



**Career & Technology Education
Pre-Academies
Lakeland Highlands Middle School
Electives Course Guide
2017-18**

MEDICAL

ORIENTATION TO HEALTH OCCUPATIONS/CAREER PLANNING

In this yearlong course, students learn a foundational knowledge in the progress in health care. Students study and perform basic health care skills and demonstrate knowledge in basic first aid skills. In addition, students study varying career occupation in the health care field learn therapeutic and diagnostic skills in the area of health sciences as well as research the history and skills required for health care occupations. Students learn specific health care related terminology, scientific research, and health informatics career pathways.



HEALTH SCIENCE-ORIENTATION TO NURSING

In this yearlong course, students learn the history of nursing from early times to present. Course includes discussion of personal qualities essential to nursing as well as the various levels of nursing occupations. Students learn the principles of wellness and develop an understanding of the science of nursing.

MEDICAL SKILLS & SERVICES

This yearlong high school credit class gives students an opportunity to apply skills and knowledge related to the area of Health Science. Activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to Health Science occupations. Students learn basic communication and mathematic skills used in health care, describe services provided by health occupations, demonstrate First Aid and CPR, identify legal aspects for the health consumer, and demonstrate knowledge of blood borne diseases along with other areas of the health field.

A.E.R. Aviation, Engineering, & Robotics

EXPLORATION OF PRODUCTION TECHNOLOGY I

In this yearlong course, students study many introductory aspects of technology including Simple Machines, Structures, and Bridge Design. Some of the projects or problem solvers include building Straw Towers, Balloons, and Powered Cars. This course emphasizes hands-on activities transforming ideas into practical solutions.



EXPLORATION: AEROSPACE & TECHNOLOGY TRANSPORTATION

This yearlong course continues to build and expand on technology education. The students study many aspects of technology including Aerodynamics and Flight, as well as Bridge Design and Transportation. Some of the projects or problem solvers may include building Bridges, File Folder Cars, Hot Air Balloons, Balsa Gliders and Mouse Trap, Powered Cars, and 2-Liter Bottle Rockets.

FOUNDATIONS OF ROBOTICS

This yearlong high school course provides a foundation in skills associated with robotics and automation, including artificial intelligence, electronics, physics, and principles of engineering. Course information will be tied to lab experiments and students will work in teams to build and test increasingly more complex mobile robots. Concepts include path planning using both geometry and multiple sensor feedback, interpreting sensor feedback, calculating threshold values, understanding conditional statements, and systems analysis.

PERFORMING ARTS



BAND 1

In this yearlong course, students learn how to read music and perform music on an instrument. No musical experience, application, or auditions necessary. Students get help selecting an instrument. There is also an optional summer band for students who are interested in a head start. During the school year, band students will perform in three concerts after school and three rehearsals before school; all other activities are conducted during the school day. Payment plans and scholarships are available to cover the cost of an instrument for students with a hardship circumstance.

JAZZ BAND

Jazz Band provides all middle school band students an opportunity to learn and perform jazz and rock styles of music. The performance schedule for these ensembles will vary throughout the year.

SYMPHONIC BAND

Students study a variety of styles of music literature, emphasizing full band, solo, and ensemble performance. Students develop good tone, intonation, articulation, and style. The Symphonic Band participates in school concerts and local, district, and regional festivals.

ORCHESTRA

In this yearlong course, students learn to play, perform, and read music via string instruments including the violin, viola, cello, and string bass. The students perform two after school concerts each year.

CHORUS I

This yearlong course provides basic training in choral singing and musicianship. Emphasis will be placed on correct posture, tone production, basic musical terms and symbols, note reading, and beginning sight-reading skills. In addition, music enrichment and music appreciation units are incorporated into the curriculum. Performance opportunities include School Concerts, All County Chorus, and Disney Magic Music Days.

CHORUS II AND III

This yearlong course is performance based. Students will sing music in two or three part harmony and learn the basics of reading choral sheet music. Music will vary in genre from popular to classical. Teamwork, cooperation, and gaining self-confidence through performance will be emphasized, as well as individual and group vocal techniques. Students will be graded on cooperation, self-discipline, participation, and attendance at concerts. These courses require successful completion of previous years of chorus.

DRAMA

This yearlong course is an introduction to effective communication. Special interest is placed on the individual learning how to handle speech anxiety, developing a personal style of presentation, and understanding audience reactions. The course explores the theatre experience from a variety of perspectives including the audience, the playwright, the actor, the designer, and the director.

MUSICAL THEATER

In this yearlong class, students develop fundamental skills in stagecraft and apply them through practical experiences. Students will create and participate in various performances including a musical learning the various responsibilities of the stage crew in a full production. **Special note:** This course requires student participation in extra rehearsals and performances beyond the school day.

DIGITAL DESIGN I

This yearlong course builds on the previous two courses and provides greater depth and more complex concepts and the skills/knowledge to master these concepts. In addition to working with network concepts, students will be provided opportunities to further extend their skills with various software applications by creating more complex documents and using more complex functions and technologies. Students will continue their exposure to computer programming and the creation of more complex computer programs.

YEARBOOK

This year long course offers a mixture of digital design, photography, and journalism. In yearbook, students report on school activities and news producing the quarterly Cougars' Mark newspaper. They are also responsible for the design of the school yearbook. Students who are imaginative, self-motivated, and responsible are encouraged to apply. Yearbook staff members must meet deadlines with stories and photographs, sell ads, cover before and after school events, and exhibit creativity in their page designs.

INTRODUCTION TO A/V TECH (TV PRODUCTION)

CVTV is a yearlong TV and Film class. Students will learn to put together video packages for inclusion in the morning show. In addition, students make short films, documentaries, commercials, and music videos. The class requires responsible students capable of working independently and creatively with other students.

FUNDAMENTALS OF A/V TECHNOLOGIES

This yearlong course is the 2nd course in TV and Film. Students build on skills developing video packages, utilizing appropriate tools and equipment to design projects related to Visual and Performing arts along with Journalism and Broadcasting. Students are offered hands on experiences to develop skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make visual observations. The class requires responsible students capable of working independently and creatively with other students

DIGITAL VIDEO PRODUCTION

In this yearlong high school class, students learn technical skills related to the Arts, A/V Technology and Communications to include broadcast speaking, voice over, production writing, and digital production. Students will develop video presentations to be broadcasted through our close circuit television show in the Cougar Vision Television lab. This class requires responsible students capable of working independently and creatively with other students.

FUNDAMENTALS OF SOFTWARE & WEB DEVELOPMENT

This yearlong course introduces students to the foundational knowledge and skills related to web and software development in the information technology industry. The content includes hands-on opportunities using html, webpage design software, programming language, and common software applications.

FOUNDATIONS OF GAMING & SIMULATION

This yearlong high school course provides an introduction to game and simulation concepts and careers, the impact games and simulations have on society and industry, along with design concepts, play mechanics and media integration. This course also covers strategies, process and methods for conceptualizing a game or simulation application using entry level game development tools and activities integrated into the curriculum. The content is taught progressively in the context of game design and development.

MEDIA DESIGN

INFORMATIONAL COMMUNICATIONS I

This yearlong course introduces students an opportunity to develop a better understanding of core concepts associated with computers and their use. The content includes hands-on opportunities to explore various software applications, including the creation of a template-based webpage and a basic computer program. The content includes digital technologies associated with digital and web development, multimedia, word processing, spreadsheet, database, Internet communications, cybersecurity, and computer programming.



INFORMATIONAL COMMUNICATIONS II

This yearlong course provides students core concepts associated with computers and their use. The content includes hands-on opportunities to explore various software applications, including the creation of a template-based webpage and a basic computer program. This course builds on the previous course and provides greater depth and more complex concepts and the skills/knowledge to master these concepts. Students will be provided opportunities to extend their skills with various software applications by creating more complex documents and using more complex functions. Students will also be exposed to structured programming and the creation of a more complex computer program.

FINE ARTS

ART 2 DIMENSIONAL II

Art 2D is a yearlong course that provides students with a two-dimensional experience in visual art. Lessons are designed to develop basic drawing and design skills that will lay the foundation for subsequent problem-solving projects in painting. Slide presentations and visual references to artists and their work will also be used to provide students with exposure to varying art designs.



ART 3 DIMENSIONAL I

In this yearlong course, students will explore different approaches to drawing while applying the elements and principles of three-dimensional design to develop skills and sensitivity to line, shape, color, value, texture and composition. A variety of mixed media and drawing techniques will be explored. Students will be expected to develop technical skills and their own styles of drawing.

ART 3 DIMENSIONAL II

In this yearlong course, students will continue to be exposed to uses of a wide range of media along with multiple uses and combinations while they develop a personal and visual concentration with their work. They will analyze and apply issues related to form and subject matter while they explore art works created by contemporary and professional artists. The development of original ideas and communicating those ideas visually in three-dimensional form will be emphasized.

CULINARY ARTS

HOSPITALITY, CULINARY, and FAMILY/CONSUMER SCIENCE

In this yearlong course, students learn foundational knowledge in restaurant, food/beverage service, lodging, travel, and other family and consumer sciences. Students develop skills in resource management, culinary food safety and sanitation, safe and proper use of culinary tools, interpreting recipes, developing menus, artist presentation of food, and use of technology in the culinary field.



FUNDAMENTALS OF CULINARY

In this yearlong course, students learn the fundamentals of culinary arts to include food and safety, sanitation, proper use of culinary equipment, interpreting recipes, developing menus, basic food preparation skills, front-of-house and back-of-house responsibilities, artistic presentation, and the use of technology in the culinary field.

CULINARY I

This yearlong high school course provides content aligned to prepare for a further education and career in Hospitality and Tourism. Course content will cover the history of the food service industry including safety in the workplace, employability skills, culinary leadership/teamwork skills, care and use of commercial culinary equipment, basic food science, nutrition and following recipes in food prep labs. Activities will focus on student practice and understanding of higher order reasoning and problem solving skills, work attitudes, and knowledge of all aspects of the Hospitality and Tourism career cluster.

WORLD LANGUAGES

BEGINNING SPANISH

This course is a yearlong class with an emphasis on the audio perspective of Spanish to include familiarizing students with hearing and understanding the varying sounds of the language as well as the pronunciation when speaking the language. Students will also learn to read and write basic Spanish. It is the first step to taking Spanish 1 Honors for high school credit.

SPANISH I

This yearlong high school course is based on the belief that the purpose of learning Spanish is to communicate with the people who speak it and to understand their culture. Students will gain practice with new vocabulary, speaking and listening, reading and grammar basics equivalent to a first year language class.

SPANISH 2

This yearlong high school course reinforces the fundamental skills acquired by the students in Spanish 1. The course develops increased listening, speaking, reading, and writing skills as well as cultural awareness. Specific content to be covered is a continuation of listening and oral skills acquired in Spanish 1. Reading and writing receive more emphasis, while oral communication remains the primary objective. The cultural survey of the target language-speaking people is continued.

HEALTH AND FITNESS

COMPREHENSIVE PHYSICAL EDUCATION

LHMS offers a semester long Physical Education course that include a focus on physical fitness and team sports. Daily activities include running, stretching, and fun physical fitness activities. Comprehensive P.E. classes include fitness exercises of running, pushups, sit-ups, and stretching with games and sports of flag football and soccer.

FITNESS

The 6th grade Fitness class is a semester long class that includes games to promote fitness, but the major focus is on fitness and health related topics. Students maintain a journal in this class.



TEAM SPORTS

The 7th grade Team Sports class is a semester long class that develops the physical skills necessary to be competent in many forms of movement, knowledge of team sports concepts such as offensive and defensive strategies and tactics, and appropriate social behaviors within a team or group setting. The integration of fitness concepts throughout the content is critical to the success of this course.

OUTDOOR PURSUITS

The 7th grade Outdoor Pursuits class is a semester long class that provides the skills, knowledge, and motivation necessary for participation in non-traditional forms of physical activity. The integration of fitness concepts throughout the content is critical to student success in this course and in the development of a physically active lifestyle.

INDIVIDUAL/DUAL SPORTS

The 8th grade Individual/Dual Sports class is a semester long class that provides skills, competencies, and techniques necessary for participation in a variety of team and individual sports. The integration of physical activities throughout the content of this course promotes the participation outside of the school setting that contribute to personal enjoyment and the attainment or maintenance of a healthy lifestyle.

VIDEO GAME DESIGN

INFORMATIONAL COMMUNICATIONS I

This yearlong course provides students an opportunity to develop a better understanding of core concepts associated with computers and their use with a focus on video game design. The content includes hands-on opportunities to explore various software applications, including the creation of a template-based webpage and a basic computer program. The content includes digital technologies associated with web development, multimedia, word processing, spreadsheet, database, Internet communications, cybersecurity, and computer programming.

