



**Lancaster High
School
2020-2021
Program of Studies**

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Agriculture Department

Art Department

Business & Computer Department

English Department

Health Department

Industrial, Technical & Engineering Dept.

Math Department

Music Department

Physical Education Department

Science Department

Social Studies Department

World Language

GENERAL INFORMATION

Lancaster High School offers over eighty courses grouped under fifteen departments. Theoretically, all classes are available to all students provided that the necessary prerequisites are fulfilled. However, some scheduling problems arise which make it impossible for a student to take a class which meets at the same time as another class. In such situations, the students must decide which class is more important, take that class or choose a substitute course to complete the schedule.

When choosing courses, students should pay particular attention to the requirements for graduation and the prerequisites of the course. Future schooling and potential occupational choices are also important factors to be considered when making course selection. Whatever schedule is selected, it should be the result of serious consideration made over a period of time. The choices are important. They should not be made hastily.

A. ACADEMIC CREDIT

Academic credit is awarded only when a student successfully completes a course with a grade of at least D-. Failure in a required course necessitates the student's retaking the course and passing it before a diploma can be awarded. Failure in an elective course earns no credit, but retaking the course is not mandatory. All courses meeting daily carries one-half an academic credit per semester. Courses not meeting daily carry partial academic credit. These courses and their credit value are as follows:

1)	Band	year	one credit
2)	Concert Choir	year	one credit
3)	Teen Parent Network		one half credit

B. GRADUATION REQUIREMENTS

Students must satisfy a total of 25 credits in order to graduate from Lancaster High School. Credits earned in grades 9-12 are counted.

Credits must be earned in the following subjects in order to meet graduation requirements:

4	Credits of English
3	Credits of Social Studies
3	Credits of Math
3	Credits of Science
1.5	Credits of Physical Education
.50	Credit of Health
.50	Credit of Computer Basics
9.5	Elective credits
25	TOTAL CREDITS

C. ACADEMIC-SENIOR REQUIREMENT

In addition to the required courses listed above, seniors must earn one academic credit from the following study areas: English, Mathematics, Science, Social Sciences or Foreign Language.

D. ELECTIVE COURSES

Of the 25 credits needed to graduate, 9.5 must be earned in elective courses. Elective courses include both yearlong and semester classes. These courses allow the student to concentrate on special interests, prepare for college entrance, or develop vocational skills.

E. COURSE LOAD

To be considered a "*full-time*" student at Lancaster High School all students, grades 9-12, must carry 6 academic subjects (a course that meets 5 days per week) plus physical education or 7 academic subjects as a senior. Students in Agri-Business OJT have revised course loads. Details of the course loads for these classes are included in the course descriptions.

F. NON-DISCRIMINATION DISCLOSURE

It is the policy of the Lancaster Community School District that no person may be denied admission to any public school in this district or be denied participation in, be denied the benefits of, or be discriminated against in any curricular, extracurricular, pupil services, recreational or other program or activity because of the person's sex, race, national origin, religion, color ancestry, creed, pregnancy, marital or parental status, sexual orientation or physical, mental, emotional or learning disability or handicap as required by s. 118.13 Wis. Stats. This policy also prohibits discrimination as defined by Title IX of the Education Amendments of 1972 (sex), Title VI of the Civil Rights Act of 1964 (race, color, and national origin), Section 504 of the Rehabilitation Act of 1973, or the Americans with Disabilities Act of 1990.

The district encourages informal resolution of complaints under this policy. A formal complaint resolution procedure is available, however, to address allegations of violations of the policy in the Lancaster Community School District. Any questions concerning this policy should be directed to: Rob Wagner, 925 West Maple Street, Lancaster, WI 53813 (608) 723-2175.

G. YOUTH OPTIONS

State law allows high school juniors and seniors to attend classes at a technical college or four-year university in addition to, or in lieu of, attending courses at Lancaster High School. Courses taken at a technical college or four-year university may count toward high school credits and lead toward high school graduation. In addition, school districts may be required to pay for some or all of the course work. If you have questions, please see the guidance counselor.

In order for a student to participate in the Youth Options Program, they need to be a student in good standing. Good standing shall be defined as on pace to graduate and not have failed any classes in the semester preceding actual participation. The Board of Education will conditionally approve new and continuing Youth Option

student's request based on the passing of their courses.

H. TUTORING

Course Type: Elective
Credit: 1/4
Course Length: Semester
Prerequisite: Approval of high school principal and instructor of tutored student.
Description: Designed for the student that may have an interest in pursuing a career in education or wants to help others. Working one on one or in a small group setting with students that need assistance with their schoolwork. The tutoring needs to be arranged to take place during a study hall for juniors wanting to participate. Seniors that have received approval may participate in the tutoring program and substitute the tutoring for one of the six courses they are required to take, providing they have the number of credits required for graduation.

LAUDE COURSES

1 Point Per Semester – for completed and passed courses

AP Biology	PLTW – Intro to Engineering and Design (IED)
AP Calculus	PLTW – Principles of Engineering (POE)
AP English Literature	PLTW – Civil Engineering and Architecture (CEA)
AP Psychology	PLTW - Engineering Design and Development (EDD)
AP US History	PLTW – Computer Science and Software Engineering (CSE)

Accounting I (TC)
Economics (TC)
Human Social Behavior (TC)
College Composition (TC)
Speech (TC)
Entrepreneurship (TC)

.50 Point Per Semester – for completed and passed courses

Advanced Microsoft (AS)	Experimentation
Spanish III	Physics
Spanish IV	Honors Band
Spanish V	Honors Choir
French III	Honors Studio Art
French IV	Advanced Ceramics and Sculpture
French V	3D Studio II
Anatomy and Physiology	Independent Studio
Chemistry II	Advanced Welding
	Veterinary Science

AGRICULTURE, FOOD & NATURAL RESOURCES

Careers in the *Agriculture, Food and Natural Resources* pathway are related to plants, animals, the environment, business and marketing. This pathway reflects on the importance of the different agrisciences, of marketing strategies, of safe food production and of the need for continuous research to improve agriculture. Some professions in agriculture are also related to engineering and industrial careers.

Do you have:

- a desire to work outdoors?
- clear verbal communication skills?
- ability to use good judgment?
- knowledge of math, business and science?
- patience and composure in working with animals?
- mechanical aptitude and ability to work with tools?
- observational and organizational skills?
- ability to work both alone and with others?
- leadership ability and decision-making skills?

If you answered "yes" to some of these questions, then you share some common abilities and interests with people who are employed in agriculture related careers.

AGRICULTURE COURSE OFFERINGS

SOPHOMORES

Plants, Animals and You (Year)
Large Animal Science
Small Animal Science
Wildlife Management
Applied Agri-Science - Plants
Ag Business Management and Marketing

JUNIORS

Plants, Animals and You (Year)
Large Animal Science
Small Animal Science
Veterinary Science
Food Science
Applied Agri-Science-Plants
Wildlife Management
Introduction to Welding
Advanced Welding
Ag Business Management and Marketing
Agriculture Mechanization and Technology (Year)

SENIORS

Plants, Animals and You (Year)
Large Animal Science
Small Animal Science
Applied Agri-Science-Plants
Veterinary Science
Food Science
Introduction to Welding
Wildlife Management
Advanced Welding
Agriculture Mechanization and Technology (Yr)
Ag Business Management and Marketing
On the Job Training (Year)
Agriculture Education cooperative
Education (OJT) (Year)



COURSE DESCRIPTIONS

PLANTS, ANIMALS AND YOU

Course Type: Elective
Credit: 1
Course Length: Year
Grade Level: 9, 10, 11, 12
Description: This course is designed to serve as a foundation course for classes in the Agriculture Department. As a foundation course, students will focus on the diversity of the agricultural industry as well as looking at the biological makeup of plants, soils, and animals. Production agriculture will be discussed along with a look at agronomy, farm safety and the dairy industry. Students will explore the FFA organization and discover an agricultural career that interests them. A unit on carpentry and shop safety will also be included in this year long course.

LARGE ANIMAL SCIENCE (Spring)

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: 10, 11 and 12
Description: Interested in Large Animals, or thinking about a career in the animal industry? This class is for you! Come with us as we take an actual look into the reproductive system of a cow through classroom dissections. We will study the anatomy, digestion, reproduction, health, diseases, and management of beef, dairy, swine, sheep, horses, goats and poultry. This hands-on class suits anyone with an appreciation for animals or pursuing a career with animals.

SMALL ANIMAL SCIENCE (Fall)

Course Type: Elective
Credit: ½
Course Length: Semester
Grade Level: 10, 11, 12
Description: This course offers animal lovers and those interested in a career in veterinary science an opportunity to explore the small animal field. Students have an opportunity to bring their small animals to class and acquire knowledge in training animals. Pets are very popular in homes today, and it is vital that people understand the animal welfare issues faced by today's animal owners. Topics covered include: nutrition, daily care, spaying, neutering, and declawing. Labs will revolve around proper grooming, feeding, handling, restraining, and showing of small animals. Animals to be discussed include: dogs, cats, rabbits, hamsters, guinea pigs, gerbils, reptiles, amphibians and caged birds.

VETERINARY SCIENCE (Fall)

Course Type: Elective
Credit: ½
Laude Points: ***.5 Honor point awarded for the entire class***
Course Length: Semester
Prerequisite: Large Animal Science and/or Small Animal Science
Grade Level: 11 and 12 only

Description: This great class is designed for the person interested in animals. Students will have the opportunity to work with animals by giving injections, learn how to suture wounds, do blood work-ups, learn about animal restraint, and radiology. Students will develop a basic understanding of animal nutrition, genetics, reproduction, and their health. Guest speakers, demonstrations, job shadows, field trips, and lab experiments are also a part of this course. Students will also have the opportunity to bring in and incorporate your own animals and pets into the class. If you love animals, you will love this class. If you like to work with animals and are thinking about entering an animal field, or even a medical field, then this class is for you! It is required that you take Large Animal Science or Small Animal Science before enrolling in this class.

FOOD SCIENCE (Fall/Spring)

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: 11 and 12 only
Description: Meat, Cheese, Cupcakes and Milkshakes... Now that we have your attention, join us as we explore your favorite foods and the science that goes into making them. Learn about the unique ways foods are processed, prepared and preserved. Come along in this Junior/Senior level course as we take full use of our meat processing equipment by learning cuts of meat and how to make jerky or brats. We also explore the dairy industry and how milk products are turned to cheese and ice cream in fun and taste bud satisfying lab activities. This class will make a variety of edible treats include: jerky, salsa, sausage, brats, cheese, yogurt, ice cream, butter, caramel, sauerkraut and jam. This class will benefit students interested in a career in the food industry, agriculture and the general sciences. There is a \$30.00 lab fee for this class.

WILDLIFE MANAGEMENT (Fall)

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: 10, 11 and 12
Description: Enjoy the outdoors? Take a walk on the wild side and learn about some of those critters that come and prowl in the night! This class explores hunting the whitetail deer, game management, endangered wildlife, and a variety of wildlife species and their habitats. A variety of lab activities are the highlight of the class. Waterfowl and wetland management are discussed, as well as fish management, forestry, hunting safety, and small and large game mammals. Students generally have an area that they excel in and this is an opportunity to earn a grade by teaching a unit to the class (hunting, fishing, trapping, etc.). If you have an interest in wildlife species or related habitats, this class is for you!

INTRODUCTION TO WELDING (Fall)

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: 11 and 12 only

Description: This class is designed to give the student instruction on and the ability to work with various welding processes. These processes include: arc welding, oxyacetylene welding and MIG (wire) welding. Students will also have the opportunity to use a plastics welding and plasma cutter. The students will be given the chance to test their welds, and to complete several small metal working projects. Supplies, including welding coupons and rods, will cost each student \$30.00

ADVANCED WELDING (Spring)

Course Type: Elective

Credit: ½

Laude Points: .5 Honor point awarded for the entire class

Course Length: Semester

Prerequisite: **GRADES 11 and 12 only, MUST HAVE RECEIVED A LETTER B GRADE IN INTRODUCTION TO WELDING OR WITH INSTRUCTOR'S PERMISSION**

Description: This course in the welding program is designed to further the skills learned through the Introduction to Welding class. This program is tailored to meet the demands of local industry and allows students a great deal of freedom and flexibility in their studies. This class is designed for the highly self-motivated student. Self-guidance and responsibility work hand-in-hand to create the best high school welding students in Lancaster.

AGRICULTURE MECHANIZATION AND TECHNOLOGY

Course Type: Elective

Credit: 1

Course Length: Year

Prerequisite: 11 and 12 only - Class size limit 15

Description: This class is designed to provide students with hands-on working experiences in major areas of Ag Mechanics and Technologies. The subjects may include small gas engines, ag equipment and machinery, past, present and future of ag power and mechanics, plumbing, electricity, ag buildings and structures, forestry, soil and water conservation and technology, shop organization and shop safety, ag materials handling and problem solving in ag mechanics and technologies. Projects and demonstrations will be a major part of this course. Students will be expected to work safely and independently.

APPLIED AGRI-SCIENCE – PLANTS (Fall)

Course Type: Elective

Credit: ½

Course Length: Semester

Pre-requisite: 10, 11 and 12

Description: This class will look at the soil and plant sciences. Changes and innovations in the agronomy and horticulture industries will be included as well as a study of fruit and vegetable gardening and landscaping. The plant lab will be used to help enhance classroom work with plants. Students will also have the opportunity to design a stepping stone and a floral arrangement.

AG BUSINESS MANAGEMENT AND MARKETING (Spring)

Course Type:	Elective
Credit:	½
Course Length:	Semester
Pre-requisite:	10, 11 and 12 only
Description:	Are you interested in how to make money in agriculture? This course is devoted to the many areas of agribusiness and marketing. We will explore farm and land management issues, business types, insurance and risk management. Course also covers the areas of agricultural marketing, which includes commodity marketing and marketing procedures. With the use of simulation activities, computers and Career Development Event materials, we will learn about finances and money in agriculture

COOPERATIVE EDUCATION/OJT CLASSROOM (All year)

Course Type:	Elective
Credit:	1
Course Length:	Year
Prerequisite:	Seniors only. Students must be accepted and enrolled in Cooperative Education OJT
Description:	This class compliments and reinforces what students may encounter at their OJT site. Units of instruction deal with job seeking and employability skills, consumer education and daily living skills. The last portion of this class will focus on job applications, resumes, cover letters and interviewing. Guest speakers will be used to supplement classroom instruction.

Please note that having enough credits to allow a shortened school day, attendance, attitude, work ethic, meeting application deadlines and career goals are among the factors considered in selecting students to be involved in the OJT program.

AGRICULTURE EDUCATION COOPERATIVE EDUCATION (OJT) (All year)

Course Type:	Elective
Credit:	1
Course Length:	Year
Prerequisite:	Four semesters of Agriculture Education
Description:	The students are placed in jobs that coincide with their career objectives. They work in the job setting approximately 15 hours per week and also have one hour per school day of related instruction.

Please note that having enough credits to allow a shortened school day, attendance, attitude, work ethic, meeting application deadlines and career goals are among the factors considered in selecting students to be involved in the OJT program.

ARTS & COMMUNICATION

Careers in *Arts and Communications* are related to the humanities and include the performing, visual and literary arts as well as the communication media. (Careers in Business and Marketing are closely related to many artistic careers)

Do you have--

- the ability to be flexible and think creatively?
- good oral and/or written communication skills?
- good physical and manual dexterity?
- the ability to get along with others and work as a team member?
- the ability to set goals and work independently?
- good spatial and aesthetic perceptions?
- poise in social situations and times of crisis?
- the ability to translate design and ideas into reality?

If you answered "yes" to some of these questions, then you share some common abilities and interests with people who are employed in the following Art and Communication-related careers:

ART COURSE OFFERINGS

2D Studio I	.50 credit
2D Studio II	.50 credit
3D Studio I	.50 credit
3D Studio II – Laude Course	.50 credit
Applied Design I	.50 credit
Applied Design II	.50 credit
Independent Studio – Laude course	.50 credit

COURSE DESCRIPTIONS

2D STUDIO I

Course Type:	Elective
Credit:	1/2
Course Length:	Semester
Prerequisite:	None
Description:	Students will explore a variety of 2D materials such as pencil, pastel, charcoal, pastel, ink and paint. They will learn observational drawing skills and develop an understanding of value and color. Students will begin creating portfolios to demonstrate their skills and to keep a record of their progress.

2D STUDIO II

Course Type:	Elective
Credit:	1/2
Course Length:	Semester
Prerequisite:	2D Studio I
Description:	Students will visually examine individual life experiences and extend their skills in drawing and painting. Authentic project ideas will lead students into a deeper understanding of expression through two-dimensional media. Students will collaborate and continue to build their portfolios.

3D STUDIO I

Course Type:	Elective
Credit:	1/2
Course Length:	Semester
Prerequisite:	None
Description:	Student will work in a variety of 3D materials such as clay, wood, wire, papier-mache and plaster. Assemblage and relief processes will help them develop an understanding of three-dimensional form and the expressive use of space. They will begin creating portfolios to demonstrate their skills and to keep a record of their progress.

3D STUDIO II – LAUDE COURSE

Course Type:	Elective
Credit:	½
<i>Laude Points:</i>	<i>.5 Honor point awarded for the entire class</i>
Course Length:	Semester
Prerequisite:	3D Studio I
Description:	Students will use sculptural and ceramic techniques for personal expression. Authentic project ideas will lead students into a deeper understanding of three-dimensional media. Students will collaborate and continue to build their portfolios.

APPLIED DESIGN I

Course Type:	Elective
Credit:	1/2
Course Length:	Semester
Prerequisite:	None.
Description:	Students will apply a fundamental knowledge of design to explore a wide variety of art materials, both 2D and 3D (glass, textiles, mixed-media, cardboard, etc.). They will begin creating portfolios to demonstrate their skills and to keep a record of their progress.

APPLIED DESIGN II

Course Type:	Elective
Credit:	1/2
Course Length:	Semester
Prerequisite:	Applied Design I
Description:	Students will expand their experience with a variety of materials, concentrating in one or two media and exploring their expressive potential. Students will collaborate and continue to build their portfolios.

INDEPENDENT STUDIO – LAUDE COURSE

Course Type:	Elective
Credit:	½
<i>Laude Points:</i>	<i>.5 Honor point awarded for the entire class</i>
Course Length:	Semester
Prerequisite:	Applied Design II or 2D Studio II or 3D Studio II plus teacher's permission
Description:	Students will develop a focused body of work in a chosen medium that demonstrates a consistent message and a high level of technical skill. Students will put together an artist's statement and a one-artist show, displaying their final artwork in the showcase. This final artwork will be featured in their portfolios.

BUSINESS & INFORMATION TECHNOLOGY EDUCATION

Business and Marketing encompasses a broad field of careers. Some occupations included in this area are finance, insurance, real estate, personnel, sales, merchandising, marketing research, advertising, packaging, distribution and purchasing.

Information Technology: As society has become more technologically advanced, the ability to use computers is essential in most careers. Therefore, students who are not looking at a career in computer systems or programming should still strive to be proficient in using computers.

Do you want to improve your:

- analytic and clerical skills?
- organizational skills and the ability to be accurate?
- ability to be persuasive?
- leadership ability and decision-making skills?
- verbal communication?
- ability to get along with others and be part of a team?
- enthusiasm and self-confidence?
- competitive nature?

- ability to work under pressure?
- problem-solving skills?

If you answered "yes" to any of these questions, then you share common abilities and interests with people who are employed in business.

BUSINESS COURSE OFFERINGS

Accounting I	1.00 credit
Computer Basics	.50 credit
Business Enterprise	.50 credit
Entrepreneurship	.50 credit
Advanced Microsoft Office	.50 credit
Publications	1.00 credit
Sales and Marketing	.50 credit
Business Education Co-op	1.00 credit

COMPUTER COURSE OFFERINGS

PLTW - Computer Science Principles	1.00 credit
Graphic & Web Design	.50 credit

ACCOUNTING I

Course Type:	Elective
Credit:	1 (4 SWTC transcribed credits available)
<i>Laude Points:</i>	<i>1 Honor point awarded for the entire class.</i>
Course Length:	Year
Prerequisite:	None
Description:	Students will learn the fundamentals of accounting. Students will become familiar with accounting terminology (the language of business), the accounting cycle, financial activities, and basic accounting principles. Fitness Junction, a computerized business simulation, will be completed. Students will do all the accounting work for a merchandising business organized as a partnership. Banking procedures will also be covered. This class is highly recommended for students pursuing all types of business careers and/or who desire to own their own business.

COMPUTER BASICS

Course Type:	Requirement for all 9 th graders
Credit:	½ (Course can also be a transcribed credit through SWTC)
Course Length:	Semester
Prerequisite:	None

Description: This is a beginning course in Microsoft Office. The main focus of this course is to help students become more efficient in Microsoft Office. By becoming more efficient in Microsoft Office students will be able to utilize the skills they learn in this course towards other high school classes throughout their high school career. The students will develop a better understanding of the Microsoft environment. The students will be introduced to Microsoft Word, Excel, and PowerPoint. The course concludes with an in-depth simulated project, which includes an integration of Microsoft Word, Excel and PowerPoint.

BUSINESS ENTERPRISE

Course Type: Elective
Credit: ½
Course Length: Semester
Prerequisite: None
Description: Students will develop skills for small business management. They will create a business plan, understand the marketing mix, management of human resources, and the role of electronic commerce. Life skills will be covered to give students a practical understanding of personal finance. A simulation is utilized which helps prepare students for their lives when they are “on their own.” It will provide a basic understanding of installment buying, banking, budgeting, insurance and how to look at the economy. This course is helpful for any student regardless of career choice. Interactive exercises are used to provide hands-on-experience. It encompasses business and personal activities including job application skills.

ENTREPRENEURSHIP

Course Type: Elective
Credit: ½
Course Length: Semester
Laude Points: 1 Honor point awarded for the entire class.
Prerequisite: None
Description: Students will have the opportunity to use an entrepreneurship toolkit that encourages an "entrepreneurial mindset" by allowing creativity, innovation, critical thinking, and problem-solving - and also equipping students with the skills necessary to succeed and excel in Business. Students will also have the opportunity to earn 3 credit-hours from the University of Iowa.

ADVANCED MICROSOFT OFFICE

Course Type: Elective
Credits: ½

Laude Points: *.5 Honor point awarded for the class with passing certifications.*
Course Length: Semester
Prerequisite: A 70% or better in Computer Basics.
Description: Advanced Microsoft Office begins with a review of computer basics processing documentation. The focus part of the course is to have students become certified Microsoft Office Specialists in Microsoft Word, PowerPoint and Excel. The class will learn more complex functions in Microsoft Excel as well as becoming efficient in Microsoft Word. Every Friday we have what is called “Tech” Fridays where we explore Photoshop & Illustrator to create fun and interesting projects.

GRAPHIC & WEB DESIGN

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: None
Description: Web Design & Development is an introduction to the design, creation, and maintenance of web pages and websites. Students learn how to critically evaluate website quality, learn how to create and maintain quality web pages, learn about web design standards and why they're important, and learn to create and manipulate images. The course progresses from introductory work on web design to a culminating project in which students design and develop websites for local community organizations.

PUBLICATIONS

Course Type: Elective, open to 12 Seniors and 2 Juniors
Credit 1
Course Length: Year
Prerequisite: Two recommendation forms filled out & instructor approval.
Description: This course produces the yearbook, Arrow Flyer, messages for the school sign outside and displays for TVs in the commons. Students will learn to navigate Josten’s online yearbook software to create yearbook pages. The students will use weebly.com to produce and maintain the Arrow Flyer. The students will learn BrightSign software to create displays to put on the TVs in the commons for the students, staff, and community members to see. Students will learn Ignite12 software to create messages for the school sign outside. Students will also use social media platforms

(Twitter, Facebook, Instagram) to help promote, advertise, and sell yearbooks #flyingarrowpride. Some of the activities involved in publications include designing pages, writing and proofreading articles, selling advertisements, taking pictures, obtaining pictures, communicating with school personnel and meeting deadlines.

SALES AND MARKETING

Course Type: Elective
Credit: ½
Course Length: Semester
Prerequisite: None
Description: Introduce yourself to the exciting world of marketing. You will learn how products are brought from the idea stage to becoming available on store shelves. Everything from distribution to sales will be explored. Create new products and learn how to market them efficiently. This hands-on course will provide the basis for a career path in Sales, Marketing and Business.

BUSINESS EDUCATION CO-OP

Course Type: Elective
Credit: 1
Course Length: Year
Prerequisite: 2 Years Business Education
Description: This is a one-year course of occupational preparation for business education students. Students are placed in jobs that coincide with their career objectives. They work in the job setting approximately 15 hours per week and also have one hour per day of related instruction.

Please note that having enough credits to allow a shortened school day, attendance, attitude, work ethic, meeting application deadlines and career goals are among the factors considered in selecting students to be involved in the OJT program.

PLTW - COMPUTER SCIENCE PRINCIPLES

Course Type: Elective
Credit: 1
Laude Points: 1 Honor point awarded for the entire class.
Course Length: Year
Prerequisite: None
Description: Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app

development, visualization of data, cybersecurity, and simulation. PLTW is recognized by the College Board as an endorsed provider of curriculum and professional development for AP® Computer Science Principles (AP CSP). This endorsement affirms that all components of PLTW CSP’s offerings are aligned to the AP Curriculum Framework standards and the AP CSP assessment.

ENGLISH

To succeed in the work place, employees must be able to communicate effectively, both orally and in writing. Therefore, most careers will require proficiency in English.

ENGLISH COURSE OFFERINGS

English I	1.00 credit
English IA	1.00 credit
English II	1.00 credit
English IIA	1.00 credit
English III	1.00 credit
College Composition	.50 credit
Creative Writing	.50 credit
Themes in Literature	.50 credit
Speech	.50 credit
Workplace Communication	.50 credit
AP English Literature	1.00 credit

NOTE: *Many four-year colleges will not accept Workplace Communication as an*

English credit. Students can apply for college credit through Southwest Technical College for Speech and College Composition.

COURSE DESCRIPTIONS

ENGLISH I

Course type: Required
Credit: 1
Course Length: Year
Prerequisite: None
Description: The English I course outline includes the study of types of fiction, non-fiction, poetry and drama. This material ranges from the traditional to the current introducing the student to an effective background in world literature.

Basic skills in writing are stressed in addition to reviewing parts of speech(grammar). Responding to literature through writing is an integral part of the course. Creative, descriptive, narrative, expository and persuasive writing are incorporated within the literature textbook.

ENGLISH IA

Course Type: Required
Credit: 1
Course Length: Year
Prerequisite: None
Description: English IA is designed for those students who need improvement in basic reading and writing skills. It is not an elective course. Students are placed in this course based on their test scores and on the recommendation of their teachers. Improvements in reading rate, comprehension, and vocabulary are the main objectives of this course. Also, students receive practice in basic paragraph construction.

ENGLISH II

Course Type: Required
Credit: 1
Course Length: Year
Prerequisite: None
Description: The English II course outline includes the study of types of fiction, non-fiction, poetry and drama. This material ranges from the traditional to the current providing the student with an effective background in world literature. Basic skills in composition are stressed. A review of grammar followed by special emphasis on paragraph, essay, and tripartite thesis development is an integral part of the course.

ENGLISH IIA

Course Type:	*Required
Credit:	1
Course Length:	Year
Prerequisite:	English IA or department recommendation
Description:	English IIA is a course designed to continue the language skill development begun in English IA, and to build upon that basis. Vocabulary development, improvement of reading comprehension, development of word attack skills, etc., remain the focus of the course. In addition, students learn the basics of expository theme writing and outlining. The course tries to offer as much of the regular English II course as possible substituting materials when necessary to accommodate for the language skill difficulties experienced by the students.

ENGLISH III

Course Type:	Required
Credit:	1
Course Length:	Year
Prerequisite:	None
Description:	The English III course outline includes the study of types of fiction, non-fiction, poetry and drama. The range of reading includes primarily early to contemporary American Literature but does not include free-choice reading units. This course also places particular emphasis on the production of mature, academic writing including, narrative, comparative, cause and effect and research based writing. Students taking this course can expect a strong introduction to the American literary tradition as well as the opportunity to draft a wide range of writing for a variety of purposes.

CREATIVE WRITING

Course Type:	Elective
Credit:	1/2
Course Length:	Semester
Prerequisite:	Junior or Senior status
Description:	In this course, students will receive instruction and practice in descriptive, narrative, and imaginative writing. Students who apply themselves will not only improve their writing skills, but also their creative problem-solving skills. Writing lessons will focus on imagery, figurative language, characterization, and plot development. In addition to writing assignments, students will study the basic contemporary literary genres. This means students will be assigned novels to read. Each quarter, students will be assigned a writing project that must be satisfactorily completed in order to pass the course.

THEMES IN LITERATURE

Course Type:	Elective
Credit:	1/2
Course Length:	Semester
Prerequisite:	Juniors and Seniors
Description:	“Themes in Literature” explores the human experience in plays, short stories, non-fiction and poetry. Major themes discussed are the journey

from innocence to awareness, heroism, tragedy, loss, exploration of the American Dream, etc. Students are encouraged to make connections between selections and authors. In addition, students will learn to discuss and write about literary themes, express and defend a point of view using reason and evidence, build vocabulary through reading, interpret and apply literary concepts.

SPEECH

Course Type: Elective

Credit: ½

Laude Points: ***1 Honor point awarded for the entire class***

Course Length: Semester

Prerequisite: Junior or Senior status

Description: This speech course is designed for students who want to pursue either a technical or college degree. This course will develop greater skill, confidence, and poise in speaking situations. The course study includes interpersonal and nonverbal communication, speech theory (principles of speaking and listening), and the writing and delivery of speeches. Equal emphasis will be placed on acquiring academic knowledge about speaking, following the designated process, and participating in all speaking activities.

Students may receive college credit for this course through SWTC.

COLLEGE COMPOSITION

Course Type: Elective

Credit: ½

Laude Points: ***1 Honor point awarded for the entire class***

Course Length: Semester

Prerequisite: Senior standing

Description: This semester course is designed to instruct the college bound students in the procedure involved in writing the following college papers: personal narrative, mini-research papers, critical analysis, visual analysis, literary analysis and the research paper. Students receive instruction in the current writing styles required by colleges today. Students may receive transcribed credit through Southwest Technical College.

WORKPLACE COMMUNICATION

Course Type: Elective

Credit: ½

Course Length: Semester

Prerequisite: English II

Description: Workplace Communication will review and reinforce the principles of English usage, focusing primarily on English used in the business/technical world. The course will cover the effective use of language in technical writing and the effective use of letter writing.

This course will not satisfy the English entrance requirement of most 4-year colleges and universities.

AP ENGLISH LITERATURE

Course Type:	Elective
Credit:	1
<i>Laude Points:</i>	<i>1 Honor point awarded for the en</i>
Course Length:	Year
Prerequisite:	Senior Status. A strong background in literature is recommended before taking this course.
Description:	This course is highly recommended for students who plan to attend college. Advanced Placement English Literature is a yearlong senior elective. This course involves rigorous reading at the college level and homework assignments. Students prepare to take the Advanced Placement exam in the spring. The exam is three hours and includes a multiple-choice section and three essay questions. Students who score high enough may receive college credits for AP English.

HEALTH AND HUMAN SERVICES

Careers in this pathway are part of the health services field. They include occupations in medicine, nursing, hospital services, psychology and psychiatry, therapy, pharmacy, medical technology, optometry, dentistry, administration of health services, and emergency services. (See also Industrial, Scientific and Engineering Pathway)

Are you--

- alert and composed in a crisis?
- seen by your peers and others as thoughtful, sensitive and patient?
- comfortable in leadership roles?
- flexible? Do you enjoy varied tasks?

Do you--

- have the ability to be accurate?
- have good physical skills and enjoy activities which promote physical stamina?
- have a concern for people and their problems?

Can you--

- work as part of a team?
- think critically and creatively?

If you answered "yes" to some of these questions, then you share some abilities with people employed in this pathway.

NOTE: A strong background in science and math is highly recommended for people considering careers in health professions.

HEALTH COURSE OFFERINGS

Health I	.50 credit
Health Issues	.50 credit

HEALTH COURSE DESCRIPTIONS

SOPHOMORE HEALTH

Course Type:	Required
Credit:	1/2
Course Length:	Semester
Description:	Can you do anything to ward off the inevitable signs of aging? What increases the RISK of being a victim of date rape? What defines an abusive relationship? Which STD's are not curable? There are just a few of the questions that are addressed within the content of this semester course. Subject matters concentrate on health problems and concerns that are relevant to this age and maturity level, as well as health information that will be useful in making choices in the future. Course content includes the study of stress management, depression, suicide, dealing with loss, eating disorders, nutrition, SBS, brain health, STD's, and dating violence.

HEALTH ISSUES

Course Type:	Elective
Credit:	½
Course Length:	Semester
Description:	Health information has become a daily segment of the internet, television and newspaper. This elective health class will use these resources as tools to update and expand health knowledge crucial to making wise decisions for healthy living. A portion of the semester will be used to provide information on health careers.

PHYSICAL EDUCATION

PHYSICAL EDUCATION COURSE OFFERINGS

Physical Education I	.50 credit
Fit for Life I & II	.50 credit
Team Sports I and II	.50 credit
Weightlifting and Fitness I and II	.50 credit

COURSE DESCRIPTIONS

PHYSICAL EDUCATION - I

Course Type:	Required
Credit:	1/2
Course Length:	Year
Prerequisite:	None
Description:	This course gives students an opportunity to develop sports skills and personal fitness through participation in team sports. Activities include soccer, football, volleyball, basketball, floor hockey, softball, lacrosse, and various cardio- games. Physical fitness testing is done to assess student's level of fitness.

Fit for Life I

Course Type:	Elective
Credit:	½ credit
Course Length:	Semester
Pre-requisite:	Grades 10-12
Description:	This class is a PE elective for non-traditional, non-competitive students. In this class you will learn how to establish personal fitness goals and develop healthy lifestyle habits that will help you have the knowledge and tools to be fit for life. We will focus on the health related fitness activities: cardiovascular endurance, flexibility, and muscular fitness. Recreational activities will also be incorporated into this class to develop a fun, cooperative, working environment. Nutrition topics will be covered as to how it relates to being fit for life.

Fit for Life II

Course Type:	Elective
Credit:	½ credit
Course Length:	Semester
Pre-requisite:	Grades 10-12
Description:	Working off the base of knowledge students have developed in Fit for Life I, this class is based on a student-centered approach where

students set goals and create personal fitness plans to reach those goals. Recreational fitness activities will still be incorporated throughout the semester.

Team Sports I and II

Course Type: Elective
Credit: ½ credit
Course Length: Semester
Pre-requisite: Grades 10-12
Description: This elective course for sophomores, juniors and seniors will give the serious competitor the opportunity to develop advanced skills, strategies, teamwork, and fitness levels in a variety of sports and activities. You will play competitive games and advance your skill level in multiple disciplines throughout the semester.

Weightlifting and Fitness I and II

Course Type: Elective
Credit: ½ credit
Course Length: Semester
Pre-requisite: Grades 10-12
Description: This class will be designed with the athlete in mind. It will focus on strength, agility, stamina, coordination, flexibility, power and other sport related fitness goals. The class is not just for athletes but anyone who would like to improve their overall body. There will be days of recreational games mixed in for a fun, inviting, cooperative atmosphere. In this class you will follow a weight program developed to make you a stronger well-rounded student/athlete.

INDUSTRIAL, TECHNICAL AND ENGINEERING

Careers in this pathway are related to engineering, science, technology, construction, manufacturing, photography, communications, power, energy and transportation.

Do you enjoy-

- Figuring out how things work?
- Operating or fixing machines?
- Working with your hands, assembling, building or repairing things?
- Working with metal, plastics, or wood materials?
- Planning and supervising a project or completing a project or part of a project?
- Drawing detailed plans or patterns or working with blueprints?
- Courses in biology, chemistry, or physics?
- Reading automotive or scientific magazines?
- Advanced mathematics classes?
- Solving practical problems with mathematics?
- Helping others build things?
- Collecting rocks, minerals, or soil samples?
- Doing chemistry experiments?
- Sorting products by size, weight, or quality?

- Working with computers, robots, or computer-controlled machines?
- Working with other people to solve a real life problem?

If you answered "yes" to some of these questions, then you share common interests with people in engineering, science, and technology.

TECHNOLOGY DEPARTMENT

COURSE OFFERINGS

PLTW Introduction to Engineering Design	1.0 credit
PLTW Principles of Engineering	1.0 credit
PLTW Civil Engineering & Architecture	1.0 credit
Introduction To Technology Systems 1	.50 credit
Introduction To Technology Systems 2	.50 credit
Fab Lab	.50 credit
Energy and Power Systems	.50 credit
Graphic Design and Applications	.50 credit
Audio/Video Production	.50 credit
Construction	.50 credit
Wood Technology	.50 credit
Photography Technology	.50 credit
Computer Aided Design & 3D Printing	.50 credit
Better Homes and Interior Decor	.50 credit
Enterprise and Entrepreneurship	.50 credit
Metal Processes	.50 credit
3d Animation and Game Design	.50 credit
Independent Study in Technology	.50 credit
Building Trades	1.00 - 2.00 credits

COURSE DESCRIPTIONS

PLTW---- INTRODUCTION TO ENGINEERING DESIGN

Course Type:	Elective
Credit:	1
<i>Laude Points:</i>	<i>1 Honor point awarded for the entire class</i>
Course Length:	Year
Prerequisite:	None
Description:	In this course, students use 3D solid modeling design software to help them design solutions to solve proposed problems. Students will learn how to document their work and communicate solutions to peers and members of the professional community. This course is designed for 9th or 10th grade students. The major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation.

PLTW---- PRINCIPLES OF ENGINEERING

Course Type: Elective
Credit: 1
Laude Points: *1 Honor point awarded for the entire class*
Course Length: Year
Prerequisite: PLTW IED, 10-12 grade
Description: This survey course of engineering exposes students to major concepts they'll encounter in a postsecondary engineering course of study. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem solving skills and apply their knowledge of research and design to create solutions to various challenges, documenting their work and communicating solutions to peers and members of the professional community. Topics include: Mechanisms, Energy and Power, Statics, Materials & Structures, Fluid Power, Statistics and Kinematics.

PLTW---- CIVIL ENGINEERING & ARCHITECTURE

Course Type: Elective
Credit: 1
Laude Points: *1 Honor point awarded for the entire class*
Course Length: Year
Prerequisite: PLTW IED, 10-12 grade
Description: Civil Engineering and Architecture is the study of the design and construction of residential and commercial building projects. The course includes an introduction to many of the varied factors involved in building and site design and construction including building components and systems, structural design, storm water management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry. Students will also use industry standard 3D architectural modeling software to facilitate site and building design and technical documentation.

INTRODUCTION TO TECHNOLOGY SYSTEMS 1&2

Course Type: Elective
Credit: 1
Course Length: Two separate semesters
Prerequisite: None

Description: The course is available either 1st or 2nd semester or the full year. Introduction to Technology Systems is a course offering an overview of the four major technology systems that are studied more specifically in other courses offered by the department. The four systems include:

- a) materials processing and manufacturing,
- b) power, energy and transportation,
- c) communications, and
- d) construction.

Activity areas can include drafting, electricity, photography, printing, woodworking, metal working, engineering, plastics, video, radio, electronics, and more.

FAB LAB (Fabrication Laboratory)

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: 10, 11, 12 only
Description: This course provides extensive lab time to experience equipment and technology associated with processing various materials. Students will work with 3D printers, laser engravers, computer numerical controlled (CNC) routers, CNC mills, CNC lathes, CNC plasma cutters. Students will also use an injection molder, vacuum former, and strip heater in the processing of plastic materials. Various woodworking and metalworking will be used in the processing of wood and metal materials.

There is a lab fee associated with this course.

ENERGY AND POWER SYSTEMS

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: 10, 11, 12 only
Description: Aviation/Aerospace (Rocketry), electricity/electronics, alternate energy, internal combustion engines, industrial hydraulics and pneumatics are some of the lab activities associated with this course. Discussion will include sources of energy, conversion, transmission, storage and control of energy.

There will be a lab fee with this course.

GRAPHIC DESIGN AND APPLICATIONS

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: 10, 11, 12 only
Description: This course explores communication by the means of printed materials. Lab activities relate to areas of the rapidly growing graphic communications industry. In addition to exploring career opportunities in the printing industry, students gain knowledge of

technologies that will apply to other occupational areas. Activities include: desktop publishing, computer aided design, mechanical drawing, offset printing, silk screen printing, airbrushing, technical illustration and darkroom techniques.

Students will be responsible for the purchase of materials for this class.

AUDIO/VIDEO PRODUCTION

Course Type: Elective
Credit: 1/2
Course Length: semester
Prerequisite: 10, 11, 12 only
Description: Students will become aware of and explore areas of multi-media and mass communications. Required projects are in the areas of audio/visual media, photography and desktop publishing, laser, electronic communication and video tape production. Applications of these activities are related to communication industries such as television, radio, newspaper/magazines, and telephone communications.

There will be a lab fee required for this course.

Students will be responsible for the purchase of materials for this class.

CONSTRUCTION

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: 10, 11, 12 only
Description: Carpentry, bricklaying, concrete, electrical wiring, plumbing and blueprint reading are some of the hands-on activities associated with this course. The basics of residential construction are covered along with current trends in constructing today's energy efficient homes.

There will be a lab fee with this course.

WOOD TECHNOLOGY

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: For juniors and seniors; (must have passed either Construction or FAB LAB).
Description: This class will teach students processes and methods of woodworking and cabinetmaking using machines and hand tools. Students will construct a hardwood project that demonstrates craftsmanship and reflects quality.

Students will be responsible for the purchase of materials for this class.

PHOTOGRAPHY TECHNOLOGY

Course Type: Elective
Credit: 1/2
Course Length: Semester
Description: After students understand basic compositions and methods to photography, they will create a portfolio or project using traditional film photography, digital computer photography.

Students will be responsible for the purchase of materials for this class.

COMPUTER AIDED DESIGN AND 3D PRINTING

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: All Students
Description: Students will learn the basics of mechanical Computer Aided Drafting and Design. The class will spend time designing and drafting items in the Inventor program, followed by creating those items using our 3D printers.

BETTER HOMES & INTERIOR DECOR

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: None
Description: This course is intended to provide students with the opportunity to experience and participate in the proper and functional arrangements of home design and decor. The atmosphere of a home has an enormous influence on the visual, physical, and intellectual comforts of people's lives. Course content includes the planning, decorating, and altering of interior home spaces. Class

activities will include interior design, computer aided drafting, home repair and maintenance, and home decorating.

ENTERPRISE AND ENTREPRENEURSHIP

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: None
Description: This class will cover all aspects of a business. It will cover ownership, leasing, inventory control, financing, management, engineering, retail pricing of goods and services, etc. Students will mass produce a product(s) and sell them.

METAL PROCESSES

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: None
Description: Through the completion of projects such as metal art, recreational equipment, home furnishings, and tools, students will learn the fundamentals of metal processes. Students will work in 2 areas; sheet metal, machining.

3D ANIMATION and VIDEO GAME DESIGN

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: None
Description: Welcome to 3D Animation! We can only imagine where the next generation of artists, designers, engineers and inventors will take

3D applications in the future, but we do know the boundaries are blurring between the arts and sciences creating new connections and that students will need the skills to integrate their ideas across various disciplines. Using Autodesk 3D applications gives students the opportunity to explore these connections and learn to see information in a new way. In this course you are going to be introduced to 3D careers concepts and applications. This course is designed to get you through a minimum of 10 assignments and a final project; however the sky is the limit for you in this course. You may be surprised at what it takes to complete what seems to be such a simple task. We will cover modeling, environments, movement, lighting, cameras, rendering, and more! Let's get started.

INDEPENDENT STUDY IN TECHNOLOGY

Course Type: Elective 11 and 12
Credit: 1/2
Course Length: Semester
Prerequisite: One or more of: Graphic Communications, Media Communications, Construction, Fab Lab, and/or Energy and Power Systems.
11 and 12 only.
Students must have prior approval from the instructor, guidance counselor and principal. Forms are available from the Technology Education Department.

Description: Independent study will allow a student who has an interest in any technology area to spend an entire semester working in that field. Examples include: photography, printing, computer aided design, computer aided manufacturing, hydraulics, pneumatics, robotics, laser communications, internal combustion engines, material testing, woodworking, metals, plastics, drafting, electricity, electronics, solar energy and many more.

BUILDING TRADES

Course Type: Elective

Credit: 2
 Course Length: Year - 2 periods/day
 Prerequisite: Two semester courses in Technology Education
 Description: The class will prepare students in a technological field through classroom instruction and hands-on experience.
 Examples: Those interested in carpentry will build garages and/or decks out in the community in the fall and spring. Students work in the shop and at indoor jobsites in the winter months.

MATH DEPARTMENT

COURSE OFFERINGS

Algebra I-B	1.00 credit
Algebra I	1.00 credit
Geometry	1.00 credit
Honor's Geometry	1.00 credit
Algebra II	1.00 credit
Pre-Calculus	1.00 credit
AP Calculus	1.00 credit
Financial Literacy	.50 credit
Elementary Statistics	.50 credit

COURSE DESCRIPTIONS

ALGEBRA I

Course type: Elective
 Credit: 1

Course Length: Year
Prerequisite: None
Description: Skills of translating language expressions into mathematical symbols, expressions, open sentences, and graphs is the main thrust of the first year of Algebra. Time is spent on manipulations, simplifying and factoring polynomials and how they relate to real life date.

ALGEBRA I-B

Course Type: Elective
Credit: 1
Course Length: Year
Prerequisite: Successful completion of Geometry and Algebra 1A
Description: This course will cover the same material done in the second semester of Algebra 1, but will take one full school year. This course will be a slower paced Algebra class and is the second year of a two-year Algebra program. Students who successfully complete this course can take Algebra II the following year.

HONOR'S GEOMETRY

Course Type: Elective
Credit: 1
Course Length: Year
Prerequisite: Algebra I – successful completion of both semesters
Description: This is a unified course dealing with relationships, properties and measurements of figures in the plane. Throughout the course the properties of solid figures are related to help the student visualize concepts in the three-dimensional world. Algebra skills are maintained throughout the course. Students will be expected to take Algebra II upon completion of this course.

GEOMETRY

Course Type: Elective
Credit: 1
Course Length: Year
Prerequisite: Algebra I-A – successful completion of both semesters.
Description: This is a unified course dealing with relationships, properties and measurements of figures in the plane. Throughout the course the properties of solid figures are related to help the student visualize concepts in the three-dimensional world. Basic Algebra skills are

maintained throughout the course. Student's will be expected to take Algebra I-B upon completion of this course.

ALGEBRA II

Course Type: Elective
Credit: 1
Course Length: Year
Prerequisite: Algebra 1 (Geometry desirable or instructor approval)
Description: A course designed to meet college entrance requirements upon successful mastery and completion of the course. Algebra I concepts will be expanded and new topics covered will be complex numbers, polynomial functions, exponential/logarithmic relations, sequences/series, and probability/statistics. Other topics that may be covered include matrices, conics, and trigonometry, if time permits. Student access to a graphing calculator is highly recommended.

PRE-CALCULUS

Course Type: Elective
Credit: 1
Course Length: Year
Prerequisite: Algebra II and Honor's Geometry
Description: A course designed for students with high mathematical ability. The first quarter is devoted to studying relations, functions, and graphs. Approximately half the year will be spent on the trig. functions and their inverses, graphing the trig. functions, trig. identities, polar coordinates, and complex numbers. The last quarter will be devoted to exponential and logarithmic functions, sequences, and probability/statistics.

CALCULUS

Course Type: Elective
Credit: 1
Laude Points: ***1 Honor point awarded for the entire class***
Course Length: Year
Prerequisite: Pre-Calculus Grade of B+ or above or a waiver from the math department.
Description: An advanced placement (AP) program to provide the opportunity

for the secondary student to pursue and receive credit for college level course work. In May of each year, the Advanced Placement Test will be offered, at the student's expense. The test, although not required, is strongly recommended. This course is for students who possess mathematical aptitude, ability, and interest. The course will be divided into three basic parts: Review of elementary functions and limits, differential calculus, and integral calculus.

FINANCIAL LITERACY

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: Junior or Senior Status
Description: This is a course designed to teach students about the financial responsibilities and choices they will have throughout their everyday life. Emphasis on content knowledge and the mathematics with the concepts will be taught for the following topics: net and gross pay, figuring your own taxes, bank accounts, budgeting, credit cards, loans and credit, buying a car, buying a house, different types of insurances, investing, and relating income to education.

ELEMENTARY STATISTICS

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: Junior or Senior
Description: This is a semester long course that will be used as an introduction to statistical analytical methods including graphing distributions, numerical summaries, linear regression and correlation, the normal distribution, confidence intervals and hypothesis tests for means and proportions, analyzing two-way tables, and analysis of variance.

MUSIC DEPARTMENT

MUSIC COURSE OFFERINGS

Concert Band	1.00 credit
Music Appreciation	.50 credit
Music Theory	.50 credit
Chamber Singers	.50 credit
Concert Choir	.50 credit

COURSE DESCRIPTIONS

CONCERT BAND

Course Type: Elective
Credit: 1
Laude Points: .5 Honor point awarded for the entire class
Course Length: **Year**
Prerequisite: Previous instrumental music experience is recommended

Description: Membership in the Lancaster High School band is open to all students in grades 9-12. The band meets five periods a week for one credit per year. If enrollment dictates, two bands may be formed during concert season at the discretion of the director and administration. Marching band includes all students and is the basic focus for the 1st quarter. Jazz Band, Pep Band, Solo Ensemble and other opportunities for individual musical growth are all a part of the Lancaster High School band program. A more complete description of the program is available from the director in the LHS Band Handbook. This course may be offered for laude credit with increased expectations provided by the teacher.

MUSIC APPRECIATION

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: None

Description: During this course, students will learn the basics in music history, theory, instrumentation, and genres. Students will listen to a variety of music throughout the course and will learn from many of the following topics: Musical Elements, Music of the Middle Ages, Music of the Renaissance, the Baroque Period, the Classical period, the Romantic Period, Twentieth Century Music, Rock, Jazz and Non-Western Music.

MUSIC THEORY

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: Experience in band, chorus or keyboards is recommended.

Description: This is a course designed for the serious music student. Music Theory presents a comprehensive program that includes coordinated work in written concepts, terminology and notation; exercises in music reading and sight singing and practice in ear training. Individualized instruction is stressed. A major project for the semester involves learning the basic functions of "Finale", a music notation software culminating in the

arrangement of a work for band or other combinations of voices and instruments.

CHAMBER SINGERS

Course Type: Elective
Credit: ½
Laude Points: *.5 Honor point awarded for the entire class*
Course Length: Year
Prerequisite: Enrollment in Concert Choir. One year in Concert Choir is recommended.
Description: Chamber Singers is open to freshman through senior students. Each member will need to pass a test of musical symbols and terms, as well as a voice range and quality check. Chamber Singers will meet every-other school day for one-half credit per year. The group will perform music from a wide variety of eras and styles. The music will be more challenging than Concert Choir. The teacher will determine group membership based on the aforementioned tests as well as attitude. Membership in this group is partial requirement to qualify for Cum Laude points in choir.

CONCERT CHOIR

Course Type: Elective
Credit: 1/2
Course Length: Year
Prerequisite: None
Description: The Concert Choir is open to freshman through senior students. Enrollment in Concert Choir is a prerequisite to the Chamber Singers and all freshman singers will be enrolled in Concert Choir. The curriculum focuses on the fundamentals of singing and musical understanding required of musicians. Students in Concert Choir will perform music from a wide variety of eras and styles. Concert Choir will meet every-other school day for one-half credit per year. Membership in this group allows students to be a part of Chamber Singers and other extra-curricular vocal music activities such as Song Spinners, Solo & Ensemble Festival, etc.

SCIENCE DEPARTMENT

SCIENCE COURSE OFFERINGS

Physical Science	1.00 credit
Biology I	1.00 credit

Chemistry I	1.00 credit
Anatomy & Physiology	1.00 credit
Physics	1.00 credit
Chemistry II	1.00 credit
AP Biology	1.00 credit
Biotechnology	.50 credit
Astronomy	.50 credit
STEM	.50 credit
Everyday Chemistry	.50 credit
Experimentation	.50 credit

COURSE DESCRIPTIONS

PHYSICAL SCIENCE

Course Type:	Required
Credit:	1
Course Length:	Year
Prerequisite:	None
Description:	Physical Science is an activity centered (60% activity) course to: 1) learn introductory chemistry and physics principles, 2) learn the scientific approach to solving problems, and, 3) acquire an appreciation for science as a system for solving present and future problems. The course is an excellent introductory course to Biology, Chemistry, Physics, and technical courses offered at LHS.

BIOLOGY I

Course Type:	Required
Credit:	1
Course Length:	Year
Prerequisite:	(See science requirement)
Description:	A knowledge of biology is crucial to understanding modern concerns and controversies such as population growth, the spread of disease, the destruction of tropical rain forests, and the promise and perils of genetic engineering. This course will attempt to relate concepts in biology to everyday experiences and to important issues facing society. This course will also emphasize the evolution of life, as well as the diversity and physiology of living things. Audio-visual materials, laboratory periods and other resources are considered a part of this course and will supplement the text.

CHEMISTRY I

Course Type:	Elective
Credit:	1
Course Length:	Year
Prerequisite:	Algebra I
Description:	This is a study of the basic concepts of chemistry designed to prepare the student for college chemistry, as well as to build a firm

foundation for life in a science-oriented society. Included are the structure of atoms, chemical bonding, periodic relationships and chemical calculations. Laboratory exercises provide opportunities to learn techniques and to demonstrate learning obtained from lectures and studies. A grade of "C" or better in Algebra is highly recommended. Chemistry is essential for students entering college with an interest of engineering, nursing, and other medical fields.

ANATOMY & PHYSIOLOGY

Course Type: Elective
Credit: 1
Laude Points: 0.5 Honor point awarded for the entire class
Course Length: Year
Prerequisite: Biology I (students who have completed Biology 1A, require approval of the teacher)
Description: This is a preparatory study of anatomy and physiology for college-bound students and others seeking a significant perspective from which to view the human body. It provides students with a knowledge of human body systems and how they interact to create a functional human body.

PHYSICS

Course Type: Elective
Credit: 1
Laude Points: 0.5 Honor point awarded for the entire class
Course Length: Year
Prerequisite: Algebra II (or currently enrolled in Algebra II)
Description: This course will provide the student with an understanding of major physics concepts in the areas of motion, forces, vectors, momentum, work, energy, and universal gravitation. The format will attract students' interest through exploration of physical phenomena, help them learn basic concepts of physics and then have them apply those concepts to activity-centered experiences. Physics can be a benefit to those who are interested in college preparation, a technical school or related field. Physics is essential for those who are entering into college with an interest in medicine, engineering, science or technology.

CHEMISTRY II

Course Type: Elective
Credit: 1
Laude Points: 0.5 Honor point awarded for the entire class

Course Length: Year
Prerequisite: Grade of "B" or higher in Chemistry I
Description: This course is designed to follow the Chemistry I course, which is a prerequisite to taking the course. It is designed to continue on, and go deeper in depth in the concepts of chemistry. Students who complete this course will be well prepared for upper level college chemistry courses. Included in the curriculum is a more in- depth study of chemical reactions, bonding, states of matter, kinetics, thermodynamics and nuclear, and organic chemistry. Laboratory exercises will be included with all units.

ADVANCED PLACEMENT BIOLOGY

Course Type: Elective
Credit: 1
Laude Points: 1 Honor point awarded for the entire class
Course Length: Year
Prerequisites: Chemistry;
Description: The AP Biology course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. This course aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Students need some grounding in the facts and vocabulary of biology, but the study of biology should not be limited to the memorization of disjointed facts. The goal of a college introductory biology course - and therefore of an AP Biology course - is to provide a learning environment that enables students to develop a solid understanding of the principal concepts of biology.

An in-depth study of the following topics will be covered and include: molecules and cells; genetics and evolution; and organisms and populations. An optional AP examination representative of the topics covered may be taken by students. After showing themselves to be qualified on the AP examination, some students, as college freshman, are permitted to undertake upper-level courses in biology or register for courses for which biology is a prerequisite. Other students may have fulfilled a basic requirement for a laboratory -- science course, and will be able to undertake other courses to pursue their majors.

Prerequisites and Other Considerations

- Enrollment will be limited to a few select students.
- Are you willing and eager to strive to meet the demands of a college-level course?
- Have you scored well on nationally normed tests like the PSAT/NMSQT?
- Do your parents approve of you taking the course?
- You must have successfully completed Biology I and Chemistry.

BIOTECHNOLOGY

Course Type:	Elective
Credit:	0.5
Course Length:	Semester
Prerequisite:	Biology I
Description:	As science and society change, there is a need for individuals to become familiar with the highly technical work field. This course is designed to emphasize the inter-relationship of science and technology and the impact of this technology on our lives. Career opportunities await those students who enjoy experimentation and application of scientific principles to the world of technology. Topics covered include: Genetics and Genetic Engineering; Biotechnology in Plant and Animal Science; Microbial Biotechnology in Agriculture and the

ASTRONOMY

Course Type:	Elective
Credit:	0.5
Course Length:	Semester
Prerequisite:	None
Description:	This course will provide the student with an introduction to the concepts of modern astronomy, the origin and history of the Universe and the formation of the Earth and the solar system. Students will compare the Earth's properties with those of the other planets and explore how the heavens have influenced humankind. The course gives a description of astronomical phenomena using the laws of physics. The course treats many standard topics including planets, stars, the Milky Way and other galaxies, black holes to the origin of the universe and its evolution and fate. Although largely descriptive, the course will occasionally require the use of sophomore-high school level mathematics. There will be several required observations of the night sky as well as in class activities.

STEM

Course Type:	Elective
Credit:	0.5
Course Length:	Semester
Pre-requisite:	Physical Science
Description:	STEM stands for Science, Technology, Engineering and Math. This will be a project-based course incorporating the science, math and technology in engineering practices. Students will be required to complete projects including presentations. Concepts covered include: Sources of Energy, Circuits and Electricity, Structural Engineering, Gravity and Projectile Motion.

EVERYDAY CHEMISTRY

Course Type:	Elective
Credit:	0.5
Course Length:	Semester
Pre-requisite:	Physical Science
Description:	Everyday Chemistry is designed to improve the basic understanding of chemistry in our lives. This course is designed to introduce students to

the fundamental principles of chemistry and to show students how chemistry is applied to their lives and society. This course combines theory, applications and the impact of chemical concepts on society. Laboratory experiments help students to develop concepts and demonstrate their relevance. Although the approach is less mathematical than in the traditional Chemistry class, the course requires an understanding of basic algebra skills. Some of the concepts we will address are; pollution, air and climate, petroleum products and alternatives, sports, drugs, cosmetics and cooking.

EXPERIMENTATION

Course Type:	Elective
Credit:	0.5
Laude Points:	0.5 Honor point awarded for the entire class
Course Length:	Semester
Pre-requisite:	Chemistry II, Anatomy and Physiology or AP Biology
Description:	The Experimentation course is an upper-level course designed to follow Chemistry II, AP Biology or Anatomy and Physiology. There will be an interview before admittance into the course. This course will be completely project-based. Students will choose a project from a list of science topics, the topic then will be researched in depth. During the research, the student must design an experiment. The experiment will be conducted with the results being written into a research paper. Grading will be done on the final projects, participation, as well as added tasks, such as article reviews and case studies.

SOCIAL SCIENCE and HUMAN SERVICES

Careers in this pathway are linked to family/consumer, economics, political and social systems. Some occupations include those in hospitality, recreation, public, and community service and the broad field of social services. Careers such as those in education, government, law, law enforcement, the military, child care, food service, counseling, cosmetology, fire protection, hotel and restaurant services, economics and history may be found in this cluster.

Are you--

- composed in a crisis or conflict?
- polite, understanding, sensitive, and patient?
- seen as a leader?
- flexible and enjoy varied tasks?
- able to plan and direct others' activities?

Do you--

- inspire trust and confidence in others?
- analyze and evaluate information readily?
- have a concern for people and their problems?
- have good physical skills and enjoy activities which promote physical stamina?

Can you--

- write and speak clearly?
- take and follow directions?

If you have answered "yes" to some of these questions, then you share common abilities with people employed in this pathway.

SOCIAL STUDIES COURSE OFFERINGS

Western Civilization	1.00 credit
United States History	1.00 credit
American Government	1.00 credit
Introduction to Law	.50 credit
Introduction to Economics	.50 credit
Human Social Behavior	.50 credit
World Cultures	.50 credit
AP Psychology	1.00 credit
AP US History	1.00 credit

COURSE DESCRIPTIONS

WESTERN CIVILIZATION

Course Type:	Required
Credit:	1
Course Length:	Year
Prerequisite:	None
Description:	The history of the Western World will be presented with units on the following: <ul style="list-style-type: none">a) Ancient Egyptb) Troy, Crete and Mycenaec) Ancient Greeced) Romee) Medieval Europef) The Italian Renaissanceg) 17th Century Englandh) Louis XIVi) The French Revolutionj) The Napoleonic Agek) Russial) The World at War

U.S. HISTORY

Course Type:	Required
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Credit: 1
Course Length: Year
Prerequisite: None
Description: This course is a study of the development of the United States from the period of the Reconstruction to the present time. A review of the Civil War, its causes and effects, is included. Emphasis is placed on the origin and development of American political, economic and social traditions and concepts, especially from the Civil War period to the present time.

AMERICAN GOVERNMENT

Course Type: Required
Credit: 1
Course Length: Year
Prerequisite: None
Description: The class is designed to give students an understanding of how the democratic process works in the United States from all perspectives: local, state, and national. A study of the United States Constitution and its interpretation and application in Current events will also be explored.

INTRODUCTION TO LAW

Course Type: Elective
Credit: 1/2
Course Length: Semester
Prerequisite: Junior or Senior Status
Description: This course is separated into two semester length topic areas. The first nine weeks is designed for those students interested in a career in law enforcement. We will explore the legal system through the viewpoints of a lawyer, judge, policeman, forensic investigator and jail officer. Students will be able to sit in on a court case, take a jail tour and participate in evidence gathering activities. Topics covered will include:
Introduction to Law
Crime in America
Crime in Wisconsin
The criminal procedure
The trial
Sentencing and corrections
The juvenile justice system
The civil law procedure

INTRODUCTION TO ECONOMICS (Transcripted Credit)

Course Type : Elective
Credit : ½
Laude Points: *1 Honor point awarded for the entire class*
Course Length : Semester
Prerequisite : Junior or Senior Status

This course is a must for those students interested in a career in the field of business. We will cover the major areas of economics which is a required course for all business degrees. Students will design and market their own businesses, participate in the Wisconsin State Stock Market Simulation and learn about money, banking and making wise consumer decisions.

Topics will include :

- Economic systems and decision making
- Business organizations and economic Institutions
- Demand
- Supply
- Prices and decision making
- Money and banking
- The Federal Reserve System
- Population, economic growth and business cycles
- Unemployment, inflation and poverty

HUMAN SOCIAL BEHAVIOR (Transcribed Credit)

Course Type: Elective
Credit: .5
Laude Points: *1 Honor point awarded for the entire class*
Course Length: Semester
Prerequisite: None

Description: This course introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues.

(Description based on SWTC Course)

WORLD CULTURES

Course Type: Elective
Credit: .5
Course Length: Semester
Prerequisite: None

Description: This course explores different regions of the world, the lifestyles of the people in these regions, their religions, food, and customs. The course also explores current events and issues in the regions and their relationship with the United States. Regions studied

include the Middle East, Latin America, Africa South of the Sahara, South Asia, and East Asia.

AP PSYCHOLOGY (Transcripted credit)

Course Type: Elective
Credit: 1
Laude Points: ***1 Honor point awarded for the entire class***
Course Length: Year
Description: This course is designed to parallel what would be taught in an introductory psychology course in college or technical school. The course is transcripted through Southwest Technical College, yet students will have the option of taking the AP Psychology exam at the end of the course if wish to pursue college credit in Psychology.
The content of the course will include the following topics:
Sensation and perception
States of Consciousness
Learning
Memory
Cognition and Language
Intelligence and Mental Abilities
Motivation and Emotion
Life Span Development
Personality
Stress and Health Psychology
Psychological Disorder
Therapies
Social Psychology

AP US HISTORY

Course Type: Elective
Credit: 1
Laude Points: ***1 Honor point awarded for the entire class***
Course Length: Year
Prerequisite: Junior or Senior Status
Description: This course will cover U.S. History from early exploration through present time, and is designed to help students develop the skills necessary to be successful on the AP U.S. History exam. This course will be conducted as a college level survey in U.S. History and will cover the following topics:

Colonial North America	America Emerges as a World
The American Revolutionary Era	Power and Progressivism
The Early Republic	World War I and the 1920's
The Age of Jackson	The Depression and New Deal
The Nation Divided	World War II
Civil War & Reconstruction	The Cold War Era
The West	The Turbulent 1960's
The Gilded Age	Politics and Economics at the End

WORLD LANGUAGES

Lancaster High School offers students the opportunity to learn **French** and **Spanish**.

Language assists in meeting some college admission/graduation requirements and also opens doors to many careers in which the ability to speak a second language is helpful. **High School language experience also provides the opportunity to test out of college language classes and to receive as many as 14 university credits for work done while in high school.** The ability to speak more than one language is a fundamental skill for global citizens of the 21st century. Study of world languages increases cultural awareness and broadens employment options for all students.

WORLD LANGUAGE COURSE OFFERINGS

French I	1.00 credit
French II	1.00 credit
French III	1.00 credit
French IV	1.00 credit
French V	1.00 credit
Spanish I	1.00 credit
Spanish II	1.00 credit
Spanish III	1.00 credit
Spanish IV	1.00 credit
Spanish V	1.00 Credit

COURSE DESCRIPTIONS

FRENCH I

Course Type:	Elective
Credit:	1
Course Length:	Year
Prerequisite:	None
Description:	This course is designed to provide an introduction to the French language and culture. An emphasis on listening, speaking, reading and writing are used throughout the course. Students will learn about the Francophone countries and will have an overview of their cultures.

FRENCH II

Course Type:	Elective
Credit:	1
Course Length:	Year
Prerequisite:	French I

Description: This is a continuation of French I with a continued emphasis on the four communication skills. Students will expand their vocabulary knowledge to become familiar with everyday topics and grammatical structures such the past tense.

FRENCH III

Course Type: Elective
Credit: 1
Laude Points: ***.5 Honor point awarded for the entire class***
Course Length: Year
Prerequisite: Completion of French 2 or instructor approval
Description: This course continues with an emphasis on the current events of the Francophone world. Students will expand their communication skills with an emphasis on resolving communication tasks and applying new sentence structures and tenses such as future and conditional. The history of the France and Canada are addressed.

FRENCH IV

Course Type: Elective
Credit: 1
Laude Points: ***.5 Honor point awarded for the entire class***
Course Length: Year
Prerequisite: French III or approval of the instructor
Description: French IV students finish their study of the verb tenses and moods with the subjunctive. An emphasis on reading skills is highlighted in fourth year French such as the reading of articles and short novels. This class may be combined with level 5. If you are a senior in French 4, you may be able to take the Dual enrollment 202 with instructor approval.

FRENCH V and Dual Enrollment French 202 University of Wisconsin-Green Bay

Course Type: Elective
Credit: 1
Laude Points: ***.5 Honor point awarded for the entire class***
Course Length: Year
Prerequisite: French IV or instructor approval
Description: Students will study thematic units on a variety of topics in modern life. The emphasis is in depth vocabulary, accurate grammar and

a functional fluency in the language. Students will have the option to take this course as a dual enrollment French 202 with UW-GB. If a B or better is earned, a student can obtain as much as 14 credit hours for \$310.00. These credits are transferrable to other universities. The college credit option is not required to take this course. The syllabus is the same for all students in French 5 regardless of credit option.

SPANISH I

Course Type: Elective
Credit: 1
Course Length: Year
Prerequisite: None
Description: This course is designed to provide an introduction to the Spanish language for the students who want only one year of study as well as a basis for students who wish to pursue further study. The objective of the class is to achieve a basic degree of communication and to be introduced to the culture of Spain and Latin America with an emphasis on holidays, food traditions, Andalucia, and the basic geography of the Spanish-speaking World. Students learn to communicate in the classroom using only Spanish.

SPANISH II

Course Type: Elective
Credit: 1
Course Length: Year
Prerequisite: A grade of C or better in Spanish I.
Description: This is a continuation of Spanish I with more emphasis on vocabulary development, reading, grammar, writing and beginning conversation skills. Spanish II emphasizes language skills that allow students to connect simple sentences in order to share their ideas.

SPANISH III

Course Type: Elective
Credit: 1
Laude Points: .5 Honor point awarded for the entire class
Course Length: Year
Prerequisite: A grade of B or better in Spanish II (or permission from the instructor).
Description: This course continues with more emphasis on the culture and history of Spain and Latin America. Spanish III emphasizes language skills that allow students to communicate and connect multiple sentences in order to share ideas. Grammar skills are

increased to facilitate conversation and writing.

SPANISH IV

Course Type: Elective

Credit: 1

Laude Points: *.5 Honor point awarded for the entire class*

Course Length: Year

Prerequisite: A grade of B or better in Spanish III (or permission from the instructor).

Description: This is a continuation of Spanish III with more emphasis on adding sophistication to ideas and increasing general speaking fluency.

SPANISH V

Course Type: Elective

Credit: 1

Laude Points: *.5 Honor point awarded for the entire class*

Course Length: Year

Prerequisite: A grade of B or better in Spanish IV (or permission from the instructor).

Description: Fifth year students review grammar and study advanced grammar points. The course continues to focus on connecting increasingly sophisticated ideas while writing and speaking and holding more spontaneous conversations.

