiveness	20%
<b>Safety(working with others)</b> Safe use of procedures, equipment, and technology	Demonstrates and promotes the safe and correct use of procedures, equipment and technology	Uses procedures, equipment and technology safely and correctly	Uses procedures, equipment and technology safely and correctly with some supervision	Uses procedures, equipment, and technology safely and correctly with supervision	20%

Student Outcomes and Project Evaluation Mark

20%  
Total: 100%

Modules (for students new to GPS high school shop)

- CON 1910 Con Project A
- CON 1010 Basic Tools and Materials
- CON 1120 Project Management
- CON 1130 Solid Stock Construction
- CON 1140 Turning Operations
- CON 2150 Finishing & Refinishing

Other modules based on individual projects in construction, fabrication or mechanics

Marks

An overall mark is not given on a report card, but rather an individual mark must be given for each module completed, which usually happens at the end of the year. A student's mark is based on the theory and project portion of each module. The number of modules a student completes is entirely up to them, but I recommend at least 6 per semester.

The marking in the CTS is much different than most courses. If you have any questions contact me at the school (780-332-4075)

### **SPECIFIC STUDENT EXPECTATIONS:**

Students are expected to come to class EVERY DAY, participate in class discussions/activities and DO THEIR HOMEWORK to maximize their success. Students are also expected to behave in a manner that ensures every class member has the opportunity to succeed.

#### Three Golden Rules

1. Safety is #1, follow the rules and if you are not sure of something, STOP and ASK me!
2. Absolutely no "HORSEPLAY" allowed.
3. Treat me and each other with respect.

### **CLASSROOM EXPECTATIONS:**

#### General

1. Students are not permitted in shops without supervision.
2. No horseplay or running.
3. Food and beverages are not permitted in shops or blueprint classes.
4. All cell phones or electronics devices are to be shut off during class time. Cell phones and electronic devices are NOT permitted during exam time.
5. Personal Protective Equipment must be worn whenever hazards exist.
6. No power equipment is to be operated, until a full operational and safety demonstration completed.  
Equipment will only be operated with the Instructor's supervision.
7. All accidents and near misses must be reported to the Instructor.
8. Student breaks will be outlined by the Instructor.
9. It is important to confer with the Instructor prior to leaving the shop.

#### Personal Protective Equipment (PPE)

1. Safety glasses are required by the operator, when any power tool is being used.
2. Hard hats are required whenever and overhead hazard exists.
3. Hearing protection is provided for your personal use.
4. Gloves are recommended to avoid contact with hazardous materials.
5. Applicable WHIMIS MSDS sheets to be referenced prior to commencing work.

## Clean-up

1. Shop clean-up will commence when instructed by the shop Instructor
2. Shop clean-up is a shared responsibility requiring team cooperation.
3. Clean up sequence is as follows:
  - Tool boxes and portable power tools put away in their designated shelves
  - Clean off work benches and machine tools
    - A light dusting of the machine tools, with the air nozzles is permitted
  - Floors are to be swept clean
4. No student is to leave the shop until the shop is completely clean
5. Clean-up participation is one component of each students shop evaluation
6. Projects will be stored in the designated shelves or areas as instructed by the Instructor.

## Emergency Orientation

Locate and identify FIRE EXTINGUISHERS.

Locate and Identify building EXITS.

Note FIRE ASSEMBLY POINTS: \_\_\_\_\_

Locate emergency EYE WASH STATION & FIRST AID KITS

## **UNITS AND TIMELINE:**

### Grade 10

All students will build pedestal tables so they can achieve at least 6 credits. After completion of this, they can choose another project of their choice that is reviewed by me. Please sign appropriate paperwork and send in ASAP We need this in place before we start our projects.

### Grade 11 & 12

All students have the opportunity to choose the project of their choice, as long as it meets the requirements to achieve the credits needed for success. The final decision will be made after consultation with the Shop Teacher.

\*\* The timeframe and number of credits available are dependent on the students' dedication to their project completion.

## CTS CONSTRUCTION - MECHANICS - FABRICATION

### Resources:

- Career and Technology Studies (CTS) – Manual for Administrators
- Grande Prairie Regional College (GPRC) – Worksheets on Equipment
- Information developed at Grimshaw Public High (GPS) from previous Instructors
- GPRC ED400 IA Training Course Material
- Information from networking with other CTS Instructors
- Assistance from GHS Administration and Staff
- Exploring Woodworking Fundamentals of Technology by Fred W. Zimmerman and Larry J. McWard
- Modern Carpentry by Willis H. Wagner and Howard Bud Smith
- McIntyre Media Ltd. Shop Safety: A Video Manual

### Resources

- Modern Welding by the Goodheart-Willcox Company, Inc.
- General Entry Level Safety (GELS) by The Petroleum Industry Training Service
- Alberta Apprenticeship Learning Modules (Welding)
- Basic Oxy-Acetylene Welding Video by The Northern Institute of Technology
- Career and Technology Studies (CTS) – Manual for Administrators
- Grande Prairie Regional College (GPRC) – Worksheets on Equipment
- Information developed at Grimshaw Public High (GPS) from prier Instructors
- GPRC ED400 IA Training Course Material
- Information from networking with other CTS instructors
- Assistance from GHS Administrators and Staff
- Meridian Education Corporation DVD Series
  - a) Small Gas Engine Troubleshooting and Tune-up
  - b) Small Gas Engine Inspection, Measurement and Cleaning
  - c) Small Gas Engine Disassembly
  - d) Small Gas Engine Reassembly
  - e) Small Gas Engine Construction And Operation

## Resources

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# CTS SHOP SAFETY CONTRACT

Grimshaw Public High School CTS shops contain a variety of machinery, tools and chemicals that can be dangerous. Therefore it is everyone's job to ensure that safe practices are followed by everyone who enters the shop.

1. I will wear safety glasses at **all times** in the shop.
2. I will not be a distraction to anyone who is working with tools or equipment.
3. I will not throw anything in the shop.
4. I will not use any tool or equipment that I am not certified to use.
5. If I have forgotten how to use a tool that I am certified on, I will ask for a refresher from my shop Teacher.
6. I will use the right tool for the job and follow the proper procedures.
7. I will report any unsafe condition that I see immediately. This includes things like damaged equipment, dull tools, spilled chemicals, and unsafe behaviour.
8. I will do my part to keep the shop clean and the tools in their proper place.
9. I will not use any equipment without the shop teacher being present.
10. I will remove any jewellery, roll up sleeves, and tie back any hair that could be caught in machinery.
11. I will wear close toed shoes in the shop at all times.
12. I will report all injuries I receive, even small cuts.
13. I will only build projects approved by my teacher.
14. I will wear hearing protection whenever I use a machine or when around loud noises such as compressed air or banging.
15. I will not come to shop class under the influence of drugs or alcohol.
16. I will not come to shop class late, and if so will remain outside of class until the instructor has time to let me in.

I (print name) \_\_\_\_\_, have read, understand and accept the above ruled. I realize that there is a three strike rule in the CTS shop. Strike one is a warning. Strike two is a call to my parents/guardians. Strike three is loss of shop privileges.

X

Student Print & Sign Name

X

Date

X

Parent/Guardian Print & Sign Name

X

Date