# Argyle Secondary School Drafting & Design 10 Course Outline Mr.Riml

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https://curriculum.gov.bc.ca/curriculum/adst/10/drafting#

#### **Course Description**

The Drafting and Design program at Argyle Secondary is focused upon having students engage and explore drafting and design specific to the Architectural and Mechanical disciplines. The goal of the Drafting and Design program is to impart respect, awareness, and theoretical knowledge of the various tools, materials, skills and techniques specific to this subject. Active participation in the development of specific skill sets will enable students to gain confidence, understanding, and achieve success in the Drafting and Design program.

## **BIG IDEAS**

User needs and interests drive the design process.

Social, ethical, and sustainability considerations impact design. Complex tasks require different technologies and tools at different stages.

# **Learning Standards**

Curricular Competencies	Content
Students are expected to be able to do the following:	Students are expected to know the following:
Applied Design	
Understanding context	design opportunities
<ul> <li>Engage in a period of research and empathetic observation</li> </ul>	<ul> <li>drafting terminology</li> <li>drawing standards and conventions</li> </ul>
Defining	scales for different types     of drawings
<ul> <li>Identify potential users and relevant contextual factors for a chosen design opportunity</li> </ul>	
<ul> <li>Identify criteria for success, intended impact, and any constraints</li> </ul>	<ul> <li>drafting styles, including perspective, mechanical drafting, and</li> </ul>
Determine whether activity is collaborative or self- directed	architectural drawing
Ideating	<ul> <li>modelling using computer- aided design (CAD) and</li> </ul>
<ul> <li>Take creative risks in generating ideas and add to others' ideas in ways that enhance them</li> </ul>	computer-aided manufacturing (CAM) software  coding for creating 3D representations of design solutions
<ul> <li>Screen ideas against criteria and constraints</li> </ul>	
<ul> <li>Critically analyze and prioritize competing factors to meet community needs for preferred futures</li> </ul>	

Maintain an open mind about potentially viable ideas

#### **Prototyping**

- Visualize possibilities and develop a **plan** that includes key stages and resources
- Evaluate a variety of materials for effective use and potential for reuse, recycling, and biodegradability
- Prototype, making changes to tools, materials, and procedures as needed
- · Record iterations of prototyping

 equipment and tools for manual and computer-aided drafting

#### 2020 Scope and Sequence by Units:

- 1. Introduction to drafting
- 2. Drafting Equipment and Software
- 3. Lines their Meaning and Uses
- 4. Views of Objects
- 5. Making a one view Drawing
- 6. Orthographic Projection
- 7. Dimensions, Conventions and Symbols
- 8. Pictorial Drawings
- 9. Sectional Views
- 10. Scale Drawing
- 11. Pattern development
- 12. Reproduction of Drawings
- 13. Freehand Sketching
- 14. Presentation Drawings and Renderings.
- 15. Building Models
- 16. Careers in Construction.

#### **Assessment & Evaluation Breakdown**

Through individual and class discussions students will have the opportunity to discuss their own progress and work daily.

Individual requirements for each assignment will be outlined at the beginning of each project, including the criteria for evaluation that is in the format of a rubric.

You will be asked to hand in your projects and theory work during the term on specific dates. Marks will be deducted for late submissions (30%)

The following allocation will be used to calculate term marks:

Class Projects (practical) 80%
Classroom Participation; energy, focus, cooperation 20%

#### **Resource Materials and Equipment Required**

Students will be supplied with all materials and literature necessary for course participation. A respect for equipment and supplies within the classroom is demanded and will be diligently enforced.

# Extra Help/ Tutorials

Students will be encouraged to use tutorial times provided for extra instruction and or practice and learning.

### **Expectations**

It is imperative that students conduct themselves in a mature manor that reflects respect toward the class environment, members of the class and themselves.

#### It is expected that students:

- Attend each class and be on time
- Bring their personal supplies to each class
- Ensure projects are completed and submitted on time
- Ensure their notes and assignments are neat, organized, and up to date
- Respect the materials and equipment of the department
- Be respectful of other's personal space and equipment
- Use class time productively and safely
- Participate in classroom organization and clean-up on a continual bases
- Be open to new ideas, share your ideas and opinions while respecting those of others

Please refer to the Student Agenda for additional information pertaining to student conduct.