

M1 Work Education 2

Course Syllabus - 2025 Term 2

Teacher: Kru Graham Roemmele

Department: Occupations and technology

Subject Code: OT21102

Periods per week: 1

Credits: 0.5

Course Description

The Work Ed course aims to give students a break from routine classroom life and to give the students opportunities to express their creativity and learn how to make things with their hands. Students will learn how to work alone and as teams, completing a variety of projects that are based on the course content below.

Course Content

1. Dream Bedroom model project
 - 1.1. Interior design - room arrangement, furniture & decoration.
 - 1.2. Basic model making techniques such as safe cutting procedures, handling hot glue, painting, wallpaper templates.
 - 1.3. Individual work to produce a 3D model of students' dream bedroom design including furniture, decoration and small details.
2. Cooking & kitchen training (& cross-curricular cookie project with English Dept.)
 - 2.1. Culinary skills: knife techniques, measuring & weighing, working practices - washing up / cleaning kitchen space etc.
 - 2.2. Specific cookie making techniques such as using a bain marie to melt chocolate, creaming sugar and butter together etc.
 - 2.3. Food safety and hygiene protocols and practical application
3. Bridge Project (*in collaboration with the Math Dept.*)

- 3.1. 1. Applied Scaling and Proportions: apply mathematical ratios to increase the dimensions of a toothpick prototype to a popsicle stick bridge while maintaining structural integrity.
- 3.2. 2. Technical Craftsmanship and Assembly: use joining techniques, including accurate stick alignment and adhesive optimization (using minimal glue to reduce "dead weight" while maximizing joint strength).
- 3.3. 3. Collaborative work & Troubleshooting: Work as an engineering team to build bridges, then identify and fix weak spots during the build, and perform a post-mortem analysis to identify the specific point of failure.

Learning Outcomes

1 - Dream bedroom model project

- Practise interior decoration, room arrangement and design skills.
- Create ideal spaces for working, relaxing and sleeping with suitable furniture that constitutes the students' vision of a 'dream bedroom'.
- Learn basic model making techniques such as safe cutting procedures and handling hot glue.
- Apply creative skills to decorate and make attractive details for a space.

2 - Cooking & kitchen training

- 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.

3 - Bridge Project (*in collaboration with the Math Dept.*)

- Students will execute a 2X proportional scale-up of prototypes, accurately translating the geometric dimensions of a toothpick prototype into a full-scale popsicle stick structure.
- Students will demonstrate precision assembly by aligning wood grain and joints with high accuracy, while optimizing the strength-to-weight ratio through minimal adhesive application.
- Students will function as a collaborative engineering team to perform real-time structural troubleshooting during construction and conduct a post-mortem analysis to identify the specific point of failure (e.g., joint shear or member buckling).

Learning Resources

- Google Classroom / Chromebooks / Internet
- Powerpoint for each lesson
- Worksheets
- Workshop materials, tools and equipment
- Hands on demonstration and modelling of techniques
- Videos of key processes and concepts
- Cooking studio facilities, equipment & ingredients

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 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

Classwork	20%
● Short classroom assignments and worksheets ● Project reports ● Progress checks for projects	
Dream bedroom project	30%
Kitchen Training & cooking	20%
Bridge project	30%

Thai National Curriculum Standards

Strand 1 - Living and family

- O1.1 Gr7/1. Analyse stages of work as required by the work process.
- O1.1 Gr7/2. Apply group processes in working with sacrifice.
- O1.1 Gr7/3. Make decisions with proper reasons in solving work problems.

Strand 2 - Design and technology

- n/a

Strand 4 - Occupations

- O4.1 Gr7/1. Explain the guidelines for choosing occupations.
- O4.1 Gr7/2. Have a favourable attitude towards livelihood.
- O4.1 Gr7/3. Recognise the importance of generating occupations.

[Total 6 indicators]