PHILOSOPHY OF THE CAREER & TECHNICAL EDUCATION DEPARTMENT

The Lemont High School Career & Technical Education Department believes that students should develop the following characteristics:
- Ability to blend laboratory and classroom instruction
- Understanding of course material in order to achieve mastery in their chosen area
- Knowledge of specific areas of interest in the curricular areas of Business Education, Family and Consumer Sciences, and Industrial Technology

Courses offered within these areas of study help students develop skills that are necessary to become productive members of the workforce, and offer students an opportunity to explore career opportunities as they move from introductory to advanced curriculum. Courses are designed to prepare students with cross-sector essential employability competencies by evaluating students' knowledge and learning through project-based assessments.

Based on their abilities and course level, students are expected to:
- Master skills in their respective areas
- Demonstrate craftsmanship, creativity and job-specific skills
- Develop interpersonal and cooperative skills
- Employ technology to accomplish goals

Grading Standards: Student grades are determined by their level of mastery of skills in their respective areas, in accordance with course requirements.

CORE AND ELECTIVE COURSES - BUSINESS EDUCATION

Accounting
Grades Course Open To: 10-11-12 **Credit:** 1.0
Prerequisite: None
Description: This course provides students with general vocational preparation for the business world, and also meets the needs of students who wish to obtain a position in some phase of accounting. It is designed for students who plan to pursue secretarial, small business and college careers. The concepts of double entry bookkeeping and income tax are introduced. Students systematically complete the accounting cycle of journalizing transactions, posting transactions, preparing a worksheet, preparing financial statements, closing the ledgers and preparing a post-closing trial balance. Several areas of study, including accounting for both service and merchandise businesses, corporate accounting and automated accounting, among others, are emphasized. Students are expected to learn terminology important in the field as well. Most work is completed using online working papers and automated accounting software.

Career & Technical Education

Advanced Accounting Honors
Grades Course Open To: 11-12   **Credit:**   1.0 - Honors credit
Prerequisite: Successful completion of Accounting I
Description: This course uses an integrated, college approach to teach real world accounting. Students first learn how to business plan and evaluate for operating, financing and investing decisions. Students develop skills to use accounting systems for gathering and providing data to internal and external decision makers. The course addresses all topics covered in the first two accounting courses in university business schools; students who plan to major in any area of business in college will be well prepared for their required accounting courses. Students have the opportunity to take a year-end qualifying exam and an online course to earn transferable college credit.

AP Computer Science A
Grades Course Open To: 10-11-12   **Credit:**   1.0 - weighted for AP
Prerequisite: Successful completion of Introduction to Computer Science: Programming or AP Computer Science Principles, or consent of Division Chair
Fees: AP Computer Science A exam (paid at fall registration)
Description: The equivalent of an introductory college computer science class, this is a programming-intensive course. Students' goals include being able to determine an appropriate program design to solve a problem or accomplish a task, write program code to create objects of a class and call methods, use test cases to find errors or validate results, and write program code to create and manipulate algorithms. Areas of study include program design, modularity, algorithm development, code testing and implementation, computer logic, and ethical computing. The class includes substantial programming projects in the Java programming language. **Note:** All students enrolled in this course **must** take the AP Computer Science A exam in the spring.

AP Computer Science Principles
Grades Course Open To: 9-10-11-12   **Credit:**   1.0 - weighted for AP
Prerequisite: None
Fees: AP Computer Science Principles exam (paid at fall registration)
Description: The equivalent of an introductory college-level course, this course introduces students to the breadth of the field of computer science by exploring essential topics such as: computer programming, the design and analysis of algorithms, how the internet works, and how computers represent various data. Students will have substantial programming projects in Python, including a fully functional program to attach as an artifact to a digital portfolio by the end of the course. **Note:** All students enrolled in this course **must** take the AP Computer Science Principles exam in the spring.

Business Economics
Grades Course Open To: 10-11-12   **Credit:**   0.5
Prerequisite: None
Description: This course is an intense approach on economic living in a global society, and explains the vital role economics plays in improving the quality of students' decision making process. Stressing the point that trade and exchange reach every aspect of their lives through the choices they make in the marketplace, students learn that international relations revolve as much around economic matters as political affairs. This class covers a number of areas, ranging from market system concepts and supply and demand, to investments and the stock market, to inflation, taxes and the Federal Reserve System, among others. **Note:** This course satisfies the Consumer Education requirement for graduation.

Business Internships & Career Training

Grades Course Open To: 11-12   **Credit:**   2.0 (1.0 Classroom, 1.0 Work)

Prerequisite: Completed program application, two teacher recommendations, and consent of program coordinator; students must be 16 years old within 45 days of the first day of the school year and provide their own transportation

Description: This two-phase course provides training related to business careers held by the students. A classroom phase teaches students job skills and helps them develop individualized career planning portfolios. The job phase allows students to practice their skills in an occupational setting, requiring them to work 15 hours weekly. The Business Internships & Career Training program is designed to develop students academically, personally and professionally as they develop critical thinking, human relations and self-assessment skills through participation in discussions, employer/employee simulations, journals, role playing, rubrics, five-year plans, a career planning portfolio, classroom presentations and projects, cooperative learning, multiple intelligences/team building activities, and personal/class mission statements. Future planning, entering the workforce, developing essential skills and the stock market are covered. **Note:** Students are expected to participate in both the classroom and work phases.

Business Law

Grades Course Open To: 10-11-12   **Credit:**   0.5

Prerequisite: None

Description: This course addresses many legal situations that individuals and families face every day, helps students develop attitudes on law and society, and focuses on the importance and obligations of citizenship. An emphasis is placed on contracts, such as insurance, buying and selling of real estate, obligations between employers and employees, debtor and creditor relations, and the renting and borrowing of goods. The legal aspects of drafts, checks, and notes are also covered. Students learn about minors' rights and some adult duties, the broad application of Police Power, classification of crimes, and torts. A number of areas of law are covered, specifically in relation to society, citizens, minors, consumers and the business community. Other topics include crimes, voidable agreements, breach, personal property and bailments, among others.

Business Leadership

Grades Course Open To: 11-12   **Credit:**   0.5 - students may choose Honors option (teacher approval)

Prerequisite: Successful completion of Introduction to Business, Business Economics, Accounting I, Personal Finance, Sports & Entertainment Marketing, or Business Law

Description: This capstone course helps students learn and develop the vital business "soft skills" and leadership skills for which all employers look. Students learn what it takes to start a business by writing and presenting a full business plan to a panel of judges. Students also participate in a mock interview process where their business knowledge, leadership qualities and communication skills are tested. Students develop their own résumés, cover letters and follow-up letters, and learn about all aspects of the interview process, including how to answer tough interview questions and use social media to get hired. Students may choose to take this course at the Honors level by choosing and completing more rigorous assignments.

Career & Technical Education

Computer Applications
Grades Course Open To: 9-10-11-12 **Credit:** 0.5
Prerequisite: Grade of C or better in Technology Concepts
Description: With an emphasis on hands-on, independent learning, this course is highly recommended for all college-bound students and those who plan to enter today's competitive job market. The course builds upon knowledge and skills learned in Technology Concepts, covering advanced business applications in word processing, spreadsheet, presentation and desktop publishing software (Microsoft Office). Students become familiar with proper communication skills and professional behavior expected of them on the job. They also are introduced to business, financial and mathematical functions used to create professional business documents.

Cybersecurity Essentials
Grades Course Open To: 11-12 **Credit:** 0.5
Prerequisite: Successful completion of AP Computer Science Principles, Introduction to Computer Science: Programming or IT Essentials, or consent of Division Chair
Description: This course develops a foundational understanding of cybersecurity and how it relates to information and network security. Students are introduced to characteristics of cyber crime, security principles, technologies, and procedures to defend networks. Through interactive, multimedia content, lab activities, and multi-industry case studies, students build technical and professional skills necessary to pursue careers in cybersecurity. **Note:** All students enrolled in this course **must** complete a 15-hour Introduction to Cybersecurity course through the Cisco Networking Academy. This can be completed before the class starts, or early in the semester as the class meets.

Desktop Publishing
Grades Course Open To: 9-10-11-12 **Credit:** 0.5
Prerequisite: Successful completion of Technology Concepts
Description: This course gives students the opportunity to produce a variety of professional, quality business documents that combine text, graphics, illustrations and photographs using Microsoft Publisher. Students at a number of skill levels work to master their desktop publishing skills. Additionally, students learn how to turn school projects and presentations into videos with movie-making software.

Introduction to Business
Grades Course Open To: 9-10-11-12 **Credit:** 0.5
Prerequisite: None
Description: This course introduces students to business and economic concepts that will help them understand their role in today's market. Students learn about government's role in business, and the importance of ethics and social responsibility as a business leader. Marketing and advertising concepts are introduced, with students creating their own commercials. Students also learn the importance of managing their credit and personal finances.

Introduction to Computer Science: Programming
Grades Course Open To: 9-10-11-12 **Credit:** 0.5
Prerequisite: Grade of C or better or concurrent enrollment in any level of Integrated Math I
Description: This course provides an introduction to computer science concepts and allows students to create games and apps and work with robots using various programming languages. Additional emerging topics in computer science also are incorporated into the class.

IT Essentials

Grades Course Open To: 10-11-12 **Credit:** 1.0
Prerequisite: None
Description: This course features the Cisco IT Essentials (ITE) curriculum, which offers a hands-on, career-oriented learning experience with an emphasis on practical activities to help students develop fundamental computer and career skills. Students learn how to install, configure and troubleshoot computers and mobile devices; identify common security threats like phishing and spoofing; and develop critical thinking and problem-solving skills using both real equipment and Cisco Packet Tracer. Students are prepared for entry level Information and Communications Technology career opportunities and the CompTIA A+ certification.

Personal Finance I

Grades Course Open To: 10-11-12 **Credit:** 0.5
Prerequisite: None
Dual/Articulated Credit: 3.0 hours of dual credit (BUSI 1120) through College of DuPage
Description: This course provides students an opportunity to develop life-long learning skills that prepare them for post-secondary education, the working world and personal finance. Students are introduced to a number of concepts to help develop their financial acumen. Included among the areas of study are finance, money management, federal and state income taxes, budgets and financial records, checking accounts and banking services, financial planning and security, investments, risk management (insurance), retirement and estate planning, personal credit, decision making, and consumers' rights and responsibilities. Students develop a personal stock portfolio using Google Sheets, based on personal products and services in different sectors and industries. **Note:** This course satisfies the Consumer Education requirement for graduation.

Personal Finance II: Investment Management

Grades Course Open To: 10-11-12 **Credit:** 0.5
Prerequisite: Successful completion of Personal Finance I
Description: This course provides students an opportunity to create and manage their finances through a Personal Financial/Investment Portfolio, a critical skill taught with an emphasis on long-term thinking/investing. Students learn to analyze traditional investments (stocks, bonds, mutual funds, REITS, etc.), and are introduced to alternative investing (hedge funds, private equity, managed futures) and its associated risks using the college-level online course, Wall Street Survivor: Investing 101. As in Personal Finance I, students evaluate investments in a variety of ways, including ROI (Return on Investment) percentage, P/E Ratio, market capitalization, dollar cost averaging, beta/alpha, yield on corporate/municipal bonds, NAV (Net Asset Value of Mutual Funds), and calculating between taxable and tax deferred investment, among others. They also gain an understanding of investing in ESG corporations that are designed to consider society and/or the environment, in addition to profit, in their decision-making process. Students access many financial websites to accomplish the class's objectives.

Professional Internship Program (PIP)

Grades Course Open To: 12 **Credit:** 0.5 or 1.0
Prerequisite: Cumulative GPA of at least 2.50, completed program application, teacher recommendation and career choice
Description: This course allows students to acquire valuable professional experience and create a network of contacts as they prepare to enter a competitive job market. Students leave the building during scheduled periods and meet with mentors in the workplace. Students must seek out a professional in the community, provide their own transportation, and dress and act professionally. Students are required to communicate every other week with the program coordinator, and must submit multiple reflections or a journal, along with mentor evaluations.

Career & Technical Education

Sports & Entertainment Marketing

Grades Course Open To: 10-11-12 **Credit:** 0.5

Prerequisite: None

Description: This course is designed for students with a strong interest in sports and entertainment marketing field, which is growing faster than the national average. Students are introduced to the fundamentals of marketing through the sports and entertainment industries with a practical hands-on, project-based approach. The course allows students to experience knowledgeable speakers, produce individual and team projects, analyze current marketing strategies, and discuss relevant videos.

Technology Concepts

Grades Course Open To: 9 **Credit:** 0.5

Prerequisite: None

Description: This course is designed to introduce students to a variety of technology tools and apps that will allow them to thrive in a 1:1 digital learning environment. Google Suite is a main emphasis of the course, and digital citizenship and keyboarding techniques also are covered. Students spend time in the CITGO Innovation Academy, which includes working with 3D printers and creating videos in green screen rooms. Video editing software and other emerging technologies are incorporated into the course. Students also complete a project in career exploration.

Note: This course is required for graduation from Lemont High School.

Technology Internship Program

Grades Course Open To: 10-11-12 **Credit:** 1.0

Prerequisite: Successful completion of Technology Concepts, completed applications, and recommendation from a teacher or Technology Integration Specialist

Description: This course provides students an opportunity for hands-on study of technology integration in an educational setting. Students are required to assess problems throughout the day and determine the best approach to resolve those issues. In addition to solving technological issues for students and teachers, students are required to complete and maintain several ongoing projects that address problems or solutions in educational technology integration. Students have the opportunity to independently pursue their interests in this area. Students should have a sincere interest in using technology and demonstrate a willingness to learn. A prior understanding of Google Suite and a desire to learn and test new technology are important for success in this program.

Web Design & Development I

Grades Course Open To: 9-10-11-12 **Credit:** 0.5

Prerequisite: None

Description: This course provides students with an introduction to create and design material that can be posted on the World Wide Web. Students begin building basic pages and move on to more advanced websites as the course progresses, and also sharpen their creativity through their coursework. A variety of topics are introduced, including HTML 5, CSS 3, principles of effective design, legal and ethical issues, and web accessibility.

Web Design & Development II

Grades Course Open To: 9-10-11-12 **Credit:** 0.5 - students may choose Honors option (teacher approval)

Prerequisite: Successful completion of Web Design & Development I

Description: This course is a continuation of Web Design & Development I, and strengthens skills that students learned in that introductory course. An emphasis is placed on multimedia applications and programming tools, such as JavaScript and HTML 5, and using them to create dynamic and responsive web pages.

Career & Technical Education

Advanced Baking
Grades Course Open To: 11-12   **Credit:**   0.5
Prerequisite: Successful completion of Food Preparation
Description: This course builds on concepts learned in Food Preparation, with students learning techniques utilized when making specialty baked goods. Students learn techniques in mixing, shaping and laminating dough, as well as cake decorating. Areas of study include cookies, quick breads, yeast breads, pastries and cake. Students are expected to continue development of skills for producing quality products.

Child Development
Grades Course Open To: 10-11-12   **Credit:**   0.5
Prerequisite: Successful completion of Parenting preferred
Description: This course prepares students to understand the developing child and covers the growth and development of children from the prenatal stage through age 3. The course analyzes all aspects of children's development, including physical, intellectual and social-emotional development. Course content also includes the study of family, labor and delivery, caring for a newborn (using a Baby-Think-It-Over simulation doll overnight), developmental challenges, and birth defects. Students determine realistic expectations of children by becoming aware of how they develop in all areas of each developmental domain.

Culinary Arts
Grades Course Open To: 11-12   **Credit:**   1.0
Prerequisite: Successful completion of Food Preparation
Description: This course expands on concepts and skills learned in Food Preparation and introduces new topics. Students develop skills through the study and preparation of food in units such as food safety and sanitation, appetizers and hors d'oeuvres, yeast breads, cakes, pies, pastries and candies, gingerbread house construction, soups and chili, and meat, poultry and fish. Careers and employment in food service are explored as well.

Family & Consumer Sciences Survey
Grades Course Open To: 9   **Credit:**   1.0
Prerequisite: None
Description: This orientation course is designed to make students aware of occupations, skills and areas associated with Family & Consumer Science. Areas such as communication, personality, relationships, marriage, parenting, child care and development, basic hand-sewing, interior design principles, and nutrition with food preparation are all emphasized. Students obtain skills necessary to prepare simple meals, sew buttons and complete a sewing project, create a budget, and work cooperatively in groups to complete other projects associated with real-life events.

Food Preparation

Grades Course Open To: 10-11-12 **Credit:** 1.0

Prerequisite: None

Description: The emphasis of this course is to develop skills and an understanding of basic culinary principles. Classroom and laboratory experiences that can be applied to everyday life in cooking, nutritional needs, time management and consumer wellness are included. Students gain knowledge in a number of areas, including kitchen and food safety, measuring techniques, recipe terms and reading a recipe. Course content centers around the following duty areas: promoting food service and preparation management using the decision-making process; meeting basic needs by applying nutrition concepts; meeting health and safety needs in planning, preparing and serving food; maximizing resources when planning, preparing and serving food; promoting hospitality in food practices; and analyzing individual and family nutritional needs in relation to change. The development of employability skills, transition skills, time management skills and vocational ethics are included in this course.

Interior Design I

Grades Course Open To: 10-11-12 **Credit:** 0.5

Prerequisite: None

Description: This course introduces students to the concepts of interior design. The coursework integrates knowledge, skills and practices required for pursuing a career in housing and interior design, utilizing appropriate technology as needed. The impact of color, use of textiles, arrangement of furnishings, addition of accessories and use of lighting are all explored through design projects. Students implement performance-based projects throughout the semester to complete a professional portfolio.

Interior Design II

Grades Course Open To: 10-11-12 **Credit:** 0.5

Prerequisite: Successful completion of Interior Design I

Description: This course expands on the concepts that students learned in Interior Design I, providing them with advanced knowledge of skills and practices required for pursuing a career in the field of housing and interior design. The areas of kitchen, bathroom and bedroom design, as well as housing renovation and landscaping, all are explored.

International Cooking

Grades Course Open To: 11-12 **Credit:** 0.5

Prerequisite: Successful completion of Food Preparation

Description: This course explores the culture and cuisine of many different regions of the world, including Latin America, Europe, the Mediterranean and Asia. In lab groups, students focus their studies on a specific country within a region, including geography, climate, holidays and its cuisine. Topics covered in the area of cuisine are ingredients, cooking methods, meal patterns and regional differences. To further explore international cuisine, this course will include field trips to different cultural restaurants.

Career & Technical Education

Teaching Internship
Grades Course Open To: 11-12   **Credit:** 1.0
Prerequisite: Successful completion of both Parenting and Child Development preferred
Dual/Articulated Credit: 3.0 hours of dual credit (EDUC 101) through Joliet Junior College; students must qualify for ENG 101 (via Accuplacer, SAT or ACT) to earn dual credit
Description: This hands-on class is intended for students interested in teaching or working with children. Students learn the fundamentals of grade school development, develop a portfolio, plan and implement lesson plans, and research an education related career. Students are placed in an elementary school, middle school or junior high classroom, where they will act as teaching assistants. Once at their placements, students gather teaching experience, classroom management techniques and lesson plan ideas. Students must provide their own transportation. Students are responsible for teaching a number of lessons within their placements. For optimal learning to take place, student attendance is critical. Completed student portfolios consist of teaching assignments, activities and experiences.

Nutrition
Grades Course Open To: 10-11-12   **Credit:** 0.5
Prerequisite: None
Description: This course is designed to provide students with an understanding of the basic six nutrients - protein, carbohydrates, fat, vitamins, minerals and water. The areas of study include functions of nutrients in the body, daily intake requirements, and the best food sources for nutrients. The course also focuses on how students can use that information when planning meals and making daily personal food choices. Students evaluate their own eating habits and learn about current topics in nutrition including food sustainability, sports nutrition, disordered eating, and fad diets.

Parenting
Grades Course Open To: 10-11-12   **Credit:** 0.5
Prerequisite: Successful completion of Child Development preferred
Description: This course provides students with a view of the family as a system, and gives them basic knowledge of parenting, nurturing and care-giving in society. The course emphasizes the fact that becoming a parent affects an individual's personal, educational and career goals. Students are introduced to concepts relating to family dynamics such as marriage and divorce, family planning, labor and delivery, and prenatal development, as well as to nurturing infants, toddlers and preschoolers, guiding grade school age children and teenagers, and other challenges of parenting. Students have the opportunity to care for a Baby-Think-It-Over simulation doll for one weekend.

CORE AND ELECTIVE COURSES - INDUSTRIAL TECHNOLOGY

3D Design & Animation
Grades Course Open To: 10-11-12   **Credit:** 0.5
Prerequisite: None
Description: This introductory course helps prepare students for college or technical college in the burgeoning field of design and drafting. A growing field within the motion picture and video industries, there is an increasing demand for individuals in the field of 3D design and animation. The course covers the development of two- and three-dimensional objects to produce rendered still frames (scenes) and, using these objects, produce rendered animations. Some of the areas of study include three-dimensional modeling, rendering, animation, lighting and material considerations, and scene composition. Technology is used in the development of projects in this course.

Advanced 3D Design & Animation

Grades Course Open To: 10-11-12   **Credit:**   0.5

Prerequisite: Successful completion of 3D Design & Animation or consent of Division Chair

Description: This course is intended for advanced-level 3D design and animation students. Students learn advanced modeling techniques, advanced lighting and rendering techniques, character animation and special effects. Students are prepared to pursue further study in the field at a post-secondary institution or technical college.

Drafting/CAD I

Grades Course Open To: 10-11-12   **Credit:**   0.5

Prerequisite: None

Description: This course provides students who plan on pursuing a career in engineering, architecture, interior design, construction, manufacturing or other related fields, with an opportunity to explore the field of drafting. Some of the major units of study include freehand sketching, lettering, multi-view drawing, isometric drawing, geometric construction, dimensioning, sectioning, and an introduction to 3D design using the latest CAD software. The use of CAD software is an integral part of this course.

Advanced CAD II Honors

Grades Course Open To: 11-12   **Credit:**   1.0 - Honors credit

Prerequisite: Successful completion of Drafting/CAD I or consent of Division Chair

Description: This course is a study of advanced CAD concepts relating to mechanical design and residential architectural design principles and techniques. Major units of study include advanced AutoCAD concepts, parametric modeling, mechanical engineering design basics, BIM house design procedures, room planning, working drawings, rendering, scene creation and camera animations. Students build to designing a home, producing photo realistic renderings, and animating a walk-through. This course is ideal for students interested in architecture, engineering, construction, interior design or related fields. CAD software and 3D printing is an integral part of this course.

Advanced CAD III Honors

Grades Course Open To: 12   **Credit:**   1.0 - Honors credit

Prerequisite: Successful completion of Advanced CAD II Honors or consent of Division Chair

Description: This advanced-level course allows students to further investigate and develop advanced mechanical and/or architectural CAD concepts. Students complete several advanced projects within the area(s) of mechanical design or residential and/or commercial architectural design. Students may be required to produce scale models or 3D printed models of designs.

Orientation to Industrial Technology

Grades Course Open To: 9   **Credit:**   1.0

Prerequisite: None

Description: This exploratory course gives students exposure to a variety of industrial-technical occupations, as well as beginning skill development in areas that are important to many industrial jobs. Included among the areas of study are measurement and calibration, identification, use and safety of portable and industrial tools, decision making in the design and processing of a product, and introductory concepts in production technology, transportation technology, communication technology and energy utilization technology. Students learn basic industrial skills and processes for drafting and design, robotic engineering, basic woodshop production, bridge design, construction and testing, carbon dioxide powered dragster design, fabrication, and finishing and testing. Students develop employability and transition skills tend vocational ethics as well.

Production Honors

Grades Course Open To: 12   **Credit:**   1.0 - Honors credit
Prerequisite: Successful completion of either Woods Technology I or Fine Arts Woodworking and either Woods Technology II or Advanced Woods, or consent of Division Chair
Fees: Course fee applies (paid at fall registration)
Description: This advanced-level course emphasizes production as an occupation, with a concentration on skill development in advanced machining operations and industrial techniques. Students run an entrepreneurial cabinet shop, which includes the design, drawing, construction, finishing and installation of the client's goods. Recordkeeping of the operation also is part of the course. Some skills that students acquire include performing first piece inspection, verifying dimensions, alignments and clearances, transferring layouts from sample parts of templates, and setting up precision drills. Students develop employability and transition skills and vocational ethics.

Robotic Engineering

Grades Course Open To: 10-11-12   **Credit:**   0.5
Prerequisite: None
Description: This course provides students with an introduction to robotic engineering. Hands-on activities in building and programming robots allow students to apply math and science concepts as they try to solve engineering problems. Current use of robots in various industries, as well as the possible future of robotics, also is explored.

Stagecraft & Theatre Technology I

Grades Course Open To: 9-10-11-12   **Credit:**   0.5 or 1.0
Prerequisite: None
Description: This course introduces students to basic Theatrical Technology and Carpentry topics and includes the construction of significant projects for plays, conferences, musicals and concerts. Students gain a better understanding of carpentry skills and concepts and apply them to the theatre setting. Theatrical concepts include basic construction, running crew, sound and lighting, make-up and criticism. Students are introduced to and gain hands-on experience in hand tools, power tools, ladders, scaffolding, and basic framing techniques. Students also read blueprints and floor plans and are introduced to theatrical electricity. This course requires students to learn and consistently practice proper safety protocols. Additional emphasis is placed on teamwork, leadership and problem solving. Students are expected to participate in several mandatory after-school events and clock 40 "hands-on" work hours for those events scheduled in the Performing Arts Center throughout each semester.

Stagecraft & Theatre Technology II

Grades Course Open To: 10-11-12   **Credit:**   0.5 or 1.0
Prerequisite: Successful completion of Stagecraft & Theatre Technology I
Description: A continuation of Stagecraft & Theatre Technology I, this intermediate course continues to employ a practical, hands-on environment and includes the construction of significant stagecraft projects for plays, conferences, musicals and concerts. Students gain a deeper understanding of carpentry skills and concepts and apply those to the theatre setting. Theatrical concepts include intermediate construction, running crew, sound, lighting, make-up and criticism. Students also gain further knowledge and hands-on experience in hand tools, power tools, ladders, scaffolding, and intermediate framing techniques. Students also read blueprints and floor plans and gain hands-on experience in the area of theatrical electricity. This course requires students to learn and consistently practice proper safety protocols. Additional emphasis is placed on teamwork, leadership, problem solving and intermediate design. Students are expected to participate in several mandatory after-school events and clock 40 "hands-on" work hours for those events scheduled in the Performing Arts Center throughout each semester for those events scheduled in the Performing Arts Center throughout each semester.

Stagecraft & Theatre Technology III - Theatre Management

Grades Course Open To: 11-12 **Credit:** 0.5 or 1.0
Prerequisite: Successful completion of Stagecraft & Theatre Technology II
Description: A continuation of Stagecraft & Theatre Technology II, this advanced course continues to employ a practical, hands-on environment and includes the construction of significant stagecraft projects for plays, conferences, musicals and concerts. Students gain a deeper understanding of carpentry skills and concepts and apply those to the theatre setting. Skills also are obtained in management and supervision of construction, running crew, sound, lighting, make-up and criticism. Students gain further knowledge and hands-on experience in hand tools, power tools, ladders, scaffolding, and advanced framing techniques. Students supervise and manage blueprints and floor plans and gain hands-on experience in the area of theatrical electricity. This course requires students to learn and consistently practice proper safety protocols. Additional emphasis is placed on teamwork, leadership, problem solving and advanced design. Students are expected to participate in several mandatory after-school events and clock 40 "hands-on" work hours for those events scheduled in the Performing Arts Center throughout each semester for those events scheduled in the Performing Arts Center throughout each semester.

Stagecraft & Theatre Technology IV - Theatre Design

Grades Course Open To: 11-12 **Credit:** 0.5 or 1.0
Prerequisite: Successful completion of Stagecraft & Theatre Technology III, or concurrent enrollment in Stagecraft & Theatre Technology III with consent of Division Chair
Description: A continuation of Stagecraft & Theatre Technology III, this capstone course continues to foster a practical, hands-on environment and includes the construction of significant stagecraft projects for plays, conferences, musicals and concerts. Students are provided a continued understanding of carpentry skills and concepts and apply those to the theatre setting. Skills also are sharpened in the design of construction and plans for running crew, sound, lighting, make-up and criticism. Students gain expert knowledge and hands-on experience in hand tools, power tools, ladders, scaffolding, and expert framing techniques. Students design blueprints and floor plans and gain hands-on experience in the area of theatrical electricity. This course requires students to learn and consistently practice proper safety protocols. Additional emphasis is placed on teamwork, leadership, problem solving and advanced design. Students are expected to participate in several mandatory after-school events and clock 40 "hands-on" work hours for those events scheduled in the Performing Arts Center throughout each semester for those events scheduled in the Performing Arts Center throughout each semester.

Woods Technology I

Grades Course Open To: 10-11-12 **Credit:** 0.5
Prerequisite: None
Fees: Course fee applies (paid at fall registration)
Description: This course begins a study of the properties and fabrication of wood products, as related to construction and finishing of residential housing. A number of areas introduce basic skill development, including identification of proper adhesives and bonding products for interior and exterior use, identification and use of lumber and construction materials, construction mathematics, measurements, accuracy of layout and marking, identification and use of hand tools, identification and use metal fasteners, and the operation of power drills, saws, routers, shapers, joiner, pneumatic nailers and double-hole boring. Laboratory activities allow students to develop introductory skills for the construction industries. Safety awareness and practice are emphasized and are integral parts of each major unit of study. Students develop employability and transition skills and vocational ethics as well.

<u>Woods Technology II</u>

Grades Course Open To: 11-12 **Credit:** 1.0

Prerequisite: Successful completion of either Woods Technology I or Fine Arts Woodworking, or consent of Division Chair

Fees: Course fee applies (paid at fall registration)

Description: This course begins with a study of the principles and elements of good design for residential construction, trimming and permanent casements. A major emphasis is placed on planning and cost estimation, reading plans, construction and finishing, and efficient time management. The sequence of stages and components for residential construction also are addressed. Some projects may include scale house structures and custom cabinets. Students develop employability and transition skills and vocational ethics as well.