

# Secondary Articulation Agreement

Part A (To be completed by Secondary CTE Instructor or Administrator.)														
District / High School / Career Center				Dearborn Heights/Annapolis High School										
Secondary Program Title:				CAD CIP C			Code	:	15.1301					
Name and Title of Secondary Contact:			Vi	Victoria Sweet										
Mailing Address: 4650 Clippert			Dearborn Heights				MI 48125							
		Street	& O	ffi	ce Number	City							State & Zip	
Office Phone:	e Phone: 313 278-9870			Email: sweetvic@dł			hsd7.net							
Area Code Number		Number												
<u>Part B (To be co</u>	Part B (To be completed by HFC Instructor, Dean, Associate Dean or Administrator.)													
HFC Program Title: CAD Technology						CI	P Code:		4.080	)2				
Date of Agreement:			03/26/2021											
Agreement Period:			3 Years											
*Expiration Date:			03/26/2024											

\*For the purposes of students enrolling and receiving articulated credit, this agreement remains effective for three (3) additional years after the expiration date. This will allow students who completed the secondary program during the agreement period to finalize the agreed upon requirements and receive articulated credit.

**Purpose:** The purpose of this agreement is to facilitate the transition of students from the abovenamed high school Career and Technical Education program to the aligned Associate Degree Program or Career and Technical Education Program at Henry Ford College (HFC). Academic credit is awarded for course requirements of the HFC certificate or degree program based on the completion of equivalent courses in the above named program at the recognized secondary institution.

**General Terms and Conditions:** An articulation agreement established with the College shall not exceed three years in duration. Students requesting articulated credit shall satisfy the conditions and requirements as stated in this agreement within three (3) years after their termination of student status at the secondary institution. Any request received after that period shall be subject to approval by the appropriate HFC instructor and dean. Credit will be awarded as specified under the "Program Specific Terms, Conditions, and Requirements" of this agreement. Students shall be responsible for initiating the process to receive articulated credit as specified by this agreement by submitting a completed "Student Application for Articulated Credit" form. Credit granted beyond HFC is at the sole discretion of the transferring institution accepting credit.

**Revisions and Renewals:** This agreement shall be reviewed annually by both parties or at such time that substantive program changes occur within the HFC or secondary program. Revisions and renewals must be in writing and agreed to by both parties before any modifications are made to this agreement. **Contact: Brandon Nowak, Articulation Agreement Manager** <u>bnowak1@hfcc.edu</u>



# Secondary Articulation Agreement Program Specific Terms, Conditions, and Requirements

Part C (To be completed by HFC Instructor, Dean, Associate Dean or Administrator.)						
HFC Program Title:	CAD Technology		CIP Code:	04.0802		
The space below is used by HFC instructors, Faculty Chair or Administrators to specify secondary articulation agreement terms, conditions, and requirements for the above program.)						
<ol> <li>Students must achieve a "C" or better average for each applicable class taken at Dearborn Heights/Annapolis High School that may apply to the specified program at Dearborn Heights/Annapolis High School.</li> </ol>						
<ol> <li>Students must hav Dearborn Heights,</li> </ol>	/e demonstrated a good/satisfact /Annapolis High School.	ory attendance rec	ord for the co	urse/program at		
3. Students from Dea for which HFC will	arborn Heights/Annapolis High Sc grant articulated credit, as deter	hool must demonst mined by HFC Facu	trate compete lty.	ency in each course,		
4. The secondary art by Dearborn Heigh	iculation agreement is predicated hts/Annapolis High School and rev	l on relevant course viewed/evaluated b	e/program cur by HFC Staff.	riculum submitted		
<ol> <li>Secondary articulated credit will be held in escrow for: DRAF 110 Into to Industrial Drafting 3 CR <u>DRAF 120 Intro to CAD 4 CR</u> Total 7 CR</li> </ol>						
Credit will be awarded upon completion of the following HFC course(s) with a grade of "C" or better:						
DRAF 130 Technical Descriptive Geometry 3 CR Total 3 CR						
Secondary Instructor or Administrator Name and Title						
Printed Name		Printed Title				
Authorizing Signatures:						

Date

Date

HFC Instructor or Faculty Chair

**Secondary Instructor or Administrator** 

School Year:	2020-21
Course Name:	Drafting & Design/CAD
Course Number:	735
Course Credit:	One Year Program – (Two Hour Session – Two Semester/3 Credits)
Instructor:	Mrs. Sweet

**Course Description:** This course is designed for a variety of students who may have different career paths in mind. It will serve as an excellent foundation for those who would like to obtain entry level employment in the drafting and computer aided design (CAD) industry, or perhaps continue toward a degree in the technical or engineering fields. Students will focus on learning state of the art CAD software by working on architectural, mechanical and manufacturing projects. They will also design and create vinyl decals using industry equipment. Students take part in the State of Michigan civil engineering curriculum which includes competitions and potential paid internships. College credit through "articulation" can be obtained at HFCC.

**<u>Course Objectives</u>**: Students will draw architectural, civil and mechanical plans. Through this course students will receive an understanding of the architectural fields and the related career fields.

# Student Competencies:

2	Use query commands to extract drawing data
7	Plot drawings to the proper scale
8	Apply scaling techniques
10	Use the Line-Type (LT) scale
14	Use Cartesian coordinates
Μ	Advanced CAD Skills
1	Use the Internet and/or network within CAD (e.g. team projects)
2	Create 3-D assemblies
3	Create and edit a solid model
4	Use various software programs to produce a product
5	Demonstrate an understanding of models
6	Use geometry in parametric programs
7	Create 2-D geometry form 3-D models
8	Extract surface and mass properties (e.g. area and perimeter)
9	Import and export various file formats (e.g. BXF,IGES, and rost)
10	Perform customization to improve productivity
0	Introduction to Architectural Drawings
1	Produce elevation drawings
2	Construct architectural symbols
3	Produce floor plans
4	Identify architectural design and planning principles
5	Identify basic construction terminology and materials
6	Use perspectives and pictorials
7	Produce typical wall and building sections with necessary details
8	Identify applicable building codes
9	Measure, sketch, and draft an as-built floor plan
10	Prepare a schedule using a freehand architectural style lettering
11	Produce a site plan
12	Produce a foundation plan
P 1	Introduction to Residential and Commercial Wiring Drawings
1	Identify applicable codes (e.g. IEC, NEC, and IEEE)
2	Identify electrical symbols
3 T	Produce wiring schematics
1	Introduction to Civil/GIS (Geographic Information Systems) Drawings
1	Demonstrate land surveying techniques (e.g. property line, corn ers, symbols, coordinates,
2	Identify the uses of CIS and Clobal Desitioning Systems (CDS)
2	Produce a land survey plot from a written description
3	Figure the area using manual and computer methods
5	Produce a contour plan
6	Produce a profile drawing
7	Demonstrate man reading skills
8	Demonstrate map reading skills
V	Leadershin Comnetencies **
1	Demonstrate an understanding of SkillsUSA-VICA its structure
2	Demonstrate an understanding of one's personal values
3	Perform tasks related to effective personal management skills
4	Demonstrate interpersonal skills
5	Demonstrate etiquette and courtesy
6	Demonstrate effectiveness in oral and written communication
7	Develop and maintain a code or professional ethics
8	Maintain a good professional appearance
9	Perform basic tasks related to securing and terminating employees
10	Perform basic parliamentary procedures in a group meeting

(Note: Refer to 15.1301 CIP code for the entire list)

# Required Text: Architecture Residential Drafting and Design by Clois Kicklighter

**<u>References & Other Resources</u>**: Students will have access to the Internet, AutoCAD, and Media Center

**Course Outline:** Introduction to Drafting, Basic Computer Skills, Applied Mathematical Skills, Basic CAD Skills, Advanced CAD Skills, Introduction to Architectural Drawings, Introduction to Residential and Commercial Wiring Drawings, Introduction to Civil/GIS (Geographic Information Systems) Drawings, Leadership Competencies

**<u>Class Assignments</u>**: Students will work alone and in groups solving design problems which normally require drawing reports and research.

**Final Exam**: Students will have a written and drawing exam. The exam will be cumulative exam for the tri-mester

# Class Policies:

#### Rules:

- 1. No accessing Internet without teacher approval
- 2. No copying of other student files.
- 3. No food, beverage, or gum in the lab
- 4. Computers are to be used in accordance with the technology use agreement
- 5. No horseplay or inappropriate verbal communication.
- 6. No electronic entertainment devices or cell phones

## Student Responsibilities:

- 1. **Attendance -** Consistent attendance is a must. Students must be in class and on time.
- 2. **Materials** Students will be expected to bring all materials to class to effectively utilize class time and to turn in all work in a timely manner.
- 3. Entering the classroom Come into the classroom <u>quietly</u> and take your seat. Check the board for daily assignments and **log on** to the computer system.
- 4. **Work Habits** Demonstrate good work habits during the class. Work habits include: responsible, positive attitude, follow directions, safety, initiative, interest, efficiency, and corporation.
- 5. **Dismissing at the end of the period** Dismissal will be at your workstations. Make sure the chair is pushed in, the computer is logged off, and the keyboard, mouse, and monitor are aligned with the desk.
- 6. Returning to class after an absence See the teacher
- 7. **Arriving tardy to class** Enter the classroom **<u>quietly</u>**, take your seat and quickly begin to get your materials together and log into your computer. Don't forget to check the board for assignments.
- 8. **Talking during class** Talking is permitted as long as you are quiet and it pertains to the subject area.
- 9. **Asking for help** Before you ask the teacher a question make sure you referred to your notes/book and have already experimented. Raise your hand and the teacher will assist.
- 10. **Moving about the room** Unless you are getting materials or receiving help students should not be out of their seats.

- 11. **Restroom** Unless it's an emergency, all students should take advantage of the restrooms between classes.
- 12. **Emergency procedures** Fire and tornado procedures are posted in the classroom, please review. In the event of an emergency follow the teachers' instructions

#### Evaluation & Grading:

The students will be evaluated on work habits, assignments, quizzes/tests, and portfolio.

#### **Computing grades:**

A= 90% and above B= 80% to 89% C= 70% to 79% D= 60% to 69% E= 0% to 59%

#### Semester Grade:

Assignments, Portfolio, Work Habits = 25%

Quizzes & Tests = 75%

**<u>Assignments</u>**: All work that is assigned will be graded and returned to the students. Assignments include but are not limited to: drawings, presentations, & handouts.

<u>Quizzes & Tests</u>: All quizzes and tests will reflect material or information that has been covered in class. Academic dishonesty or cheating will not be tolerated and may result in a loss of credit for the quiz/test.

**<u>Portfolio</u>**: All students will maintain a notebook that contains notes from class discussions and any assigned drawings. This notebook will be turned in at periodic intervals during the semester as directed by the teacher for a grade.

<u>Work Habits</u>: Work Habits will be assessed throughout the tri-mester. Students will be able to earn points which will be a combination of attendance and performance in the class.

**Late Assignments:** Students will turn in the projects on the due date. Whether the project is complete or not. The students will be assessed a grade according to work complete. No late assignments will be permitted unless student was absent. Absent students will be have double the amount of days absent to turn in the work. If a student was absent for one day they will receive two days to turn in the assignment.

**<u>Course Advisory Committee</u>**: The advisory committee is made up of a variety of members from business and industry, post-secondary, parents and former students.

**<u>Articulation</u>**: Henry Ford College has partnered with Annapolis High School to provide articulation opportunities.

**<u>Class Material</u>**: All students must obtain the following materials for use within the class: writing utensil, 2" notebook with clear cover on the front, & 25 sheet protectors.

**Absent:** Upon returning to the classroom it is your responsibility for work missed and receiving any required notes. Make up work that requires the use of the classroom computers will require consultation with the teacher to determine if lab time is available.

**Work Based Learning**: As a completer for the CAD program students will participate in a work base learning experience.

#### Work Habits

Work habits are meaningful. Employers have recognized valuable employees as those who demonstrate knowledge and skill in a chosen area plus have a positive attitude towards work. That's why work habits are a part of the final grade in this course.

1.	RESPONSIBILITY AND DEPENDABILITY are indicated when you a. are in class on time every day b. report absences as required c. complete tasks on time d. return tools and equipment to the proper place	5.	<ul> <li>INITIATIVE AND EFFORT are indicated when you</li> <li>a. complete routine tasks before being told</li> <li>b. begin new tasks without being told</li> <li>c. volunteer for extra duties or assignments</li> <li>d. ask for help when needed</li> <li>e. complete extra tasks</li> </ul>
2.	<ul> <li>POSITIVE ATTITUDE is indicated when you</li> <li>a. contribute every day</li> <li>b. accept constructive criticism</li> <li>c. are a leader and set a goods example</li> <li>d. work willingly every day</li> <li>e. complete extra tasks</li> </ul>	6.	INTEREST is indicated when you a. are in class on time every day b. come prepared to work c. stay on task d. work actively toward your career goal
3.	FOLLOWING DIRECTIONS is indicated when you a. follow program rules b. follow verbal instructions c. follow written instructions	7.	<ul> <li>a. plan and organize your work</li> <li>b. conserve materials</li> <li>c. complete tasks accurately</li> <li>d. recheck, verify, and proof work</li> <li>e. complete tasks on time</li> </ul>
4.	<ul> <li>a. use and store tools and equipment properly</li> <li>b. maintain a safe work area</li> </ul>	8.	<ul> <li>COOPERATION is indicated when you</li> <li>a. participate actively</li> <li>b. assist others</li> <li>c. volunteer readily</li> <li>d. respect people and property</li> <li>e. encourage others</li> </ul>

School Year:	2020-21
Course Name:	Mechanical 1A & 1B
Course Number:	714/715
Course Credit:	Two Semesters – (1.0 Credits)
Instructor:	Mrs. Sweet

**Course Description:** This class serves as an introduction course in computer aided drafting emphasizing on mechanical design techniques. During the class students will design mechanical, electronics, packaging design, civil design and 2D as well as 3D design. They will also design and produce a vinyl decal, construct wooden models and enter into competitions.

**<u>Course Objectives</u>**: Students will draw mechanical plans. Through this course students will receive an understanding of the mechanical fields and the related career fields.

## Student Competencies:

# 15.1306 Mechanical Drafting Consolidated (2011)

I	ACADEMIC FOUNDATIONS
II	COMMUNICATIONS
III	PROBLEM-SOLVING AND CRITICAL THINKING
IV	INFORMATION TECHNOLOGY APPLICATIONS
V	SYSTEMS
VI	SAFETY, HEALTH AND ENVIRONMENTAL
VII	LEADERSHIP AND TEAMWORK
VIII	ETHICS AND LEGAL RESPONSIBILITIES
IX	EMPLOYABILITY AND CAREER DEVELOPMENT
X	TECHNICAL SKILLS
XI	ENGINEERING TECHNOLOGY PATHWAY

**<u>Required Text</u>**: Elementary Blueprint Reading for Machinist 4<sup>th</sup> Edition by David Taylor

**<u>References & Other Resources</u>**: Students will have access to the Internet, AutoCAD, and Media Center

**<u>Course Outline</u>**: Introduction to Drafting, Basic Drawing Skills, Basic Computer Skills, Basic Communication Skills, Applied Mathematical Skills, Basic CAD Skills

<u>**Class Assignments</u>**: Students will work alone and in groups solving design problems which normally require drawing reports and research.</u>

**Final Exam**: Students will have a written and drawing exam. The exam will be cumulative exam for the semester

# Class Policies:

#### **Rules:**

- 1. No accessing Internet without teacher approval
- 2. No copying of other student files.
- 3. No food, beverage, or gum in the lab
- 4. Computers are to be used in accordance with the technology use agreement
- 5. No horseplay or inappropriate verbal communication.
- 6. No electronic entertainment devices or cell phones

## Student Responsibilities:

- 1. Attendance Consistent attendance is a must. Students must be in class and on time.
- 2. **Materials** Students will be expected to bring all materials to class to effectively utilize class time and to turn in all work in a timely manner.
- 3. Entering the classroom Come into the classroom <u>quietly</u> and take your seat. Check the board for daily assignments and log on to the computer system.
- 4. **Work Habits** Demonstrate good work habits during the class. Work habits include: responsible, positive attitude, follow directions, safety, initiative, interest, efficiency, and corporation.
- 5. **Dismissing at the end of the period** Dismissal will be at your workstations. Make sure the chair is pushed in, the computer is logged off, and the keyboard, mouse, and monitor are aligned with the desk.
- 6. Returning to class after an absence See the teacher
- 7. **Arriving tardy to class** Enter the classroom **<u>quietly</u>**, take your seat and quickly begin to get your materials together and log into your computer. Don't forget to check the board for assignments.
- 8. **Talking during class** Talking is permitted as long as you are quiet and it pertains to the subject area.
- 9. **Asking for help** Before you ask the teacher a question make sure you referred to your notes/book and have already experimented. Raise your hand and the teacher will assist.
- 10. **Moving about the room** Unless you are getting materials or receiving help students should not be out of their seats.
- 11. **Restroom** Unless it's an emergency, all students should take advantage of the restrooms between classes.
- 12. **Emergency procedures** Fire and tornado procedures are posted in the classroom, please review. In the event of an emergency follow the teachers' instructions

## Evaluation & Grading:

The students will be evaluated on work habits, assignments, quizzes/tests, and portfolio.

#### **Computing grades:**

A= 90% and above B= 80% to 89% C= 70% to 79% D= 60% to 69% E= 0% to 59% **Semester Grade:** Assignments, Portfolio, Work Habits = 25%

Quizzes & Tests = 75%

**<u>Assignments</u>**: All work that is assigned will be graded and returned to the students. Assignments include but are not limited to: drawings, presentations, & handouts.

<u>Quizzes & Tests</u>: All quizzes and tests will reflect material or information that has been covered in class. Academic dishonesty or cheating will not be tolerated and may result in a loss of credit for the quiz/test.

**<u>Portfolio</u>**: All students will maintain a notebook that contains notes from class discussions and any assigned drawings. This notebook will be turned in at periodic intervals during the semester as directed by the teacher for a grade.

**Work Habits**: Work Habits will be assessed throughout the tri-mester. Students will be able to earn points which will be a combination of attendance and performance in the class.

**Late Assignments:** Students will turn in the projects on the due date. Whether the project is complete or not. The students will be assessed a grade according to work complete. No late assignments will be permitted unless student was absent. Absent students will be have double the amount of days absent to turn in the work. If a student was absent for one day they will receive two days to turn in the assignment.

**<u>Course Advisory Committee</u>**: The advisory committee is made up of a variety of members from business and industry, post-secondary, parents and former students.

**<u>Articulation</u>**: Henry Ford College has partnered with Annapolis High School to provide articulation opportunities.

**<u>Class Material</u>**: All students must obtain the following materials for use within the class: writing utensil, 2" notebook with clear cover on the front, & 25 sheet protectors.

**<u>Absent:</u>** Upon returning to the classroom it is your responsibility for work missed and receiving any required notes. Make up work that requires the use of the classroom computers will require consultation with the teacher to determine if lab time is available.

**Work Based Learning:** As a completer for the mechanical program students will participate in a work base learning experience.

# Work Habits

Work habits are meaningful. Employers have recognized valuable employees as those who demonstrate knowledge and skill in a chosen area plus have a positive attitude towards work. That's why work habits are a part of the final grade in this course.

1.	RESPONSIBILITY AND DEPENDABILITY are indicated when you a. are in class on time every day b. report absences as required c. complete tasks on time d. return tools and equipment to the proper place	5.	<ul> <li>INITIATIVE AND EFFORT are indicated when you</li> <li>a. complete routine tasks before being told</li> <li>b. begin new tasks without being told</li> <li>c. volunteer for extra duties or assignments</li> <li>d. ask for help when needed</li> <li>e. complete extra tasks</li> </ul>
2.	<ul> <li>POSITIVE ATTITUDE is indicated when you</li> <li>a. contribute every day</li> <li>b. accept constructive criticism</li> <li>c. are a leader and set a goods example</li> <li>d. work willingly every day</li> <li>e. complete extra tasks</li> </ul>	6.	INTEREST is indicated when you a. are in class on time every day b. come prepared to work c. stay on task d. work actively toward your career goal
3.	<ul><li>FOLLOWING DIRECTIONS is indicated when you</li><li>a. follow program rules</li><li>b. follow verbal instructions</li><li>c. follow written instructions</li></ul>	7.	<ul> <li>EFFICIENCY is indicated when you</li> <li>a. plan and organize your work</li> <li>b. conserve materials</li> <li>c. complete tasks accurately</li> <li>d. recheck, verify, and proof work</li> <li>e. complete tasks on time</li> </ul>
4.	SAFETY is indicated when you a. use and store tools and equipment properly b. maintain a safe work area	8.	<ul> <li>COOPERATION is indicated when you</li> <li>a. participate actively</li> <li>b. assist others</li> <li>c. volunteer readily</li> <li>d. respect people and property</li> <li>e. encourage others</li> </ul>

School Year:	2020-21
Course Name:	Mechanical 2A & 2B
Course Number:	719/720
Course Credit:	Two Trimesters – (1.0 Credits)
Instructor:	Mrs. Sweet

**Course Description:** This course is designed to further develop skills in visualization through drawings. This course will be taught using CAD software both 2D & 3D. Additional areas that will be covered are 3D assemblies, exploded assemblies, parametric modeling using Inventor software. Students will design and produce a 3D part using the 3D printer as well as vinyl decals. Competitions will also be a part of the program. Students who enroll in this course must have successfully completed Mechanical Drafting I and II.

**<u>Course Objectives</u>**: Students will draw mechanical plans. Through this course students will receive an understanding of the mechanical fields and the related career fields.

## Student Competencies:

## 15.1306 Mechanical Drafting Consolidated (2011)

I	ACADEMIC FOUNDATIONS
II	COMMUNICATIONS
III	PROBLEM-SOLVING AND CRITICAL THINKING
IV	INFORMATION TECHNOLOGY APPLICATIONS
V	SYSTEMS
VI	SAFETY, HEALTH AND ENVIRONMENTAL
VII	LEADERSHIP AND TEAMWORK
VIII	ETHICS AND LEGAL RESPONSIBILITIES
IX	EMPLOYABILITY AND CAREER DEVELOPMENT
X	TECHNICAL SKILLS
XI	ENGINEERING TECHNOLOGY PATHWAY

**Required Text:** Elementary Blueprint Reading for Machinist 4<sup>th</sup> Edition by David Taylor

**<u>References & Other Resources</u>**: Students will have access to the Internet, AutoCAD, and Media Center

**<u>Course Outline</u>**: Introduction to Drafting, Basic Drawing Skills, Basic Computer Skills, Basic Communication Skills, Applied Mathematical Skills, Basic CAD Skills

<u>**Class Assignments</u>**: Students will work alone and in groups solving design problems which normally require drawing reports and research.</u>

**Final Exam**: Students will have a written and drawing exam. The exam will be cumulative exam for the semester

# Class Policies:

#### **Rules:**

- 1. No accessing Internet without teacher approval
- 2. No copying of other student files.
- 3. No food, beverage, or gum in the lab
- 4. Computers are to be used in accordance with the technology use agreement
- 5. No horseplay or inappropriate verbal communication.
- 6. No electronic entertainment devices or cell phones

## Student Responsibilities:

- 1. Attendance Consistent attendance is a must. Students must be in class and on time.
- 2. **Materials** Students will be expected to bring all materials to class to effectively utilize class time and to turn in all work in a timely manner.
- 3. Entering the classroom Come into the classroom <u>quietly</u> and take your seat. Check the board for daily assignments and log on to the computer system.
- 4. **Work Habits** Demonstrate good work habits during the class. Work habits include: responsible, positive attitude, follow directions, safety, initiative, interest, efficiency, and corporation.
- 5. **Dismissing at the end of the period** Dismissal will be at your workstations. Make sure the chair is pushed in, the computer is logged off, and the keyboard, mouse, and monitor are aligned with the desk.
- 6. Returning to class after an absence See the teacher
- 7. **Arriving tardy to class** Enter the classroom **<u>quietly</u>**, take your seat and quickly begin to get your materials together and log into your computer. Don't forget to check the board for assignments.
- 8. **Talking during class** Talking is permitted as long as you are quiet and it pertains to the subject area.
- 9. **Asking for help** Before you ask the teacher a question make sure you referred to your notes/book and have already experimented. Raise your hand and the teacher will assist.
- 10. **Moving about the room** Unless you are getting materials or receiving help students should not be out of their seats.
- 11. **Restroom** Unless it's an emergency, all students should take advantage of the restrooms between classes.
- 12. **Emergency procedures** Fire and tornado procedures are posted in the classroom, please review. In the event of an emergency follow the teachers' instructions

## Evaluation & Grading:

The students will be evaluated on work habits, assignments, quizzes/tests, and portfolio.

#### **Computing grades:**

A= 90% and above B= 80% to 89% C= 70% to 79% D= 60% to 69% E= 0% to 59% **Semester Grade:** Assignments, Portfolio, Work Habits = 25%

Quizzes & Tests = 75%

**<u>Assignments</u>**: All work that is assigned will be graded and returned to the students. Assignments include but are not limited to: drawings, presentations, & handouts.

<u>Quizzes & Tests</u>: All quizzes and tests will reflect material or information that has been covered in class. Academic dishonesty or cheating will not be tolerated and may result in a loss of credit for the quiz/test.

**<u>Portfolio</u>**: All students will maintain a notebook that contains notes from class discussions and any assigned drawings. This notebook will be turned in at periodic intervals during the semester as directed by the teacher for a grade.

**Work Habits**: Work Habits will be assessed throughout the tri-mester. Students will be able to earn points which will be a combination of attendance and performance in the class.

**Late Assignments:** Students will turn in the projects on the due date. Whether the project is complete or not. The students will be assessed a grade according to work complete. No late assignments will be permitted unless student was absent. Absent students will be have double the amount of days absent to turn in the work. If a student was absent for one day they will receive two days to turn in the assignment.

**<u>Course Advisory Committee</u>**: The advisory committee is made up of a variety of members from business and industry, post-secondary, parents and former students.

**<u>Articulation</u>**: Henry Ford College has partnered with Annapolis High School to provide articulation opportunities.

**<u>Class Material</u>**: All students must obtain the following materials for use within the class: writing utensil, 2" notebook with clear cover on the front, & 25 sheet protectors.

**<u>Absent:</u>** Upon returning to the classroom it is your responsibility for work missed and receiving any required notes. Make up work that requires the use of the classroom computers will require consultation with the teacher to determine if lab time is available.

**Work Based Learning:** As a completer for the mechanical program students will participate in a work base learning experience.

Work habits are meaningful. Employers have recognized valuable employees as those who demonstrate knowledge and skill in a chosen area plus have a positive attitude towards work. That's why work habits are a part of the final grade in this course. Т

1.	RESPONSIBILITY AND DEPENDABILITY are indicated when you a. are in class on time every day b. report absences as required c. complete tasks on time d. return tools and equipment to the proper place	5.	<ul> <li>INITIATIVE AND EFFORT are indicated when you</li> <li>a. complete routine tasks before being told</li> <li>b. begin new tasks without being told</li> <li>c. volunteer for extra duties or assignments</li> <li>d. ask for help when needed</li> <li>e. complete extra tasks</li> </ul>
2.	<ul> <li>POSITIVE ATTITUDE is indicated when you</li> <li>a. contribute every day</li> <li>b. accept constructive criticism</li> <li>c. are a leader and set a goods example</li> <li>d. work willingly every day</li> <li>e. complete extra tasks</li> </ul>	6.	INTEREST is indicated when you a. are in class on time every day b. come prepared to work c. stay on task d. work actively toward your career goal
3.	<ul><li>FOLLOWING DIRECTIONS is indicated when you</li><li>a. follow program rules</li><li>b. follow verbal instructions</li><li>c. follow written instructions</li></ul>	7.	<ul> <li>a. plan and organize your work</li> <li>b. conserve materials</li> <li>c. complete tasks accurately</li> <li>d. recheck, verify, and proof work</li> <li>e. complete tasks on time</li> </ul>
4.	SAFETY is indicated when you a. use and store tools and equipment properly b. maintain a safe work area	8.	<ul> <li>COOPERATION is indicated when you</li> <li>a. participate actively</li> <li>b. assist others</li> <li>c. volunteer readily</li> <li>d. respect people and property</li> <li>e. encourage others</li> </ul>

School Year:	2020-21
Course Name:	Mechanical 3A & 3B
Course Number:	01731-1/01732-1
Course Credit:	Two Semesters – (1.0 Credits)
Instructor:	Mrs. Sweet

## Course Description:

This course is designed for students seeking a career in Computer Aided Drafting (CAD), engineering and related fields of study. Advanced CAD techniques will be the major focus of this course which includes skill development in CAD commands, modeling and designer software. Students who enroll in this course must have successfully completed Mechanical Drafting 2A and 2B.

**<u>Course Objectives</u>**: Students will draw a complete set of architectural plans and create models. Through this course students will receive an understanding of the architectural fields and the related career fields.

Required Text: Mechanical Drafting and Design by Thomas Smith

**<u>References & Other Resources</u>**: Students will have access to the Internet, AutoCAD, and Media Center

**<u>Class Assignments</u>**: Students will work alone and in groups solving design problems which normally require drawing reports and research.

**Final Exam**: Students will have a written and drawing exam. The exam will be cumulative exam for the semester.

#### Class Policies:

#### **Rules:**

- 1. No accessing Internet without teacher approval
- 2. No copying of other student files.
- 3. No food, beverage, or gum in the lab
- 4. Computers are to be used in accordance with the technology use agreement
- 5. No horseplay or inappropriate verbal communication.
- 6. No electronic entertainment devices or cell phones

#### Student Responsibilities:

- 1. Attendance Consistent attendance is a must. Students must be in class and on time.
- 2. **Materials** Students will be expected to bring all materials to class to effectively utilize class time and to turn in all work in a timely manner.
- 3. Entering the classroom Come into the classroom <u>quietly</u> and take your seat. Check the board for daily assignments and log on to the computer system.
- 4. **Work Habits** Demonstrate good work habits during the class. Work habits include: responsible, positive attitude, follow directions, safety, initiative, interest, efficiency, and corporation.
- 5. **Dismissing at the end of the period** Dismissal will be at your workstations. Make sure the chair is pushed in, the computer is logged off, and the keyboard, mouse, and monitor are aligned with the desk.
- 6. Returning to class after an absence See the teacher
- 7. **Arriving tardy to class** Enter the classroom **<u>quietly</u>**, take your seat and quickly begin to get your materials together and log into your computer. Don't forget to check the board for assignments.
- 8. **Talking during class** Talking is permitted as long as you are quiet and it pertains to the subject area.
- 9. **Asking for help** Before you ask the teacher a question make sure you referred to your notes/book and have already experimented. Raise your hand and the teacher will assist.
- 10. **Moving about the room** Unless you are getting materials or receiving help students should not be out of their seats.
- 11. **Restroom** Unless it's an emergency, all students should take advantage of the restrooms between classes.
- 12. **Emergency procedures** Fire and tornado procedures are posted in the classroom, please review. In the event of an emergency follow the teachers' instructions

## Evaluation & Grading:

The students will be evaluated on work habits, assignments, quizzes/tests, and portfolio.

Computing grades:	Semester Grade:
A=90% and above	Assignments, Portfolio,
B = 80% to $89%$	Work Habits = $25\%$
C = 70% to $79%$	
D = 60% to $69%$	Quizzes & Tests = $75\%$
E = 0% to 59%	-

**Assignments:** All work that is assigned will be graded and returned to the students. Assignments include but are not limited to: drawings, presentations, & handouts.

**Quizzes & Tests**: All quizzes and tests will reflect material or information that has been covered in class. Academic dishonesty or cheating will not be tolerated and may result in a loss of credit for the quiz/test.

**<u>Portfolio</u>**: All students will maintain a notebook that contains notes from class discussions and any assigned drawings. This notebook will be turned in at periodic intervals during the semester as directed by the teacher for a grade.

**Work Habits**: Work Habits will be assessed throughout the tri-mester. Students will be able to earn points which will be a combination of attendance and performance in the class.

**Late Assignments:** Students will turn in the projects on the due date. Whether the project is complete or not. The students will be assessed a grade according to work complete. No late assignments will be permitted unless student was absent. Absent students will be have double the amount of days absent to turn in the work. If a student was absent for one day they will receive two days to turn in the assignment.

**<u>Course Advisory Committee</u>**: The advisory committee is made up of a variety of members from business and industry, post-secondary, parents and former students.

**<u>Articulation</u>**: Henry Ford College has partnered with Annapolis High School to provide articulation opportunities.

**<u>Class Material</u>**: All students must obtain the following materials for use within the class: writing utensil, 2" notebook with clear cover on the front, & 25 sheet protectors.

**<u>Absent:</u>** Upon returning to the classroom it is your responsibility for work missed and receiving any required notes. Make up work that requires the use of the classroom computers will require consultation with the teacher to determine if lab time is available.

**Work Based Learning:** As a completer for the mechanical program students will participate in a work base learning experience.

#### Work Habits

Work habits are meaningful. Employers have recognized valuable employees as those who demonstrate knowledge and skill in a chosen area plus have a positive attitude towards work. That's why work habits are a part of the final grade in this course.

<ol> <li>RESPONSIBILITY AN when you         <ul> <li>are in class on time</li> <li>report absences as</li> <li>complete tasks on</li> <li>return tools and equilation</li> </ul> </li> </ol>	ID DEPENDABILITY are indicated e every day s required time uipment to the proper place	5.	<ul> <li>INITIATIVE AND EFFORT are indicated when you</li> <li>a. complete routine tasks before being told</li> <li>b. begin new tasks without being told</li> <li>c. volunteer for extra duties or assignments</li> <li>d. ask for help when needed</li> <li>e. complete extra tasks</li> </ul>
<ol> <li>POSITIVE ATTITUDE         <ol> <li>contribute every da</li> <li>accept constructive</li> <li>are a leader and se</li> <li>work willingly every</li> <li>complete extra tas</li> </ol> </li> </ol>	is indicated when you ay e criticism et a goods example / day ks	6.	<ul> <li>INTEREST is indicated when you</li> <li>a. are in class on time every day</li> <li>b. come prepared to work</li> <li>c. stay on task</li> <li>d. work actively toward your career goal</li> </ul>
<ol> <li>FOLLOWING DIRECTI</li> <li>a. follow program rule</li> <li>b. follow verbal instru</li> <li>c. follow written instru</li> </ol>	ONS is indicated when you es ctions ictions	7.	<ul> <li>EFFICIENCY is indicated when you</li> <li>a. plan and organize your work</li> <li>b. conserve materials</li> <li>c. complete tasks accurately</li> <li>d. recheck, verify, and proof work</li> <li>e. complete tasks on time</li> </ul>
<ol> <li>SAFETY IS Indicated w a. use and store tools b. maintain a safe wo</li> </ol>	nen you and equipment properly rk area	8.	COOPERATION is indicated when you a. participate actively b. assist others c. volunteer readily d. respect people and property e. encourage others