Edit page

CW High School

Computer Aided Design II

1. **Unit 1 Advanced CAD Output to Plotter (5 days) (9.09%)**

Learning Targets

1.1 I can choose a scale and page size to create an easy to read and understandable document.

Learning Target	Descriptor	Definition
4	Proficient	I can choose a scale and page size to create an easy to read and understandable document.
3	Developing	I can choose a scale or page size to create an easy to read document but not both.
2	Basic	I can create a document but parts are crowded and difficult to understand.
1	Minimal	I can create a document based on default settings.
0	No Evidence	No evidence shown.

2. **Advanced Views and communication (5 days (9.09%)**

Learning Targets

2.1 1. I can demonstrate use and understand Auxiliary Views.

Learning Target	Descriptor	Definition
4	Proficient	1. I can demonstrate use and understand Auxiliary Views.
3	Developing	I can apply an auxiliary view in the correct locations resulting in a correct view of a part but a better view is available.
2	Basic	I can apply an auxiliary view but is difficult to understand.
1	Minimal	I can apply an auxiliary view with default settings
0	No Evidence	No evidence shown.

2.2 2. I can demonstrate use and understanding of Section Views.

Learning Target	Descriptor	Definition
4	Proficient	2. I can demonstrate use and understanding of Section Views.
3	Developing	I can apply a section view in the correct locations resulting in a correct view of a part but a better view is available.
2	Basic	I can apply a section view but is difficult to understand.
1	Minimal	I can apply a section view with default settings that is difficult to understand.
0	No Evidence	No evidence shown.

Edit page

CW High School

Computer Aided Design II

2.3 I can demonstrate use and understanding of Detail Views in needed locations resulting in a clear and precise understanding of a part.

Learning Target	Descriptor	Definition
4	Proficient	I can demonstrate use and understanding of Detail Views in needed locations resulting in a clear and precise understanding of a part.
3	Developing	I can demonstrate use and understanding of Detail Views in needed locations resulting in understanding of a part.
2	Basic	I can demonstrate use of Detail Views but not in needed locations resulting in some understanding of a part.
1	Minimal	I can demonstrate use of Detail Views but not in needed locations resulting in misunderstanding of a part.
0	No Evidence	No evidence shown.

3. **Building Sheet Metal Objects (3days) (9.09%)**

Learning Targets

3.1 I can accurately model a part and generate the flat pattern.

Learning Target	Descriptor	Definition
4	Proficient	I can accurately model a part and generate the flat pattern.
3	Developing	I can model a part with a few errors and generate the flat pattern.
2	Basic	I can model a part with a few errors and the flat pattern also has a few errors.
1	Minimal	I can model a part with many errors and the flat pattern is not generated.
0	No Evidence	No evidence shown.

3.2 2. I can produce a fold test of a sheet metal part. I can create a paper pattern that fully incorporates all folds and bends resulting in an accurate part.

Learning Target	Descriptor	Definition
4	Proficient	2. I can produce a fold test of a sheet metal part. I can create a paper pattern that fully incorporates all folds and bends resulting in an accurate part.
3	Developing	I can create a paper pattern that incorporates folds or bends resulting in a part.
2	Basic	I can create a paper pattern that results in inaccurate folds and bends resulting in a part with errors of .0625.
1	Minimal	I can create a paper pattern that incorporates inaccurate folds and bends resulting in a part with errors of .125.

Edit page

CW High School

Computer Aided Design II

Learning Target	Descriptor	Definition
0	No Evidence	No evidence shown.

3.3 3. I can demonstrate use and understanding of Ordinate dimensioning. I can apply ordinate dimensioning in the correct locations resulting in a clear and precise understanding of a part.

Learning Target	Descriptor	Definition
4	Proficient	3. I can demonstrate use and understanding of Ordinate dimensioning. I can apply ordinate dimensioning in the correct locations resulting in a clear and precise understanding of a part.
3	Developing	I can apply ordinate dimensioning in the correct locations resulting in a correct view of a part but a better location is available.
2	Basic	I can apply ordinate dimensioning but is difficult to understand.
1	Minimal	I can apply ordinate dimensioning with default settings
0	No Evidence	No evidence shown.

Edit page

CW High School

Computer Aided Design II

4. **Prototyping (Geneva Wheel) (15 days) (9.09%)**

Learning Targets

4.1 I can understand and demonstrate an accurate Digital Model.

Learning Target	Descriptor	Definition
4	Proficient	I can understand and demonstrate an accurate Digital Model.
3	Developing	1. I can demonstrate a Digital Model that may have a few questions regarding feasibility.
2	Basic	I can demonstrate a Digital Model that may have several questions regarding feasibility.
1	Minimal	I can demonstrate a Digital Model that has many questions regarding feasibility.
0	No Evidence	No evidence shown.

4.2 I can demonstrate a Digital Model that will have all questions answers regarding feasibility.

Learning Target	Descriptor	Definition
4	Proficient	I can demonstrate a Digital Model that will have all questions answers regarding feasibility.
3	Developing	I can demonstrate a Digital Model that will have most questions answered regarding feasibility.
2	Basic	I can demonstrate a Digital Model that will have many questions regarding feasibility.
1	Minimal	I can demonstrate a Digital Model that does not answer any questions regarding feasibility.
0	No Evidence	No evidence shown.

Edit page

CW High School

Computer Aided Design II

5. **Stress Testing a Model (Hand Wheel) (8 days) (9.09%)**

Learning Targets

5.1 I can understand and apply stress testing to learn information then modify a digital model.

Learning Target	Descriptor	Definition
4	Proficient	I can understand and apply stress testing to learn information then modify a digital model.
3	Developing	I can understand and apply stress testing to learn information but cannot modify a digital model.
2	Basic	I can apply stress testing but learn very little information to modify a digital model.
1	Minimal	I can apply stress testing.
0	No Evidence	No evidence shown.

5.2 I can demonstrate use and understanding of the Sweep tool resulting in a fully accurate model .

Learning Target	Descriptor	Definition
4	Proficient	I can demonstrate use and understanding of the Sweep tool resulting in a fully accurate model .
3	Developing	I can demonstrate use and understanding of the Sweep tool resulting in a model with a few errors .
2	Basic	I can demonstrate use and understanding of the Sweep tool resulting in a model with many errors .
1	Minimal	I can demonstrate use of the Sweep tool resulting in a model that is not recognizable .
0	No Evidence	No evidence shown.

Edit page

CW High School

Computer Aided Design II

6. **Creating a Bill of Materials (BOM) (6 days) (9.09%)**

Learning Targets

6.1 I can understand and create a labeled exploded view that includes all parts in a clear and precise CAD sheet.

Learning Target	Descriptor	Definition
4	Proficient	I can understand and create a labeled exploded view that includes all parts in a clear and precise CAD sheet.
3	Developing	I can understand and create a labeled exploded view but a few parts are missing or difficult to understand.
2	Basic	I can understand and create a labeled exploded view but several parts are missing and difficult to understand.
1	Minimal	I can understand and create a labeled exploded view but many parts are missing and very difficult to understand.
0	No Evidence	No evidence shown.

6.2 I can understand and create a bill of materials that includes all parts of the assembly and is clear and precise and follows ANSI standards.

Learning Target	Descriptor	Definition
4	Proficient	I can understand and create a bill of materials that includes all parts of the assembly and is clear and precise and follows ANSI standards.
3	Developing	I can understand and create a bill of materials but is missing a few parts of the assembly or has areas that are difficult to understand.
2	Basic	I can understand and create a bill of materials but is missing several parts of the assembly and is difficult to understand.
1	Minimal	I can understand and create a bill of materials but is missing many parts of the assembly and is very difficult to understand.
0	No Evidence	No evidence shown.

Edit page

CW High School

Computer Aided Design II

7. **Use of the Loft and Break Tool in designing a Fishing Rod (9.09%)**

Learning Targets

7.1 **I can apply baseline dimensioning in all areas and use the break tool resulting in a clear and precise understanding of a part.**

Learning Target	Descriptor	Definition
4	Proficient	I can apply baseline dimensioning in all areas and use the break tool resulting in a clear and precise understanding of a part.
3	Developing	I can apply baseline dimensioning in some areas and use the break tool resulting in a basic understanding of a model.
2	Basic	I can apply baseline dimensioning but inaccurately or use the break tool in ineffectual areas.
1	Minimal	I can apply baseline dimensioning inaccurately and use the break tool in ineffectual areas.
0	No Evidence	No evidence shown.

8. **Use of Parametric Tool in designing fishing rod Eyelets (9.09%)**

Learning Targets

8.1 **I can understand and use geometric parameters to effectively modify a series of 6 parts (eyelets).**

Learning Target	Descriptor	Definition
4	Proficient	I can understand and use geometric parameters to effectively modify a series of 6 parts (eyelets).
3	Developing	I can understand and use geometric parameters to effectively modify 5 or 4 parts in a series.
2	Basic	I can understand and use geometric parameters to effectively modify 3 or 2 parts in a series.
1	Minimal	I can understand and use geometric parameters to model one part but not a series.
0	No Evidence	No evidence shown.

Edit page

CW High School

Computer Aided Design II

9. **Use of the Free Form Tool in Calculating Specifications (Cycle Tank) (9.09%)**

Learning Targets

9.1 I can use the Free Form Tool to Calculate accurate specifications of a model (Cycle Tank) and make revisions.

Learning Target	Descriptor	Definition
4	Proficient	I can use the Free Form Tool to Calculate accurate specifications of a model (Cycle Tank) and make revisions.
3	Developing	I can use the Free Form Tool to Calculate accurate specifications of a model but cannot make revisions.
2	Basic	I can use the Free Form Tool to Calculate some specifications of a model or cannot make revisions.
1	Minimal	I can use the Free Form Tool to Calculate some inaccurate specifications of a model and cannot make revisions.
0	No Evidence	No evidence shown.

9.2 I can demonstrate Metric and Imperial Dimensioning combined in one sheet resulting in clear and precise understanding.

Learning Target	Descriptor	Definition
4	Proficient	I can demonstrate Metric and Imperial Dimensioning combined in one sheet resulting in clear and precise understanding.
3	Developing	I can demonstrate some Metric and Imperial Dimensioning combined in one sheet resulting in clear and precise understanding.
2	Basic	I can demonstrate a few Metric and Imperial Dimensions combined in one sheet resulting in clear understanding.
1	Minimal	I can demonstrate Metric or Imperial Dimensions but not combined in one sheet resulting in understanding.
0	No Evidence	No evidence shown.

Edit page

CW High School

Computer Aided Design II

10. 3D Printing (9.10%)

Learning Targets

10.1 I can revise a previously created 3D print with improvements in design as well as improvements in the 3D print settings.

Learning Target	Descriptor	Definition
4	Proficient	I can revise a previously created 3D print with improvements in design as well as improvements in the 3D print settings.
3	Developing	I can revise a previously created 3D print with improvements in design or improvements in the 3D print settings.
2	Basic	I can revise a previously created 3D print with a fewnimprovements in design or a few improvements in the 3D print settings.
1	Minimal	I can only make an initial 3D print without any improvements in a second print.
0	No Evidence	No evidence shown.

Edit page

CW High School

Computer Aided Design II

11. **Basic use of Robotic Technology (9.09%)**

Learning Targets

11.1 I can understand and create efficient RC controlled movement in a robot.

Learning Target	Descriptor	Definition
4	Proficient	I can understand and create efficient RC controlled movement in a robot.
3	Developing	I can understand and create RC controlled movement in a robot.
2	Basic	I can create inconsistent RC controlled movement in a robot.
1	Minimal	I can create RC controlled movement in a robot but not predictable
0	No Evidence	No evidence shown.

11.2 I can program autonomous control with 3 sensors to achieve a predetermined task.

Learning Target	Descriptor	Definition
4	Proficient	I can program autonomous control with 3 sensors to achieve a predetermined task.
3	Developing	I can program autonomous control with 2 sensors to achieve a predetermined task.
2	Basic	I can program autonomous control with 1 sensor to achieve a predetermined task.
1	Minimal	I can program autonomous control with 1 sensor to achieve a random task.
0	No Evidence	No evidence shown.

Submitted on 6/21/2021 by