

M5 Work Education

Course Syllabus - 2025, Term 1

Teacher: Kru Graham Roemmele

Department: Occupation Technology

Subject Code: OT32101

Periods per week: 1

Credits: 0.5

Course Description

This term will begin by completing a project that was started in M4 term 2, in which the students produced their own detailed scale drawings of an engineered structure (buildings, bridges, ships, planes etc.) This term they will work in small teams to carefully create one of their designs into a real scale model. They will be crafted using recycled cardboard and other materials of their choice, to the exact same scale as their drawings. The expected amount of details and refinement is that of an architectural model. Students will develop their team working skills, crafting skills and expand their eye for detail. This project will form the majority of the students' grade this term as it is a very detailed and difficult task lasting for many weeks.

Students will have the opportunity to explore the wonderful world of culinary arts in the PHS cooking studio. Our classes are designed to inspire a love for cooking, foster creativity in the kitchen, and teach valuable culinary skills that students may use throughout their lives. Our classes will offer PHS students hands-on experience in the basics of knife techniques, hygiene, measuring and weighing ingredients and good working practices. They will learn the basic fundamental skills needed for both Asian and Western cooking.

As part of the fundraising efforts for the upcoming community support field trip "*Blind Camp*" in Term 2, students will begin a project at the end of term 1 that will extend into the second term. They will begin by working in teams to research ideas for snacks, drinks or foods that could be home-made and sold for profit during lunch times or after school. They will experiment with recipes, conduct market research, and then experience pulling together as a class to make their tasty treats for the whole school to try - all while making money for charity.

Course Content

1. Scale Model Project
 - 1.1. Calculating and drawing to scale
 - 1.2. Model-making crafting techniques
 - 1.3. Use of hand tools and power tools
 - 1.4. Precision measuring and cutting of materials
 - 1.5. Minimising wastage of materials
 - 1.6. Fine model assembly skills
 - 1.7. Painting and detailing models
 - 1.8. Reflecting on project through report writing

2. Cooking practical lessons
 - 2.1. Culinary skills: knife techniques, measuring & weighing, working practices - washing up / cleaning kitchen space etc.
 - 2.2. Cooking & preservation methods and techniques: frying, blanching, pickling, sugaring etc.
 - 2.3. Food safety and hygiene protocols and practical application

3. Cooking for Charity (recipe development stage)
 - 3.1. Recipe and method research
 - 3.2. Market research & promotion
 - 3.3. Bookkeeping / accounting of costs and profits
 - 3.4. Packaging design
 - 3.5. Cooking, preparing and selling foods
 - 3.6. Generating money for charity

Learning Outcomes

- Students will understand how to calculate and produce scale models to exact specifications.
- Students will develop experience in using many tools and materials effectively, safely and precisely to construct three dimensional forms.
- Students will develop design and construction skills.
- Students will develop their collaborative and problem solving skills.
- Students will overcome problems through creativity and teamwork.
- Build confidence in their cooking abilities, encouraging them to continue exploring and experimenting with different recipes and techniques.
- Gain an understanding of food safety practices, including proper storage, handling, and hygiene, to ensure the safety of food preparation and preservation.

- Develop practical culinary skills, including knife techniques, weighing ingredients, cooking methods, and food preparation, enabling them to create delicious and well-prepared dishes.
- Product Development & Marketing: Students will create and market a food product.
- Financial Skills: Students will manage project finances (budgeting, pricing, profit).
- Teamwork & Communication: Students will collaborate and communicate effectively within a team.
- Social Responsibility: Students will contribute to a community cause.
- Problem-Solving & Adaptability: Students will solve problems and adapt to challenges.
- Cooking Skills: Students will develop their practical ability in the kitchen including time management and hygiene.

Learning Resources

- Google Classroom / Chromebooks / Internet
- Cooking studio & equipment
- Powerpoint for each lesson
- Worksheets
- Hand tools, power tools and various materials in the Work Ed room.
- Videos of key processes and concepts
- Hands on demonstration and modelling of techniques
- Videos of key processes and concepts

Assessment Methods

As this course is mostly based on the effort applied to their work rather than level of skill, students' work will be mainly assessed on their effort and timely completion of work to the best of their ability.

Short exercises completed during class time will generally be graded on a 0-5 scale according to the teacher's expectations in that lesson. Longer projects that continue for multiple lessons will be assessed according to specific rubrics that will be shared with the students during the project via Google Classroom. Whilst some portions of the rubric may pertain to overall group performance, there will always be an element of individual performance too ensuring that not all students will receive the same grade in a group. These projects may require that the students spend additional time at home on them to complete them by the deadline.

Homework Policy

Please view [this link](#) for further details about how homework, classwork and major projects will be penalised if submitted late.

Evaluation Breakdown

Safety	5%
Scale Model Project	70%
Cooking for charity	25%

Thai National Curriculum Standards

Strand 1: Living and family

Standard 0.1.1: Understanding of concept of work; endowment with creativity and skills for various aspects and work processes, management, teamwork, investigation for seeking knowledge, morality, diligence, and awareness of the need to economise on the use of energy and the environment for one's life and for family.

O1.1 Gr11/2. Create achievements through creative thinking and have teamwork skills.

O1.1 Gr11/3. Have management skills for work.

O1.1 Gr11/4. Have skills for problem-solving processes.

O1.1 GR11/5. Have skills for seeking knowledge for a living.

O1.1 Gr11/6. Have morality and desirable characteristics and habits when working.

O1.1 Gr11/7. Cost-effectively and sustainably use energy and resources in working for conservation of the environment.

Strand 2: Design and technology

Standard O2.1: Understanding of technology and technological processes; design and creation of objects and utensils or methodologies through creative technological processes; selective utilisation of technologies beneficial to one's life, society and the environment, and participation in sustainable technological management.

O2.1 Gr11/1. Explain and link relationship between technology and other disciplines.

O2.1 Gr11/2. Analyse the technological system.

O2.1 Gr11/3. Safely construct objects and utensils or methodologies in accord with the technological process by conveying ideas through an image and models, leading to constructing work pieces or conveying concepts of the methodology through models, and reporting on results by using or presenting achievements.

O2.1 Gr11/4. Have creativity in problem-solving or responding to needs for their own products or development of others' products.

O2.1 Gr11/5. Analyse and choose to creatively apply technologies suitable to daily life for the benefit of life, society and the environment, and sustainably manage technologies through methodology of clean technologies.

Strand 4: Occupation

Standard O4.1: Understanding and acquisition of necessary skills and experiences; proper perception of future career; technological application for occupational development; endowment with morality and favourable attitude towards occupations.

O4.1 Gr11/2. Choose and apply technologies appropriate to the occupations.

O4.1 Gr11/4. Have desirable characteristics for occupations.

[Total 13 indicators]