

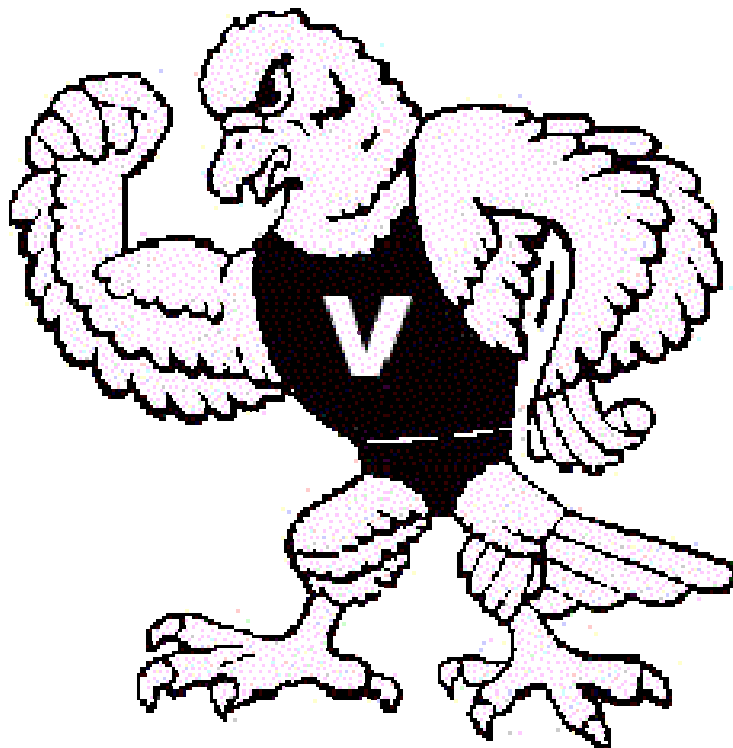
# Vandercook Lake High School

Class of  
2010 - 2013

Course Descriptions

And

Graduation Requirements



# Career Pathways



## Arts and Communication

The Arts and Communication pathway offers many career opportunities for people who are creative and enjoy communicating ideas in a variety of ways. Occupations in this pathway focus on expressing ideas through speech and written form, through the performing arts of acting, dancing, music or athletic competition, and through the visual arts such as photography, film, design and art. Imagination and creativity are important characteristics for success. Occupations in this area include: advertising, public relations, creative writing, film production, journalism, radio and television, architecture/interior design, photography, foreign language.



## Business, Management, Marketing and Technology

This pathway offers a very broad range of careers with a wide range of skill and training requirements. This pathway includes occupations such as: accounting, administrative support, business ownership, computer systems, economics, finance, information services, management, marketing, sales, tourism.



## Engineering/Manufacturing and Industrial Technology

Careers in this pathway include architects, engineers, construction trades, transportation and material moving occupations, mechanics, machinists and many more. Common elements of these occupations include: curiosity about how many things work; physical and visual coordination to operate equipment and instruments; ability to accurately design, build or repair things; use numbers and symbols to express ideas. Examples include: automotive technology, construction trades, drafting/design, electrical operations, engineering, machine tool, mechanics and repair, precision production, plastic mold technology.



## Health Sciences

Careers in this pathway are divided into three areas: health diagnosis, assessment and treatment; health technologists and technicians; and health assistants. People who are happiest in this pathway enjoy science and chemistry, like to help others, and are interested in health, fitness and rehabilitation. There are over three million new jobs in the health sciences. Occupations include: biomedical engineering, environmental health, dentistry, veterinary medicine, medicine, nursing, nutrition, pharmacy, sports medicine.



## Human Services

Occupations in this pathway are related to economic, political and social systems. This pathway is appropriate for people who have good written and oral communication skills and enjoy working with a variety of people to help solve problems or teach new skills. Some examples are: child and family services, education, economics, law and legal studies, law enforcement, public administration, religion, social services, hospitality and food services.



## Natural Resources/Agriscience

Occupations in this pathway are for people who love to explore nature and the world of science. They enjoy being physically active and demonstrate skill and interest in math, science and biology. Technology has opened new career areas in agriculture, forestry, the study of weather and climate, geology, and conservation. People in this path should have a desire to understand the physical world and explore the unknown. Careers include: agriculture, earth science, environmental, fisheries, forestry, geophysics, horticulture, wildlife management, oceanography, agricultural chemical sales.

# VANDERCOOK LAKE HIGH SCHOOL

Dear Student and Parent / Guardian,

One of the most important decisions you make each year in high school is the selection of your course of study. By selecting the appropriate classes that relate to your Career Pathway, and then by putting forth the maximum effort in learning, you will begin to reach your educational potential.

Please seriously consider the decisions you make regarding course selection. Seek information from the course description guide, career pathway brochures, counselor, principal, teaching staff, and parents to help you in this process. You should select the best course of study to meet your educational needs.

The entire high school staff wishes you the best during this course selection process and hope your years at Vandercook Lake High School are rewarding, happy and successful.

If you have any questions after perusal of this Course Description Guide, please feel free to seek assistance from our instructional staff, guidance personnel, or administration.

With Best Regards,

Mark Schonhard  
Principal

### **HIGH SCHOOL and MIDDLE SCHOOL ADMINISTRATION**

Mr. Mark Schonhard, High School Principal 782-8167  
Ext. 205  
Ms. Renee Rudloff, Assistant Principal/Middle School Coordinator 782-8167  
Ext. 204  
Mr. Les Essex, Assistant Principal/Athletic Director 782-8167  
Ext. 203

### **COUNSELORS**

Ms. Marney Alley 782-8167 Ext. 206  
Doug Blume 782-8167 Ext. 208

### **CAREER PREP COORDINATOR**

Ms. Patti Shafer 782-8167 Ext. 127

#### **Our Mission Statement:**

Vandercook Lake Public Schools, in partnership with our community, will provide a quality education empowering all students to become independent, life - long learners, and productive citizens.

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A semester of credit is given for the satisfactory completion of a semester's work in any academic class. Each student is required to carry eight (7) credits each semester unless approved by administration. A doctor's certificate is required for a student to be excused from physical education.

**COLLEGE-BOUND STUDENTS:** Four-year colleges review these key factors for admissions: Which classes a student has taken, the grades in those classes, class rank, and the score on a standardized achievement test such as the ACT. The President's Council of State Colleges and Universities strongly recommends a background of:

English	4 years
Mathematics	4 years
Science	4 years
Social Studies	4 years

In addition, high school students planning to attend college are strongly encouraged to complete:

Foreign Language	2 years (same language)
Fine or Performing Arts	2 years
Computers	1 year

**9<sup>th</sup> Grade Required:**

1. English 9
2. *Algebra 1 or Geometry*
3. *World History w/ Geography*
4. *Physical Science*
5. PE 9

**Choose 2 Electives**

Art  
Pottery  
Band  
Choir  
Spanish I  
Advertising & Writing  
HS Leadership  
Technology I  
Drawing & Painting

**HS Credit available in 8<sup>th</sup> grade for:**

**Algebra I**

**Health**

**10<sup>th</sup> Grade Required:**

1. English 10
2. *Geometry or Algebra II*
3. *US History w/ Geography*
4. *Biology*
5. *Computer Applications 1*

**Choose 2 Electives**

Cont.  
Communications  
Advertising/Writing  
Art or Advanced Art  
Pottery or Advanced Pottery  
Jazz Band  
Band  
Choir  
Chorale  
Spanish I or II  
HS Leadership  
HS Health  
Technology I or II  
PLTW - pre-engineering  
Drawing/Painting  
Recreational P.E.  
Physical Conditioning

**11<sup>th</sup> Grade Required:**

1. English 11
2. *Algebra 2 or Pre Calculus*
3. *Chemistry or Physics*
4. Civics/Economics

**Choose 3 Electives**

Advertising/Writing  
Speech/Research  
Journalism  
Chemistry  
Physics  
Forensic Science/Genetics  
Health  
*Comparative Anatomy*  
Art or Advanced Pottery or Advanced Drawing/Painting  
Jazz Band  
Band  
Choir  
Chorale  
Spanish I, II or III  
Computer Apps I  
Technology I or II  
PLTW - pre-engineering  
Digital Multimedia  
Web Design  
Recreational PE  
Physical Conditioning  
Applied Mentoring  
Accounting  
HS Leadership  
World Studies/Psych.  
Career Center

**MIVU**  
*German*  
*French*  
*Contemporary Issues*

**Dual Enrollment**  
Based on scheduling availability

**12<sup>th</sup> Grade Required:**

1. *English 12*
2. *Algebra 2 or Pre Calc or Calculus or Math Credit*
3. Finance/Career Prep

**Choose 4 Electives**

Advertising/Writing  
Speech/Research  
Journalism  
Chemistry  
Physics  
Genetics/Forensic Science  
Health  
*Comparative Anatomy*  
Art or Advanced Pottery or Advanced Drawing/Painting  
Jazz Band  
Band  
Choir  
Chorale  
Spanish I, II, III or IV  
Technology I or II  
PLTW - pre-engineering  
Digital Multimedia  
Web Design  
Recreational PE  
Physical Conditioning  
Accounting  
Applied Mentoring  
World Studies/Psych.  
HS Leadership  
Career Center  
CAS Internship (2<sup>nd</sup> sem. only)

**MIVU**  
*German*  
*French*  
*Calculus*  
*AP English Lit. Comp.*  
*AP Calculus*  
*AP Biology*  
*AP Chemistry*  
*AP Physics*

**Dual Enrollment**  
Based on scheduling availability

# CAREER CRUISING

**Career Cruising** is a comprehensive and interactive career guidance resource that provides the information you need to make the right career choice. It includes in-depth profiles of hundreds of different careers, detailed information on colleges and universities, and something no other resource has: multimedia interviews with real people in every career. What better way to learn about careers than from the people who know them best? Go to [www.careercruising.com](http://www.careercruising.com)

Username: vandercook Password: jayhawks

## Features

### Career Matchmaker

Career Matchmaker is an internationally respected interest assessment tool. It is a great place to start the career exploration process.

- Students can answer as few as 39 questions, or more depending on their needs
- Additional details are available for each question by clicking on the “More Info” button
- The resulting career suggestions list includes 40 occupations ranked in order of suitability
- By clicking on an occupation, students can receive clear feedback on exactly why the occupation is considered to be a good match for them
- The “See how other careers match up with my answers” feature helps students understand why other careers didn’t appear on their career suggestions list
- Students can tailor their list of career suggestions to match their education goals by specifying the level of education they plan to complete

### Explore Careers

The explore Careers section gives students several different ways to search for careers:

- Keyword search
- Search by school subject
- Career cluster search
- Career Selector

Each in-depth occupation profile includes the following information:

- Job description
- Working Conditions
- Earnings
- Education & Training
- Direct links to related college and university programs
- Sample Career Path
- A list of related occupations
- Links to other sources of information
- Multimedia interviews (2 per occupation)

## Explore Education & Training

This section of Career Cruising provides comprehensive information on colleges and universities to help students plan their education and training.

Students can:

- Search for schools by name or by state
- Search for college, university, and vocational school programs by name or using the cluster search tool
- View detailed information on 2 and 4-year colleges and vocational schools
- Use School Selector to find schools that match their criteria
- Search thousands of financial aid programs they may be eligible for

## EDP Tool

With the EDP Tool, students are able to organize and save career and education information, keep track of courses and skills, and create resumes for job applications.

Students can:

- Bookmark careers and schools of interest
- Store Career Matchmaker interest assessment results
- Create a personalized high school education plan
- Maintain a diary of their thoughts on careers and life goals
- Document work experience and extracurricular activities
- Build a customized resume

**Vandercook Lake H.S. will provide every student a personal ID and password to access the EDP Tool described above. All other components of career cruising can be utilized prior to getting this information. Go Cruising!**  
[www.careercruising.com](http://www.careercruising.com)  
username: vandercook  
password: jayhawks

# ART

## Art 400/401

This course is a basic class in the visual arts. It begins with a study of the elements of design and the principles of art. The course explores several different medias of creative expression. Students will draw, paint, sculpt, printmake, as well as make pottery. Art appreciation will be emphasized. The main movements and eras of art history will be studied.

**No prerequisite**

**Grades 9-12**

**Elective**

## Advanced Art 408/409

Major areas of concentration will be: drawing, painting, pottery, printmaking, and sculpture. The first half of the year will be spent completing various creative problems in all medias. The second semester students will create their own plan designed to gain an in-depth exploration of a chosen media. Students may take Advanced Art for three years of high school.

**Prerequisite: Art I**

**Grades 10-12**

**Elective**

## Pottery 406/407

This course explores a variety of methods of producing pots. Major areas of concentration will be hand-built methods of pinch, coil, and slab. Students will learn the fundamentals of working on the potter's wheel. Students will learn to stack and fire kilns. The second semester focuses on the techniques of wheel thrown pottery. Students will learn advanced methods of form building, slip casting, extrusion pottery, techniques of decoration and firing pottery, and an introduction to pit firing and raku.

**No prerequisite**

**Grades 9-12**

**Elective**

## Advanced Pottery 410/411

Advanced Pottery is a class designed for students that have a love of clay and a desire to go beyond the first year of pottery. Students will explore advanced throwing techniques, as well as extruded and handbuilt forms. Students will learn about glaze chemistry as they create glaze recipes of their own design. Advanced forms of decoration, such as scragfitto, slip combing, and trailing, will be explored. Visiting area professional pottery studios will be part of the field trips we will take.

**Prerequisite: Pottery or Advanced Art**

**Grades 10-12**

**Elective**

## Drawing and Painting

This class is for those students that want to learn to draw and paint. Students will learn to draw Cartoons, caricatures, people, animals and landscapes. This class is all 2-Dimensional - meaning we will only work on drawing or painting. We will not incorporate any 3-dimensional work such as pottery or sculptures. Students will explore the following medias - pencil, charcoals, colored pencil, markers, india ink, crayons, watercolor pencils, water pastels, oil pastels and chalk pastels. White sulphite paper, illustration board, Bristol board, canvas paper, watercolor paper, canvas boards. Watercolors, acrylics, gouaches and temperas will be our painting medias. Students will learn to draw from observation, using grids, gesture and contour line, imagination and memory. Painting will use many of the same skills that the students will use in drawing. Students will learn to paint with a variety of brushes and learn the uses of them, flats, rounds, filberts, points, fan wash. They will work with natural and synthetic brushes. Students will learn the potential of each brush. Each lesson

students will be able to apply what they learned on the previous lesson. Most of the supplies will be free but canvas and sketchbooks will have a small fee.

**Grades 9-12**

**Elective**

## **BUSINESS**

### **Accounting 204/205**

This course is designed to give students a basic understanding of accounting. Students will learn how to keep proper financial records and learn how to interpret financial statements for the sole proprietorships, merchandising corporations, and partnerships. A computerized accounting program will be used. At the completion of this class, students will be prepared for a variety of entry-level Accounting careers.

**No prerequisite**

**Grades 11-12**

**Elective**

### **Computer Apps I 124/125**

Students will learn to become Microsoft Office specialists. (in Word, Excel, Publisher, Access and Power Point) The skills acquired will both help students in their future educational endeavors as well as give them employability skills that are highly marketable, widely recognized by the business community, and are highly sought after by employers.

**Prerequisite: BST**

**Grades 10-12**

**Elective**

### **Finance/Career Prep 210/211**

Finance is designed to prepare students to become financially independent, as well as introduce them to careers in the financial field.

Students will be involved in such areas as financial services, money management, credit, investments, and insurance. Students will participate in the Stock Market Game and a banking simulation.

Career Prep gives each student an opportunity to chart a course for career exploration and transition into the world of work. Students will gain skills in interviewing, job search methods, resumes, and other employability skills. Portfolios will be finalized.

**No prerequisite**

**Grade 12**

**Required**

### **Web Design**

Students will gain knowledge and skills to build creative, interactive and well-designed websites using Dreamweaver, Photoshop, Flash and Fireworks software. This class will attempt to balance technical skills with artistic skills to create web pages that are conceptually interesting, easy to navigate, visually pleasing, and functional.

**Prerequisite: BST**

**Grades 11-12 or Instructor**

**Recommendation**

**Elective**

### **Digital Multimedia**

Students will learn how to create multimedia presentations for print, web sites, and multimedia productions using flattop scanners, graphic manipulation, and digital photography. Adobe Photoshop, Fireworks, Illustrator, and other image editing software will be used throughout the course.

**Prerequisite: BST**

**Grades 11-12 or Instructor**

**Recommendation**

**Elective**

# ENGLISH

## English 9 304/305

Students will learn the essential skills in reading, interpreting, and writing about literature through four projects per year. Projects may include a short story, a poetry project, and a social issue essay. Parts of speech are also included. Major works covered include *The Odyssey*, *The Miracle Worker*, *Romeo and Juliet*, and *To Kill A Mockingbird*.

**Grade 9 Required**

## English 10 306/307

Students gain an understanding of sentence structure, the elements of fiction, poetry terms, research papers, and the structure of a novel/short story. A yearly emphasis is placed on reading and writing using the writing process. Students are encouraged to think and write independently.

**Grade 10 Prereq: Eng. 9 Required**

## English 11 American Lit/Creative Comp 312/313

Various authors and their works are studied. This course also includes the study and practice of structured writing. Development of individual style is pursued. The student should expect to write each day and several major writing projects that reflect the writing process will be required.

**Grade 11 Prereq: English 9/10 Req.**

## English 12 English Lit/World Lit 310/311

This course explores English literature and World literature. Topics include Anglo-Saxon poetry through metaphysical poets, as well as the

writings of Homer, Cervantes, Milton, Swift, and Goethe. Reading, discussion, writing assignments that reflect the writing process and projects will also be included.

**Prereq: English 9/10/11**

**Grade 12 Required**

## English 12 Honors

This course is a two semester survey course designed for the above average college bound seniors by recommendation. First semester will give students a background in English Literature while the second semester covers World Literature. Both courses will be explored at a more rapid pace.

**Grade 12 Elective**

## Journalism 318/319

Students in journalism will learn all aspects of creating, funding, and producing a newspaper and a yearbook. Students will learn graphics, typesetting, and computer publishing as well as journalism law and ethics. This class will function as a company with a common goal. Students will read, write, and learn management skills and work in conjunction with the technology dept. to create a bi-weekly video news show.

**Prereq: Instructor recommendation**

**Grades 11-12 Elective**

## Advertising/Writing 316/317

Students will study newspaper, magazine, television, and internet advertising. A major project will include the creation and marketing of a product including copy, visual images, and musical accompaniment. The Collins Writing Format will be used to create marketing strategies,

resumes, and critical observations of popular advertising.

Text: The Hidden Persuaders by Vance Packard

Supplemental Materials: Jackson Citizen Patriot, New York Times, Washington Post.

Video/Text: The Medium is the Massage (by Marshall McLuhan)

"Ours is a brand-new world of allatonceness. 'Time' has ceased, 'space' has vanished. We now live in a global village...a simultaneous happening."... "Electric circuitry profoundly involves men with one another. Information pours upon us, instantaneously and continuously. As soon as information is acquired, it is very rapidly replaced by still newer information. Our electrically-configured world has forced us to move from the habit of data classification to the mode of pattern recognition. We can no longer build serially, block-by-block, step-by-step, because instant communication insures that all factors of the environment and of experience co-exist in a state of active interplay."

**Grades 9-12** **Elective**

### **Speech / Research**

This is a two semester course designed for college bound Juniors and Seniors. Speech will be concentrated on in the first semester. Students will prepare and deliver various types of speeches throughout the semester. Emphasis is also placed on listening and critiquing. The second semester will revolve around the research paper and the accepted APA form. Students will learn the necessary steps and the organizational tools needed to create a research paper of substantial length.

**Grade 11-12** **Elective**

## **FOREIGN LANGUAGE**

### **Spanish I 382/383**

Spanish I is designed to teach students practical vocabulary and expressions to use in situations which surround their home, school, social events, traveling, etc. Students will listen, speak, read, and write in the language. A study of customs, culture, and geography of Spanish-speaking countries will also be included.

**No prerequisite**

**Grades 9-12** **Elective**

### **Spanish II 384/385**

Spanish II expands students' oral and written comprehension of the language. Students are actively participating almost daily in conversations, answering questions, skits, and other oral assignments to develop fluency and increase vocabulary. The study of grammar, customs, culture, and geography of Spanish-speaking countries is also continued.

**Prerequisite: Spanish I**

**Grades 10-12**  
**Elective**

### **Spanish III 386/387**

Spanish III emphasizes improving oral expression and comprehension skills. The course covers a wide variety of topics as students read short stories, Spanish periodicals, and continue to study the culture of Spanish-speaking people. Students will complete a formal study of grammar and verb tenses and will work with peers, the teacher, and also independently.

**Prerequisite: Spanish I/II**

**(2.5 GPA recommended in Spanish)**  
**Grades 11-12**

**Elective**

**Spanish IV (Indep. Study)**  
**998/999**

Spanish IV concentrates on the structure of sentences, including idiomatic expressions, as they appear in literary selections. Fourth year students should easily translate, write, and/or speak on familiar topics covered in the levels of their study. A study of culture will continue in the literary readings.

**Prerequisite: Spanish I/II/III**  
**(2.5 GPA recommended in Spanish)**  
**Grades 11-12**  
**Elective**

## **MATHEMATICS**

**Algebra 1 464/465**

A full year math course covering variables, properties, solving equations, working with real numbers, polynomials, factoring polynomials, fractions, applications with fractions, introduction to functions, systems of linear equations inequalities, and rational and irrational numbers.

**Grades 9-12** **Required**

**Geometry 468/469**

This course includes topics such as points, lines, planes, angles, reflections, transformations, congruencies, plane and solid figures.

**Prereq: Algebra I**  
**Grades 10-12** **Required**

**Algebra II 466/467**

This course deals with algebraic concepts at a greater in-depth level. Linear relationships, matrices,

systems of equations, quadratic equations, powers and roots, exponents and logarithms along with basic trigonometric concepts are included.

**Prereq: Geometry**  
**Grades 11-12** **Required**

**Algebra II A & B**

This course covers the same material as Algebra II, but is spread over a two year period.

**Required if not taking regular Algebra II**  
**Grades 11-12**

**Pre-Calculus 462/463**

Pre-Calculus is a year long class. First semester will cover logic, analyzing functions, equations and inequalities, integers and polynomials, and rational numbers and functions. Second semester will cover trig identities and equations, recursion and mathematical induction, polar coordinates and complex numbers, combinatorics and graphs and circuits.

**Prerequisite: Algebra II**  
**Grades 11-12** **Elective**

## **MUSIC**

**Band 418/419**

Band is an instrumental music course designed to build a student's musical skill, instill active participation, reward responsibility and timeliness, and encourage good citizenship and cooperative spirit. Students are evaluated by their concert attendance, musical improvement, and citizenship. Band members perform a variety of music at band

festivals, parades, selected athletic events, and indoor concerts. They also attend a band camp in the summer.

**Grades 9-12** **Elective**

### **Jazz Band 422/423**

This course will cover different genres of jazz music and is offered for students who play wind instruments, percussion, and stringed instruments (guitar, bass). Recommended to be taken with symphonic band.

**Grades 9-12 recommended**  
**Elective**

### **Choir - Chamber 420/421**

The Chamber Choir is a performance-oriented class made up of high school students who desire to sing and to be a part of an ensemble. The purpose of the Chamber Choir is to understand and to improve advanced vocal technique of young singers. Students will learn advanced vocal technique, advanced sight reading skills, advanced musicianship, teamwork, critical thinking skills, and performance etiquette. Evaluation will be based on participation in classroom activities, participation in and punctuality at performances, overall citizenship, and improvement of musicianship.

**Grades 9-12** **Elective**

### **High School Chorale 424/425**

The Vandercook Lake Chorale is a mixed-voice ensemble comprised of students from 9<sup>th</sup> through 12<sup>th</sup> grade. This auditioned ensemble performs a variety of repertoire which ranges from pop to classical. In addition to community concerts, the ensemble also participates in solo, ensemble and choir festival. The Chorale is also involved in events around school

and local events in the community. The Vandercook Lake Chorale is dedicated to a high standard of choral excellence and musical performance. If you are interested in auditioning, please speak with Mr. Konkel.

## **PHYSICAL EDUCATION**

### **Physical Education 9**

**Boy 524/525**

**Girl 514/515**

Students will receive instruction in some or all of the following: speedball, soccer, flag football, softball, volleyball, basketball, track, weight training, badminton, floor hockey, and fitness. Students are evaluated periodically through the use of physical fitness tests, skill tests, written tests, participation, and evaluation during game play.

**No prerequisite**

**Grade 9** **Required**

### **Recreational Physical**

**Education**

**532/533**

This class covers recreational sports. Activities include, but are not limited to, speedball, soccer, hockey, volleyball, golf, basketball, tennis, bowling, ping-pong, horse-shoes, shuffleboard, badminton, flag football, and archery. Knowledge of the game and its rules will be required.

**Prerequisite: Minimum 2.0 GPA in PE9 or previous PE class recommended.**

**Grades 10-12** **Elective**

## **Physical Conditioning** **530/531**

Physical conditioning is an advanced physical education course. The course is primarily intended to improve the athletic performance of our student athletes. Students are instructed in proper form for all lifts and the benefits of those lifts. Students are instructed on proper nutrition and are given sample diets to lose, gain, or maintain body weight. Students will be tested on three core lifts to check improvements. Records will be maintained. Students will be encouraged to attend powerlifting competition.

**Prerequisite: PE 9**

**Grades 10-12**

**Elective**

## **SCIENCE**

### **Physical Science 256/257**

Subject areas covered in this class are the essential content expectations for Physics, Chemistry and Earth Science of the Michigan Merit Curriculum. Lecture, videos, and hands-on learning experiences are used in this course.

**No prerequisite**

**Grade 9**

**Required**

### **Physical Science Lab**

The purpose of this class will be to help those students who are struggling with Physical Science. It will be used as a study hall to help students further comprehend and complete assignments. It will also include supplementary instruction and activities to further their understanding of the high school content expectations. How the students are placed into this class has

not yet been determined. It may be based on their performance in 8<sup>th</sup> grade Earth Science to begin this year. Students will be placed in this science lab for at least 1 semester. Second semester may be based on 1<sup>st</sup> semester performance in Physical Science.

**Grade 9**

### **Biology 258/259**

Biology is the study of living things. We will survey a wide variety of topics including cells, organic compounds, cellular energetics and processes, heredity and genetics, evolution and natural selection, and ecosystems.

**No prerequisite**

**Grade 10**

**Required**

### **Biology Science Lab**

This course will be taken in conjunction with Biology. Students who struggle with understanding scientific concepts and the processes involved will be provided with additional help, instructions, activities and hands-on work that will aid in their understanding. Additional aid may be given to students who need help with their homework, but this will not be a “study hall” for students to complete assigned work from their regular Biology class.

**Grade**

**Elective**

### **Chemistry 260/261**

The basic goal of this course is to make the student aware of the behavior of the materials of the earth. Possible topics include the study of oxygen and hydrogen, titration and the study of acids and bases, the study of elements and their families on the periodic table, compounds and groups of compounds, structure of atoms, chemical formulas

and equations, plus classes of chemical reactions.  
**Prereq: Biology**  
**Grade 11-12** **Elective**

### **Comparative Anatomy** **268/269**

This is a science course that explores the anatomy and physiology of animals, including humans. Comparisons are made between the different phylum, how they meet the required functions of animals, and how their systems compare. Students will complete numerous dissections, observe live and preserved specimens, and observe animal behavior. Expect extensive terminology including taxonomy.

**Prerequisite: Successful completion of Biology**  
**Grades 11-12** **Elective**

### **Physics 262/263**

This course is designed to extend the concepts learned in physical science and allow more in-depth understanding. Topics include: motion of objects, forces and motion including Newton's Laws, energy, sound and light waves, thermodynamics, and electricity. This is a math-based science class.

**Prereq: Biology, Algebra & Physical Science**  
**Grades 11-12**  
**Either Chemistry or Physics is required for Juniors**

### **Genetics** **1<sup>st</sup> semester**

This course will extend the genetics concepts introduced in biology. Students will work on solving problems in an inquiry based environment. Topics of study will include cellular genetics, molecular

genetics. Mendelian genetics, and medical genetics.  
**Prerequisite: Must have successfully completed Biology**  
**Grade** **Elective**

### **Forensic Science 2<sup>nd</sup> semester**

Forensic science is defined as any application of scientific analysis to matters of the law. This course will give students a basic understanding of forensic science and how it is used in criminal cases through published works and case studies. Students will apply knowledge in the lab to approach a crime scene, collect evidence, and communicate findings.

**Prerequisite: Must have successfully completed Biology**  
**Grade** **Elective**

## **SOCIAL STUDIES**

### **World History and Geography** **558/559**

This course covers the history of major world regions, as well as the culture, land features, vegetation and climate of those regions. Projects include maps, oral presentations, crafts, and reports.

**No prerequisite**  
**Grade 9** **Required**

### **U.S. History 554/555**

This course covers a period from the Post-Reconstruction period to the present. The course covers in detail most events dealing with American history. The course will also examine the geographical features of the United States and its influence on the nation's history. Reports and homework will be required. Tests are given periodically.

**Prereq: World History w/ Geography**  
**Grade 10** **Required**

## **World Studies 556/557**

**(1 semester)**

This class will look at the many different cultures in our world today. We will look at current issues facing our world, as well as looking at some of our most important civilizations throughout world history. We will also look at the impact that major religions have had on our history as well. Each student will also debate a current topic of their choosing. This will be a project based/discussion class.

**No prerequisite**

**Grade 11-12**

**Elective**

## **Psychology 562/563**

**(1 semester)**

Psychology is the study of human behavior and mental processes. In this course, students study behaviorism, learning and memory, biological psychology, abnormal psychology, and other topics. Students will explore the aspects of psychology, experiments, and write in-depth analysis of characters from a novel.

## **Contemporary Issues**

This class will consist of looking at many current issues facing our country and our world today. We will be discussing Social, Environmental, Political, Law, State and Local issues. Students will be asked to take part in class discussions and a debate. As well as writing to the newspaper, students may be asked to attend outside school functions.

**Grade 11-12**

## **Leadership**

This class is designed to facilitate the development of student leaders at Vandercook Lake High School. Through discussion and the shared experiences of class members, attention will be

given to the leadership challenges that exist at VCL. In addition to covering the broad areas of leadership, the course will focus on skills development and community service. Topics include: setting goals, planning for activities, and project management for school activities, communication skills, group processes and problem solving.

**No prerequisite**

**Grade**

**Elective**

## **Civics 560/561**

**(1 semester)**

Government is the study of our political system, the effect the government has upon us, and our rights and responsibilities as citizens. The course deals with ways we can influence or participate in government decision making. The class compares several political systems by developing the concepts of leadership, decision making, ideology, citizenship, and institutions common to all governments.

**Grade 12**

**Required**

## **Economics 654**

**(1 semester)**

This course covers the basic economic concepts of supply and demand, prices, market structures, gross domestic product, financial markets, and the economic challenges faced by the United States and other countries around the world. Assessments will be made primarily through tests, projects and written work. Classroom activities will include stock market games, skits and performances, and daily work.

**Prereqs: World History and Geography, U.S. History**

**Grade 11**

**Required**

# TECHNOLOGY

## Technology I 440/441

This class is intended for the high school freshman or sophomore; however, juniors and seniors may take the course also. The course is career preparatory and will cover a range of subjects that can be pursued in greater detail at the Career Center or higher levels of Technology.

**No prerequisite**

**Grades 9-12**

**Elective**

## Technology II 442/443

This class is intended for the high school sophomore or junior; however, seniors are welcome to take the class as well. The course is a continuation from High School Technology I giving students the chance to work in subject areas not covered in previous years. Hands-on projects will also be a part of this course, as well as 2<sup>nd</sup> level Drafting. Students planning to take Advanced Technology need to complete their portfolios to be reviewed.

**Prerequisite: Technology I (2.5 GPA recommended in Technology)**

**Grades 10-12**

**Elective**

## Advanced Technology / Video Editing 446/447

This course will equip students with the skills needed to communicate effectively in the medium of video. Students will learn techniques and aesthetics of photography, computer editing, basic script writing and segment producing. Students will learn the skills that will enable them to tell a story with a video camera, and have fun while doing it! Grades will be determined by quizzes, homework assignments, class participation, and video projects. Students will

conceptualize, write, photograph, and edit several short "films", school news programs and a video yearbook which will reflect the students' creativity and technical abilities as the year progresses. These video projects will also provide a body of work for each student to utilize as resume material when they enter a professional video-production working environment.

**Prerequisite: High School Technology I, II, and Instructor recommendation (2.0 cumulative GPA in previous Technology courses recommended)**

**Grades 11-12**

**Elective**

## Project Lead the Way (PLTW)

Introduction to Engineering Design (IED) offers a dynamic high school program that provides students with real-world learning and hands-on experience. Students interested in engineering, biomechanics, aeronautics, and other applied math and science arenas will discover PLTW is an exciting portal into these industries. The IED course uses a design development process while enriching problem solving skills; students create and analyze models using specialized computer software. Limit 16 students

**Grades**

**Elective**

# MISCELLANEOUS

## Community-As-School (CAS) Internship Program 221

**(2<sup>nd</sup> semester senior year—2 hours or class periods)**

This program offers eligible seniors the opportunity to experience their chosen career at an in-depth level. While on site during a part of their school day, students work and learn about their chosen career. Students

complete a series of learning activities written specifically for their placement. Students earn credit by successfully completing these activities. CAS connects school with employers in the community as they work together to create a valuable career experience for the student.

**Prerequisite:**

**Application/Recommendations Req.**

**Grade 12**

**Elective**

### **Applied Mentoring 048/049**

Applied Mentoring incorporates the study and understanding of human behavior in an interactive manner with at-risk students. In this course, students will study behaviorism, learning and memory, applied peer mentoring and mediation. In addition to classroom studies, students will participate in applied peer mentoring and mediation with junior high students.

**Prereq: Counselor recommendation**

**Grades 11-12**

**Elective**

### **Career Center**

**4 Hours or class periods**

Application process through counseling office.

Programs offered are:

visual imaging, business applications and computer certifications, computer systems technology, marketing, construction trades/building maintenance, manufacturing technology, transportation, health occupations, childcare, cosmetology, hospitality and food services, public safety, agriscience and natural resources.

**Prerequisite: Application process through Mr. Biondolillo in the Counseling Office**

**Grades 11-12**

**Elective**

## **Michigan Virtual High School Online Courses**

Students who meet or exceed the following requirements are eligible to enroll in online classes through Michigan Virtual High School.

- Parental permission
- Must have met/exceeded 3 of the 4 ACT Plan Test scores below.
  - Math - 18
  - Reading - 17
  - English - 21
  - Science - 19
- Achieve Level 1 or 2 in three of the four areas on the MME
- Administrative Discretion

**The district will pay the enrollment fee. Students may incur additional costs based on course requirements.**

## **MVH Foreign Languages**

### **German A & B**

This is either a first semester or full year course. This innovative course, based on new information about how language is acquired, teaches students to speak German by focusing on listening, reading, writing and spontaneous, natural speech. German 1 is the first half of a two-year course of study. Students use online audio and a variety of written exercises to acquire the skills, knowledge and experience to lay the foundation for a continuing pursuit of language master. The course is correlated to national foreign language standards.

**Prereq: See requirements above  
Grades 11 - 12**

## **French A & B**

This is a semester or year-long course. Learning language is a process, a natural bridge from listening to understanding to speaking. This is the guiding principle behind the French 1 introductory language course. French 1 avoids the rote memorization of grammar rules and vocabulary typical to other language courses; instead, the course focuses on listening, reading, writing and spontaneous, natural speech. Students use online audio and a variety of written exercises to acquire the skills, knowledge and experience to lay the foundation for a continuing pursuit of language mastery. The course is correlated to national foreign language standards.

**Prereq:** See requirements above  
**Grades 11 - 12**

## **MVH Math**

### **Calculus**

This course is divided into two semesters and is designed to acquaint you with calculus principles such as derivatives, integrals, limits, approximation, applications and modeling, and sequences and series. During this course you will gain experience in the use of calculus methods and learn how calculus methods may be applied to practical applications.

**Prereq:** In addition to the requirements above it is also recommended that the student achieved at a minimum a solid "C" grade or higher in previous mathematics classes which include basic concepts of: algebra, geometry, and trigonometry. In addition you must have had a deep understanding of linear functions, polynomial functions, exponential functions, logarithmic functions, and trigonometric functions. Successful completion of a precalculus course will insure meeting these prerequisites.

**Grades 11-12**

## **AP Calculus**

This course is divided into two semesters and is designed to acquaint you with calculus principles such as derivatives, integrals, limits, approximation, and applications and modeling. During this course you will gain experience in the use of calculus methods and learn how calculus methods may be applied to practical applications.

**Prereq:** In addition to the requirements above it is also recommended that the student achieved a minimum B average in the following courses: Algebra II, Geometry, Trigonometry and Pre-Calculus (or Math Analysis). In general, students should be self-motivated and good independent learners. Good writing skills are important to a student's ability to succeed in an AP course, and essay writing is important to do well on the free-response sections of an AP Exam. Because this course is computer-based, students should have basic keyboarding skills and be comfortable with getting online, using email, and using a word processor.

**Grades 11-12**

## **MVH Language Arts**

### **AP English Lit. Comp.**

The AP Language and Composition course will provide high school students with college level instruction in studying and writing various kinds of analytic or persuasive essays on literary and nonliterary topics in language, rhetoric and expository writing. This course will effectively prepare students for the AP Exam by enabling them to read, comprehend, and write about complex texts, while developing further communication skills on a college level.

**Prereq:** In addition to the requirements above it is also recommended that the student achieved at least a B in the most recent English course. In general, students

should be self-motivated and good independent learners. Good writing skills are important to a student's ability to succeed in an AP course, and essay writing is important to do well on the free-response sections of an AP Exam. Because this course is computer-based, students should have basic keyboarding skills and be comfortable with getting online, using email, and using a word processor.

**Grades 11-12**

## MVH Science

### AP Biology

The AP Biology course is designed to give students a first year introductory biology experience. Paramount to this experience is addressing content within the three basic subject areas, molecules and cells, heredity and evolution, and organisms and populations. Included in this experience are a variety of laboratory experiences, including the 12 AP Biology labs.

Through completion of course activities, students acquire a framework for understanding science as a process, recognizing unifying themes, and applying the knowledge they gain to critical thought about environmental and social issues.

**Laboratory Experience:** Laboratory activities are a critical component of the AP Biology course. There are 12 recommended

labs for which College Board has provided guidelines and procedures. These 12 labs, as well as others, are completed through a variety of methodologies including hands-on student conducted labs and virtual or simulated labs. Simulated activities are correlated to the corresponding AP Lab and structured so that students are familiar with key concepts, experimental design, and data analysis as presented in the lab manual.

**Prereq:** In addition to the requirements above it is also recommended that the student achieved a minimum B average

in the following courses: Biology I, Chemistry I, Algebra I.

**Grades 11-12**

### AP Chemistry

This is the first semester of a year-long course. AP Chemistry builds students' understanding of the nature and reactivity of matter. After studying the structure of atoms, molecules, and ions, students move on to solve quantitative chemical problems and explore how molecular structure relates to chemical and physical properties. Students will examine the molecular composition of common substances and learn to predictably transform them through chemical reactions. The equivalent of an introductory college-level chemistry course, AP Chemistry prepares students for the AP Exam and for further study in science, health sciences, or engineering.

**Prereq:** In addition to the requirements above it is also recommended that the student achieved a minimum B average in the following courses: Intro Chemistry and Algebra II. In general, students should be self-motivated and good independent learners. Good writing skills are important to a student's ability to succeed in an AP course, and essay writing is important to do well on the free-response sections of an AP Exam. Because this course is computer-based, students should have basic keyboarding skills and be comfortable with getting online, using email, and using a word processor.

**Grades 11-12**

### AP Physics

This curriculum covers all of the material outlined by the College Board as necessary to prepare students to pass the AP Physics B exam. This course is divided into two semesters and is designed to acquaint you with topics in classical and modern physics. The first semester discusses topics in Newtonian mechanics including: kinematics, laws of motion, work and energy, systems of particles, momentum, circular motion,

oscillations, and gravitation. The first semester concludes with topics in fluid mechanics, thermal physics, and kinetic theory. The second semester discusses the topics of electricity and magnetism, waves and optics, and atomic and nuclear physics. The course emphasizes problem solving, and there are numerous interactive examples throughout. You will also gain laboratory experience through interactive lab simulations and wet labs.

**Prereq:** : In addition to the requirements above it is also recommended that the student achieved a minimum B average in the following courses: Algebra II, Math Analysis or Trigonometry. In general, students should be self-motivated and good independent learners. Good writing skills are important to a student's ability to succeed in an AP course, and essay writing is important to do well on the free-response sections of an AP Exam. Because this course is computer-based, students should have basic keyboarding skills and be comfortable with getting online, using email, and using a word processor.

**Grades 11-12**

## DUAL ENROLLMENT

Students may enroll at a post secondary institution in a course that is not offered here at Vandercook Lake. To do this the student must meet or exceed the following requirements.

- Parental permission
- Must have met/exceeded the

Dual enrollment qualifications as determined by the State of Michigan on the ACT Plan, ACT or MME.

Courses are available based on an individual scheduling basis

**Vandercook High School Clubs and  
Co-Curricular Activities**

Art Club

Drama Club

Foreign Language Club

Quiz Bowl

SADD

Student Council

National Honor Society

Ski Club

**VCL Athletics**

Fall Sports

Boys & Girls Cross Country

Cheerleading

Football

Girls Golf

Volleyball

Winter Sports

Boys & Girls Basketball

Competitive Cheerleading

Boys & Girls Bowling

Spring Sports

Baseball

Softball

Boys & Girls Track

Boys Golf