Curriculum Committee

Thursday, June 5, 2014 4:30 PM Curriculum Committee, L.P. Wilson Community Center, Room 17, 601 Matianuck Avenue, Windsor, CT 06095

- 1. Call to Order, Pledge of Allegiance, Moment of Silence
 - 2. Audience to Visitors
 - 3. Introduction to Electronic Commerce
 - 4. Aviation and Flight
- 5. English 12: The Journey and Beyond
 - 6. Family Sociology
- 7. Innovation and Invention Design and Communication (Grade 7)
 - 8. Introduction to Manufacturing
 - 9. New Textbook Purchases for Early Global Studies (9th Grade) and Modern Global Studies (10th Grade) College and Honors Level
 - 10. For informational purposes only: Reconfiguration of awarding credits for full year courses.
- 11. Adjournment

Windsor Public Schools Curriculum Map for the Secondary Level Introduction to Electronic Commerce BOE Approval Date

Purpose of the Course: This course will introduce students to marketing on the internet and how businesses employ electronic commerce. The growth of the internet continues to have a tremendous influence on business. This course will challenge students to explore the realities and implications of ecommerce from a marketer's perspective. Creating an online presence, branding, responsible use of social media and the fundamentals of completing online transactions will be addressed through the establishment of a web-based school store.

Name of the Unit 1: Fundamentals of E-Commerce

Length of the unit: 7 blocks (86 minutes)

Purpose of the Unit: Students will gain an understanding and appreciation of how the internet can be used to complete business transactions, establish a brand presence and complete commercial transactions. Learning activities will address both business and commercial transactions.

Business Standards:

Business & Finance Technology Education Frameworks Entrepreneurship

http://www.sde.ct.gov/sde/lib/sde/pdf/deps/career/business/Entrepreneurship Aligned ELA CCSS.pdf

Common Core State Standards Addressed in the unit:

- CCSS.ELA.RI.9-10.2. Determine a central idea of a text and analyze its development over the course
 of the text, including how it emerges and is shaped and refined by specific details; provide an
 objective summary of the text.
- <u>CCSS.ELA.RI.9-10.7</u>. Analyze various accounts of a subject told in different mediums (e.g., a
 person's life story in both print and multimedia), determining which details are emphasized in each
 account.
- CCSS.ELA.RI.9-10.8. Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.
- <u>CCSS.ELA.W.11-12.2</u>. Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and

analysis of content.

- o Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.
- Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.
- Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.
- Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic.
- Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
- Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).
- <u>CCSS.ELA.SL.11-12.4</u>. Present information, findings, and supporting evidence, conveying a clear
 and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing
 perspectives are addressed, and the organization, development, substance, and style are appropriate
 to purpose, audience, and a range of formal and informal tasks.
- CCSS.ELA.SL.11-12.5. Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
- <u>CCSS.ELA.SL.11-12.6</u>. Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.

Big Ideas:	Essential Questions:
The internet is a global marketplace.	Will e-commerce change the standard of living for
	people around the world?
Like any entrepreneurial endeavor, there are	
rewards and challenges for all e-commerce	What is the future of e-commerce?
businesses.	
Students will know:	Students will be able to:
 Trends that provide domestic and 	Comparison shop by applying the theories
international opportunities for	and concepts underlying e-commerce
entrepreneurs for whom e-commerce is	

part of their business strategy

- Advantages of e-commerce over traditional business methods
- Ways online businesses try to capture sales and increase repeat customers
- Compare and contrast brick and mortar and online businesses
- Identify marketing strategies used by online businesses

Significant task 1:

Purchase Decisions Summary Table:

This significant task will open with a brainstorming session in which students list the factors that influenced a recent buying decision. Students then will take notes on a teacher-generated PowerPoint that summarizes the components that drive purchasing behavior. Following the presentation, students will work individually to create a summary table of the factors they deem most influential. Upon completion, students will work in small groups of three and revise their summary table in preparation for writing their report.

Individually, students will type a first draft of well-written report of their findings. In small groups of two, students will peer edit the first draft of the report using the school -wide rubric #1: Use Research tools to access, evaluate, and document information as their guide. After peer editing, each student will make the necessary corrections and compose their final report.

As a culminating activity, individual students will create a PREZI, PowerPoint or other presentation medium and share their findings with the class.

Timeline: 4 blocks (86 minutes)

Key vocabulary: Global economy, psychological pricing, bundle pricing, discount pricing, business

strategy, strategy implementation

Resources: Glencoe Entrepreneurship: Building a Business, E-Commerce, computers/I-Pads

Common learning experiences:

Activity focused on comparing online stores with brick and mortar establishments

Research on planning a purchase using traditional and web based resources

Review of school-wide rubrics and their application

Write a well written two page report explaining their findings

Peer editing of purchasing decision report

Editing and revising purchase summary table

Think-Pair Share on the differences between online and brick and mortar retail establishments Vocabulary instruction; utilizing word walls and non-linguistic representation methods; such as graphic organizers and creating pictorial representation of vocabulary words

Sharing research with class using presentation software

Common assessments:

Comparison of web- based vs. physical retail establishment assessed using School Wide Rubric #1: Use research tools to access, evaluate and document information.

Collaborative work during Think-Pair Share and peer editing assessed using School Wide Rubric #2 Work Collaboratively.

Oral presentation on research findings assessed using School Wide Rubric #3: Effectively Communicates for a Variety Purposes.

Research report assessed using English department rubric: Writing for a variety of purposes.

Teacher notes:

Go over school wide rubrics with students to familiarize them of the requirements of the rubric. Suggested grading weight of Unit 1 Assignments:

Shopping Comparison Assignment	15%
Cooperative Learning	15%
Written Report	25%
Presentation (creation)	15%
Presentation	15%
Recommendations	15%

Windsor Public Schools Curriculum Map for the Secondary Level Introduction to Electronic Commerce

Name of the Unit 2: Web Site Development	Length of the unit: 17 blocks (86 minutes)

Purpose of the Unit: This unit introduces students to the importance of making the correct choices in developing an effective website. Students will come to understand that the purpose of the website will influence the style, the website technologies required, hosting costs and budget required for maintaining the website.

Business Standards:

Business & Finance Technology Education Frameworks Entrepreneurship

http://www.sde.ct.gov/sde/lib/sde/pdf/deps/career/business/Entrepreneurship Aligned ELA CCSS.p df

Common Core State Standards Addressed in the unit:

- 10.W.2: **Text Types and** Purposes Writing Informative/explanatory text to examine and convey complex ideas
- 10.W.7: **Research to Build and Present Knowledge** Conduct short as well as more sustained research projects to answer questions (including self-generated questions) or solve a problem, narrow or broaden the inquiry when appropriate, demonstrating understanding of the subject under investigation
- 10.W.8: **Research to Build and Present Knowledge** Gather relevant information from multiple authoritative print and digital sources
- 10.SL.1: **Comprehension and Collaboration** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on topics, texts and issues
- 10.SL.4: **Presentation of Knowledge and Ideas** Present information findings and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance and style are appropriate to purpose, audience and tasks.
- 10.L.1: **Conventions of Standard English -** Demonstrate command of the conventions of standard English and usage when writing or speaking

10.L.4: **Vocabulary Acquisition and Use-** Determine or clarify the meaning of unknown and multiple meaning words and phrases based on reading and context

Big Ideas:	Essential Questions:
An effective website should be organized to	How has electronic commerce changed the way
ensure it is easy to access, read and navigate.	marketers reach out to potential customers?
You never get a second chance to make a good first impression. Having a reliable system for product delivery is important to online companies.	Is e-commerce a passing fad? What factors and disciplines affect webpage design?
Students will know:	Students will be able to:
 The basic design principles used when planning the visual aspects of a website: Proximity, Alignment, Repetition, Contrast (PARC) The concept of freemium Features and capabilities of Xara web design software 	 Use Xara web design software to create an effective website Apply basic web design principles Set up a site map, flowchart, web graphic organizer to show the layout of the website Use freemium to create an income stream for their e-commerce business

Significant task 1:

Understanding Website Layout:

The purpose of this significant task is to introduce students to the concept of website optimization. Students will engage in activities to familiarize them with how web pages operate and the best layouts for potential customers to be able to accomplish a successful search.

As a whole group students will be introduced to basic design principles and organization of a web site; including categorization methods, ways of focusing the reader's attention and the importance of simplicity in presentation. Following the teacher presentation, students will be paired with a partner to create a graphic organizer outlaying their chosen website(s from a teacher-approved list. Each team will then display the graphic organizer on Xara. Students will present their work and explain the organization of their website, highlighting how their work adheres to the principles of web design.

Following a group critique, students will apply their acquired skills to create an organizational flowchart in Xara on one of the following: vacation planner business, sporting goods business or an office supply business. Students will include as many actual parts of the web page as possible on their flowchart and explain the rationale behind their organizational decisions in respect to proximity, alignment, repetition and contrast.

Timeline: 3 blocks (86 minutes)

Key vocabulary: Site map, demographics, home page, navigate, feasibility assessment, flowchart,

layout, target market, navigation scheme, white space, streaming video J-PEG, GIF, resolution, point size, visual balance, freemium

Resources: Glencoe, E-Commerce, Xara software tutorial

Significant task 2:

Designing an Effective Website:

As an introduction to basic design principles, students will use the SmartBoard to brainstorm a list of features found on an effective website. Once the list is created, their list will be compared with established basic web design principles; such as the importance of simplicity, the effective use of white space, the importance of using plain and objective language, etc. With the knowledge gained from this activity students will work independently to rate the design principles of 10 websites selected by the teacher, based on a teacher-generated rubric tapping web design principles.

Students then will view Screencasts and YouTube videos as an introduction to the functions of Xara Graphic Studio. Students will complete activities that will teach them the basic Xara Graphic Studio functions such as: creating shapes, transparencies, drop shadows, font manipulation, overlays, widgets, buttons, and manipulating photos.

Timeline: 4 blocks (86 minutes)

Key vocabulary:

creating shapes, transparencies, drop shadows, font manipulation, overlays, widgets, buttons, manipulating photos

Significant task 3:

Mimicking a Website:

Once basic skills in Xara Graphic Studio are mastered, students will choose a website to mimic using Xara to showcase their burgeoning skills. Individually, students will copy and paste into Xara a teacherapproved website to use as a tracing layer.

Individually students will then create a live version of this website using their mastered skills and showcase their website to the class and explain/justify their choices.

Timeline: 5 classes (86 minute blocks)

Key vocabulary:

Tracing layer, navigation bar, banner, google adwords, freemium, buttons

Significant Task #4

Positioning a Website:

Significant tasks 1 through 3 address the concepts of recognizing good and bad website designs. Now is the time for students to apply these concepts in a real world situation.

Two important questions students should continually ask themselves/partners about the website are:

- 1. Who is the target audience?
- 2. What do I want the site to accomplish?

With these key questions foremost in their mind, in small groups of three, students will be assigned a

product or service business and do the following:

- Brainstorm a name for their website
- Brainstorm key words to use to give the web site a good position in the search engine
- Using three different search engines, enter the key words to see what develops
- Consider the proper positioning of these key words on the website

Each small group will elect a representative to present their findings to the class. Class discussion will follow to identity the most effective key terms that generate the proper positioning on the website. Direct instruction with guiding questions will be utilized to supplement student findings to ensure that all essential concepts are addressed.

Timeline: 3 blocks (86 minutes)

Key vocabulary: positioning, cross marketing, freemium, url, chain-yank award, title element, meta data, robots, pay-per click, back-end management, server, bandwidth, Structured Query Language Resources: Xara software, I-Pads, computers, Glencoe-E-commerce, the Non-Designer's web book

Common Learning Experiences:

Activities highlighting design principles in websites; such as, evaluating the use of design principles in existing websites and compare/contrast tasks that compare the effectiveness of different placement of navigation tools

Exploration of factors affecting website optimization

Introduction to freemium

Online tutorials focused on the functions of Xara software

Utilize Xara Graphic Organizer (flowchart) to design the basic layout of a website

Presentation of Xara assignments

Common assessments:

Student group work assessed using School Wide Rubric #2: Working collaboratively

Xara presentation assessed using School Wide Rubric #3: Effectively communicating for a variety of purposes school wide rubric

Elements of good design activities assessed using the School- Wide Rubric #1: Research tools to access and evaluate and document information and Rubric #4: Critical Analysis/Thinking

Tracing layer using Xara Graphic Studio project assessed using Rubric #5: Problem Solving

Teacher Notes:

Use the SmartBoard to create two lists about effective website design. Show correlation between the two lists. As we continue with the actual web page (s), keep the list of features of good web design in a visible area in the classroom. Keep in mind the following:

- 1. What creates a look of quality and sophistication?
- 2. What does a lack of quality convey to potential customers? (lack of trust)

Create rubric based on page 116; *The Non-Designer's Web Book*

- 1. P Proximity
 - A Alignment
 - **R-** Repetition
 - **C** contrast

Significant task 3 teacher notes: Focus on the following: Google adwords, freemium, marketing/E-commerce

When testing for errors, make sure to check the validity of external and internal links, find missing files, which graphics are located in the wrong place and tells which links are broken. If possible, check the site using various browsers, on different platforms with graphics turned off, and with variety of default fonts and point sizes.

Wrap up the activities /chapter by telling students one of the key things people running web-site stores need to know is marketing, and that without effective marketing, they cannot succeed.

Rubrics: Have students place the school wide rubrics in a separate area of their Interactive Notebook to allow easy access when needed.

Windsor Public Schools Curriculum Map for the Secondary Level Introduction to Electronic Commerce

Name of the Unit 3: E-Commerce Marketing	Length of the unit: 14 blocks (86 minutes)		
Purpose of the Unit: This unit introduces students to various aspects of marketing on the Internet.			

Students will have an understanding that marketing, with an emphasis on customer service, is an important aspect of e-commerce and critical to building an online brand.

Business Standards:

Business & Finance Technology Education Frameworks Entrepreneurship

http://www.sde.ct.gov/sde/lib/sde/pdf/deps/career/business/Entrepreneurship_Aligned_ELA_CCSS.pdf

Common Core State Standards Addressed in the unit:

- 10.W.2: **Text Types and** Purposes Writing Informative/explanatory text to examine and convey complex ideas
- 10.W.7: **Research to Build and Present Knowledge** Conduct short as well as more sustained research projects to answer questions (including self-generated questions) or solve a problem, narrow or broaden the inquiry when appropriate, demonstrating understanding of the subject under investigation
- 10.W.8: **Research to Build and Present Knowledge** Gather relevant information from multiple authoritative print and digital sources
- 10.SL.1: **Comprehension and Collaboration** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on topics, texts and issues
- 10.SL.4: **Presentation of Knowledge and Ideas** Present information findings and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance and style are appropriate to purpose, audience and tasks.
- 10.L.1: **Conventions of Standard English -** Demonstrate command of the conventions of standard English and usage when writing or speaking
- 10.L.4: **Vocabulary Acquisition and Use-** Determine or clarify the meaning of unknown and multiple meaning words and phrases based on reading and context

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Marketing executives rely on data to make decisions.

The relationship between buyers and sellers is personalized and dynamic.

Essential Questions:

Do all companies need a web presence?

Can an e-commerce business effectively compete with an established brick and mortar store?

Students will know:

- The website is an important foundational online asset
- Content that attracts and engages customers need to be broad, searchable, relevant and geared to do just what it says, "attract and engage"
- It is important to clearly identify the target market and conduct research to find the best ways to reach your audience

Students will be able to:

- Use Xara Graphic software to create and e-zine
- Create a survey using primary and secondary data
- Use their knowledge of marketing to create an infomercial

Significant task 1:

Fundamentals of Internet Marketing:

To help students access their prior knowledge on marketing, they will be asked to recall marketing/promotional strategies that were successful in influencing a purchasing decision. In a whole group, students will discuss which strategies worked and why, and which did not. During the discussion, students will use the SmartBoard to generate a master list of the pros and cons of each strategy.

In small groups of four, students will review the strategies they identified and note how they apply to a product assigned to them by the teacher; such as apparel, sporting goods, etc. Each group also will identify the product's target market, target segment, and product mix and determine into what market niche the product will fit.

As a culminating activity, each small group will create a multimedia presentation that illustrates their knowledge of marketing concepts and how they apply to their product. Students will present their multimedia presentations, using technologies such as PowerPoint or PREZI to the class and a question and answer session will follow each presentation.

Timeline: 3 blocks (86 minutes)

Key vocabulary:

Marketing, marketing mix, market segments, cross selling, promotion, product mix, personalization, e-mail marketing, permission marketing, niche sales forecast, SWOT analysis, mission statement, attraction, engagement, leads, E-CRM, e-tailers, rich media

Resources: Xara software, I-Pads, computers, Glencoe-E-commerce

Significant task 2:

Creating an e-zine, part I:

The world-wide reach of the Internet has made it a place rich with marketing opportunities. At the same time, the sheer popularity of the internet and social media has made it possible for an e-commerce site to drop into obscurity if not marketed carefully. The purpose of this significant task is for students to recognize the impact marketing has on their e-commerce business.

In small groups of three, students will research several teacher approved e-zines, focusing on those that businesses have created, and compare and contrast features. Individually, students will complete the top hat graphic organizer and as a whole group discuss the features that created the most impact from a potential buyer's perspective.

In their original small groups, students will use their knowledge of e-zine features to design the first draft of the e-zine cover, following teacher- provided desktop publishing and Xara Graphics design principles. With the use of the SmartBoard, students will critique each other's design, based on Xara Graphics design principles. Each group will then revise their e-zine cover, and one will be selected to represent the e-commerce class.

Timeline: 6 blocks (86 minutes)

Key vocabulary:

Mission statement, sales forecast, SWOT analysis, attraction, lead, engagement, capture, nurture, convert, measure, google analytics, E-CRM, e-tailers

Resources: Xara software, I-Pads, computers, Glencoe-E-commerce

Common Learning Experiences:

Direct instruction on using a video camera and taking effective video
Vocabulary instruction; including word wall and non-linguistic representation strategies
Guided instruction introducing e-zines
Collaborative work to create an e-zine cover
Online tutorials on Xara Graphic Organizer
Presentation of Xara assignments

Common assessments:

Fundamentals of internet marketing multimedia presentation assessed using Rubric #3: Effectively Communicating for a variety of purposes school wide rubric.

Xara Graphics Design Principles- E-zine cover assignment assessed using teacher -created rubric on design principles and School Wide Rubric #4: Critical Analysis/Thinking.

Infomercial (Multimedia culminating project): School Wide Rubrics #3: Effectively Communicating for a variety of purposes school wide rubric and Rubric 2: Work Collaboratively.

Teacher notes:

Wrap up the activities /chapter by telling students one of the key things people running web-site stores need to know is marketing, and that without effective marketing, they cannot succeed.

Differentiated Instructions: Some students will work on quickly. These students may be assigned independent projects which will be provided by the teacher, with the assistance of the district technology coordinator. For students who require additional time and/or instruction, the teacher will utilize peer helpers, and give students multiple opportunities to practice and fine tune their skills, allow extra time to complete assignments and test as well modify assignments and tests.

With the huge spike in Smartphones, it is extremely important to add a mobile component to the website.

Compare Nike website with Nuala's . Nike's site is aimed at people with an active lifestyles whereas Nualas' site is aimed at people with la more relaxed, leisurely lifestyle. (product mix)

E-zine cover must include: logo, tag line, graphics, publication date, etc.

Significant task 4: With assistance from advanced students as well as district technology coordinator, students will upload approved videos, podcasts, and Xara images on website.

Windsor Public Schools Curriculum Map for the Secondary Level Introduction to Electronic Commerce

Name of the Unit 4: **Building a Career in E-Commerce**

Length of the unit: 7 blocks (86 minutes)

Purpose of the Unit: Students will explore career opportunities within the technology industry. The growth of the internet and the rapid growth of electronic commerce have increased opportunities in careers specializing in developing and maintaining websites, creating and maintaining corporate intranets, and many other careers. Job opportunities in these career fields have the potential to increase exponentially in the years to come.

Common Core State Standards Addressed in the unit:

- <u>CCSS.ELA.SL.11-12.4</u>. Present information, findings, and supporting evidence, conveying a clear
 and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing
 perspectives are addressed, and the organization, development, substance, and style are appropriate
 to purpose, audience, and a range of formal and informal tasks.
- CCSS.ELA.SL.11-12.5. Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
- <u>CCSS.ELA.SL.11-12.6</u>. Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.

Business Standards addressed in this unit:

Business & Finance Technology Education Frameworks Entrepreneurship http://www.sde.ct.gov/sde/lib/sde/pdf/deps/career/business/Entrepreneurship_Aligned_ELA_CCSS.p df

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The career you choose will be a major factor in determining your lifestyle.

Many popular careers of today didn't exist 10 years ago.

Keep an open as you plan your future.

Essential Questions:

How might emerging technologies impact your chosen career?

How can you plan for a career in an occupation that might not exist today?

Students will know:

- Traits employers want in e-commerce workers
- Preparation needed for e-commerce careers
- Career strategies for finding e-commerce jobs
- Training and education necessary for a career in e-commerce

Students will be able to:

- Craft S.M.A.R.T goals
- Create an e-resume and a digital portfolio
- Select a career strategy in e-commerce jobs

Significant Task #1:

Preparing for a career in e-commerce:.

The purpose of this significant task is to increase students' awareness of e-commerce careers that interest them and to think of that job in terms of career advancement goals.

As an introduction, students will brainstorm e-commerce careers in which they are interested and want to explore. Each student then will select a career from the list and graphically plot a course leading to successful placement in the area. Factors to be included are: when to begin, specific education needed, helpful career strategies, entry-level and related early jobs to seek. Each student will extend the activity by using Xara Graphic organizer (Flowchart) to create a career timeline storyboard, then present to the class.

Individually students will use the information gathered to create an e-resumé and a cover letter for their chosen career, utilizing the writing process rules: Write, Edit, Revise, and Final Draft. In groups of two, students will peer edit each other's e-resumé and cover letter, using the e-resume writing rubric. Once work is edited and revised, a finalized copy of their e-resumé will be added to their digital portfolios.

Differentiation: Electronic visuals could selected from the following: slide presentation, video presentation, electronic collage, visual organizer, etc.

Timeline: 4 blocks (86 minutes)

Key Vocabulary: jobs, careers, job shadowing, internships, mentorship, OSHA, multimedia, Occupational Outlook Handbook, digital portfolio, electronic resume, job shadowing, , multimedia, Occupational Safety and Health Administration, ergonomics

Common Learning Experiences:

Introduction to S.M.A.R.T goals

Creation of professional S.M.A.R.T. goals

Practice in using Xara Graphic Organizer

Brainstorming a list of careers related to e-commerce

Researching a career path within e-commerce

Peer editing of resume and cover letter

e-Resumé creation

Vocabulary instruction using word wall and non-linguistic representation strategies

Using Xara Graphic Organizer (flowchart) to create a career timeline

Common assessments:

S.M.A.R.T goal assignment relating to their E-commerce occupation assessed with teacher-created rubric.

Researching careers in E-commerce assessed using rubric #1: Using research tools to access, evaluate and document information.

E-Resumé assessed using teacher-created rubric.

Windsor Public Schools Curriculum Map Aviation and Flight BOE Approved Date

Purpose of the Course: Students will be introduced to a wide range of topics in the exciting field of aviation. Areas of study will include historical events in aviation, the theory of flight, the flight environment, aviation safety, aerodynamics, and aircraft performance. The physics of flight and navigation principles will be explored, and students will apply their knowledge as they learn to design and fly an airplane through the use of flight simulators. Career opportunities such as pilots, flight attendants, technicians, and air traffic controllers will be explored as students are provided with a tour of an aviation facility. Due to the integration of STEM subjects, this course can be applied as an optional credit in science or technology.

Grade Level: 9-12

Course Name: Aviation and Flight

Name of the Unit: History of Flight Unit 1

Length of the Unit: 9 blocks (86 minutes)

Purpose of the Unit: Introduce students to the evolution of aircraft design and acquaint them with the uses of aviation and its impact on modern life.

Common Core State Standards Addressed In The Unit:

<u>CCSS.ELA-Literacy.RST.11-12.1</u> Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.

<u>CCSS.ELA-Literacy.RST.11-12.2</u> Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

<u>CCSS.ELA-Literacy.RST.11-12.7</u> Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

<u>CCSS.ELA-Literacy.CCRA.W.4</u> Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

<u>CCSS.ELA-Literacy.SL.11-12.5</u> Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

Connecticut Technology Education Standards addressed in this Unit: http://www.sde.ct.gov/sde/lib/sde/pdf/deps/career/TE Standards 09 12.pdf <u>EKS.05</u> Employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate).

ENG.02.05 Brainstorm possible solutions

ENG.05.04 Actively contribute to a team project.

ENG.05.05 Identify characteristics of an effective design team

TRAN.01.03 Predict the social, economic and environmental impacts of existing and evolving transportation technology

Big Ideas:

Achieving mastery over flight has been a constant struggle throughout human history.

Aircraft design is driven by both technological innovation and the need for new functions.

The aviation Industry has economic, social, political, and environmental effects.

Essential Questions:

What do we learn from failure?

How far should aviation research progress?

What will be the future impact of aviation design?

Students will know:

- Relationships between aircraft form and function
- Needs and innovations that drove aviation history
- Significant people in aviation history
- The social, political, economic and environmental impact of aircraft

Students will be able to:

- Organize the sequence of events that led to modern aviation
- Gather, analyze, and organize multiple sources
- Synthesize information about a historical event across multiple sources
- Explain and connect ideas using supporting evidence to present a major historical event to the class

Significant Task 1:

This unit will be introduced through a class lecture and web- based video clips that demonstrate the major innovations and significant events throughout aviation history. Examples of the videos that will be presented include; *The Magic of Aviation* presented by the Boeing Corporation, and *The History of American Aviation* (You Tube video from US Military Videos). Following this introduction, students will work in small groups as they engage in two lab activities that represent milestone discoveries of flight. The labs will consist of designing and constructing flying devices that utilize similar concepts of early aviation pioneers.

Lab1 will incorporate an activity that involves the construction of a "lighter than air" vehicle such as a balloon. An example of this type of activity is *Hot Air Ballooning* from the EAA Air Academy.

Lab 2 will incorporate an activity that involves the construction of a winged aircraft. An example of this type activity is the construction of the Wright Brothers glider from http://www.grc.nasa.gov/.

For each lab activity, students will work in their groups and follow a sequence of activities:

- Create their model
- Make predictions regarding the performance of the model
- Test the model
- Evaluate the accuracy of their predictions
- Classroom presentation of findings

Timeline: 6 blocks (86 minutes)

Key vocabulary:

innovation, Bernoulli's Principle, fuselage, empennage, aspect ratio, cambered airfoil

Resources:

FAA Website - http://www.faa.gov/

EAA Academy Website - http://www.eaa.org/

NASA Website - http://www.nasa.gov/

Common Learning Experiences:

- Videos on the history of flight. (http://www.faa.gov/ is a great resource)
- Design and construction of a "lighter than air" vehicle and a winged vehicle
- Model testing and analysis of data
- Vocabulary instruction
- Computer-based research
- Brainstorming sessions to foster clarity and creativity
- Student lead class discussion based on the significant event in aviation they researched
- Student presentation of a significant event that led to impactful change in modern aviation.
- Vocabulary lessons utilizing word walls, graphic organizers, and non-linguistic vocabulary strategies

Common Assessments:

Research project scored using school-wide rubric 1 – Use technological and traditional

- research tools to access and evaluate information ethically
- Team activities scored using school-wide rubric 2 Works collaboratively to accomplish group goals
- Presentations scored utilizing school-wide rubric 3 Effectively communicates Information for a variety of purposes
- Unit quiz

Teacher Notes:

- Activities and tasks are designed to provide quality feedback that will allow for an
 increase in the effectiveness of learning activities as the course progresses. Students
 are being asked to perform and evaluate lower level activities in order to prepare them
 for the progressively higher level learning that becomes necessary later in the course.
 Any struggles that are identified during this Unit will be properly addressed in order to
 provide students with the assistance needed for success.
- The activities and tasks in this unit are completed in groups; this can allow for the development of individuals through peer assistance. The design is to identify students that may have prior knowledge, and display the initiative to help others. These students can become an asset during the higher level activities.
- Activities should include different degrees of difficulty in order to properly differentiate lessons. There should also be additional activities prepared in order to provide students that complete assignments in a more rapid timeframe, with material that can maintain their involvement, and continue their development.

Windsor Public Schools Curriculum Map Aviation and Flight BOE Approved Date

Grade Level: 9-12

Course Name: Aviation and Flight

Name of the Unit: Principles and Theory of Flight Unit 2

Length of the Unit: 10 Blocks (86 minutes)

Purpose of the Unit: To provide students with an understanding of basic aerodynamic principles and the four forces of flight (lift, weight, thrust, drag).

Common Core State Standards Addressed In The Unit:

<u>CCSS.ELA-LITERACY.RST.11-12.1</u> Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.

<u>CCSS.ELA-LITERACY.RST.11-12.2</u> Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

<u>CCSS.ELA-LITERACY.RST.11-12.3</u> Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

<u>CCSS.ELA-LITERACY.RST.11-12.7</u> Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

<u>CCSS.ELA-LITERACY.RST.11-12.8</u> Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.

<u>CCSS.ELA-LITERACY.RST.11-12.9</u> Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

CT Technology Education Standards:

ENG.02.06 Analyze and research between alternate solutions.

ENG.05.04 Actively contribute to a team project.

ENG.02.08 Build a prototype from plans.

ENG.02.09 Test a prototype.

ENG.02.10 Redesign prototypes.

ENG.02.11 Communicate processes and results.

Big Ideas:

Precise calculations must be met to achieve flight.

The laws of physics guide all aircraft design.

All parts of an airplane's design serve a purpose.

Essential Questions:

Have Newton's laws remained relevant in the era of technology?

Why do some theories remain a driving force in modern research and development while others do not?

How could science be used to enhance aviation technology?

Students Will Know:

- Newton's Laws of inertia, acceleration, and action / reaction
- The two types of motion
- Bernoulli's Principle
- The four forces of flight. (lift, weight, thrust, and drag)

Students will be able to:

- Explain motion, velocity, and acceleration
- Identify the scientific principles that affect lift and drag
- Calculate aerodynamic forces using the lift and drag equations
- Prove the four forces of flight through hands-on activities

Significant Task 1:

This unit will begin with a series of teacher- led activities on Newton's three Laws of Motion. For each demonstration (such as, *air powered mass* from http://www.nasa.gov/), students will first predict the outcome, observe the results, and then analyze the accuracy of their prediction.

Following a presentation on Bernoulli's Principle, each student will engage in hands- on activities (such as Bernoulli on a straw from http://members.gocivilairpatrol.com/), that apply the concept to flight. As a culminating activity, students will work in teams of 2 in order to create a media presentation explaining how Bernoulli's Principle and Newton's Law of Motion work together to create flight. Students will be encourage to choose from a variety of media options (PowerPoint, PREZI, Imovie) to develop a 5 – 10 minute demonstration to share with the class.

Timeline: 6 - 86 minute blocks

Key vocabulary: airflow, pressure, kinetic energy, potential energy, venture, motion, force,

acceleration, velocity, inertia, vector

Resources:

FAA Website - http://www.faa.gov/

EAA Academy Website - http://www.eaa.org/

NASA Website - http://www.nasa.gov/

<u>Civil Air Patrol Website - http://members.gocivilairpatrol.com/</u>

Common Learning Experiences:

- Internet research on Newton's Laws of Motion and Bernoulli's Principle
- Student outcome predictions
- Student created demonstrations on Newton's three Laws of Motion
- Group work on flight presentations
- Conducting basic aerodynamic calculations
- Vocabulary lessons utilizing word walls, graphic organizers, and non-linguistic vocabulary strategies

Common Assessments:

- Student prediction sheets will be scored utilizing school-wide rubric 1 Use technological and traditional research tools to access and evaluate information ethically
- Presentations scored utilizing school-wide rubric 3 Effectively communicates Information for a variety of purposes
- Aerodynamic calculations scored by percent of correct answers

Teacher Notes:

- Differentiation is achieved by providing students with designs that incorporate a range
 of difficulty. The expectations for each student should be differentiated appropriately,
 yet all students must be challenged in order to achieve their highest level of success.
- Students will present demonstrations on Newton's Law after their predictions as they develop an understanding of the principles involved.

Windsor Public Schools Curriculum Map Aviation and Flight BOE Approved Date

Grade Level: 9-12

Course Name: Aviation and Flight

Name of the Unit: Aerodynamics Unit 3

Length of the Unit: 11 Blocks (86 minutes)

Purpose of the Unit: To give students an understanding of how the principles of Newton's law and Bernoulli's principle apply to an airfoil.

Common Core State Standards Addressed In The Unit:

<u>CCSS.ELA-LITERACY.RST.11-12.1</u> Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.

<u>CCSS.ELA-LITERACY.RST.11-12.2</u> Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

<u>CCSS.ELA-LITERACY.RST.11-12.3</u> Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

<u>CCSS.ELA-LITERACY.RST.11-12.9</u> Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

CT Technology Education Standards:

ENG.02.06 Analyze and research between alternate solutions.

ENG.02.08 Build a prototype from plans.

ENG.02.09 Test a prototype.

ENG.02.10 Redesign prototypes.

ENG.02.11 Communicate processes and results.

TRAN.02.01 Define and properly use common transportation technology terminology (e.g. combustion. pathways. velocity. vehicle. mode. payload. and terminal)

Big Ideas:

The aerodynamics of flight are based in Physics.

The air environment directly affects airfoil performance.

Airfoil design varies based on the function of an aircraft.

Essential Questions:

In what ways does modern technology assist in the design of air foils?

How will continuously changing environmental factors shift aircraft design?

In what ways can aerospace create a more efficient airplane design?

Students Will Know:

- Drag, thrust, weight, and lift are forces that interact during all aspects of flight
- The sections of an airfoil
- The angle of attack changes the way the air functions around the aircraft
- Parasitic drag is a force that is incorporated into aircraft design while induced drag must be created to control an airplane
- The three axes of an aircraft
- How to incorporate the design process in the development of a prototype

Students will be able to:

- Explain the effect drag, thrust, weight, and lift during flight
- Label the leading edge, trailing edge, mean camber line, and chord line sections of an airfoil
- Graph how the angle of attack will affect an aircraft in flight
- Design, test, and evaluate an airfoil
- Calculate the lift/drag ratio of an aircraft design
- Display knowledge of roll, pitch, and yaw during a simulated flight

Significant Task 1:

Following an introduction to the interaction between air pressure and airfoil design, small groups of students will take part in station-based activities demonstrating the impact of lift and drag on a variety of airfoil designs. Following completion of the stations, each student will utilize the design process to create an initial airfoil design, and then test its ability function against drag, thrust, and lift. Following testing, each student will revise their design and create a 3 dimensional airfoil section made of a material like Styrofoam to test in a wind tunnel experiment.

Timeline: 4 – 86 minute blocks

Key vocabulary: airfoil, air pressure, forces, coefficient of lift

Resources: FAA Website - http://www.faa.gov/ EAA Academy Website - http://www.eaa.org/

NASA Website - http://www.nasa.gov/

Autodesk Flow Design Tutorials

Significant Task 2:

Following an introduction addressing how an aircraft is controlled in flight, each student will begin a series of flight maneuvers on a simulator; based on roll, pitch, and yaw (the three axes of flight). They will follow a set pattern of maneuvers as they engage in flight from one specific set point to another, and record their results based on altitude, attitude, and heading. During this exercise, their recorded data will familiarize them with basic flight instrumentation, and how to interpret actual flight conditions. The instrumentation that the students will become familiar with includes, airspeed, altitude, attitude, heading indicator, and all engine operating conditions.

Timeline: 3 – 86 minute Blocks

Key vocabulary: angle of attack, leading edge, trailing edge, mean camber line, chord line,

airflow, drag, roll, pitch, yaw

Resources: : FAA Website - http://www.faa.gov/ EAA Academy Website - http://www.eaa.org/

NASA Website - http://www.nasa.gov/ X Plane 9 Flight simulator tutorials

Common Learning Experiences:

- Label sections of an airfoil
- Calculate the Coefficient of Lift on airfoil design
- Airfoil construction
- Wind tunnel testing and data collection
- Flight simulator training exercises
- Vocabulary lessons utilizing word walls, graphic organizers, and non-linguistic vocabulary strategies

Common Assessments, including the end of unit summative assessment:

- Airfoil construction evaluation
- Airfoil testing data sheet
- Flight simulator data sheet
- Compare and contrast activity scored using school-wide rubric 1 Use technological and traditional research tools to access and evaluate information ethically
- Airfoil design activity will be scored using school-wide rubric 4 Critical analysis/thinking

Teacher Notes:

- This unit is designed to introduce students to how optimum lift can be calculated and achieved. It is important that they gain a firm understanding of design before they progress through each phase.
- Differentiation is achieved by providing students with designs that incorporate a range
 of difficulty. The expectations for each student should be differentiated appropriately,
 yet all students must be challenged in order to achieve their highest level of success.
- The flight simulator exercises can be regulated for each student, and new challenges will be provided for maximum effect.

Windsor Public Schools Curriculum Map Aviation and Flight BOE Approved Date

Grade Level: 9-12

Course Name: Aviation and Flight

Name of the Unit: Aircraft and Performance Unit 4

Length of the Unit: 14 Blocks (86 minutes)

Purpose of the Unit: The purpose of this unit is for students to gain knowledge of aircraft design features, aerodynamics during flight maneuvers, and aircraft performance under different load factors.

Common Core State Standards Addressed In The Unit:

<u>CCSS.ELA-LITERACY.RST.11-12.1</u> Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.

<u>CCSS.ELA-LITERACY.RST.11-12.2</u> Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

<u>CCSS.ELA-LITERACY.RST.11-12.3</u> Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

<u>CCSS.ELA-LITERACY.RST.11-12.9</u> Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

CT Technology Education Standards:

ENG.02.06 Analyze and research between alternate solutions.

EKS.05.04 Create ideas, proposals, and solutions to problems

ENG.02.08 Build a prototype from plans.

ENG.02.09 Test a prototype.

ENG.02.10 Redesign prototypes.

ENG.02.11 Communicate processes and results.

Big Ideas:

The design process is utilized in a multiple of industries for research and development.

Aerodynamic forces change during different flight maneuvers.

Precise calculations are necessary in order to achieve aircraft balance and stability.

Weather has a major impact on flight.

Essential Questions:

What developments in aviation will have the most impact in our global economy?

Can design changes negate the effects of weather on flight?

Students will know:

- Stability is a major factor in aircraft design
- Causes of spiral instability
- The aerodynamic forces applied during turns, descents, climbs, and stalls
- Load factors are designed into an aircraft
- Weight and balance calculations for safe flight
- Primary and secondary flight controls
- Normal/abnormal readings on instrumentation during flight

Students will be able to:

- Design aircraft features with functional stability
- Explain aerodynamic forces during flight maneuvers
- Calculate the weight and balance data of an aircraft
- Design an aircraft with a specific function; such as cargo, passenger
- Construct a prototype of their design and perform wind tunnel testing
- Analyze, evaluate, and create improved designs; based on data acquisition
- Read instrumentation during flight
- Perform a series of flight maneuvers on a simulator

Significant Task 1:

This unit will be introduced through an interactive presentation on an aircraft design. Working in small groups of 2-3, students will design an aircraft that includes a specific airfoil (previously tested), and a plan for their design that includes function. Each team member will be responsible for a specific set of operations during the design and presentation process. Each group will complete a prototype design using software and present their idea for initial approval. First, each group will present their proposal to the class. Proposals will be evaluated by the class and then approved for prototype construction by the teacher.

Timeline: 5 - 86 minute Blocks

Key vocabulary: prototype, brainstorm, solution, vector, static stability, dynamic stability

Resources: FAA Website - http://www.faa.gov/

Science Buddies Website - http://www.sciencebuddies.org/

NASA Website - http://www.nasa.gov/

Design Software Tutorials

Significant Task 2:

Following an introduction to the design process, students will perform initial exercises that will familiarize them with the equipment to be used for creating a prototype. Then, in teams of 2-3, they will begin the process of construction. Upon completion of their prototypes, students will make predictions on the aerodynamic efficiency of their aircraft, and then perform a series of tests in a wind tunnel. Teams will analyze data, and then perform minor adjustments to improve their prototype. Then, as individuals, students will evaluate their team's results and create a summarized report on the project. The report will include data research, requirements, brainstormed solutions, development work, prototype construction/testing, and redesign. (based in the design process)

As a culminating activity, students will test their aircraft design in a series of maneuvers under varying conditions in a flight simulator.

Timeline: 6 – 86 minute blocks

Key vocabulary: attitude indicator, airspeed in knots, empennage, aileron, elevator, flaps

Resources: FAA Website - http://www.faa.gov/

Science Buddies Website - http://www.sciencebuddies.org/

NASA Website - http://www.nasa.gov/wind Tunnel/Data Acquisition Tutorials

Common Learning Experiences:

- Brainstorm a design proposal of an aircraft with a specific function
- Create a design with industry level software with premade designs from which to choose
- Utilize media resources (PowerPoint, PREZI) in order to present a design proposal
- Construction of a prototype utilizing modeling materials
- Efficient data acquisition and evaluation
- Test and redesign techniques that confirm improvements in design
- Full flight simulation exercises with changes in environmental conditions
- Vocabulary lessons utilizing word walls, graphic organizers, and non-linguistic vocabulary strategies

Common Assessments:

- Initial computer design scored using school-wide rubric 1 Use technological and traditional research tools to access and evaluate information ethically
- Presentations scored using school-wide rubric 3 Effectively communicates information for a variety of purpose
- Prototype construction scored using school-wide rubric 4 Critical analysis/thinking
- Flight simulation scored with a teacher-created flight simulator data sheet

Teacher Notes:

 During prototype design, students are to be assigned certain responsibilities, and scored appropriately with the same rubric. Examples of such areas of concentration would be; wing design, fuselage design, weight and balance calculations.
 Differentiation can be implemented here as the degree of difficulty differs in each area, yet all team members are striving to achieve the same goal.

- Once the designs are approved, there must be a solid time frame and schedule for prototype construction. Teacher observation will be important as some teams will complete the process quicker than others, and may begin their construction with the tools and machinery available.
- During this unit, students may go on a field trip to the New England Air Museum for an Aviator Day. The day would consist of a series of preplanned activities that would be performed and scored. The winning student would be named Aviator of the Day.

Windsor Public Schools Curriculum Map for the Secondary Level English 12: The Journey and Beyond BOE Approval Date

Purpose of the Course:

This course is designed to strengthen students' critical reading and writing skills. Students will prepare for college-level work by studying complex literary texts and contemporary non-fiction selections. In completing the requirements for this course, students will prepare a comprehensive reading and writing project that incorporates research, revision, and presentation. Students will also be responsible for completing several summative writing assessments, in which they will learn to plan, draft, and proofread a formal, multi-page document.

Name of the Unit:	Length of the unit:
UNIT 1- The Universal Journey	12-14 Blocks

Purpose of the Unit:

Students will examine the true purpose of "the human journey" and how it is impacted by both individual and societal values.

Common Core State Standards Addressed in the unit: (Provide the link to the specific standards.)

RL.11-12.1

Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.

RI.11-12.3

Analyze a complex set of ideas or sequence of events;

Explain how specific individuals, ideas, or events interact and develop over the course of the text.

SL.11-12.1b

Work with peers to promote civil, democratic discussions and decision-making,

Set clear goals and deadlines and establish individual roles as needed.

W.11-12.2f

Provide a concluding statement or section that follows from and supports the information or explanation presented.

Big Ideas:

- Individuals undergo emotional, physical and/or spiritual journeys to find their purpose in life, which according to classic philosophers, is a life filled with either knowledge, virtue, or happiness.
- Societal values make individuals question their personal values when those values conflict/interfere with the idea of the "greater good" and what society deems as acceptable.
- When a person embarks on a journey of selfdiscovery, the ideal end result is a state of self-actualization.
- The journey leads to a transformation of our individual thinking about who we are.

Essential Questions:

- What is the true purpose of "the human journey"?
- How do an individual's values conflict with society's?
- To what degree does "the journey" help us to develop an understanding of ourselves?

Students will know:

- "the human journey" and "the purpose of life" are illustrated through literature;
- the importance of acknowledging multiple points-of-view regarding the meaning of life;
- the importance of understanding "the human journey" and "the purpose of life" within the study of literature.

Refer to the links below:

Depth of Knowledge LA

Students will be able to:

- 1. Determine themes and central ideas, and be able to analyze various texts.
- 2. Support analysis, reflection, and research with appropriate text.
- 3. Write effective arguments using sufficient evidence.
- 4. Identify a narrator's or author's point of view
- 5. Define these literary terms:
 - lens
 - artifact
 - self-actualization
 - societal values
 - impetus
 - conflict
 - virtue
 - purpose
 - analysis
 - inference
 - personal journey

Significant task 1: Annotating and Comparing Excerpts/ Written Response to Essential Question 1

In a whole class setting, the teacher should review various annotating techniques including: <u>Text Coding</u>, <u>Questioning</u>, <u>Basic Questioning</u>, and/or <u>Reflecting</u>. (Models of these types of annotations should be provided to students.)

While continuing in a whole class arrangement, students will begin this unit by reading, annotating and comparing three excerpted texts (using Interrupted Style is highly recommended) to determine common themes associated with the unit. Recommended texts that are aligned with the unit theme are: "The Journey" (Poem), an excerpt from "Notes of a Native Son" (Non-Fiction), and "The World is Too Much With Us" (Poem). The teacher should choose a variety of texts with which to work.

After reading and annotating these excerpts, students will engage in a guided discussion in groups of 3-4 to compile evidence of common themes among the excerpts, specifically regarding the concepts of "purpose" and "journey." Teachers should assist students by using these questions to guide the discussion; these questions can be printed on index cards and distributed to each group:

- What are some of the obstacles we face on our journey?
- Why is the journey important? What do we hope to accomplish?
- What elements of the artifacts speak to your personal journey?

To finally demonstrate an understanding of the essential question "What is the true purpose of the human journey?" students will independently write a 1-2 page Big Idea Response in which they further explore the relevance of the concepts "purpose" and "journey." In this writing assignment, students must support or refute the idea that "Individuals undergo an emotional, physical, and/or spiritual journey to find their purpose in life." Students will ultimately apply this knowledge to their reading of the core text(s). The teacher may choose to repeat this task during the reading of the core text(s) as a way to check for understanding. The 5 Level Rubric and/or the 21st Century Rubrics will be used to grade this writing response.

A possible modification of this task is to write the Big Idea Response as a Mini-Essay of a single paragraph, or to write it as a whole class to model the expectations of essay writing.

Timeline: 5 Blocks

Key vocabulary:

- theme
- central idea
- purpose
- journey

Resources:

- "The Journey" (Mary Oliver)
- "The World is Too Much With Us" (William Wordsworth)
- excerpts from Walden ("Where I Lived and What I Lived For") (Henry David Thoreau)
- excerpts from *The Norton Sampler*
- Engaging Ideas (John Bean)
- all hyperlinked resources
- "Notes of a Native Son" James Baldwin

Significant task 2: Text Tracking

The teacher will review the difference between analysis and inference with the students using a New American Lecture, modeling, and/or independent practice. The teacher may also introduce key vocabulary using this lecture style and may choose to incorporate vocabulary in a series of initiating prompts. In introducing the concept of the word "purpose"- for example- the teacher will begin by asking the class, "Why are you here today?" In the ensuing class discussion, the teacher will lead students to the larger question of the human purpose for existence, thus leading students to understand this term.

Before students begin reading the teacher will lead a direct instruction lesson on the key vocabulary listed below. Students will apply the key vocabulary in their journal entries to the character in the novel.

Students will then keep a <u>Dialectical Journal</u>, <u>Key Line Journal</u>, or any other <u>Journaling Options</u> of their findings from the core text(s). (The teacher will provide a model of these types of journals with a sample text before students begin reading.) The teacher will establish specific expectations for the number of required entries. The teacher can choose to use a limited amount of class time for reading and journaling, or this can be accomplished as a whole class. Ideally, this task should be accomplished independently. At this point in their high school careers, students should have a great deal of expertise with journaling. Consider other ideas for <u>Tracking Reading</u> from John Bean's Engaging Ideas.

The dialectical journals will be used to help students compile evidence for the upcoming Lens Essay. The journals can also be used to facilitate small group or whole class discussion about the essential questions.

Timeline: 5 Blocks

Key vocabulary:

- analysis
- inference
- self-actualization
- societal values
- impetus
- conflict
- virtue
- purpose
- personal journey

Resources:

- *Into the Wild* (Jon Krakauer)
- The Kite Runner (Khaled Hosseini)
- Frankenstein (Mary Shelley)
- One Flew Over the Cuckoo's Nest (Ken Kesey)
- I am the Messenger (Markus Zusak)
- Hole in My Life (Jack Gantos)
- Breaking Night (Liz Murray)
- The Other Wes Moore (Wes Moore)
- *The Picture of Dorian Gray* (Oscar Wilde)
- Getting Away with Murder (Christopher E. Crowe)
- The Road (Cormac McCarthy)

Significant task 3: Lens Summary or Capstone Pre-Writing

The teacher will provide a model of a <u>10 Percent Summary</u> and will explain its purpose in the writing process. The teacher will emphasize the importance of including supporting text in the summary.

Then, students will read article about "Maslow's Hierarchy of Needs," and annotate and complete a 10 Percent Summary. This can be used as preparation for the unit post-assessment. The teacher will assign three Focus Correction Areas to use as a customized grading rubric for the assignment. The students and teacher can collaboratively establish which three areas will be assessed. The key vocabulary that is found within the Maslow document is listed below. The key vocabulary must be used when writing the summary.

OR

Students will complete <u>Capstone Pre-Writing</u> by writing a <u>Mini-Explanatory Essay</u> on a character in a core text from this unit. They will describe how this character embodies the struggles and/or triumphs of the human experience. The <u>5-Level Rubric</u> will be used. From this assignment, students can begin considering possible author of interest for their capstone project. This assessment could also serve as a unit post-assessment (see below). By the end of unit one, students should have selected an author to research and chosen the novels (2-3) they would like to read. The students will be given the Capstone question from the Unit 5 Post-Assessment to focus their research. The question is: "How does the author's life and work embody the essence of the human journey?" Students may choose from a predetermined <u>List of Authors</u> chosen by the teacher.

Timeline: 2-3 Blocks

Key vocabulary:

- physiological needs
- self-actualization
- summary

Resources:

- "Maslow's Hierarchy of Needs"

Common learning experiences:

- <u>Philosophy Jigsaw</u>: Students will learn about various schools of philosophy to examine the purpose of life's journey
- View commencement speech <u>"This is Water"</u> by David Foster Wallace; use it to discuss how our outlook and even the smallest choices we make will affect our personal journey
- View and discuss <u>PowerPoint about Maslow's Hierarchy of Needs</u>; use this as a lens to analyze the personal journey
- Independent reading related to the unit theme
- Book talks and/or book clubs
- Initial research for Capstone Project (investigation of a person of interest)
- Every student will receive a letter before school starts informing them of the Capstone Project.

Common assessments including the end of unit summative assessment:

Unit Pre-Assessment:

1. This <u>Summer Reading Assessment</u> will serve as the pre-assessment for Unit 1. Students will choose two books to read over the summer. Students will then use *both* of their summer reading books to support or refute the following statement: *All people endure individual journeys, after which they*

emerge morally and emotionally stronger. The <u>5-Level Rubric</u> will be used to grade this writing response.

Unit Post-Assessment Options:

1. Students will write a Lens Essay in which they will examine the core literature through the lens of Maslow's Hierarchy of Needs. They will explore how the character attains or tries to attain self-actualization.

The <u>5-Level Rubric</u> will be used to grade this writing response. Within the response, students must:

- summarize the text(s)
- analyze the character's journey through the hierarchy
- use text from the literature read to support the analysis
- 2. Students will revisit the prompt (above) from the summer reading assessment. They will now rewrite the essay using a core unit text to support their claim.
- 3. Students will complete Capstone Pre-Writing by writing an Explanatory Essay on a character in a core text from this unit. They will describe how this character embodies the struggles and/or triumphs of the human experience. The 5-Level Rubric will be used. From this assignment, students can begin considering possible people of interest for their capstone project. This assessment could also serve as Significant Task 3. By the end of unit one, students should have selected an author to research and chosen the novels (3) they would like to read. The students will be given the Capstone question as well to focus their research. The question is: "How does the author's life and work embody the essence of the human journey?" Students may choose from a predetermined list of authors chosen by the teacher.
- 4. Students will expand on their knowledge of one of the unit's essential questions. Using a core text, they will answer the question and support it using well-aligned text. Significant Task One will serve as an appropriate precursor to this post-assessment choice. The 5-Level Rubric will be used.

Teacher notes:

Core Literary Resources:

- *Into the Wild* (Jon Krakauer)
- The Kite Runner (Khaled Hosseini)
- Frankenstein (Mary Shelley)
- One Flew Over the Cuckoo's Nest (Ken Kesey)
- I am the Messenger (Markus Zusak)
- Hole in My Life (Jack Gantos)
- Breaking Night (Liz Murray)
- The Other Wes Moore (Wes Moore)
- *The Picture of Dorian Gray* (Oscar Wilde)
- *Getting Away with Murder* (Christopher E. Crowe)
- The Road- Cormac McCarthy

Poems:

- "The World is Too Much With Us" by William Wordsworth
- "If We Must Die" by Claude McKay
- "Do Not Go Gentle Into That Good Night" by Dylan Thomas
- "Nothing Gold Can Stay" by Robert Frost
- "The Journey" by Mary Oliver

Multimedia Resources:

- Schools of Philosophy Articles (Nihilism, Stoicism,
- "This is Water" clip
- The Meaning of Life PowerPoint Maslow Keynote PowerPoint
- "You are not special" YouTube Clip- David McCullough Jr.

Rubrics:

5-Level Rubric

Teacher Resources:

Engaging Ideas (John Bean)

Key Vocabulary:

- lens
- artifact
- self-actualization
- societal values
- impetus
- conflict
- virtue
- purpose
- analysis
- inference
- personal journey

Windsor Public Schools Curriculum Map for the Secondary Level English 12: The Journey and Beyond

Purpose of the Course:

This course is designed to strengthen students' critical reading and writing skills. Students will prepare for college-level work by studying complex literary texts and contemporary non-fiction selections. In completing the requirements for this course, students will prepare a comprehensive reading and writing project that incorporates research, revision, and presentation. Students will also be responsible for completing several summative writing assessments, in which they will learn to plan, draft, and proofread a formal, multi-page document.

Name of the Unit:	Length of the unit:
UNIT 2 - Ourselves Among Others	15-18 Blocks

Purpose of the Unit:

This unit explores the Big Idea or Essential Question "How are people transformed through their relationships with others?" The unit uses multiple sources from the classroom (novels, poems, essays and/or short stories). The goal is for students to create and prove an argument, not merely summarize the many different ideas. Students should work to synthesize ideas from sources.

Common Core State Standards Addressed in the unit:

RL.11-12.6/RI.11-12.6

Analyze a case in which grasping a point of view requires distinguishing what is directly stated in a text from what is really meant

Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective

Analyze how style and content contribute to the power, persuasiveness or beauty of the text

SL.11-12.5

Make strategic use of digital media in presentations to enhance understanding of findings, reasoning, and evidence and to add interest

W.11-12.2d

Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic.

Big Ideas:

 Personal journeys allow us to reflect on our personal relationships with the people in our lives and drive us to reexamine what

Essential Questions:

- How do our personal journeys impact our relationships with others?

constitutes a healthy relationship.

- Relationships with others can either challenge or confirm our initial understanding of ourselves, nature, and society.
- Individuals enjoy being in relationships where their views are reflected in other people, but individuals also benefit from relationships where their views are challenged because it forces them to reexamine their beliefs and consider others.

- How are people transformed through their relationships with others?

Students will know:

- the extent of the relationship between the self and others (the world);
- relationships can work to support our belief system or to challenge it;
- the importance of understanding the concepts of "coexistence" and "independence."

Refer to the links below:

Depth of Knowledge LA

Students will be able to:

- 1. Analyze the explicit and implicit ideas that are contained within a text.
- 2. Study an author's perspective and her/his writing style to determine its impact on the reader.
- 3. Use digital media to effectively deliver a presentation.
- 4. Use precise word choice in a formal written response.
- 5. Define these terms:
 - explicit
 - implicit
 - rhetorical strategies/ rhetoric
 - author's style
 - interpersonal
 - intrapersonal
 - interconnectedness
 - interdependence
 - transformed
 - persona

Refer to the links below:

Depth of Knowledge LA

Significant task 1: *Implicit-Explicit Poetry Scrapbook*

Students will conduct an independent study of poetry to determine what the poet implies about relationships to make inferences about the poet's intended message. Students will be allowed to choose from a variety of related poems and to work at a pace of their choosing to allow for differentiation.

The teacher can begin by modeling an "anchor" poem from the resources listed below, or (s)he can give the students choice by allowing them to select this anchor poem from a variety of texts that all include a motif of relationships. Using the anchor poem, the teacher will demonstrate how to read and annotate the poem, with a special emphasis on explicit and implicit findings. The teacher can use a <u>2-Column Notetaking Sheet</u> to record this information and the students should do the same.

Then, working in small groups, students will read another poem from the resources list and work together to annotate it and categorize their findings as explicit and implicit. Finally, these students will use their reading and notes to complete <u>Text-Dependent Questions</u> on the poem. These questions will relate to explicit and implicit information, as well as the author's craft and rhetorical choices.

Students will present their findings to the class and receive feedback from their peers. The <u>Numbered Heads</u> strategy is a good option for sharing as a whole group. Finally, each student will work independently on a selected poem to demonstrate their mastery of the lesson. They will choose a poet from a preselected group and begin to read poems by him or her. (Differentiation may include selecting specific poets for students, preselecting the poems for students, and limiting or expanding the number of poems to be read.) Students will create an <u>Electronic Scrapbook</u>, in which they analyze a series of poems by their chosen author and analyze each for explicit and implicit information connected to relationships. A <u>Project Rubric</u> will be used to grade the task. The teacher may ask students to present their scrapbooks upon completion.

Timeline: approximately 5 Blocks

Key vocabulary:

- explicit
- implicit
- author's style
- rhetorical strategies/ rhetoric

Resources:

- My Papa's Waltz by Theodore Rothke http://www.poetryfoundation.org/poem/172103
- Those Winter Sundays by Robert Hayden http://www.poets.org/viewmedia.php/prmMID/19217
- To My Dear and Loving Husband by Anne Bradstreet http://www.poetryfoundation.org/learning/guide/238168#poem
- A Poet to His Baby Son by James Weldon Johnson http://www.poetryfoundation.org/poem/179019
- Eating Alone by Ly-Young Lee http://www.poemhunter.com/poem/eating-alone/
- all hyperlinked resources

Significant task 2: *Essential Question Journals*

While reading the core text(s), students will keep an ongoing <u>Essential Question Journal</u>. The teacher will indicate the number of required entries. As students read, they will track text that could help answer both essential questions:

- How do our personal journeys impact our relationships with others?
- How are people transformed through their relationships with others?

Before beginning the reading of the core texts, the teacher will introduce the key vocabulary using direct

instruction and may ask students to complete <u>Illustrated Notes</u> about each term.

On a weekly, or near-weekly basis, students will share their findings in discussion groups. These groups will exercise a deep analysis of the essential questions, possibly even drawing from their own experiences. Students should be integrating the key vocabulary into their discourse. During these discussions, the teacher can use a 21st Century Rubric (Critical Analysis/ Thinking) to grade student performance.

Timeline: Ongoing

Key vocabulary:

- interpersonal
- intrapersonal
- interconnectedness
- interdependence
- transformed

Resources:

- *King Lear* (William Shakespeare)
- A Thousand Acres (Jane Smiley)
- *Taming of the Shrew* (William Shakespeare)
- Kite Runner (Khaled Hosseini)
- Othello (William Shakespeare)
- 12 Angry Men (Reginald Rose)
- In the Time of the Butterflies (Julia Alvarez)
- Endurance (Alfred Lansing)
- *In the Heart of the Sea* (Nathaniel Philbrick)
- *Into the Wild* (Jon Krakauer)
- A Tale of Two Cities (Charles Dickens)
- The Road (Cormac McCarthy)
- all hyperlinked resources

Significant task 3: Capstone Pre-Writing 2

Students should now be well into the second phase of preparing their Capstone Project. The teacher should pair with the media specialists to assist students in finding several types of texts related to their chosen authors (See: Significant Task 3 in Unit 1 for more information). These texts should contain fewer than 1,000 words each and should contain biographical information. Students should conduct this foundational research in the classroom, or the media center. Students will use these readings to begin creating a working thesis for their projects. If needed, the teacher should review <u>How to Write a Claim</u>.

Then, based on the reading of the short texts, the student must first write 3-5 preliminary essential question journal entries <u>as</u> the author they have selected. This can be accomplished in class. For example, the students will explain how *they* (the author) have been transformed through relationships with others and how their personal journeys have impacted their relationships with others. The teacher should provide a model of exemplary completion of this part of the task. The teacher should emphasize the author's tend to infuse their own personal experiences- both triumphs and tragedies- in their own writing.

Then, in an Extended Persona Journal, students are expected to expand on these entries by writing in paragraphs, adding elaboration, and to using specific text to support their responses to the essential questions. While taking on the persona of their author, the students will still need to cite reference material

using MLA format. It is possible that the teacher must review MLA format before beginning the task. The writing portion of this task will be graded using the <u>5-Level Rubric</u>. It is expected that students will integrate the key terms into their writing, and may also explore additional metaphors, similes, and analogies to truly express themselves through their writing. Again, a model should be provided by the teacher. This model can be a 1-2 paragraph "snapshot" of the extended journal.

Timeline: 2-3 Blocks

Key vocabulary:

- interpersonal
- intrapersonal
- interconnectedness
- interdependence
- transformed
- persona

Resources:

- WHS Library Media Center
- Student research
- MLA Handbook
- They Say, I Say (Chapter on Quoting)

Common learning experiences:

- Review MLA format in class and/or using the Purdue Owl website
- Research in the computer labs, media center, or classroom
- Assessment of digital literacy skills using T.R.A.I.L.S.
- Independent reading related to the unit theme
- Book talks and/or book clubs
- Watch excerpts of <u>Edward Scissorhands</u>. Smoke Signals and/or Steel Magnolia and connect it to the unit theme
- Continued research for Capstone Project

Common assessments including the end of unit summative assessment:

Unit Post-Assessment (This should be completed by November 1st.):

Students will write a response to <u>one</u> of the following essay prompts from *The Common Application*, paying attention to incorporating key vocabulary, metaphors, analogies, or other rhetorical devices that enrich the response:

- Some students have a background or story that is so central to their identity that they believe their application would be incomplete without it. If this sounds like you, then please share your story.
- Reflect on a time when you challenged a belief or idea. What or who prompted you to act? Would you make the same decision again?

The <u>5-Level Rubric</u> will be used to grade this assessment. The teacher can choose to have students write this

as a timed essay, or to complete it at home. The essay must be a maximum of 650 words. Students should consider their learning from this unit as a framework for writing the essay. The teacher should encourage students to use the essay, if possible, during the college application process.

Teacher notes:

Key Vocabulary

- explicit
- implicit
- rhetorical strategies/ rhetoric
- author's style
- interpersonal
- intrapersonal
- interconnectedness
- interdependence
- transformed
- persona

Literary Resources:

- *King Lear* (William Shakespeare)
- *A Thousand Acres* (Jane Smiley)
- *Taming of the Shrew* (William Shakespeare)
- *Kite Runner* (Khaled Hosseini)
- *Othello* (William Shakespeare)
- 12 Angry Men (Reginald Rose)
- *In the Time of the Butterflies* (Julia Alvarez)
- Endurance (Alfred Lansing)
- In the Heart of the Sea (Nathaniel Philbrick)
- *Into the Wild* (Jon Krakauer)
- A Tale of Two Cities (Charles Dickens)
- The Road (Cormac McCarthy)
- *Hard Times (*Charles Dickens)

Video Resources:

- Edward Scissorhands
- Smoke Signals
- Steel Magnolias

Teacher Resources:

- WHS Library Media Center
- MLA Handbook
- They Say, I Say (Chapter on Quoting)

Windsor Public Schools Curriculum Map for the Secondary Level English 12: The Journey and Beyond

Purpose of the Course:

This course is designed to strengthen students' critical reading and writing skills. Students will prepare for college-level work by studying complex literary texts and contemporary non-fiction selections. In completing the requirements for this course, students will prepare a comprehensive reading and writing project that incorporates research, revision, and presentation. Students will also be responsible for completing several summative writing assessments, in which they will learn to plan, draft, and proofread a formal, multi-page document.

Name of the Unit:	Length of the unit:
Unit 3 – Ethics and Morality	15-18 Blocks

Purpose of the Unit:

In Unit 1, students studied multiple perspectives on the purpose of the human journey. In this unit, students will continue this exploration, but will do so by thinking about the relationship between the human journey and being a "good" human being.

Common Core State Standards Addressed in the unit:

RI.11-12.7

Integrate and evaluate multiple sources of information presented in different media or formats

W.11-12.1d/W.11-12.2e

Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing (for argumentative, informal, and explanatory texts)

W.11-12.1

Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence

SL.11-12.1d

Respond thoughtfully to diverse perspectives

Synthesize comments, claims and evidence to resolve contradictions

Determine what additional information or research is required

Big Ideas:

- Our perception of what is right and wrong is influenced by our emotions and those of the people around us.
- One's personal moral code can be fluid and changing while ethics is dependent upon the group.
- A "good" human being is one who conducts him or herself in an ethical, dignified, and responsible manner without extrinsic motivation to do so and without seeking recognition for such conduct.

Essential Questions:

- How do outcomes change when we make decisions based on emotion and not reason?
- How do we determine what is right and wrong?
- What does it mean to be a "good" human being?

Students will know:

- how literature adds richness to discussions of real-life moral questions and dilemmas;
- the differences between morals and ethics;
- what it means to be a "good" human being;
- how our emotions factor into our decision-making.

Refer to the links below:

Depth of Knowledge LA

Students will be able to:

- 1. Determine themes, central ideas and be able to analyze various texts.
- 2. Support analysis, reflection, and research with appropriate text.
- 3. Write effective arguments using sufficient evidence.
- 4. Define these literary terms:
 - ambition
 - reason
 - morals/morality
 - moral philosophy/moral code
 - ethics
 - logic
 - taboo
 - credo

Refer to the links below:

Depth of Knowledge LA

Significant task 1: Dilemma Mini-Research Project and Presentation

The teacher will first lead the students through a brainstorming session, during which they identify instances in which public figures have made very bad decisions. When completing this task, students should be focused on recent current events, but also those instances that could be viewed from two very different perspectives. (This could also be accomplished in groups.) Very general examples include:

- Politicians failing to follow through on promises
- Business owners misappropriating funds

- Athletes using performance enhancing substances
- Leaders using public media to disparage other people
- Celebrities taking advantage of their fame and notoriety

Then, students will use research skills to find two juxtaposed articles, speeches, transcripts, news stories, blogs, etc. about one of the brainstormed examples. The teacher and media specialists must work with the students to find credible sources. It is recommended that students use the pathways on the Windsor High School Library Media Center Webpage. The two chosen sources must contain evidence of opposing viewpoints about the subject. Each source should also be at least 500 words in length. It is advised that students use two different types of sources, like a blog and a news article, or a speech and a transcript.

Next, each student will read and summarize the two viewpoints in a 10-Percent Summary assignment. Then, (s)he will present the moral dilemma to their classmates in a brief presentation. The 21st Century Rubric-Effectively Communicates Information will be used to grade their performance. At the conclusion of the presentation, the class will use the presenter's information to discuss Essential Question 1: How do outcomes change when we make decisions based on emotion and not reason? They will also explore, How do you know?

Timeline: 3 Blocks

Key vocabulary:

- morals/ethics
- ambition
- reason/logic
- taboo

Resources:

- Windsor High School Library Media Center

Significant task 2: Moral and Ethical Discussion

To prepare for any of the follow types of discussions, students should create 5 or more <u>Support Cards</u>, on which they have collected evidence from their respective texts that will assist them in answering the essential questions.

The teacher can then choose from many different options for encouraging discussion about the essential questions, including: Fishbowl Discussions, R-A-E-S, Numbered Heads, Jigsaw, or Socratic Seminar. During the discussion(s), students should take notes on classmates' responses to create a Resource Bank for use on the post-unit assessment. The teacher can also opt to "spot check" the students' note-taking, to ensure that they are using the discussion as a means of gathering the necessary information for the final assessment.

After the conclusion of the discussion(s), students will create a <u>Claim Template</u>, in preparation for the assessment. Students will write a claim discussing the morality of the character.

Timeline: 3-4 Classes

Key vocabulary:

- morals/ethics
- ambition
- reason/logic
- taboo

Resources:

- The Kite Runner (Khaled Hosseini)

- Frankenstein (Mary Shelley)
- *One Flew Over the Cuckoo's Nest* (Ken Kesey)
- *A Lesson Before Dying* (Ernest J. Gaines)
- "A Modest Proposal" (Jonathon Swift)
- *The Taming of the Shrew* (William Shakespeare)
- The Road (Cormac McCarthy)
- *In the Heart of the Sea* (Nathaniel Philbrick)
- *Hard Times* (Charles Dickens)
- A Tale of Two Cities (Charles Dickens)

Significant task 3: Capstone Pre-Writing 3

The teacher will lead a class discussion on the idea of a "personal credo." A personal credo can be defined as "a set of beliefs that drives thoughts and behaviors." The teacher will have students read some personal credos such as "Desiderata" or Jack London's. Students will independently (or in small groups) answer <u>Text-Dependent Questions</u> about the credo. The whole class will discuss these.

Next, students will create their own personal credos of 5 or more lines, and present their ideas to the class in an informal discussion. They could also design a decorative poster to express the credo.

Students will then complete a <u>Credo Explanation</u> for a character of interest from one of the novels by their selected author, (if student is using poetry they may write a credo about the poet). By the end of this unit students should be finished with at least one novel and they are to pick one character of interest for this project. This credo should incorporate the character's struggles and/or triumphs of the human experience, and must be supported with text from the book. The <u>5-Level Rubric</u> will be used to grade this task.

Timeline: TBD by Teacher (This could be a timed, in-class assignment, or a take-home one.)

Key vocabulary:

- credo

Resources:

- "Desiderata"
- Jack London's credo

Common learning experiences:

- Ethics and morality keynote PPT
- Visits to the Windsor High School Library Media Center to choose biographies/autobiographies
- Video clips and analysis of ethics-themed movies like Seven Pounds, Pay it Forward, or Bullied
- Use of the Warrior Writing Center
- Discussions about religious versus secular ethics
- Class debate: What does it mean to be a "good" human being?

Common assessments including the end of unit summative assessment:

Unit Post-Assessment Options:

1. In an <u>Argumentative Essay</u>, students will choose an ethical dilemma from Randy Cohen's column, *The Ethicist*. Students will analyze the central conflict of the dilemma and discuss the moral and ethical

implications for both the individual and the society. Finally, they will argue in favor of a specific solution to the problem. The <u>5-Level Rubric</u> will be used. The teacher can modify this assessment by: (A) selecting 3-5 dilemmas from The Ethicist from which students choose one, and/or (2) providing discussion time for each of the dilemmas before students write.

OR

2. Students will expand on their knowledge of one of the unit's essential questions in an Essential Question Response. Using a book of their choice and/or any of those from the unit, they will answer the question and support it using well-aligned text. Significant Task 2 will serve as an appropriate precursor to this post-assessment choice. The 5-Level Rubric will be used.

Teacher notes:

Key Vocabulary:

- ambition
- reason
- morals/morality
- moral philosophy/moral code
- ethics
- logic
- taboo
- credo

Literary Resources:

- The Kite Runner (Khaled Hosseini)
- Frankenstein (Mary Shelley)
- *One Flew Over the Cuckoo's Nest* (Ken Kesey)
- A Lesson Before Dying (Ernest J. Gaines)
- "A Modest Proposal" (Jonathon Swift)
- *The Taming of the Shrew* (William Shakespeare)
- The Road (Cormac McCarthy)
- *In the Heart of the Sea* (Nathaniel Philbrick)
- Hard Times (Charles Dickens)
- *A Tale of Two Cities* (Charles Dickens)

Video Resources:

- Seven Pounds
- Pay it Forward
- Bullied

Teacher Resources:

- "Desiderata"
- Jack London's credo

Windsor Public Schools Curriculum Map for the Secondary Level English 12: The Journey and Beyond

Purpose of the Course:

This course is designed to strengthen students' critical reading and writing skills. Students will prepare for college-level work by studying complex literary texts and contemporary non-fiction selections. In completing the requirements for this course, students will prepare a comprehensive reading and writing project that incorporates research, revision, and presentation. Students will also be responsible for completing several summative writing assessments, in which they will learn to plan, draft, and proofread a formal, multi-page document.

Name of the Unit:	Length of the unit:
Unit 4 - The Role of Gender and Personal Identity in the Human Experience	15-18 Blocks

Purpose of the Unit:

Students will develop an understanding of controversy surrounding gender roles and personal identity and how each influences an individual's behavior and his/her behavior towards others.

Common Core State Standards Addressed in the unit:

RL.11-12.1

Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text

Determine where the text leaves matters uncertain

SL.11-12.1c

Propel conversations by posing and responding to questions that probe reasoning and evidence

Ensure a hearing for a full range of positions on a topic or issue

Clarify, verify, or challenge ideas and conclusions

Promote divergent and creative perspectives

W.11-12.3a-e

Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

Big Ideas:

- The conventional assumptions surrounding gender impact emotional and psychological well-being.
- Throughout history, people have tried to defy the preconceived notions about gender
- Literature both reinforces and challenges our ideas of gender roles

Essential Questions:

- What are the controversial issues surrounding gender in the modern world?
- How do ideas about gender influence an individual's behavior and his/her behavior towards others?
- In what ways have gender roles evolved over time and how do they impact daily lives?
- What part does literature play in creating gender roles?

Students will know:

- all societies try to define gender and gender roles, but not all people "fit society's mold;"
- understanding gender is a key facet to selfdiscovery;
- the importance of identifying and analyzing examples of gender conformity and nonconformity in literature.

Refer to the links below:

Depth of Knowledge LA

Students will be able to:

- 1. Support analysis, reflection, and research with appropriate text.
- 2. Participate effectively and collaboratively in all aspects of discussion.
- 3. Write a narrative that effectively demonstrates and understanding of textual themes.
- 4. Define these literary terms:
 - gender
 - perpetuate
 - debunk
 - systemic
 - conventional
 - preconceived
 - evolve

Refer to the links below:

Depth of Knowledge LA

Significant task 1: *Text Rendering*

The teacher will review the terms "explicit" and "inferred" by direct instruction and/or modeling from one of the core texts before students begin their text rendering. The teacher can use Text Rendering as a guide. The teacher will provide students with direct instruction on the key vocabulary and while they are completing their journals, the students will pay attention to the key vocabulary. The journaling is described below.

Students will read a core text throughout the unit. While reading, they will choose sentences, phrases, and words that are particularly significant in understanding explicit and inferred ideas about gender. The teacher will assign a specific number of required "renderings." Students can track these items in a journal, or through the use of sticky notes. The teacher will also provide an Example from the core text. This example will show

students how to "render" and to use the unit vocabulary appropriately.

Then, in ongoing discussion groups, students will share their findings. They will discuss what they learned about the themes of the text and any new insights that emerge- related to gender, gender identity, etc.- as a result of the text rendering. The text rendering will enable students to collaboratively construct meaning, clarify and expand their thinking about the themes of the text.

After the text rendering assignment, students will engage in a seminar style discussion (such as a <u>Fishbowl Discussion</u>) about these questions. Students may be graded on their engagement and participation using the <u>Socratic Circles Rubric</u>. During these circles, students should be encouraged to share their own experiences, as related to the texts.

Timeline: ongoing

Key vocabulary:

- gender
- perpetuate
- debunk
- systemic
- conventional
- preconceived
- evolve

Resources:

- The Kite Runner (Khaled Hosseini)
- *Taming of the Shrew* (William Shakespeare)
- The Awakening (Kate Chopin)
- Canterbury Tales (Geoffrey Chaucer)
- A Room of One's Own (Virginia Woolf)
- To the Lighthouse (Virginia Woolf)
- Women of Brewster Place (Gloria Naylor)
- *Men of Brewster Place* (Gloria Naylor)
- "A Vindication of Women's Rights" (Mary Wollstonecraft)
- *My Antonia* (Willa Cather)
- Picture of Dorian Gray (Oscar Wilde)
- Endurance (Alfred Lansing)
- Into the Wild (Jon Krakauer)
- *A Thousand Acres*-Jane Smiley

Significant task 2: *Gender Narrative*

In a well-developed <u>Narrative</u>, students will adopt the persona of a character from the core text(s) and explain how "they" would respond to one of the essential questions from the unit. Students should address the following questions as they prepare to write the essay:

- How does this text perpetuate or debunk traditional gender roles?
- What are some current or past controversial issues surrounding gender roles and sexual identity?
- How much influence does gender have on the choices we make on a daily basis?

The <u>5-Level Rubric</u> and/or the <u>21st Century Rubrics</u> will be used to grade this writing response. The teacher will provide <u>Graphic Organizers</u> for those students choosing this task and he/she will also allow time for the use of <u>Peer Review Protocols</u>. Class time will be used for all steps of the writing process: brainstorming, prewriting, drafting, and peer reviewing. Students can also use the Warrior Writing Center for support and the

teacher can send students to the Center during class time, as needed.

Students should be encouraged to participate in a basic "show and tell" exercise before they submit the narratives, in order to take ownership of their work.

Timeline: 3-5 Blocks

Key vocabulary:

- gender
- perpetuate
- debunk
- systemic
- conventional
- preconceived
- evolve

Resources:

- The Kite Runner (Khaled Hosseini)
- *Taming of the Shrew* (William Shakespeare)
- The Awakening (Kate Chopin)
- Canterbury Tales (Geoffrey Chaucer)
- A Room of One's Own (Virginia Woolf)
- To the Lighthouse (Virginia Woolf)
- Women of Brewster Place (Gloria Naylor)
- Men of Brewster Place (Gloria Naylor)
- "A Vindication of Women's Rights" (Mary Wollstonecraft)
- *My Antonia* (Willa Cather)
- *Picture of Dorian Gray* (Oscar Wilde)
- Endurance (Alfred Lansing)
- Into the Wild (Jon Krakauer)
- A Thousand Acres-Jane Smiley

Significant task 3: Debate

This task could be used as the unit post assessment or Task 3.

Teacher can choose from the following questions for topics of debate:

- Is it in a child's best interest to be raised genderless?
- One could argue that society places a heavier burden and greater expectation on one gender versus the other. Choosing one side, prepare evidence to prove that there is indeed a greater burden placed on one gender by society's expectations.

They will use their core text(s) and personal experience to defend a position. They will also draw from an additional source (listed below).

Students will be graded on their collaboration skills using the 21st Century Rubrics. The teacher will allot time for preparation. If students debate individually, the teacher will need to devise a system for grading each participant. This is at the teacher's discretion. At the culmination of the debate, students will write a final response to each question in an MCC-Style Graded Journal Response.

Timeline: 2 Blocks

Key vocabulary:

- gender
- perpetuate
- debunk
- systemic
- conventional
- preconceived
- evolve

Resources:

Article on Baby Storm
Boys Don't Cry (film)
A Girl Like Me (film)

Significant Task 4: Capstone Pre-Writing Literary Criticism

Students will begin to research <u>Literary Criticism</u> that pertains to their respective authors and the works of literature they have read. Before students conduct their research, the teacher should model how to read a piece of literary criticism and how to pull out the key details. The sample literary criticism should relate to one of the core texts in this unit. Teachers will help students find the author's claim in the criticism and then the details that substantiate that claim.

After the teacher is done modeling how to read a piece of literary criticism and analyze it, students will independently read a piece of literary criticism that relates to their author and the novels they have read by that author. Students will take notes on the criticism and will present their findings to the class; the findings should relate to claim and how it is substantiated. The teacher will guide student discourse through the <u>Linking Ideas</u> discussion strategy, in which students connect, or link, their findings to those of another student. The 21st Century Rubric for Effective Communication will be used to grade student performance.

Common learning experiences:

- Reading texts for the Capstone Project
- Capstone Project "check ins" with the teacher to assess progress
- Book talks for the Capstone Project
- Journaling or discussing the essential questions

Common assessments including the end of unit summative assessment:

Unit Pre-Assessment:

Students will complete an Anticipation Guide in which they will be asked questions about their understanding of gender roles in literature. They will support each response with prior knowledge to demonstrate their level of understanding of these concepts.

Unit Post-Assessment Options:

- 1. See: Significant Task 3.
- 2. Students will first complete a graded pre-writing organizer (outline, graphic model, etc.) and then write an "In Light of" Essay: In light of a series of readings about gender issues, discuss how gender influences an individual's behavior and his or her attitude towards others.

In defending your response, you must explain and support your claims with specific and relevant evidence from texts, discussions, and debates from this unit. It is expected that assignment will be typed and submitted in the proper format for a formal essay.

Students will be graded using the 5-Level Rubric and/or the 21st Century Rubrics.

Teacher notes:

Key vocabulary:

- gender
- perpetuate
- debunk
- systemic
- conventional
- preconceived
- evolve

Core Literary Resources:

- The Kite Runner (Khaled Hosseini)
- Taming of the Shrew (William Shakespeare)
- The Awakening (Kate Chopin)
- Canterbury Tales (Geoffrey Chaucer)
- *A Room of One's Own* (Virginia Woolf)
- *To the Lighthouse* (Virginia Woolf)
- Women of Brewster Place (Gloria Naylor)
- Men of Brewster Place (Gloria Naylor)
- "A Vindication of Women's Rights" (Mary Wollstonecraft)
- *My Antonia* (Willa Cather)
- *Picture of Dorian Gray* (Oscar Wilde)
- Endurance (Alfred Lansing)
- Into the Wild (Jon Krakauer)
- *A Thousand Acres*-Jane Smiley

Media Resources:

- Boys Don't Cry (film)
- A Girl Like Me (film)

Windsor Public Schools Curriculum Map for the Secondary Level English 12: The Journey and Beyond

Purpose of the Course:

This course is designed to strengthen students' critical reading and writing skills. Students will prepare for college-level work by studying complex literary texts and contemporary non-fiction selections. In completing the requirements for this course, students will prepare a comprehensive reading and writing project that incorporates research, revision, and presentation. Students will also be responsible for completing several summative writing assessments, in which they will learn to plan, draft, and proofread a formal, multi-page document.

Name of the Unit:	Length of the unit:
Unit 5 – Adversity and Renewal	30 Blocks

Purpose of the Unit:

Students will study a work of Shakespeare and analyze a characters journey through adversity. They will then apply their understanding of this motif to their Capstone Projects. Students should eventually understand that adversity can be the precursor to personal growth, and spiritual and emotional renewal.

Common Core State Standards Addressed in the unit:

RL 11-12.7

Analyze multiple interpretations of a story, drama, or poem evaluating how each version interprets the source text (include at least one play by Shakespeare)

RI.11-12.7

Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem

SL.11-12.4

Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks

W.11-12.2b

Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic

W.11-12.2

Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content

W.11-12.7

Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

W.11-12.8

Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively

Assess the strengths and limitations of each source in terms of the task, purpose, and audience;

Integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation

Big Ideas:

- In life, tragedy is inevitable and universal because we all possess the capability to make mistakes, but it is how the individual chooses to deal with such a tragedy that matters.
- No matter a person's life events, when a reader is able to empathize with the character or author the story resonates with them.
- To be credible, our claims must be supported with a variety of well-aligned and valid sources of information.
- Publishable papers require multiple drafts and an attention to organization, content, accuracy, writing style, and proper mechanics.

Essential Questions:

- How did the texts you read this year convey the struggles and/or triumphs of the human experience?
- Do we need to personally experience tragedy in order to understand its significance?
- How can we make connections between the life and works of an author?
- How do we effectively and credibly support a claim?
- How do we write papers of publishable quality?

Students will know:

- the common threads of the human experience that run through literature;
- how common experiences in literature reflect those of our actual lives;
- the process by which students write papers of publishable quality.

Students will be able to:

- 1. Analyze multiple interpretations of Shakespeare to evaluate how his work applies to a source text (biography/autobiography).
- 2. Interpret and evaluate multiple sources of text, as related to the Capstone Project.
- 3. Present information, findings, and supporting evidence, conveying a clear and

Refer to the links below:	distinct perspective.
Depth of Knowledge LA	4. Develop the topic thoroughly.
	 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.
	6. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively.
	Assess the strengths and limitations of each source in terms of the task, purpose, and audience.

avoiding plagiarism and overreliance on any one source and following a standard format for citation.

selectively to maintain the flow of ideas,

9. Cite compelling evidence from texts that effectively illustrates a writer's claim.

8. Integrate information into the text

Refer to the links below:

Depth of Knowledge LA

Significant task 1: Research and Brainstorming

RESEARCH

- 1. Students will use a Shakespearean play- or excerpts from it- to explore how human adversity transcends time, in order to apply it to their Capstone Projects. The teacher should select a play, or pieces of it, that relate to:
- the inevitability of adversity and the human (characters') responses to it
- adverse circumstances with which we can empathize
- adverse circumstances that lead to personal growth

Students must track their findings using Reminds Me Of Notes or any other note-taking strategy that assists them in relating the Shakespearean text to their biography or autobiography and works of literature they are studying. The teacher will provide a model of these notes. By completing this task, students should understand how Shakespeare's characters experience similar adverse circumstances as their person of interest, and will compare various responses to the respective tragedies.

At the conclusion of this part of the task, students will use a Pair Share to discuss how they will

incorporate the concept of adversity into their Capstone Project papers.

- 2. Students will conduct additional research to augment their body of knowledge for writing the Capstone paper about their selected author. With the help of the teacher and/or library media specialist, the students will assess the quality of each of their sources, including: the biography/autobiography, the novels, previously utilized sources from Units 1-4, and additional research. They should begin considering which sources are most credible and will work in small groups to discuss their findings before moving forward with the project. In these groups, students will discuss: How do we effectively and credibly support a claim with the sources we found?
 - At the conclusion of the discussion session, students should collate a <u>Source Portfolio</u> that contains all of the valid and credible materials they plan on incorporating in their papers. The teacher will provide a sample of a <u>Source Portfolio</u> for students to review.
- 3. Students should carefully review all previous pre-writing assignments related to the Capstone prompt. They should gather these assignments together and begin considering the central claim for their papers. If needed, the teacher should review How to Write a Claim.

BRAINSTORMING

The teacher should introduce the students to the <u>Brief Thesis-Elaborated Thesis</u> technique for brainstorming. This method allows students to transition from a simple one-sentence claim to a more elaborate one that is appropriate for a paper of this magnitude. Students will have the opportunity to produce and experiment with 5-10 potential claims.

The teacher could also consider modeling and implementing the <u>Thesis-Proposing Strategy</u>. Students use this exercise to justify a "best solution answer" to the Capstone prompt and to justify arguments that support these "best solution answers." The Thesis-Proposing Strategy results in a rich classroom conversation and is best suited for mixed ability groups.

Timeline: Approximately 5-6 Blocks

Key vocabulary:

- tragedy
- brainstorming
- thesis
- claim
- justify
- support/sources
- credible
- valid

Resources:

- *King Lear* (William Shakespeare)
- *Othello* (William Shakespeare)
- Engaging Ideas (John Bean)

Significant task 2: Exploratory Writing and Drafting

EXPLORATORY WRITING

Exploratory writing will begin with either student-student or student-teacher conferences, so that each student can receive feedback on his/her intended claim. The <u>ATLAS Protocol</u> can be used for this process.

Then, with the guidance of the teacher and the Warrior Writing Center, students will continue with exploratory writing with the <u>Template Strategy</u>. The teacher will give students a template or map that forecasts the shape of the Capstone paper, but does not address the content (the students must do this). Within the template, students should begin mapping how they will support the claim. Students should be encouraged to create <u>Support Cards</u> that they will collect, store, and eventually apply to the body of their papers.

The teacher should remind the students to review previous pre-writing assignments and notes that can help contribute to the pre-writing plan. At this point, the teacher should review MLA format again. An MLA Format Handout should be available for students to use as reference.

DRAFTING

The students must now produce a typed draft, using the template as a guide. The teacher should provide some class time for this part of the task. The remainder of the draft must be completed at home. Ultimately, it is expected that students produce an initial draft of at least 3-5 pages.

Timeline: 6-8 Blocks

Key vocabulary:

- Support
- MLA citation

Resources:

- They Say, I Say (Gerald Graff, Cathy Birkenstein)
- Everything's an Argument (Andrea A. Lunsford, John J. Ruszkiewicz, Keith Walters)
- MLA Handbook

Significant task 3: *Norming Session and Drafting*

NORMING SESSION

The students will work in groups of 3-5 for a Norming Session. The teacher will prepare by printing copies of three specific student drafts with the names redacted. The teacher will purposely choose drafts that represent three levels of competency: (1) approaching standard, (2) standard, and (3) above standard. The teacher will make copies of the essays for all students in the class.

Then, students in the group will begin by reading the same student draft, one-at-a-time. They will rank the essays from least to most effective and will justify their rankings to the group. They will discuss their findings. The teacher will then shift the discussion to the whole class.

Students will repeat this process for all three drafts (approaching, standard, and above).

DRAFTING

Then, they will transition independently to their own drafts and begin typing revisions that are based on the norming session. When they make a change or add something new, students should track their changes using the "Review" feature on Microsoft Word. Each change or addition should be accompanied by a corresponding explanation of why the student made it. Then, the student must submit a copy of this second draft to the teacher. The teacher should provide students will Instructions for Tracking Changes. This will include an example of what these will look like.

Using Chromebooks in the classroom is the best way to complete this part of the task, although it can be done at home.

Timeline: 6-8 Blocks

Key vocabulary:

MLA Citation

Resources:

- They Say, I Say (Gerald Graff, Cathy Birkenstein)
- Everything's an Argument (Andrea A. Lunsford, John J. Ruszkiewicz, Keith Walters)
- MLA Handbook

Significant task 4: Peer Review and Drafting

PEER REVIEW

Students will bring their next draft to class. The teacher will use a student sample to model a Peer Review Protocol with the whole class. In pairs, students will engage in the same protocol. It is essential that students engage in a conference before handing their partner's paper back to them. The peer review feedback *must* be submitted with the student's final draft of the Capstone Project. Peer review is the final step before students write a publishable, formal draft.

DRAFTING

Students should have at least two weeks to complete this final draft. During this time, the teacher will conduct additional student-teacher writing conference to check the progress of each student's writing. The teacher will provide the student with an initial grade using a Writing Scorecard. The scorecard will allow the teacher to provide an overview of strengths and weaknesses of the paper.

Timeline: 6-8 Blocks

Key vocabulary:

MLA Citation

Resources:

- *They Say, I Say* (Gerald Graff, Cathy Birkenstein)
- Everything's an Argument (Andrea A. Lunsford, John J. Ruszkiewicz, Keith Walters)
- MLA Handbook

Common learning experiences:

- Library research
- Warrior Writing Center
- Peer review protocols
- Selected readings from *They Say, I Say*
- Selected readings from Everything's an Argument
- Student-teacher writing conferences

- Review of MLA format
- Review of how to use Google Drive
- "Show and Tell" writing sessions/ read alouds
- Students who maintain the schedule assigned and demonstrate commitment to the Capstone Project will have the opportunity to explore the historic role of individuals within the Hartford, Connecticut and New England area in shaping this unique part of America through field trips and workshops with local and regional experts.

Common assessments including the end of unit summative assessment:

Unit Post-Assessment:

The Senior <u>Capstone Project</u> is designed to allow students to demonstrate their mastery of all of the skills addressed in the 12th Grade English curriculum. It is also an opportunity to reflect upon their experience as learners throughout their years at WHS with a specific emphasis on their progress during the 12th grade year.

Students will address: "How does the author's life and work embody the essence of the human journey?"

The project has three components.

PART ONE- DUE TWO WEEKS BEFORE THE FINAL EXAM

The first is a 7-10 page MLA formatted research paper based upon a student chosen biography or autobiography, as well as the works of literature read, and the pre-writing components that were completed earlier in the year. Additional research will be conducted to augment or corroborate the information presented in the biography and literature. This research will occur in the classroom or media center with assistance from the library media specialists. The paper will explore the essence of the human journey and how the author and his/her works embody the struggles and/or triumphs of the journey.

PART TWO- DUE ONE WEEK BEFORE THE FINAL EXAM

The second is an oral presentation based upon the research they have conducted. Students should delineate and discern the important components needed to present to the class. The presentation will include a technology component, and will be peer evaluated in addition to teacher evaluation.

PART THREE- OCCURS ON THE DAY OF THE FINAL EXAM

Students will schedule an appointment for a 10-minute writing conference with their teacher. During this time, the teacher will conduct a final discussion of the Capstone Project's quality and will also incorporate some "live grading" or a <u>Grade Aloud</u> to show each student why (s)he scored in the range they did. Additionally, the teacher will offer suggestions for improving the writing process in the college or career setting.

Teacher notes:

Key Vocabulary:

- tragedy
- brainstorming
- thesis
- claim

- justify
- support/sources
- credible
- valid
- MLA citation

Texts and Resources:

- King Lear (William Shakespeare)

- Othello (William Shakespeare)
 They Say, I Say (Gerald Graff, Cathy Birkenstein)
 Everything's an Argument (Andrea A. Lunsford, John J. Ruszkiewicz, Keith Walters]
- MLA Handbook

Windsor Public Schools Curriculum Map for the Secondary Level Family Sociology BOE Approval Date

Purpose of the Course: This one-semester course provides an opportunity for students to gain an understanding of the importance of responsibility and maturity in successful relationships. To achieve this, students are taught how to understand themselves, how to interpret their actions, and how to understand and interpret the actions of others.

Name of the Unit: Developing Effective	Length of the unit: 10 Blocks (86 minutes each)
Communication Skills	
Unit 1	

Purpose of the Unit: This unit provides students with the opportunity to analyze the impact of effective and ineffective communication upon relationships.

FCCLA Standards addressed in the unit:

Determine the processes for building and maintaining healthy relationships. 13.1.1 Determine factors that contribute to unhealthy relationships. 13.1.4 Explore processes for handling unhealthy relationships. 13.1.5

Common Core State Standards addressed in the unit:

Research to Build and Present Knowledge 10.W.7: Conduct short as well as more sustained research projects to answer questions(including self-generated questions) or solve a problem,, narrow or broaden the inquiry when appropriate, demonstrating understanding of the subject under investigation **Conventions of Standard English** 10.L.1: Demonstrate command of conventions of standard English and usage when writing or speaking

Presentation of Knowledge and Ideas 10.SL.4: Present information findings and supporting evidence, clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance and style are appropriate to purpose, audience and tasks.

Vocabulary Acquisition and Use 10.L.4: Determine or clarify the meaning of unknown and multiple meaning words and phrases based on reading and context

Comprehension and Collaboration 10.SL.1: Initiate and participate in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on topics, texts and issues

Big Ideas:	Essential Questions:
Communication is the basis for all relationships.	When does communication begin?
Conflict is not the same as fighting.	How do one's communication skills impact interactions with family, peers and others?

Students will know:

- Factors which affect communication
- Conflicts are different from fighting
- Methods to resolve conflicts effectively

Students will be able to:

- Assess ways in which verbal and nonverbal communication contribute to relationships
- Identify steps to manage conflicts
- Effectively use I statements to de-escalate conflict

Significant task 1: Introduction to the communication process

In this unit, students will engage in a range of activities which illustrate the communication process. Students will work in groups, with partners and individually to assess factors which contribute to or break down the communication process in a variety of situations.

The students' first communication exercise will be a "get to know you" activity. This will serve as a hook into the topics which will be covered throughout the course. Students will be given a paper with 20 statements which pertain to the topics to be covered in class for the semester. Students must ask each classmate a question and, if the classmate answers in the affirmative, write their name in full next to the sentence. Students' responses will be used to formulate a discussion around communication and also provide an overview of topics to be covered for the semester.

To showcase the communication process, students will view a video clip or role play of Abbot and Costello's "Who's on First" routine. In small groups, students will make a list of examples of effective and ineffective communication from the vignette. Using their lists, students then will create a list of terms and phrases regarding the communication process. Finally, in their small groups, students will develop a list of personal experiences that exemplify effective and ineffective communication and share their list with the class.

The concepts of verbal and non-verbal communication, points of view and trust will be introduced and explored through a series of experiential exercises, followed by small group debriefing sessions. In pairs, groups and as a whole class students will participate in a trust walk, a survival game and other activities involving verbal messages and drawing. Individually, students will write a reflection piece documenting their personal experiences following each experiential exercise. (Refer to teacher notes)

In groups, students will read about the meanings of various forms of gestures from other cultures from around the world and discuss how these gestures differ from their meaning in the United States. Students will also discuss the ramifications of misinterpreting gestures from other cultures. Then through direct instruction students will be presented with a Power Point developed by Kris Rusaken of Ball University as to "The Importance of Body Language."

Timeline: 3 Blocks (86 minutes)

Key vocabulary: non-verbal communication, verbal communication, body language, shared meaning, checking out, reflecting, teamwork, group, leader, empathy, communication, sender, receiver, passive listening, active listening

Resources: Teacher's Resource Portfolio Strengthening Family and Self 2006

Team Activity: Springfield College/ Ropes Course
Text: Strengthening Family & Self , Leona Johnson 2006

Script "Who's on First" Bud Abbott and Lou Costello Website :http://www.baseball-almanac.com/humor4.shtml Kris Ruksaken, Body Speaks Power Point, Ball State University, Muncie Indiana 2005

Significant task 2: Skills for conflict resolution

Students will be introduced to the concept of conflict resolution through a group discussion on the differences between a fight and a conflict. Students then will explore different methods of conflict resolution through a series of small group exercises that focus on identification of one's own style as well as the pros and cons of each conflict resolution method.

As a class, students will discuss the use of "I" – statements as a way to resolve conflicts. In small groups, students will practice using "I statements" through role-playing scenarios. The purpose is to recognize that "you-statements" contribute to poor conflict management.

In groups of four, students will discuss the issue of problem ownership as a pre-cursor to conflict resolution. In small groups, students will review a variety of situations and identify the person who should own the problem and prepare an assertive response to resolve the issue.

Using the vocabulary from the unit, students will summarize their learning by writing a response to the following question: "How would you help a group of middle school students resolve conflicts using effective communication skills?" As a culminating activity, students will work in groups of three to four to create a brochure, iMovie or PREZI to present ways to handle a conflict in a positive fashion, aimed at a middle school audience. The students will be provided with scenarios which can be resolved with assertive responses as opposed to aggressive responses to resolve a conflict. Students will also be shown a fight from a martial arts tournament and be asked to distinguish the differences between fighting and a conflict.

Timeline: 3 Blocks (86 minutes)

Key vocabulary: conflict, conflict resolution, blaming, placating," I"-statements, distracting, stroking, negotiation, compromise, problem ownership

Resources: Text and Teacher's Resource Portfolio Strengthening Family and Self, Leona Johnson 2006 Ready-to-Use Conflict Resolution Activities for Secondary Students, Ruth Perlstein, Gloria Thrall 1996

Student Activity Guide, Activities C,D and E Chapter 5 , Strengthening Family and Self, Leona Johnson 2006

High School library/media center or computer lab, timer, communication enhancers and barriers list/ Teacher generated

Common learning experiences:

- Pre-test on unit vocabulary
- Direct instruction on vocabulary for the topic of "Communication" using PowerPoint
- Brainstorming and creating a list of common conflict scenarios
- Group activities focused on effective communication and conflict management including the Survival game and the Paired Trust Walk
- Jig-saw technique for Communication chapter review
- Development of a Prezi, iMovie or brochure focusing on conflict management styles using 2^{1st} century technology
- Identifying personal methods of dealing with conflict
- Exit slips (Students will be asked to write about three things they learned and two questions they may have about the lesson?)
- Quick Writes (Students will use the vocabulary terms from the unit for their Quick Write regarding methods for resolving a conflict)
- Reflection writing about experiential activities

Common assessments:

- Communication essay
- End of unit summative assessment including unit vocabulary
- Quick Writes (Students will use the vocabulary terms from the unit for their Quick Write regarding methods for resolving a conflict)
- Prezi, iMovie or brochure presentation pertaining to communication and conflict management techniques.

Common Rubrics:

- Presentations scored using school-wide rubric #3 (Effective Communication)
- Collaboration activities scored using school-wide rubric #2 (Works Collaboratively)
- Managing conflicts scored using school wide rubric #5 (Problem Solving)

Teacher notes:

Vocabulary instruction will be integrated into each unit of study throughout the course, utilizing the following method: First, students will utilize a non-linguistic graphic organizer for note-taking during direct instruction. Each student will then identify key vocabulary terms from their notes. Finally, the class will agree upon a list of critical terms and use them to create a class word wall

Ice Breaker- Show a video clip of Abbot and Costello's "Who's on First" routine initially. You can also role play the skit along with a student as an alternative. Google "Abbott and Costello's "Who's On First" to access a script.

At the end of significant task (Intro. To the Communication process) a formative assessment will be given. Students will respond to the following exit slip questions.

- 1. Write three things that you learned.
- 2. Write one or two questions regarding today's lesson.

Trust walk activity: Give clear instructions about the important task of the non-blind folded student's

task to keep his/her partner safe. The walk should take approximately ten minutes for each student who is blind folded. At the conclusion of the activity in groups the students should discuss how they needed to communicate so their partner would be safe. Students who were blindfolded should state whether their level of trust increased, decreased or didn't change along with the reasons for their response. Should there be an odd number of students the teacher may lead the lone student. Students with impairments should walk beside the teacher and be instructed to observe the interactions the other students are having as they walk. Again the guide should use precise language to ensure the impaired partner's safety. The impaired partner must respond appropriately to the guide's instructions throughout the exercise demonstrating the bi-directional flow of the communication process.

Closing: Reflection writing about their experience during the trust walk. Having been visually impaired and having been sighted should be discussed in the reflection piece. Students should evaluate as to what worked and what didn't to accomplish the trust walk. Discussion should revolve around effective and ineffective communication and how trust is a key factor to healthy relationships.

Survival Game/Team work activity: As a whole class students will participate in a group or team effort to assemble themselves in alphabetical order while standing on four two by six inch boards assembled in a square on a grassy ground. This activity will incorporate the issue of trust, verbal and non-verbal communication along with team building and leadership skills. Refer to teacher's notes for more details and rules. When the students have accomplished this task they should write a reflection as to what made the process work and what made the process difficult. Be sure to mark on a sheet of paper the number of times the students had broken the rules. This serves to motivate a sense of urgency and purpose. When the students have concluded the task ask them to discuss the verbal and non-verbal cues they used to accomplish this task

Interpretive activity -Working in pairs and sitting back to back students will be given an object and a piece of paper. Using precise language one person will describe the object while the other person will create a drawing of the object. The object of the activity is to demonstrate the limitations of using only verbal communication to describe an object. Students will compare the drawings with what was interpreted from the description. As a whole class students should report and discuss their findings.

Observation activity: A modification would be to divide the class into various small groups initially. Then provide each group with a different photo then conduct the activity in the same fashion as the original. Individually students should describe what they are observing and then compare their observations with each other.

Conflict Styles activity: Ask the question, Why is it often difficult to identify the real issue in a conflict? Have the students brainstorm a list of conflicts people contend with on a day to day basis. Then have them identify who owns the problem in each situation.

Prior to distributing the handout titled "Dealing With Conflict" be sure to place the name of each conflict style on an 8inch by 11inch piece of construction paper. Place these papers in various places on the walls around the classroom where they can be clearly seen. Management styles include competition, avoidance accommodation, compromise and collaboration.

Jig-saw technique will be used to read and respond to review questions at the end of each assigned chapter or reading. At the conclusion of the activity the class will regroup for a review session in

preparation for the summative test. Throughout these activities guiding questions will be utilized as needed

Essay – Assign an essay to be worked on in class in which the students must re-cap and explain the components and importance of good communication.

Bring the class to the library/media center or computer lab so they can develop their iMovie, Prezi and brochure.

Windsor Public Schools Curriculum Map for the Secondary Level Family Sociology

Name of the Unit: Establishing Healthy

Relationships

Length of the unit: 15 Blocks (86 minutes)

build a happy and stable marriage

Unit 2	
Purpose of the Unit: This unit gives students the opportunity to analyze a interpersonal relationships with an emphasis on frie	_
Big Ideas:	Essential Questions:
Interpersonal relationships require effort in order to function effectively.	What is a healthy relationship?
Assertive responses are an optimal way to respond	Can passive or aggressive responses be useful?
to a variety of interpersonal relationship issues.	What is the purpose of dating?
Relationships with people of other cultures can be beneficial.	Is marriage beneficial?
Dating behaviors have long-term effects.	
Marriage has an impact beyond the two individuals involved.	
Students will know:	Students will be able to:
 How various behaviors impact future interpersonal relationships 	 Distinguish the differences between passive, assertive and aggressive responses
 Skills for communicating, making decisions, and solving problems which can help a relationship grow 	Identify warning signs of abusive behaviors
 The functions and stages of dating in our society 	 Explain the function of dating in our society
·	Recognize the stages in the dating process
 Factors that promote violence in dating and marital situations 	Identify personal qualities that can help

- How to distinguish mature love from romantic feelings
- Personal qualities that can help build a happy and stable marriage
- Analyze how skills for communicating, making decisions and solving problems can help a relationship grow
- Determine measures for preventing violence and abuse in the family

Significant task 1: Behaviors and attitudes which can develop or degrade friendships

The topic of assertiveness will be introduced through a YouTube video clip about assertiveness training.

Following the clip, students will divide into groups of four and read a series of situations and problemsolve ways to respond to these situations in an assertive fashion. Following the small group exercise, individual groups will present their findings to the class. For homework, students will be asked to take notes on peer pressure situations they have observed in one school day. Students will include verbal exchanges, facial expressions and other body language in their notes.

In class, students will work in small groups to discuss their observed situations and classify each as an assertive, passive, or aggressive response. This will be followed by a class discussion in which students will debate whether the situations were handled appropriately from their point of view.

As a culminating activity, students will produce live role plays or an I-Movie demonstrating methods of coping with peer pressure in an assertive fashion.

Timeline: 3 Blocks (86 minutes)

Key vocabulary: passive, aggressive, assertive, rapport, risk-taker, acquaintances, support network

Resources: Text and Teacher's Resource Portfolio Strengthening Family and Self, Leona Johnson 2006 Ready-to-Use Conflict Resolution Activities for Secondary Students, Ruth Perlstein, Gloria Thrall 1996, : Library/Media Center/Computer lab., Smartboard, The New York Times, The Hartford Courant, The Wall Street Journal

Significant task 2: Dating

In small groups, students will share their ideas as to what qualities they would want in a potential dating partner. As a whole class students will share their ideas by listing them on the board or on butcher paper. Following the discussion, student will view a PowerPoint presentation from the Interval House, titled "What Are The Components Of A Health Relationship?" Students will then individually compare their list of qualities with those listed in the presentation.

As homework, students will be asked to interview people from three different age groups regarding their dating experiences. In pairs, students will share their results, classify the experiences into the six main function areas of dating, and compare/contrast the reports of different age groups. Each group

will share a summary of their findings with the class.

Timeline: 2 Blocks (86 minutes)

Key vocabulary: formal dating, informal dating, group dating, steady dating, double-date, random dating Resources: Text and Teacher's Resource Portfolio Strengthening Family and Self, Leona Johnson 2006

Significant task 3: Date rape and acquaintance rape

This task begins with a pre-test on the issues of date rape and acquaintance rape.

Ice breaker: As a whole class students will debate a series of teacher- generated statements about dating and preventing dating violence. Students will move from one end of the room or to the other side of the room, depending upon whether they agree or disagree with the questions. This will serve to emphasize their position with their classmates as the debate unfolds.

The topics of date rape, acquaintance rape and domestic violence will be addressed through a series of interactive activities and speakers from the community. Emphasis will be placed on dating violence prevention and intervention, the dynamics of violence, crisis intervention and a review of state and community resources.

Finally, students will work as partners to create their own wheel of "Teenage Power and Control in Dating" in a PowerPoint or Prezi and present their work to the class.

Timeline: 3 Blocks (86 minutes)

Key Vocabulary: date rape, acquaintance rape,

Resources: Text and Teacher's Resource Portfolio Strengthening Family and Self, Leona Johnson 2006, An officer from Windsor Police Department, Hartford Interval House, Inc. –Guest speaker and information packets, DVD- Date Rape, Smartboard, The New York Times, The Wall Street Journal

Significant Task 4: Distinguishing the differences between various forms of love

Using a debate format, students will debate a series of questions developed by Hartford Interval House Inc. pertaining to the topic of love and relationships.

As a whole class students will listen to a series of songs from the past sixty years about the various types of love. As students listen to pieces of each song, they will discern which type of love is being described from the lyrics. In groups, students will share and defend their answers. Students will then discuss which type of love was presented more often than others for the purpose of determining what types of love are most significant in society.

In pairs, students will research ten songs of their choosing that exemplify each type of love. Research should include the song title and a chosen set of lyrics from the song to serve as evidence for their findings. Findings will be presented to the class. Individually, students will type a one page reflection about the class's findings.

Students will summarize their learning by writing an essay discussing their findings regarding the

messages of "love" in popular music, followed by a compare and contrast of mature and romantic love.

Culminating project:

As individuals, students will research the marriage customs of two cultures. Topics to be covered will include the rituals associated with the ceremony as well as the responsibilities of the bride and groom and their friends and family. This project can be extended to include dress, food and other detailed information associated with the ceremony. Students' research can be shared through PowerPoint, Prezi, or other presentation media. Students will share their presentation with their classmates and be assessed by their peers.

Timeline: 4 Blocks (86 minutes)

Key Vocabulary: Mature love, Romantic Love, Agape, Eros, Philos, Ludus, Mania, Pragma, Storge Resources: Text and Teacher's Resource Portfolio Strengthening Family and Self, Leona Johnson 2006

Our Sexuality, Crooks and Baur 2011, 11th edition

Hartford Interval House, Inc.

I-tunes

Common learning experience:

- Creating a PowerPoint or Prezi comparing marriage customs from two cultures of the student's choosing
- Jig-saw activities for test review
- Guest Speakers–Windsor Police Department Police Officer, Hartford Interval House Representative
- Creating a Teenage Power and Control in Dating Wheel, utilizing presentation technology
- Exit Slips

Common assessments:

- Tests on the topics of relationships, dating, and preparation for marriage
- Pre-tests on vocabulary
- Research project comparing and contrasting courtship and marriage customs from around the world
- Student produced Teenage Power and Control in Dating Wheel
- Essay comparing and contrasting mature and romantic love

Common rubrics:

- Research for Marriage and Customs project scored using School-wide rubric #1 (Access and evaluate information) and #4 (Critical Analysis/Thinking)
- Teamwork focused on formulating assertive responses scored using School wide rubric #2 (Collaboration)
- Presentation of essay on mature and romantic love scored using School-wide rubric #3 (Communication)

Teacher notes:

A pre-test of vocabulary pertaining to relationships will initiate the lesson.

Through direct instruction, present the power point slide adapted, from the Interval House, titled "What Are The Components Of A Health Relationship?" Students will then individually compare their list of qualities with the Interval Houses power point slide of "What Are The Components Of A Healthy Relationship?"

As a whole class using direct instruction for vocabulary students will use a nonlinguistic graphic organizer to take their notes. As a whole class students will create a word wall from the vocabulary for this lesson. Individually students will be asked to discuss their illustration.

Students will create a Teenage Power and Control in Dating Wheel using PowerPoint or Prezi http://www.youtube.com/watch?v=hvOpN-QQs U – Beware of Date Rape Drugs

Marriage and Marriage Customs Project is under Project Links in the Windsor Library Homepage

The Windsor Library also has an MLA style formatting guide for works cited.

Collaborative groups will consist of at least four students. Each student will have a task as a group leader, recorder, timer or reporter.

Popular songs that apply for the music and types of love activity should be professionally edited. Use I-tunes.

Windsor Public Schools Curriculum Map for the Secondary Level Family Sociology

Name of the Unit: Understanding Families	Length of the unit: 6 Blocks (86 minutes)
Unit #3	

Purpose of the Unit: The purpose of the unit is to explore what a family is and to emphasize that the structure of families is an evolving paradigm. Students will understand that although families have varying structures they still have the same functions and that the way family members interact with each other has an impact on how the family carries out those functions.

FACS Standards addressed in the unit:

Demonstrate standards that guide behavior in interpersonal relationships 13.6 Evaluate effective conflict prevention and management techniques 13.4 Demonstrate communication skills that contribute to positive relationships13.3 Analyze personal needs and characteristics and their impact on relationships13.2

Common Core State Standards Addressed in the unit:

Research to Build and Present Knowledge 10.W.7: Conduct short as well as more sustained research projects to answer questions(including self-generated questions) or solve a problem,, narrow or broaden the inquiry when appropriate, demonstrating understanding of the subject under investigation **Conventions of Standard English** 10.L.1: Demonstrate command of conventions of standard English and usage when writing or speaking

Presentation of Knowledge and Ideas 10.SL.4: Present information findings and supporting evidence, clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance and style are appropriate to purpose, audience and tasks.

Vocabulary Acquisition and Use 10.L.4: Determine or clarify the meaning of unknown and multiple meaning words and phrases based on reading and context.

Comprehension and Collaboration: 10.SL.1: initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners topics, texts and issues.

Big Ideas: There are many ways of defining "family".	Essential Questions: What is a family?	
Families have a range of structures.	What is the purpose of a family?	
Cultural changes have changed family structures.	How do family members' interactions impact the	

Family members interactions impact the functions of the family	functions of the family?
 Various forms of family structures The functions of the family Methods of preventing family violence and abuse Communication patterns in families 	 Students will be able to: Describe how cultural changes have affected the family Appraise the benefits of living in a family Describe patterns of communication and decision making that increase positive family interaction Determine measures for preventing violence and abuse in families

Significant task 1: Family Structures and Functions

As a hook, students will be asked to write a paragraph titled, "What is a Family?" Volunteers will be asked to read their paragraphs to the class. As a class students will summarize the definitions into a class definition of a family. Following this activity, students will be participate in discussion which will introduce the concepts of family structures and functions.

In groups of four, students will compare and contrast American family structures and functions from the colonial days, the Industrial Revolution and the technological age. Students will then share their responses with the whole class.

In small groups, students will extend their knowledge of family structures and functions by discussing their predictions as to what family life will be like in the year 2100. Students will predict ways in which families will meet their children's emotional and physical needs and ways in which children will be socialized.

Timeline: 3 Blocks (86 minutes)

Key vocabulary: family, nuclear family, single-parent family, blended family, extended family, modified extended family, dual career family, single living, stereotype

Resources: : Text and Teacher's Resource Portfolio Strengthening Family and Self, Leona Johnson 2006 Student Activity Guide Strengthening Family and Self, Leona Johnson 2006

Significant task 2: Family Interactions

This task will be introduced through a brainstorming session in which students will identify ways in which families demonstrate positive and negative interactions.

Following the brainstorming session, students will view video clips that depict a range of positive and negative family interactions. This will serve as a hook into the topic of family interactions. After a class discussion comparing the students' ideas of family interactions with those from the videos, students will break up into small groups to role play family interactions between parents and their teenage children, noting the reasons for differing outcomes.

Finally, students will synthesize their learning through a small group activity in which they will assume that they are a task force assigned to set guidelines for preventing violence and abuse in the family. Each member of the group will select a type of abuse that no other group member researches. As a group the students will develop role plays with guidelines for preventing abuse and family violence.

Timeline: 2 Blocks (86 minutes)

Key vocabulary: family system, family life cycle, democratic decision making, scapegoating, violence, battering, child abuse, physical abuse, emotional abuse, sexual abuse, neglect, crisis-care centers, shelters, group homes, foster care, independent living, family routines, family traditions

Resources: Windsor Police Department, Windsor High School Social Worker, Windsor High School Library/Media center, Windsor High School Computer laboratories, Teacher's Resource Portfolio and Student Activity Guide, Strengthening Family and Self, Leona Johnson 2006

Newspapers: the Hartford Courant, The New York Times, The Wall Street Journal

Common learning experiences:

- Pre-tests
- Brainstorming as it pertains to
- Role plays
- Quick writes
- Jig-saw for test review
- Cooperative learning activities including functions of the family, family communication and problem solving and family strengths
- Presentations using PowerPoint, Prezis or I-movies
- Guest speakers including the Windsor Police Department
- Exit Slips

Common assessments:

- Pre-tests on family interactions and associated vocabulary
- Cooperative learning activities including small group work to develop a task force against family violence
- Presentations of role plays to fellow classmates and possibly Sage Park Middle School students.
- Unit test (Includes unit vocabulary)

Common rubrics:

- Development of role plays to prevent family violence scored using School- wide rubric #2 (Collaboration)
- Students' presentations comparing the American family from the Colonial days to the present scored using School- wide rubric #3 (Communication)
- Development of ways to stem family violence scored using School- wide rubric #5 (Problem Solving)

Windsor Public Schools Curriculum Map for the Secondary Level Family Sociology

Name of the Unit: Establishing and Maintaining	Length of the unit: 8 Blocks (86 minutes)
your Future Family	
Unit #4	
Purpose of the Unit: In this unit, students explore the	ne components needed to provide for themselves
and a potential family in the future.	

FACS Standards addressed in the unit:

Analyze functions and expectations of various types of relationships 13.1

Analyze personal needs and characteristics and their impact on relationships 13.2

Demonstrate communication skills that contribute to positive relationships 13.3

Evaluate effective conflict prevention and management techniques. 13.4

Common Core State Standards addressed in the unit:

Research to Build and Present Knowledge 10.W.7: Conduct short as well as more sustained research projects to answer questions(including self-generated questions) or solve a problem,, narrow or broaden the inquiry when appropriate, demonstrating understanding of the subject under investigation **Conventions of Standard English** 10.L.1: Demonstrate command of conventions of standard English and usage when writing or speaking

Presentation of Knowledge and Ideas 10.SL.4: Present information findings and supporting evidence, clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance and style are appropriate to purpose, audience and tasks.

Vocabulary Acquisition and Use 10.L.4: Determine or clarify the meaning of unknown and multiple meaning of words and phrases based on reading and context.

Comprehension and Collaboration 10.SL.1: Initiate and participate in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on topics, texts and issues.

Big Ideas:	Essential Questions:
Education is a major component of job success. Providing for one's self and family effectively	What do successful individuals and families have in common?
requires planning.	What is success?
	What are the benefits of planning?
Students will know:	Students will be able to:
 Methods of researching possible careers Methods of searching for appropriate housing as it relates to their budget 	 Develop a career plan Balance a personal and family budget Distinguish career success from success

- Where to search for online products for living
- Personal success for one's self and family requires planning and accountability
- with a family
- Problem solve ways to support one's self and future family

Significant task 1: Researching a career for self and family life

This task will begin with a teacher-guided discussion regarding career choice; including matching interests to career paths, the wide range of career choices available, the variety of schooling and training needed for different careers and the differing lifestyles that would result from different paths. Individually, students will complete the "Career and Family" project, in which they research a career of interest in terms of preparation needed, median and top salary, job projections for Connecticut and typical work week for someone working in that career pathway. A speaker from a local technical college may be utilized to provide additional information regarding educational options for technical fields. Students will be responsible for writing a two page reflection at the conclusion of the project and unit specifically focusing on the ways to balance personal, family and career goals.

Timeline: 3 blocks (86 minutes)

Key vocabulary: career, job, occupation, lifestyle, work, transferrable skill, career ladder Resources: Windsor High School Library, Making it! Career and Family Project(On Line under Project Links), Occupational Outlook Handbook (online), Porter and Chester Institute, Lincoln Technical Institute Text: Strengthening Family and Self, Leona Johnson 2006

Significant task 2: Preparing a budget

In this task, students will extend the career information they gathered in significant task #1. Individually, students will utilize research resources to develop a detailed budget plan, using the salary projection from their career of choice. Students then will explore a place to live which will accommodate their budget and lifestyle. Prior to beginning their project, students will work in groups to develop a list of budget categories for their research. Upon completion, students will share their research with the class and then summarize their learning with a reflection paper.

Timeline: 2 blocks (86 minutes)

Key vocabulary: savings, housing, transportation, net, gross income, net income, compounded, fixed expenses, variable expenses, liquidity, electronic funds transfer (EFT), installment credit, revolving credit, line of credit, credit rating, overdraft, security deposit, mortgage, down payment, fixed rate, conventional mortgage, adjustable rate mortgage

Resources: Windsor High School Library Project Links for "Career and Family Project" produced by the library/media specialist, website - www.apartments.com, Text and Teacher's Resource Portfolio Strengthening Family and Self, Leona Johnson 2006

Common learning experiences:

- Guest speakers from Porter and Chester or Lincoln Technical Institute
- Instruction from the Library Media specialists as to how to develop the project online
- Conducting online research
- Project presentations
- Peer assessment of presentations

Common assessments:

- Career and Family project and presentation with PowerPoint or Prezi
- Pre-tests and a summative assessment on vocabulary

Common rubrics:

- Career and Family project presentations scored using School- wide rubric #3 (Communication)
- Individual/Family budget development scored using School- wide rubric #5 (Problem Solving)

Teacher notes:

- Produce a hard copy of the project as some students find a hard copy beneficial.
- Set up at least three days in the library to assist the students with the project
- When the guest speakers complete their discussions with the class be sure to have the students
 write a summary of the presentation along with an opinion. In addition, students should try to
 make any associations and predictions as to how the information from the presentation can be
 used in the future.

Windsor Public Schools Curriculum Map Innovation and Invention-Design and Communication BOE Approved Date

Purpose of the Course:

This course is aligned with the Engineering by Design curriculum designed by the International Technology and Engineering Educators Association (ITEEA) and is designed to provide students with standards-based content in a project-based environment. In this course, students will focus upon the process by which a product is brought from concept to production. Students will be afforded the opportunity to: recognize and define a problem, create a solution to the problem, and then communicate the solution in the form of a CAD drawing and design brief.

Grade Level: 7th Grade

Course Name: Innovation and Invention – Design and Communication

Name of the Unit: Structure design and construction

Length of the Unit: 22 class periods (48 minutes)

Purpose of the Unit:

The purpose of this unit is to expose students to the engineering design process and creation of a design prototype. This process will include communicating testing results to the design team for the purpose of design modification, which is a critical component of the engineering process.

Common Core State Standards Addressed In The Unit:

- Text Types and Purposes
 - W.7.1c: Use words, phrases and clauses to create cohesion and clarify the relationships among claims, reasons and evidence.
 - W.7.2d: Use precise language and domain-specific vocabulary to inform about or explain the topic.
 - W.7.2: Writing informative/ explanatory text to examine and convey complex ideas.
- Production and Distribution of Writing
 - W.7.4: Produce a clear and coherent writing in which the development, organization and style are appropriate to task, purpose and audience.
 - W.7.5: With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing and rewriting.
 - W.7.6: Use technology, including the internet, to produce and publish writing.
- Research to build and present knowledge
 - W.7.7: Conduct short research projects to answer a question.
- Mathematics
 - 7.EE: Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
 - 7.RP: Analyze proportional relationships and use them to solve problems.
 - 7.NS: Apply and extend previous understandings of operations with fractions to add,

subtract, multiply and divide rational numbers.

Connecticut Technology Education Standards:

- Nature of Technology:
 - NT.01.02: Explain that technology is closely aligned to creativity, which has resulted in innovation.
 - NT.01.08: Recognize and explain that technology involves inventing new things and modifying the old ones to make them more efficient.
 - NT.01.012: Explain that technological innovation is driven by the profit motive.
 - NT.01.013: Explain that technology creates new economic opportunities and social benefits and at the same time, produces new social problems.
 - NT.02.05: Explain the benefits and consequences of technological innovation.
- Impact of Technology:
 - IT.01.04: Determine if the use of a product or system creates positive or negative results.
 - IT.01.06: Interpret and evaluate the accuracy of the information obtained and determine if it is useful.
 - IT.03.04: Evaluate local, regional or global issues surrounding technology.
- Design and Development (Engineering)
 - DD.01.02: Incorporate science concepts and mathematic processes applied through the use of technology.
 - DD.01.03: The positive and negative aspects of a design.
 - DD.01.05: Explain why a design process leads to useful products and processes.
 - DD.01.06: Critique designs and products created to solve a problem.
 - DD.02.01: Demonstrate that evaluating, modeling, modifying and testing can be used to transform ideas into practical solutions.
 - DD.02.04: Select and use appropriate materials, tools and machines.
 - DD.02.07: Create various graphic representations or drawings of the design solution.
 - DD.02.12: Evaluate the effectiveness of a model and recommend necessary changes.
 - DD.03.03: Explain that the use of symbols, measurements and drawings promotes clear communication by providing a common language to express ideas.
 - DD.03.06: Diagram and demonstrate the process used for operating an efficient transportation system.
 - DD.03.10: Identify the factors used to select the designs for structures based on building laws and codes, style, convenience, cost climate and function.

Big Ideas:

Engineers follow a specific process when designing. Drafting standards are international.

Essential Questions:

What makes one design more functional than another?

Does the safety of the design outweigh the cost of the design?

Are there multiple functional avenues to a desired result?

Students Will Know:

- The Engineering Design process
- The West Point Bridge Design software
- Graphic communication and scale drawing
- Standard material processing techniques and construction processes

Students will be able to:

- Describe and utilize the steps in the design process
- Utilize the design features of the West Point software
- Transfer scaled design to 1/8 graph paper
- Demonstrate proper use of modeling tools and materials
- Compare bridge model to set standards

Significant Task 1: Bridge design

This task will begin with an introduction and demonstration of the West Point software on the Smart Board, followed by a class discussion. Through guided questioning, students will be encouraged to consider the merits of each bridge style available in the software in regards to their ability to withstand the forces of tension and compression. The students, as individuals, will become familiar with the software, select a bridge style and begin design of their own bridges. Each bridge will be run through a virtual test to see if it functions at the prescribed expense schedule. When their bridge complies with the design rubric, each student will print a copy of their bridge. Students then will proceed to create a 1/8 by 1/8 graph representation of their bridge design from significant task #1. The bridge will meet set size standards for the test bench. When the student completes the drawing, they will mount it to a cardboard base material and coat it with wax paper to protect the drawing during construction. The student will demonstrate the use of a 12 inch scale to make sure the bridge is held to standard constraints.

Timeline: 4 periods (48 minutes)

Key vocabulary: truss, tension, compression, torsion, beam, weldment, suspension, deck, roadbed, elevation, Grid, graph paper, scale, adhere, wax paper

Resources: Lecture, class demonstrations, West Point software on classroom computers, 12 inch scale

Significant Task 4: Balsa wood model construction

This task will begin with students watching a video on construction methods used with balsa wood, as well as the tools necessary to accomplish the modeling task. The class will be given a demonstration of construction techniques by the teacher, as well as being shown examples of good and bad bridges. The proper safety techniques will be shown to the students during the demonstration portion of the class. The tools and materials will be supplied to the students by the teacher. Individual help will be given to the students by the teacher while they are in the process of making the bridges. The students will seek input from fellow students both in concepts and in technique.

After successful construction of their bridge, students will then individually subject their bridges to load tests to evaluate the bridges ability to withstand compression and tension. The instructor will hold an open discussion with the students to compare and contrast the merits of individual designs tested.

Timeline: 10 periods (48 minutes)

Key Vocabulary: Balsa, adhesive, separating, combining, assembly, joinery, Tension, torsion, compression, forces, calculate, withstand

Resources: Pitsco balsa bridge video, classroom demonstration, modeling tools, raw materials, Classroom demonstration by the instructor, use of the test stand and scales to calculate weight withstood by the bridge, video by "Building Big"

Common Learning Experiences:

- Introduction to Invention and Innovation, the 7th grade component of Engineering by Design
- Engineering design process introduction and activities
- Introduction to and utilization of the West Point bridge design software
- Exposure to graphing and use of standard scales
- Exposure to model making materials and tools
- Introduction to lab testing bridges and exposure to the forces bridges must withstand

Common Assessments:

- Computer generated design (demonstrating critical thinking and problem solving)
- Use of scale and ratio, using 1/8 inch grid paper (demonstrating communication skills)
- Compliance assessment (demonstrating financial and economic literacy)
- Inspection standards
- Construction skills, based on standards demonstrated in class

Rubrics:

- Four point rubrics posted in classroom
- Student self- assessment point sheet
- Bridge testing rubric posted in classroom
- Writing samples in class using 6 + 1 rubric

Teacher Notes: Vocabulary instruction

- Vocabulary instruction will be content and activity specific, incorporated into daily lessons. The students will be given definitions and descriptions of all new vocabulary while given the opportunity to use the words in proper sentence form. The student will be demonstrating communication and creativity skills.
- The instructor, with feedback from the students, will construct a word wall for the unit
- The students will be asked to place the words on the wall into content specific sentences.
- The students will be given a list of definitions and asked to align these definitions with the correct word from the word wall

Windsor Public Schools Curriculum Map for the Secondary Level Introduction to Manufacturing

Purpose of the course: Instructional modules in this "hands-on" course allow students to develop an understanding of the design, material, fabrication and production components of the machining industry. Processes involved with each component will be explored on a sequential basis allowing students to design and produce alternative solutions to specific manufacturing/machining problems.

Name of the unit: 1-Introduction to	Length of the unit: 8 Blocks (86 minutes)
Manufacturing	

Purpose of the unit: This unit introduces students to the manufacturing basics of design production, general shop and machine safety.

Common Core State Standards addressed in the unit:

Text Types and Purposes 10.W.2: Writing informative/explanatory text to examine and convey complex ideas

Research to Build and Present Knowledge 10.W.7: Conduct short as well as more sustained research projects to answer questions (including self-generated questions) or solve a problem, narrow or broaden the inquiry when appropriate, demonstrating understanding of the subject under investigation

Comprehension and Collaboration 10.SL.1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on topics, texts and issues

Presentation of Knowledge and Ideas 10.SL.4: Present information findings and supporting evidence, clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance and style are appropriate to purpose, audience and tasks

Conventions of Standard English 10.L.1: Demonstrate command of the conventions of standard English and usage when writing or speaking

Vocabulary Acquisition and Use 10.L.4: Determine or clarify the meaning of unknown and multiple meaning words and phrases based on reading and context

Connecticut Technology Education Standards addressed in this unit:

Describe and demonstrate the use of graphic communication skills through sketching CADD.02.04

Evaluate and select appropriate method of communication for a given problem CADD 02.05 Use the concepts of geometric construction in the development of design drawings CADD 05.04

Create and manipulate line types, colors and layers/levels CADD 05.09

Produce proportional two- and three-dimensional sketches and designs CADD 08.01

Develop details of a solution ENG 02.07

Communicate processes and results ENG 02.11

Make an oral presentation ENG 05.03

Actively contribute to a team project ENG 05.04

Identify available resources for researching problem solutions ENG 07.01

Use presentation software to develop oral presentation of findings ENG 07.03

Big Ideas: Manufacturing is critical to the economy.	Essential Questions: What makes one design more desirable than another?
Throughout the manufacturing process accuracy and precision is required.	What is safety mindset?
	Can you be too accurate?
Students will know: • The aspects of manufacturing • The components of mechanical drawings • Safety procedures and protocol	Students will be able to: Demonstrate safe procedures Describe and utilize mechanical drawing Accurately measure and lay out in a machining setting

Significant task 1: Introduction to manufacturing and safety protocols As an introduction to this unit, students will research manufacturing career opportunities present in Connecticut and give a three minute presentation to the class regarding their findings.

Students then will participate in a manufacturing simulation. The class will be divided into two equal groups, with each group representing a manufacturing company. Each company will be given the task of producing an object made out of paper. The goal for each company will be to produce as many quality finished products as they can in a given time limit. Each team will have the opportunity to devise a manufacturing process, and then revise that process to enable them to make more products, do it more efficiently and with higher quality. Students

will document their experiences in a one page reflection in which they will examine what went well, what could have gone better, what was important about the simulation and what they learned from the experience.

Finally, students will take a tour of the manufacturing lab and view several machines in safe operation.

Timeline: 3 blocks (86 minutes)

Key vocabulary: manufacturing, milling, assembly line, efficiency, quality, machinist, lean

manufacturing, lathe, drill press, milling machine

Resources: PowerPoint presentations, recycled paper for manufacturing simulation

Significant Task 2: Mechanical drawing and measurement

This task will be introduced with an interactive presentation, in which students will learn the basic components of multi-view drawings, orthographic, and isometric projections. Following the presentation, students will take a three dimensional wooden block and create a 3 view drawing. This will require students to look only at one view at a time, and graphically represent that view on paper. Upon completion, students will submit their drawing for a grade, and then the drawing will be handed back to students so they can complete the second part of this unit.

Students will be shown a PowerPoint presentation about dial calipers, and measurement to the thousandth of an inch. Finally, using their orthographic drawing and their original wooden 3-D block, students will measure and dimension their drawing utilizing their new dial caliper measurement skills.

Timeline: 3 blocks (86 minutes)

Key vocabulary: orthographic projection, isometric view, 3-D, 2-D, object lines, hidden lines,

center lines, dimension, dial caliper, reference edge

Resources: PowerPoint presentations, corresponding notes template, caliper worksheet

Common learning experiences:

- Safety presentations, question and answer sessions, and a safety pre-assessment
- Manufacturing lab safety scavenger hunt to find all of the safety equipment and PPE in the labs.
- Introduction to lab machinery and safety equipment
- Multimedia presentations
 - Introduction to manufacturing careers
 - Lab safety procedures
 - Mechanical drawing techniques

- Manufacturing simulation
- Career research
- Shared class Google Doc for vocabulary

Common assessments:

- Safety assessment: The general lab safety will conclude with a written safety test and an activity in which students will label the location of all the safety equipment on a floor plan drawing of the lab.
- Presentation-Manufacturing Careers in Connecticut
- Notes on presentations
- Mechanical drawing with dimensions

Rubrics:

- Presentations scored using school-wide rubric #3 (Effective oral communications)
- Manufacturing simulation reflection will be grading using school-wide rubric #4 (Critical Analysis/Thinking)
- Internet research scored using school-wide rubric #1 (Uses research tools to access, evaluate and document information)
- Mechanical Drawing scored using school-wide rubric #5 (Problem solving)

Windsor Public Schools Curriculum Map for the Secondary Level Introduction to Manufacturing

Name of the Unit: Machining Unit #2	Length of the unit: 20 Blocks (86 minutes)
Purpose of the Unit: Students will demonstrate processes.	an understanding of machining techniques and

Common Core State Standards addressed in the unit:

<u>CCSS.Math.Content.HSA-CED.A.3</u> Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context.

<u>CCSS.Math.Content.HSG-CO.D.12</u>Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.).

Connecticut Pre-Engineering Technology standards:

Identify and use tools, fasteners and equipment. ENG.03.02

Measure with precision measurement tools and instruments. ENG.03.03

Actively contribute to a team project. ENG.05.04:

Connecticut Technology Education standards:

Demonstrate the safe and accurate secondary process to create a finished product; forming; separating; combining; assembly; finishing. MAN.03.02

Apply a variety of manufacturing techniques and processes to create a usable product. MAN.03.03

Identify and describe the four major types of engineering materials: metallic, polymeric, ceramic and fibrous. MAN.02.01

Identify and describe seven major types of material properties. MAN.02.02 Select materials based on properties required by the project. MAN.02.03

Big Ideas:	Essential Questions:
Lathes and milling machines are used to	What makes a solution or product an optimal?
fabricate objects from various materials.	

Machining requires setup, accuracy, planning, and efficiency.

Students will know:

- The uses of lathes
- The differences between climb vs. conventional milling
- Various types of engineering materials and properties

Students will be able to:

- Demonstrate how to properly setup and use a lathe and a vertical milling machine
- Choose the correct cutting tool for a particular function

Significant task 1: Lathe processes

Following an introduction to the lathe, its components, operation, and cutting abilities, students will learn about how to start a metal working project through a class discussion. Emphasis will be placed on the necessity of planning and the proper order of operations.

Students then will begin work on their aluminum project. Throughout the project, students will learn various techniques as they present themselves in the project. First, the teacher will demonstrate end facing and center drilling on the lathe, and students will perform these functions on their own work pieces. The teacher then will demonstrate how to lay out a work piece, and explain that the information that is contained on the plan must be transferred to the work piece. Following the demonstration, students will lay out their work piece, with support from the teacher. This will require students to analyze the information on the plan, use various layout tools, and utilize math operations to determine the proper measurement and problem solve the process. They also will be utilizing knowledge from Unit 1 on mechanical drawings and measurement.

Demonstrations of the various lathe operations will be provided as students progress through the process of making their products. Students will learn the following through discussions and practice: efficient processes, tool selection, tool sharpening, cutting direction, speed rate, feed rate, and generally accepted practices.

Finally, students will observe and demonstrate how to transition a metal working project from a rough piece into a finished product; utilizing proper filing, sanding and polishing techniques.

Students will work at varying paces, with some students finishing before others. Individual students who finish the project first will go on to assist other students to help them successfully finish their projects.

Timeline: 8 Blocks (86 minutes)

Key vocabulary: aluminum, end face, center drill, turning, taper, knurl, height gauge, emory cloth, grit, tool, rake, continuous chip, spindle, table, saddle, knee, base, column

Resources: Well-equipped machining shop, aluminum rod, rubric for assignment

Significant task 2: Setup and tools

This significant task will expose students to the two types of milling (conventional vs. climb). In a whole group setting, students will be introduced to milling, the advantages and disadvantages of each type, and the various categories of cutting tools. Students then will be divided into small groups. Each group will be assigned a particular milling operation. For their assigned operation, each group will:

- Complete an action list of how they will setup their mill
- Identify the process they will be using
- Choose the proper cutting tool
- Upon teacher approval, complete set up in the lab
- Mill with their proposed setup

Upon completion of the task, each student will write a reflection that asks them to examine:

- the chip thickness
- surface finish of the part
- tool wear
- chatter in part
- chip clogging present
- load on the machine

Timeline: 3 Blocks (86 minutes)

Key vocabulary: conventional, climb, end mill, carbide, high speed steel, feed, speed, chip load, surface finish, metallic, polymeric, ceramic, fibrous, tenacity, density, color, streak, luster, magnetism, hardness

Resources: Milling machine with appropriate tools, clamping devices, Notes template that correlates to vertical milling machine PowerPoint presentation, milling machine parts identification and safety worksheet

Common learning experiences:

• Lab safety instruction, to include vertical milling machine's capabilities, components and safe operation

- Experiential learning exercise that will demonstrate how a milling machine alters the 4 types of engineering materials
- Small group, student-focused learning experiences
- Discussion-based introductory lessons-These lessons will be exploratory in nature to help students grasp and put the concepts into perspective with prior knowledge.
- Vocabulary instruction-Students will watch videos on machining and complete vocab exercises. Students will also maintain a notebook with vocab words defined.
- Student demonstration of content knowledge: Student work in the lab that includes their machining operations performed
- Worksheets that act as documentation of their learning-E.g.: notes template, project plans with notes to guide them through their machining processes
- Reflection on classroom experience-Journal entry that asks student to reflect on their completed work from that day/week to describe what went well, what could have gone better, and what you would do differently next time
- Do now's: primers or "hooks" for upcoming lesson
- Exit slips that demonstrate knowledge of daily lesson. E.g.: reflection on activity, quick answer to essential question

Common assessments:

- Lathe ID, and basic operations worksheet
- Lathe project
- Notes template for milling machine
- Engineering Materials presentation
- Milling artifact-demonstration of climb vs conventional milling
- Students' daily professionalism

Rubrics:

- Lathe assessment to be scored by teacher-generated rubric
- Multimedia presentation to group scored using the school- wide rubric # 3: Effective oral communications
- Collaboration in groups scored using school-wide rubric #2: Works collaboratively.
- Students' daily professionalism graded using the school-wide rubric # 6: Demonstrates personal responsibility and character to self and community
- Students' design ideas recorded in their engineering notebooks scored using the school- wide rubric #5: Problem solving

Teacher notes:

Significant Task 1: The guideline sheet is common in industry, every machine will have a guidelines sheet that accompanies it.

Windsor Public Schools Curriculum Map for the Secondary Level Introduction to Manufacturing

Name of the unit: Invention Unit #3	Length of the unit: 14 Blocks (86 minutes)
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Purpose of the unit: This unit provides students with the opportunity to identify a need for a product, design this product using the engineering design process and then fabricate it utilizing manufacturing technology.

Common Core State Standards addressed in the unit:

Research to Build and Present Knowledge 10.W.7: Conduct short as well as more sustained research projects to answer questions (including self-generated questions) or solve a problem, narrow or broaden the inquiry when appropriate, demonstrating understanding of the subject under investigation

Comprehension and Collaboration 10.SL.1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on topics, texts and issues

Presentation of Knowledge and Ideas 10.SL.4: Present information findings and supporting evidence, clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance and style are appropriate to purpose, audience and tasks

Conventions of Standard English 10.L.1: Demonstrate command of the conventions of standard English and usage when writing or speaking

Vocabulary Acquisition and Use 10.L.4: Determine or clarify the meaning of unknown and multiple meaning words and phrases based on reading and context

Connecticut Technology Education Standards addressed in this unit:

Describe and demonstrate the use of graphic communication skills through sketching CADD.02.04

Evaluate and select appropriate method of communication for a given problem CADD 02.05 Use the concepts of geometric construction in the development of design drawings CADD 05.04

Create and manipulate line types, colors and layers/levels CADD 05.09

Produce proportional two- and three-dimensional sketches and designs CADD 08.01

Use freehand graphic communication skills to represent conceptual ideas, analysis, and design

concepts CADD 08.03

Explain the purpose of sketching and how it applies to design CADD 08.04

Describe and utilize the steps in the design process ENG. 02.01

Describe the process for researching known, relevant information, constraints and limitations ENG 02.03

Compare and contrast physical properties of materials ENG 04.02

Explain the process used for selecting the correct materials for specific functions ENG 04.06 Actively contribute to a team project ENG 05.04

Select materials based on properties required by the project MAN 02.03

Describe the relationship between materials and manufacturing MAN 02.04

Big Ideas: The engineering design process is critical to create a plan to manufacture a product. Manufacturing a product from an idea requires collaboration at many levels and with colleagues.	Essential Questions: Does following a process kill creativity? How do you effectively collaborate in a small group setting?
Students will know: • The steps of the engineering process • The benefits of collaboration	 Students will be able to: Utilize the engineering design process Demonstrate how an idea becomes an actual product Machine complex parts utilizing traditional machining equipment and CNC milling machine Create a basic NC program of their initials utilizing the fundamentals of the Cartesian coordinate system

Significant task 1: CNC Showcase

Throughout the semester students have been working on manual machines to complete their projects. The skills the students have learned on the lathe and on the mill are the fundamentals of automated manufacturing. Modern automated manufacturing takes place on CNC (Computer Numeric Control) milling machines and lathes and simply automates the operations that were once done manually. In this task, students will have an opportunity to see how modern machining is done by observing and learning the basics of CNC machining.

As an introduction, a student from Advanced Manufacturing will demonstrate how a CNC machine works. The advanced student will show how to set up the tools and workpiece, and

then prepare the programming for the machine to run. Once that has been completed, the class will observe the machine running. Students will be guided to notice how the machine is doing all of the same operations that they did manually and identify the differences between their work and that produced by the machine. Students then will write a reflection on the importance of CNC machining, the fundamentals of its operation, and how it differs from a manual machine.

In this task students will gain experience in how to use the Cartesian coordinate system as it pertains to Computer Numerical Control (CNC) Milling. In a whole group, students will be introduced to the CNC coordinate system through an interactive PowerPoint presentation that outlines how the system is set up and its major components. Individual students will complete a PowerPoint study guide during the presentation.

Individually, students will demonstrate their understanding of the coordinate system by plotting their initials on graph paper, and then determining the corresponding sequence of coordinates. Students will check the accuracy of their work by having a peer recreate their initials, utilizing their coordinate sequence sheet. Students who demonstrate mastery of this activity will be given a more complex shape to program. Upon completion of their program, they will input their program into computer simulation software and troubleshoot any issues that arise.

Students will discover the need for a z axis through a small group exercise. Each small group will be given the same initials at different depths on different materials and given the task of writing a sequence of coordinates that describes the initials. The task for each group will be as follows:

Group 1: Initials written on paper

Group 2: Initials engraved on piece of metal

Group 3: Initials 1/4" deep into material

Group 4: Initials 1/2"deep into a material

Upon completion, teams share their coordinate sequence. Through guiding questions, students will discover the need for the z axis to plot depth. Following class discussion, students will return to work in their small groups to complete their original task, utilizing the z axis.

Students will demonstrate their understanding of the three axis coordinate system by completing an individual task. Each student will be assigned a depth of cut and then work to revise their initials' coordinate sequence to include the z axis.

In a whole group, students will observe a teacher demonstration of CNC simulation software. Upon completion of the revised initials activity, they will be responsible for entering their program into the software. They will be assessed on the accuracy of their program and if the program accomplishes their intended outcome.

Timeline: 3 blocks (86 minutes)

Key vocabulary: datum, absolute, incremental, X,Y,Z Axis, CNC, Cartesian coordinate

system

Resources: PowerPoint, initials activity handout, CNC simulation software, CNC Machines

Significant Task 2: Final machining project

This task begins with a whole class discussion that outlines the guidelines for the project. The project that students choose must be: school appropriate, able to take on an airplane (no weapons), be completed on a lathe or mill (no sheet metal projects) and be appropriate for their skill level. Students will have access to books that contain various plans, and they may also access the internet to find plans. They are to review the books, choose three plans that they wish to create, and create a 3 view drawing of their favorite plan. Students will have a worksheet that asks them to document where their plans came from and their drawing.

Once they have finalized their plan and it has been approved by the instructor, students will begin work on their final machining project. Students will be responsible for material selection, rough cutting, processing and finishing their project. Students will be graded individually for their project using the teacher-created manufacturing rubric.

Timeline: 6 blocks (86 minutes)

Key vocabulary: Engineering Design Process, orthographic projection, technical drawing, machining, milling, jig/fixture, wastes, push and pull systems, Kanban, systems thinking, work cells, Kaizen

Resources: Plan reference books/magazines, internet machining sites, machining rubric

Common learning experiences:

- Lab safety instruction, to include CNC machine's capabilities, components and safe operation
- Experiential learning exercise that will demonstrate how CNC simulation software is used
- Small group, student-focused learning experiences
- Discussion-based introductory lessons-These lessons will be exploratory in nature to help students grasp and put the concepts into perspective with prior knowledge.
- Vocabulary instruction-Students will watch videos on machining and complete vocab exercises. Students will also maintain a notebook with vocab words defined.
- Student demonstration of content knowledge: Student work in the lab that includes their machining operations performed
- Worksheets that act as documentation of their learning-E.g.: notes template, project plans with notes to guide them through their machining processes
- Reflection on classroom experience-Journal entry that asks student to reflect on their completed work from that day/week to describe what went well, what could have gone

- better, and what you would do differently next time
- Do now's: primers or "hooks" for upcoming lesson
- Exit slips that demonstrate knowledge of daily lesson. E.g.: reflection on activity, quick answer to essential question

Common assessments:

- End of unit assessment: Demonstration of initials activity program on CNC machine. Encompasses all significant tasks within unit: safety, understanding of machine operation, proper setup, choice of material and tool, understanding of basic programming
- Individual project assessment
- Safety assessment
- Collaboration on a task team

Rubrics:

- Engineering notebooks scored using school-wide rubric #5 Problem solving
- Collaboration in groups scored using school-wide rubric #2: Works collaboratively.
- Students' daily professionalism graded using the school- wide rubric # 6: Demonstrates personal responsibility and character to self and community.
- Students' design ideas recorded in their engineering notebooks scored using the school-wide rubric #5: Problem solving.

AGENDA ITEM PROCESS FOR CURRICULUM COUNCIL

Suggested agenda items must be submitted 30 days in advance of the scheduled monthly meeting of the
Curriculum Council. This will allow for the thorough review of all suggested items by the Steering Committee price
to establishing the agenda for the monthly meetings of the Curriculum Council.

DATE May 7, 2014 NAME(S) Nancy Crilly-Kirk AREA WHS Social Studies and History

AGENDA ITEM: New Textbook Purchases for Early Global Studies (9th Grade) and Modern Global Studies (10th Grade) College and Honors Level

Background/Identified Need: The present textbooks (World History, People and Nations, Holt, Rinehart) are out of print (from 2000) and have no online presence or continuing support.

Proposal for Change:

The proposed books are:

World History: Patterns of Interaction by Roger Beck, et. al Published by McDougal Littell

Divided into two volumes: Ancient World History
Modern World History

Publication date 2012.

Book, including atlas, teaching materials, and online book.

Student outcomes: Increase in reading skills; Cross Disciplinary skills in reading, history, social sciences, literature, art

Relation to Board of Education Goals and Mission Statements:

The books fit in with the Early Global and Modern Global curricula, will increase student literacy, will help students become global citizens, and increase knowledge of living in a diverse society.

Timeline (Significant dates/deadlines): Review by Curriculum Council: June 2014

First Reading: Board of Education: July 2014

Purchase by District: August 2014

Budget Implications: \$38,000

Estimated time of presentation to Curriculum Council (not including the discussion): 25 minutes

Information and materials needed by council members to participate in an informed discussion:

Online copies of book:
Go to: http://my.hrw.com/

Your username is: BSOUCY26

Your password is: a5x8h

FOR OFFICE USE ONLY:
Date reviewed:
Action:
file:forms