Assignment Code		Endorsement Requirement
08: PHYSICAL, HEALTH, AND SAFETY EDUCATION		
080510	**Family Health and Wellness – Grades 10-12 (FC0302)** A course designed to prepare individuals with the basic principles of physical, emotional, social and mental well-being. Key content includes personal health and wellness, (nutrition, mental health, stress management, drug/alcohol abuse prevention, disease prevention and first aid) healthy growth and development, family health issues; managing health resources; careers in the health field; and community, national and world health issues. This course will earn a health credit when taught by a Family and Consumer Sciences teacher who has a Health endorsement. Idaho Content Standards for Health have been included in this course.	7094 Voc Home Ec 6/12 7513 P.E. & Health 6/12 7520 Health 6/12 7970 Gen Home Ec 6/12 7971 Family/Consumer 6/12
080515	**Healthy Living, Healthy World (FC 0105)** This course focuses on how our daily lives affect the environment and the Three Pillars of Sustainability. Students will recognize how their choices on housing, transportation, food, and waste management, water and energy consumption impact both their near environment and global wellbeing. Sustainable career choices as well as community connections are an integral part of this curriculum. This course focuses on the roles and responsibilities of the student as a global citizen and consumer of finite resources. FCCLA (Family, Community and Career Leaders of America) leadership activities are strongly tied to this course.	0074 Family Cons Sci 6/12 3020 Child Dev Care/Gu 6/12 3023 Food Service 6/12 3025 Culinary Arts 6/12 7094 Voc Home Ec 6/12 7970 Gen Home Ec 6/12 7971 Family/Consum 6/12
10: COMPUTER AND INFORMATIONAL SCIENCES ***CTE***		
100010	**Computer Technology I (BE0160)** A course designed to focus on the study of computer systems and application software. The influences of computers on societal issues are presented especially in the areas of security, privacy, computer crime and viruses. A broad array of computer applications are surveyed in context to how they help solve personal, business, and societal problems.	4015 Business Mgt/Finance 4021 Comp Graph Comm 4024 Info/Com Tech 6/12 4025 Wrd Pro Tech 7093 Business Tech Ed 6/12 7935 Business Ed 6/12
100011	**Computer Technology II (BE0170)** A course designed to focus on the study of computer hardware and operating systems. This course elaborates on skills and issues included in Computer Technology I.	4021 Comp Grap Co 4024 Info/Com Tech 4025 Wrd Proc Tech 7093 Business Tech Ed 6/12 7935 Business Ed 6/12

Assignment Code		Endorsement Requirement
101520	**Computer Programming & Software Development I (BE0250)** A course designed to introduce students to computer science through programming concepts, and skills. Students will learn how to design, enter, compile, run and debug programs and gain an understanding of how to break up large programming tasks into small, solvable parts to create effective working programs across a variety of platforms.	4026 Network Supp 6/12 6153 Networking Tech 6/12 7093 Business Tech Ed 6/12 7321 Computer Apps 6/12 7935 Business Ed 6/12 7980 Industrial Arts 6/12 7982 Industrial Tech 6/12
101521	**Computer Programming & Software Development II (BE0260)** A course designed to build on the skills and knowledge established in Computer Programming and Software Development I.	4026 Network Supp 6/12 6153 Networking Tech 6/12 7093 Business Tech Ed 6/12 7321 Computer Apps 6/12 7935 Business Ed 6/12 7980 Industrial Arts 6/12 7982 Industrial Tech 6/12
101570	**Computer Science—Database Design and Programming (BE0261)** This course is an authorized AP College Board course teachers must be authorized to teach the course through the AP College Board. Upon completion of the course, students will be able to pass the AP College Board Exam for Computer Science A or Computer Science AB. For complete details regarding AP Board Approval of the Teacher and the curriculum go to: http://apcenteral.collegeboard.com.	4024 Info/Comm Tech 6/12 4026 Network Supp 6/12 6153 Networking Tech 6/12 7093 Business Tech Ed 6/12 7321 Computer Apps 6/12 7935 Business Ed 6/12 7980 Industrial Arts 6/12 7982 Industrial Tech 6/12
100013	**Introduction to Information Technology (BE0270)** A course designed to provide students with an understanding of voice and data communication networks and components necessary for information systems' maintenance. Students will become familiar with hardware and software utilities used to install, upgrade and problem solve various types of operating systems' problems.	4020 Microcomp Apps 6/12 4021 Comp Graph Co 4024 Info/Comm Tech 6/12 4025 Wrd Pro Tech 7093 Business Tech Ed 6/12 7935 Business Ed 6/12
102020	**Introduction to Interactive Media (BE0273)** A course designed to introduce students to interactive technologies. Topics include designing, editing, and producing video, audio and graphical elements using digitally-generated or computer-enhanced media.	4021 Comp Graph Co 4024 Info/Com Tech 6/12 6180 Grap Arts/Journal 6/12

Assignment Code		Endorsement Requirement
		6190 Grap Art/Journalism 6195 TV Prod/Broadcasting 7093 Bus Tech Ed 7930 Bus Ed Office Occ 7935 Business Ed 6/12
109980	**Technology Assistant Internship (BE0274)** A course designed to allow students to practice skills learned in the initial levels of the program by performing the duties of an assistant to the system operator of a computer network or technology center. Duties will be performed in conjunction with adults in the school district. Skills to be learned and reinforced would include installing, maintaining and troubleshooting equipment. In addition, the student would be responsible for providing training and in-service on appropriate equipment to all school personnel, develop communication linkages, and serve as system technician.	4020 Microcomp Apps 6/12 4024 Infor/Comm Tech 6/12 6153 Networking Tech 6/12 7093 Business Tech Ed 6/12 7321 Computer Apps 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
102560	**Computer Design and Networking** A course designed to examine computer design, assembly, and maintenance, as well as develop foundational computer networking competencies; to include a study of appropriate procedures for working with hubs, switches, and routers. Students will learn associated workplace skills including inventory tracking, scheduling, component research and acquisition, and related business procedures.	7093 Business Tech Ed 6/12 7321 Computer Apps 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12
102561	**Advanced Networking (BE0290)** A course designed for students to develop skills and competencies for the installation and maintenance of computer equipment in the district, community and industry using cable, fiber optics, and wireless communication. Students will connect users to computer systems, keep documentation on network performance and install upgrades when necessary. A personal code of ethics for information use and management will be established.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 7093 Business Tech Ed 6/12 7321 Computer Apps 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12
100050	**Business Computer Applications I (BE0310)** A course designed to introduce students to the use of industry standard computer applications used for solving business problems. Career awareness, employment skills, and contextualized business problems represent the theme of the course. Topics include an introduction to operating systems and file management; the use of word processing software for purposes of creating basic business documents; the use of	4015 Business Mgt/Finance 4020 Microcomp Apps 6/12 4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12

Assignment Code		Endorsement Requirement
	spreadsheet software for storing data and solving mathematically based problems; and the use of presentation software to support the delivery of effective presentations.	4075 Accounting 6/12 7093 Business Tech Ed 6/12 7321 Computer Apps 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7980 Ind Arts 6/12 7981 Tech Ed 6/12 7982 Ind Tech 6/12
111530	**Interactive Media – Graphics I (BE0317)** A course designed to allow students to develop skills in formatting and editing raw visual layouts and illustrations using appropriate print, 3D, and animation software. Skills to be acquired include mapping, lighting, camera techniques, animation planning and storyboard development. Emphasis is placed on preparing materials to web/print industry standards.	4024 Infor/Comm Tech 6/12 6153 Network Tech 6/12 6190 Graph/Print Comm 6/12 7093 Business Tech Ed 6/12 7321 Computer Apps 6/12 7935 Bus Education 6/12 7937 Bus Ed Accounting 6/12 7980 Industrial Arts 6/12 7981 Tech Ed 6/12 7982 Industrial Tech 6/12
102010	**Web Design I – Introduction (BE0318)** A course designed to allow students to develop Web pages utilizing HTML, XHTML, CSS, and XML basic web coding. This course is an entry-level course intended as a prerequisite for advanced Web design courses. This course is designed to provide students with vocabulary and concepts required to develop a Website. Students will be introduced to industry standard Web design software and be ready to advance to Web Design II, where students will use advanced Web authoring tools.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Networking Tech 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12
100051	**Business Computer Applications II (BE0320)** A course designed to build on the skills and knowledge established in Business Computer Applications I. Information and data management, retrieval, merging, and presentation represent the framework of the course. Topics include an introduction to database applications, the use of word processing software for creating complex business documents and reports, and the use of spreadsheet software for solving mathematically based problems involving business finance.	4015 Business Mgt/Finance 4020 Microcomp Apps 6/12 4075 Accounting 6/12 7093 Business Tech Ed 6/12 7321 Computer Apps 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12

Assignment Code		Endorsement Requirement
111534	**Interactive Media – Graphics II (BE0327)** A course designed to focus on project-based applications of concepts addressed in Media: Graphics I. The projects may integrate skills with school, business or community needs.	4024 Infor/Comm Tech 6/12 6153 Network Tech 6/12 6190 Graph/Print Comm 6/12 7093 Business Tech Ed 6/12 7321 Computer Apps 6/12 7935 Bus Education 6/12 7937 Bus Ed Accounting 6/12 7980 Industrial Arts 6/12 7981 Tech Ed 6/12 7982 Industrial Tech 6/12
102011	**Web Design II – Website Authoring Tools (BE0328)** A course designed to emphasize planning and publishing dynamic, professional web sites using industry standard web design authoring tools. Students will learn to create and incorporate special effects, photographs, icons, quality animations, and other graphics suitable for web deployment. An in-depth application of editing software and advanced coding applications will be the focus of this course.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Networking Tech 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12
100052	**Business Computer Applications III (BE0330)** A course designed to build on the skills and knowledge established in Business Computer Applications II. Solving business problems that require advanced use and integration of productivity applications for data management, data analysis, and information presentation represent the framework of the course. The course includes an examination of career and industry certification opportunities as they relate to the skills and knowledge acquired.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Networking Tech 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12
102012	**Web Design III (BE0338)** A course designed to integrate knowledge from Web Design I and II to develop e-commerce through incorporation of sales, marketing, and customer interfaces. Students will increase their knowledge of design and application as they focus on the client and database functionality. Students will have the opportunity to explore server side scripts, server application interaction, and increase their skills in dynamic design.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Networking Tech 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12
100012	**Fundamentals of Information Systems Technology (TI 0550)** This course is a survey of computer technologies. This course may include ethics of computer and network use, web design, introduction to graphics, animation, computer hardware and operating systems, elementary networking, troubleshooting and programming. (The student should have prior knowledge of an "office suite" to include but not be limited to word processing, spreadsheet, database and presentation software.)	4024 Infor/Comm Tech 6/12 6153 Networking Tech 6/12 4026 Network Supp 6/12 7093 Business Tech Ed 6/12

Assignment Code		Endorsement Requirement
		7935 Business Ed 6/12
101031	**Computer Support Essentials (TI 0551)** This course maps to Comptia A+ computer maintenance and repair industry outcomes. Students may choose to sit for the A+ certification. This course must be taken in either the Network Support Program or Information Support & Services Program.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Networking Tech 6/12
102013	**Web Design & Development (TI 0555)** Students enrolled in this course will learn the fundamentals of Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) and their vital relationship to each other. Students will distinguish the use of HTML and CSS as to content and presentation. Students will demonstrate knowledge of W3C compliant websites.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Networking Tech 6/12
101522	**Programming & Software Development I (TI 0557)** This course provides the beginning programmer with a solid foundation in programming fundamentals, using visualization and application. Designed for beginners with little or no previous programming experience, this course teaches students the fundamentals behind all programming languages. By putting standard concepts, like input, output, selection, and repetition, at the forefront, students will gain knowledge and insight that is easily transferable to other languages.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Networking Tech 6/12
101010	**Network Support I (TI 0600)** This course covers LAN segmentation using routers, basic router configurations, LAN switching theory, virtual LANs, and basic LAN design technologies. The course also introduces WAN theory and design, WAN technology, encapsulation methods, and network troubleshooting. Maps to CCENT and/or Comptia Network+ industry outcomes.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Network Tech 6/12
101523	**Programming & Software Development II (TI 0558)** This course provides the beginning programmer with object-oriented programming concepts. The course reviews basic programming concepts such as structure, decision making, looping, arrays, and method calling and enforces good style and logical thinking. Advanced topics include inheritance, exceptions, GUIs, events, and files.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Networking Tech 6/12
101100	**Desktop Support I (TI 0604)** Students will plan, design, administer and troubleshoot a variety of instances of application systems including, but not limited to database, desktop o/s support, and various applications support utilizing existing business o/s and programs in a variety of hardware settings.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Networking Tech 6/12
101101	**Web Design & Development II (TI 0605)** This course is designed to teach the student the process of creating, designing, and publishing a web page. Web page media will be developed for the World Wide Web using Industry Standard development tools. The course will take the student from the initial design to the launching of the accessible web site.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Network Tech 6/12

Assignment Code		Endorsement Requirement
101030	**Network Support II (TI 0607)** This course covers LAN segmentation using routers, advanced router configurations, LAN switching theory, virtual LANs, and advanced LAN design technologies. The course also introduces WAN theory and design, WAN technology, encapsulation methods, and network troubleshooting. Server security. Maps to CCENT and/or Comptia Network+, Service + industry Outcomes.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Network Tech 6/12
111536	**Web Design & Development III (TI 0608)** This course is designed to be a capstone experience for the student where they will apply knowledge and skills learned throughout their course of study as they apply advanced web design and development topics. Students in this course will also investigate current and emerging technologies.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Network Tech 6/12
101020	**Desktop Support II (TI 0609)** Students must design and show application/operating system administration for a business or industry area problem. They must present progress reports, submit a final written report and defend their solutions to a panel of outside reviewers at the end of the school year.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Network Tech 6/12
101524	**Programming & Software Development III (TI 0610)** This course is designed to be a capstone experience for the student where they will apply knowledge and skills learned throughout their course of study as they apply advanced programming and development topics. Students in this course will also investigate current and emerging technologies. This course will also provide an introduction to Systems Analysis and Design. Topics include analyzing cases, requirements modeling, data and process modeling, and development strategies. Students also learn about output and user interface design, data design, systems architecture and implementation, and systems operation, support and security.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Network Tech 6/12
101530	**Computer Science I (TE 0530)** This course is designed to introduce students to programming and the role of the computer in society. The areas of major emphasis in the course will be on object-oriented programming methodology, algorithms, data structures and ethics. Topics will include program design, program implementation, standard data structures, and standard algorithms.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Network Tech 6/12 6155 Comp Sci/Info Tech 6/12
101531	**Computer Science II (TE 0531)** AP® Computer Science Principles introduces students to the central ideas of computer science, instilling the ideas and practices of computational thinking and inviting students to understand how computing changes the world. The rigorous course promotes deep learning of computational content, develops computational thinking skills, and engages students in the creative aspects of the field.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Network Tech 6/12 6155 Comp Sci/Info Tech 6/12
101532	**Computer Science III (TE 0532)** AP® Computer Science A follows Advanced Placement curriculum and prepare students for the AP Computer Science exam. The course provides advanced computer science students with instruction in advanced	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12

Assignment Code		Endorsement Requirement
	programming, techniques and processes. The students will continue to develop all skills learned in Principles of Computer science. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment in this field or entry into a college level Computer Science course of study.	6153 Network Tech 6/12 6155 Comp Sci/Info Tech 6/12
101533	**Computer Science Advanced Studies (TE 0533)** This course is offered to students who have achieved all content standards in a program whose desire is to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Network Tech 6/12 6155 Comp Sci/Info Tech 6/12
101540	**Introduction to Computer Science (ICS) (TE 0540)** Designed to be the first computer science course for students who have never programmed before, ICS is an optimal starting point for the PLTW Computer Science program. Students work in teams to create apps for mobile devices using MIT App Inventor®. They explore the impact of computing in society and build skills in digital citizenship and cybersecurity. Beyond learning the fundamentals of programming, students build computational thinking skills by applying computer science to collaboration tools, modeling and understanding of programming gained in App Inventor to text-based programming in Python® and apply their knowledge to create algorithms for games of chance and strategy.	6157 Comp Sci PLTW 6/12
101541	**Computer Science Principles (CSP) (TE 0540)** Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. While this course can be a student's first in computer science, students without prior computing experience are encouraged to start with Introduction to Computer Science. CSP helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation. The course curriculum is a College Board-approved implementation of AP CS Principles.	6157 Comp Sci PLTW 6/12
101542	**Computer Science A (CSA) (TE 0542)** CSA focuses on further developing computational thinking skills through the medium of Android™ App development for mobile platforms. The course utilizes industry-standard tools such as Android Studio, Java™ programming language, XML, and device emulators. Students collaborate to create original solutions to problems of their own choosing by designing and implementing user interfaces and Web-based databased. The course curriculum is a College Board-approved implementation of AP CSA.	6157 Comp Sci PLTW 6/12
101543	**Cybersecurity (SEC) (TE 0543)** SEC introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Nationally, computational resources are	6157 Comp Sci PLTW 6/12

Assignment Code		Endorsement Requirement
	vulnerable and frequently attacked; in SEC, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely.	
109981	**Occupational & Career Experience – Info Systems Technology (TI 9855)** A school district, community, or industry (preferred) based work experience/internship activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experience must be supervised and monitored by the teacher.	4024 Infor/Comm Tech 6/12 4026 Network Supp 6/12 6153 Network Tech 6/12 6155 Comp Sci/Info Tech 6/12 6157 Comp Sci PLTW 6/12 7016 Career Counselor 6/12 7099 Work-Based Learn 6/12
11: COMMUNICATION AND AUDIO/VIDEO TECHNOLOGY ***CTE***		
111520	**Publishing I (BE 0314)** A course designed to develop proficiencies in the planning, designing, and development of business and promotional documents (newsletters, magazines, advertisements, etc.) using industry standard pagination and graphic design software. Identification of client needs and consideration of the intended audience direct the work students engage in as they combine appropriate text, graphics and design concepts to communicate the desired message effectively. Publishing careers will be examined.	7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12
110020	**Interactive Media – Video I (BE0316)** A course designed to provide in-depth knowledge of audio-visual production equipment and processes. Students will be introduced to video editing skills and techniques for planning, designing and developing video. Skills to be obtained are file management, audio and video capturing, adding events to timelines, editing multiple video tracks, transitions, voice over production, and key framing.	4024 Infor/Comm Tech 6/12 6180 Graph Arts/Journal 6/12 6190 Graph/Print Comm 6/12 6195 TV Prod/Broad 6/12 7093 Bus Tech Ed 7930 Bus Ed Office Occ 7935 Business Ed 6/12 7980 Industrial Arts 6/12 7981 Tech Ed 6/12 7982 Industrial Tech 6/12
111521	**Publishing II (BE 0324)** A course designed to build on the skills acquired in Publishing I. Students plan, design, and develop complex documents and develop enhanced graphics while using journalistic principles and design concepts to communicate the intended message of the publication. Concepts addressing print publication requirements	7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12

Assignment Code		Endorsement Requirement
	(CMYK, spot colors, bleed, creep, etc.) and Web publication requirements (RGB, font issues, etc.) are studied. Documents will be finalized and ready for commercial printing.	
110021	**Interactive Media – Video II (BE 0326)** A course designed to build on the skills and knowledge established in Interactive Media I. Soundtrack creation, multiple camera editing, story line development, and advanced video capturing represent the framework for this course. Skills to be learned include masking, editing, and special FX and DVD authoring. Culminating activities include integrating acquired skills and abilities with school, business or community needs.	4024 Infor/Comm Tech 6/12 6190 Graph/Print Comm 6/12 6195 TV Prod/Broad 6/12 7093 Business Tech Ed 6/12 7321 Computer Apps 6/12 7935 Bus Education 6/12 7937 Bus Ed Accounting 6/12 7980 Industrial Arts 6/12 7981 Tech Ed 6/12 7982 Industrial Tech 6/12
111522	**Publishing III (BE 0334)** A course designed to utilize publishing skills for the creation and publication of a complex publication such as a school yearbook. Planning and design principles are used to analyze and organize information, select and create visuals and develop a design structure. Organizational and professional skills are developed through team projects in which students prioritize project components and present the final product to its intended audience.	7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12
110022	**Communication Systems I (TE 1951)** Communication Systems I is a comprehensive course designed for a broad approach to the field of study. This is a course designed to develop an understanding of contemporary communication principles and devices. Students develop graphic and electronic communication projects through the use of various media. Activities typically include engineering and technical concepts of sketching, drafting, screen printing, computer-assisted graphics, technical presentations, photography, audio, and video production. Students learn to apply the elements of good design to communication products.	7093 Business Tech Ed 6/12 7321 Computer Apps 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7980 Ind Arts 6/12 7981 Tech Ed 6/12 7982 Ind Tech 6/12
110023	**Communication Systems II (TE 1952)** Communication Systems II is a comprehensive course designed for a broad approach to the field of study and uses the skills and insights gained from Communication Systems I. Students develop detailed and integrated communication projects and concepts. Students produce a variety of technical presentations using telecommunications, computer applications, graphics, and photography. This course is designed for students planning to enter business, education, marketing, sales, and advertising or planning to major in science, engineering, or technical fields related to communications.	7093 Business Tech Ed 6/12 7321 Computer Apps 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7980 Ind Arts 6/12 7981 Tech Ed 6/12 7982 Ind Tech 6/12
111535	**Digital Imaging Technology (TE 1953)**	

Assignment Code		Endorsement Requirement
	This course is offered to students who wish to pursue careers in the field of photography and computer graphics. Studies will include the design and manipulation of images to develop communications media and productions. Still and motion images will be developed, printed, copied, edited and/or projected in a studio environment or presentation format. Emphasis will be placed on industrial applications of digital imagery.	6180 Graph Arts/Journal 6/12 6190 Graph/Print Comm 6/12 6192 Photography 6/12 6195 TV Prod/Broad 6/12 7980 Ind Arts 6/12 7981 Tech Ed 6/12 7982 Ind Tech 6/12
111531	**Video Editing Technology (TE 1959)** This course is offered to students who wish to pursue careers in the broadcast industry and related telecommunications fields. Students will be required to make videos and edit the material to make a comprehensive presentation on specific topics. Common recording and digital applications will be studied with specific emphasis on commercial applications. The course may involve preparing video for sporting events, drama, and closed circuit television broadcasts. Story boarding and script development are integral components of the course.	6180 Graph Arts/Journal 6/12 6190 Graph/Print Comm 6/12 6192 Photography 6/12 6195 TV Prod/Broad 6/12 7980 Ind Arts 6/12 7981 Technology Ed 6/12 7982 Ind Tech 6/12
111532	**Technical Illustration Technology (TE0230)** An entry level course in Communications Systems in which students will explore and develop basic skills in shading/rendering, water color applications, overlays, airbrush techniques and computer design. Student work will involve renderings in mechanical, architectural, structural and aerospace-related objects and structures. Assignments should be of display/presentation quality.	6190 Graph/Print Comm 6/12 7093 Business Tech Ed 6/12 7144 Communication 6/12 7935 Business Ed 6/12 7980 Ind Arts 6/12 7981 Technology Ed 6/12 7982 Ind Techn 6/12
111030	**Broadcast/Video Technologies Level I (TI 1701)** A course designed to introduce students to the basic concepts of the broadcast technology field.	6180 Graph Arts/Journal 6/12 6195 TV Prod/Broad 6/12 7144 Communications 6/12 7851 Art K/12 7852 Art 6/12
111031	**Broadcast/Video Technologies Level II (TI 1702)** A course designed to cover the technical aspects of the broadcast field, audio and video equipment usage.	6180 Graph Arts/Journal 6/12 6195 TV Prod/Broad 6/12 7144 Communications 6/12 7851 Art K/12 7852 Art 6/12
111032	**Broadcast/Video Technologies Level III (TI 1703)**	6180 Graph Arts/Journal 6/12

Assignment Code		Endorsement Requirement
	A course designed to provide students with opportunities to produce, direct, host, and write programs to be aired on commercial and public media.	6195 TV Prod/Broad 6/12 7144 Communications 6/12 7851 Art K/12 7852 Art 6/12
119980	**Occupational & Career Experience – Media Technologies (TI 9807)** A school district, community, or industry (preferred) based work experience/internship activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experience must be supervised and monitored by the teacher.	6180 Graph Arts/Journal 6/12 6190 Graph/Print Comm 6/12 6192 Photography 6/12 6195 TV Prod/Broad 6/12 7016 Career Counselor 6/12 7099 Work-Based Learn 6/12 7980 Ind Arts 6/12 7981 Technology Ed 6/12 7982 Ind Techn 6/12
111533	**Media Technologies Fundamentals (TI 0700)** This course is designed to provide the basic fundamental competencies for the media technologies cluster courses and is to be offered as the beginning course at the freshman/sophomore level. Legal and ethical issues, fundamental tool and equipment skills, transferable knowledge sets, employability skills, communication skills, and terminology used throughout the industry will be discussed.	6180 Graph Arts/Journal 6/12 6190 Graph/Print Comm 6/12 6192 Photography 6/12 6195 TV Prod/Broad 6/12 7120 English 6/12 7134 Journalism 6/12
111550	**Graphic Communications Level I (TI 0701)** This course is designed to introduce students to basic graphic/printing. The course will include digital photo/graphics, and computer graphics.	6190 Graph/Print Comm 6/12 7093 Business Tech Ed 6/12 7144 Communication 6/12 7935 Business Ed 6/12 7980 Ind Arts 6/12 7981 Technology Ed 6/12 7982 Ind Tech 6/12
111551	**Graphic Communications Level II (TI 0702)** A course designed to provide students with graphic printing applications including digital and computerized graphics. Transfer of images from digital processes to paper and other media is included as well as transferring paper images to digital files for modification. Pre-press and copy production skills include set-up, image development, layout, and final draft copy.	6190 Graph/Print Comm 6/12 7093 Business Tech Ed 6/12 7144 Communication 6/12 7935 Business Ed 6/12 7980 Ind Arts 6/12 7981 Technology Ed 6/12 7982 Ind Tech 6/12

Assignment Code		Endorsement Requirement
111552	**Graphic Communications Level III (TI 0703)** A course designed to provide students with team work, critical thinking, problem solving, diagnostics, designing, and computer graphics from basic digital images to final print. Students will be provided opportunities to prepare finished products such as newsletters, catalogs, and school publications. All work will be performed to industry standards.	6190 Graph/Print Comm 6/12 7093 Business Tech Ed 6/12 7144 Communication 6/12 7935 Business Ed 6/12 7980 Ind Arts 6/12 7981 Technology Ed 6/12 7982 Ind Tech 6/12
111010	**Beginning Journalism Level I (TI 0710)** An entry level course which provides instruction in the basic skills and techniques needed in the field of journalism. The use of electronic desktop publishing as a means of producing for the journalistic media is explored. The content should include, but not be limited to the following: Recognition of and writing news; development of editorials, sport articles, and feature stories; workshop experience in photography, lay-outs, advertising, printing, and other practical aspects of journalistic enterprise.	6180 Graph Arts/Journal 6/12 6190 Graph/Print Comm 6/12 6192 Photography 6/12
111011	**News Production Level II (TI 0711)** A course which provides students with actual hands-on experiences associated with publishing a tabloid newspaper. Writing, editing, photographic layout, desktop publishing, legal and ethical issues, and business management skills are emphasized. Students actually perform all the skills necessary to produce a monthly school newspaper. Assignments for video notebooks and or technical writing for the development of technical manuals may be typical assignments.	6180 Graph Arts/Journal 6/12 6190 Graph/Print Comm 6/12 6192 Photography 6/12
111012	**News Production Level III (TI 0712)** A course which provides students with actual hands-on experiences associated with producing photographic works for the school and special activities. Creating, editing, photographic layout, desktop publishing and business management skills are emphasized. Students actually perform all the skills necessary to produce various school photos and/or special projects.	6180 Graph Arts/Journal 6/12 6190 Graph/Print Comm 6/12 6192 Photography 6/12
111013	**Newspaper/Yearbook Level IV (TI 0716)** Course designed for school newspaper and/or yearbook student editors. Leadership skills necessary to meet newspaper and yearbook deadlines, managing staff, etc., are emphasized.	6180 Graph Arts/Journal 6/12
111014	**Yearbook Production Level I (TI 0713)** This course provides students with actual hands-on experience associated with producing a conventional student yearbook or a video yearbook. Writing, editing, photographic layout, desktop publishing, and business management skills are emphasized. Students actually perform all the skills necessary to produce a school yearbook.	6180 Graph Arts/Journal 6/12 6190 Graph/Print Comm 6/12
111015	**Yearbook Production Level II (TI 0714)**	

Assignment Code		Endorsement Requirement
	This course provides students with actual hands-on experience associated with producing a conventional student yearbook or a video yearbook. Writing, editing, photographic layout, desktop publishing, and business management skills are emphasized. Students actually perform all the skills necessary to produce a school yearbook.	6180 Graph Arts/Journal 6/12 6190 Graph/Print Comm 6/12
111016	**Yearbook Production Level III (TI 0715)** A course which provides students with actual hands-on experiences associated with producing or assisting with the school closed circuit broadcasts and other video projects. Creating, editing, layout, sound clips, equipment set-up, authoring, desktop publishing, and business management skills are emphasized. Students actually perform all the skills necessary to produce a school broadcast or video production.	6180 Graph Arts/Journal 6/12 6190 Graph/Print Comm 6/12
110520	**Photography Level I (TI 1601)** A course designed to introduce students to basic commercial photography.	6180 Graph Arts/Journal 6/12 6190 Graph/Print Comm 6/12 6192 Photography 6/12 6195 TV Prod/Broad 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7980 Ind Arts 6/12 7981 Tech Ed 6/12 7982 Ind Tech 6/12
110521	**Photography Level II (TI 1602)** A course designed to provide students with commercial photography applications.	6180 Graph Arts/Journal 6/12 6190 Graph/Print Comm 6/12 6192 Photography 6/12 6195 TV Prod/Broad 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7980 Ind Arts 6/12 7981 Tech Ed 6/12 7982 Ind Tech 6/12
110522	**Photography Level III (TI 1603)** A course designed to provide students with team work, creative thinking, problem solving, diagnostics and creative designing to industry standards.	6180 Graph Arts/Journal 6/12 6190 Graph/Print Comm 6/12 6192 Photography 6/12 6195 TV Prod/Broad 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7980 Ind Arts 6/12 7981 Tech Ed 6/12 7982 Ind Tech 6/12

Assignment Code		Endorsement Requirement
12: BUSINESS AND MARKETING ***CTE***		
120010	**Business Essentials (BE 0100) (ME 0100)** A course designed to introduce students to career exploration strategies with a focus on foundational skills and knowledge necessary for occupations in business. Establishment of employability traits will occur through the study and development of interpersonal, communication and leadership skills and knowledge. The course includes integration of skills and knowledge in reading, writing, mathematics, and economics as they relate to business occupations.	1010 Marketing 1080 Sales 1085 Hospitality 4015 Business Mgt/Finance 4020 Microcomp Apps 6/12 4075 Accounting 6/12 4080 Para/Leg Ast 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7095 Voc Off Occ-Clerk 6/12 7096 Multi-Occupations 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7960 Marketing Ed 6/12
121011	**Introduction to Financial Services (BT 0100) (MT 0100)** This course can be offered either as a one or two-semester course to be given in either the ninth or tenth grade as a means of introducing students to the various sectors of the financial services industry. The objective of this course is to help students learn about both the nature of the careers found in a particular sector and the scope of the work that comprises businesses such as insurance, real estate, public finance, accounting, and the securities industry.	1080 Sales 4015 Business Mgt/Finance 4075 Accounting 6/12 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7960 Marketing Ed 6/12
121012	**Banking & Credit (BT 0102) (MT 0102)** A course presenting a survey of the principles and practices of banking and credit in the U.S. Students learn about the major functions of banks and other depository institutions, their in-house operations and procedures, central banking through the Federal Reserve System and modern trends in the banking industry. The credit component provides an overview of credit functions and operations including credit risk evaluation, loan creation and debt collection.	4075 Accounting 6/12 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12

Assignment Code		Endorsement Requirement
		7939 Basic Business 6/12 7960 Marketing Ed 6/12
121013	**Financial Planning/Financial Operations (BT 0103) (MT 0103)** A course that introduces the students to the financial planning process and the components of a comprehensive financial plan. The students learn how to prepare a financial plan that includes saving, investing, borrowing, risk management (insurance), and retirement and estate planning.	4075 Accounting 6/12 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7960 Marketing Ed 6/12
121014	**International Finance (BT 0104) (MT 0104)** A course which explores major components of the international financial system. It includes the study of foreign trade, the international monetary system, foreign exchange rates, foreign exchange markets, international financial markets, international banking, and the multinational corporation.	7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12
121050	**Economics & the World of Finance (BT 0105)** A course covering macro and micro-economics which provides an understanding of how our market economy functions in a global setting. It provides students with a survey of economic concepts including all of the basic principles recommended by the National Council on Economic Education. In addition, a unit on capital markets acquaints the students with the role that various markets and securities play in the U.S. Economy.	7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7950 Consumer Econ 6/12 7960 Marketing Ed 6/12
042012	**Economics & the World of Finance (BT 0105)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 121050** A course covering macro and micro-economics which provides an understanding of how our market economy functions in a global setting. It provides students with a survey of economic concepts including all of the basic principles recommended by the National Council on Economic Education. In addition, a unit on capital markets acquaints the students with the role that various markets and securities play in the U.S. Economy.	**Additional Endorsement Required:** 7200 Social Studies 6/12 7228 Economics 6/12
120550	**Securities (BT 0106) (MT 0106)** A course focusing on the roles and functions of a modern securities organization. Through a study of the structure of brokerage firms, the trading process, credit and margin practices, automated processes, and government regulations, students gain an understanding of how a securities firm	7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7950 Consumer Ec 6/12

Assignment Code		Endorsement Requirement
	services its customers and plays an important role in our economy. Students are given the opportunity to relate their knowledge of economics, accounting, and data processing to the operations areas of various sectors of the securities industry. Emphasis is placed on the skills and attitudes necessary for success in business and college. NOTE: This course may be combined with Insurance, in a course titled "Securities and Insurance".	7960 Marketing Ed 6/12
120551	**Insurance (BT 0107) (MT 0107)** A course that introduces students to various elements of the insurance industry, including insurance needs and products for businesses and individuals. Students learn about insurance sales, rate-setting, insurance and financial planning, insurance regulations, and careers in the industry. NOTE: this course may be combined with Insurance, in a course titled "Securities and Insurance".	7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
120050	**Input Technologies I (BE 0110)** A course designed to develop and apply input technology skills that focus on keyboarding to format and produce standard business documents such as letters, memos, tables, reports, and outlines; speed and accuracy are emphasized. Other forms of input technologies introduced include voice recognition, handwriting recognition, image and text scanning, and tablet forms of input.	0073 Voc Office Occ 6/12 0076 Multi-Occupations 6/12 4015 Business Mgt/Finance 4020 Microcomp Apps 6/12 4025 Wrd Pro Tech 4080 Para/Leg Ast 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7095 Voc Off Occ-Clerk 6/12 7096 Multi-Occupations 6/12 7321 Computer Apps 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7960 Marketing Ed 6/12 7981 Tech Ed 6/12
120051	**Input Technologies II (BE 0120)** A course designed to advance skills in the use of input technologies for original composition and refinement of unarranged or rough draft materials. Emphasis is placed on employability keyboarding skills and productive ability with other forms of input technologies such as voice recognition, handwriting recognition, image and text scanning, and tablet forms of input. Emerging technologies are introduced.	0073 Voc Office Occ 6/12 0076 Multi-Occupations 6/12 4015 Business Mgt/Finance 4020 Microcomp Apps 6/12 4025 Wrd Pro Tech 4080 Para/Leg Ast 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12

Assignment Code		Endorsement Requirement
		7095 Voc Off Occ-Clerk 6/12 7096 Multi-Occupations 6/12 7321 Computer Apps 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7960 Marekting Ed 6/12 7981 Tech Ed 6/12
120552	**Business Management (BE 0150) (ME 0150)** A course designed to introduce students to essential business and marketing competencies required for business operations. Units of instruction include general business and management principles, leadership, salesmanship, marketing/entrepreneurship, public speaking, and the use of accounting information for making business decisions.	1010 Marketing 1080 Sales 1085 Hospitality 4015 Business Mgt/Finance 4075 Accounting 4080 Para/Leg Ast 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7960 Marketing 6/12
120553	**Business Law/Ethics Applications (BE 0151)** A course designed to provide students with an overview of civil and criminal law, as it relates to business principles and practices. Topics include ethics, an overview of the legal system, court procedures, criminal/civil justice systems, oral and written contracts, and consumer protection.	4015 Business Mgt/Finance 4080 Para/Leg Ast 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12
121015	**Banking & Finance Services (BE 0153) (ME 0153)** A course designed to examine the principles and practices of financial institutions. Students will demonstrate skills and knowledge in money management, personal finance, investment and stock market strategies, institutions' operations and procedures, the Federal Reserve System, and credit functions and operations.	4015 Business Mgt/Finance 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7960 Marketing Ed 6/12

Assignment Code		Endorsement Requirement
120020	**Business Communications (BE 0175) (ME 0175)** A course designed to provide essential skills and knowledge required in workplace and business settings. The course content addresses written and oral communication and competencies that include writing, speaking, listening, and interpreting. Technology is applied as an integral aspect of business communication.	1010 Marketing 1080 Sales 1085 Hospitality 4015 Business Mgt/Finance 4075 Accounting 4080 Para/Legal Ast 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12
121043	**Business Math (BE 0180)** A course designed to provide students with an understanding of essential business mathematical concepts. Basic math and algebraic operations as well as statistical procedures are used to analyze and solve realistic business and money management problems.	4075 Accounting 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7960 Marketing Ed 6/12
021540	**Business Math (BE 0180)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 121043** A course designed to provide students with an understanding of essential business mathematical concepts. Basic math and algebraic operations as well as statistical procedures are used to analyze and solve realistic business and money management problems.	**Additional Endorsement Required:** 7300 Mathematics 6/12 7320 Basic Math 6/12
121016	**Personal Business Finance (BE 0190)** A course designed to provide students personal finance skills and knowledge; to include goal setting, budgeting, saving, investing, borrowing, insuring, identity protection and retirement planning.	4015 Business Mgt/Finance 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7960 Marketing Ed 6/12

Assignment Code		Endorsement Requirement
121051	**Marketing Economics (Applied Economics) (BE 0200) (ME 0200)** A course designed to provide students an understanding of economic theory and principles. Theories of the economic free enterprise system, with a focus on decision-making and its relationship to how people produce, distribute, and consumer goods and services are examined.	4015 Business Mgt/Finance 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7950 Consumer Ec 6/12 7960 Marketing Ed 6/12
042013	**Marketing Economics (Applied Economics) (BE 0200) (ME 0200)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 121051** A course designed to provide students an understanding of economic theory and principles. Theories of the economic free enterprise system, with a focus on decision-making and its relationship to how people produce, distribute, and consumer goods and services are examined.	**Additional Endorsement Required** 7200 Social Studies 6/12 7228 Economics 6/12
129985	**Marketing Research (ME 0225)** A course designed to introduce students to the marketing research process including research design, field work, data collection, and finding and presenting results. The curriculum has a strong project-based learning structure and may work in conjunction with DECA students who are interested in completing marketing research projects for State and National level competition. This course provides excellent preparation for college.	1010 Marketing 4015 Business Mgt/Finance 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
121521	**Principles of Marketing (BE 0300) (ME 0300)** A course designed to focus on the fundamentals and functions of marketing as they relate to the competitive enterprise system. Marketing theory is presented and applied to business problems, practices, and the business environment and management systems. (This class must be taught by a Marketing endorsed instructor to be part of the Marketing Program sequence).	1010 Marketing 1080 Sales 1085 Hospitality 4015 Business Mgt/Finance 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
121522	**Introduction to International Business/Marketing (BE 0340) (ME 0340)** A course designed to provide students an introduction to international business and marketing. Topics will include exporting and importing basics, international economics and finance, distribution, laws and regulations, entrepreneurship, trade documentation, and employability skills.	1010 Marketing 1085 Hospitality 4015 Business Mgt/Finance

Assignment Code		Endorsement Requirement
		4080 Para/Legal Ast 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7960 Marketing Ed 6/12
121523	**International Business/Marketing I (BE 0341) (ME 0341)** A course designed to provide students an introduction to international business and marketing. Topics will include exporting and importing basics, international economics and finance, distribution, laws and regulations, entrepreneurship, trade documentation, and employability skills.	4015 Business Mgt/Finance 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7960 Marketing Ed 6/12
121524	**International Business/Marketing II (BE 0342) (ME 0342)** A course designed to study the rapidly increasing area of international business and marketing. This second semester class covers areas related to our economy as well as other countries' economic and trade systems; proper procedures for linking with international business customers; and valuable aspects of becoming a part of this dynamic growing marketplace.	4015 Business Mgt/Finance 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7960 Marketing Ed 6/12
121525	**E-Commerce (BE 0348) (ME 0348)** A course designed to provide students with an understanding of the concepts and skills necessary for conducting e-business. Students will develop an understanding of the economic, social, legal and ethical issues related to e-business. Skill development in creating and publishing Web pages and using the Internet for research, decision-making, and business communication is emphasized.	1010 Marketing 1080 Sales 4015 Business Mgt/Finance 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 4024 Infor/Comm Tech 6/12
121053	**Principles of Insurance (BE 0350)** A course designed to introduce students to insurance products, rate-setting, insurance regulations and careers in the industry.	7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12

Assignment Code		Endorsement Requirement
121526	**Retail Merchandising (ME 0350)** A course designed to develop an understanding of the basic principles of product acquisition, pricing, inventory management, visual merchandising and advertising.	1010 Marketing 1080 Sales 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
121527	**Fashion Merchandising & Marketing (ME 0355)** A course designed to provide an introduction and overview of the international business industry of Fashion Design and Merchandising including apparel & accessories marketing. Students will learn about the major components of the industry including fashion design, apparel classifications, and accessories. Additionally, students will learn about marketing strategies in fashion.	1010 Marketing 1080 Sales 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
121528	**Principles of Promotion (ME 0400)** A course designed to provide students with an understanding of basic marketing principles and strategies used to promote products and services that satisfy customers' needs and wants. The course will focus on identifying and analyzing principles of product benefits and features, advertising strategies, promotion/display, store layout, and personal selling.	1010 Marketing 1080 Sales 1085 Hospitality 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
121040	**Accounting I (BE 0410)** A course designed to emphasize accounting principles as they relate to the basic understanding and skills required in keeping manual and computerized financial records for a business. Emphasis is on providing basic skills for the accounting profession and/or preparation for further study in accounting. Accounting I may include software applications.	4015 Business Mgt/Finance 4075 Accounting 6/12 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12
121041	**Accounting II (BE 0420)** Accounting II reinforces and expands the basic principles and procedures learned in Accounting I. Accounting II may include software applications.	4015 Business Mgt/Finance 4075 Accounting 6/12 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12

Assignment Code		Endorsement Requirement
		7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12
121042	**Computerized Accounting (BE 0421)** A course designed for students to study accounting principles as they relate to the understanding of financial records for a business using industry-standard software.	4075 Accounting 6/12 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12
121054	**Principles of World Finance (BE 0425)** A course designed to explore major components of the financial system including foreign trade, the monetary system, exchange rates, financial markets, multinational corporations and banking.	4015 Business Mgt/Finance 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7950 Consumer Ec 6/12 7960 Marketing Ed 6/12
121529	**Principles of Management (ME 0500)** A course designed to focus on accomplishing the goals of an organization through the effective use of people and other resources. The functions of management are discussed and analyzed. Role playing, case analysis, guest lecturers and assignments are used to bring together the total management function.	1010 Marketing 1085 Hospitality 4015 Business Mgt/Finance 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
121520	**Sports & Entertainment Marketing (ME 0550)** A course designed to allow students to develop an understanding of the concepts and theories that apply to sports and entertainment marketing. This course covers basic marketing concepts such as; target marketing and segmentation, sponsorship, event management/marketing, promotions, sponsorship proposals, and implementation of sports and entertainment marketing plans. Students taking sports and entertainment marketing will have the opportunity to participate in DECA.	1010 Marketing 4015 Business Mgt/Finance 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
120554	**Business Ownership/ Entrepreneurship (BE 0600) (ME 0600)** A course designed for students to expand their knowledge of business/marketing principles related to ownership and management of a business, traits and characteristics of successful entrepreneurs, and strategies of business management and marketing. The development of a business plan related to the students' area of entrepreneurial interest is a course objective. (Must be taught by a Marketing endorsed instructor to be part of the Marketing Program sequence.)	1010 Marketing 4015 Business Mgt/Finance 4080 Para/Legal Ast 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12

Assignment Code		Endorsement Requirement
		7937 Bus Ed Accounting 6/12
120021	**Office Technologies (BE 0610)** A course designed to provide students with the procedures and skills necessary for the operation of a modern business office. The course includes integration of concepts into realistic simulations and incorporation of computers as they relate to the typical tasks in a modern business. Students study emerging technologies and concepts that will allow them to function effectively in a high-tech environment.	7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7095 Voc Off Occ-Clerk 6/12 7096 Multi-Occupations 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7960 Marketing Ed 6/12
129980	**Administrative Assistant Internship (BE 0610)** A course designed to allow a student the opportunity to serve as an intern to the local school district or school building office. The student will demonstrate competencies and skills acquired while working through an approved sequence of courses in the business/management program.	0076 Multi-Occ 6/12 4010 Bookkeeping 6/12 4075 Accounting 6/12 7016 Career Counselor 5/12 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7095 Voc Off Occ-Clerk 6/12 7096 Multi-Occupations 6/12 7099 Work-Based Learn 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7960 Marketing Ed 6/12
120555	**Business Administration (BE 0650)** A course designed to provide students project-based application of essential business and marketing competencies. The course demonstrates proficiency in the following areas: leadership, accounting principles, technology, salesmanship, marketing/entrepreneurship, general business principles, business law, human relations skills, public speaking, business communications, keyboarding skill development, computer applications, career awareness, and job seeking skills.	4015 Business Mgt/Finance 4075 Accounting 6/12 7093 Business Tech Ed 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12

Assignment Code		Endorsement Requirement
121601	**HSB Leadership (BA 0101)** Leadership, a project-based leadership course, develops student understanding and skills in such areas as communication skills, emotional intelligence, operations, and professional development. Students acquire an understanding and appreciation of the need for leadership skills. To encourage immediate implementation of leadership skills, Leadership utilizes an on-going service-learning project for course delivery and reinforcement. The course content is sequenced for students to identify, plan, implement, and evaluate a service-learning project based on the needs of their community/school. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical-thinking skills. Formal reflection is an on-going component of the course. Recommended: 9th grade Credit: .5 (one semester) **NOTE: This course is to be used only by approved High School of Business programs.**	1010 Marketing 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
121602	**HSB Wealth Management (BA 0102)** This project-based financial literacy and investment course develops student understanding and skills in such areas as personal finance, types of investment, the stock market, and stock valuation. Students acquire an understanding and appreciation of the need for personal financial management and investing. To encourage immediate implementation of financial literacy and investment skills, Wealth Management utilizes an on-going investment project for course delivery and reinforcement. The course content is sequenced for students to develop a diversified, balanced investment portfolio based both on their interest in products and companies and on fundamental analysis. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical-thinking skills. Recommended: 9th grade Credit: .5 (one semester) **NOTE: This course is to be used only by approved High School of Business programs.**	1010 Marketing 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
121603	**HSB Principles of Business (BA 0103)** Principles of Business, a project-based business course, develops student understanding and skills in such areas as business law, economics, financial analysis, human resources management, information management, marketing, operations, and strategic management. Through the use of three projects, students acquire an understanding and appreciation of the business world. They develop a business analysis report, conduct an environmental scan of the local business community, and investigate business activities. Current technology will be used to acquire information and to complete the projects. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical-thinking skills. Formal reflection is an on-going component of the course. Recommended: 10th grade Credit: .5 (one semester) **NOTE: This course is to be used only by approved High School of Business programs.**	1010 Marketing 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12

Assignment Code		Endorsement Requirement
121604	**HSB Business Economics (BA 0104)** In Business Economics, a project-based business course, students expand their understanding that businesses are influenced by external factors that are often beyond their control. Consumer spending, government policies, economic conditions, legal issues, and global competition are addressed through practical, current applications to everyday societal and business life. Decision matrices are introduced, and the importance and costs of quality are stressed. Students develop their knowledge and skills in such areas as economics, entrepreneurship, operations, and professional development. Throughout the course, students will be presented with current economic problems for which they are asked to determine solutions, often through the application of decision matrices. Recommended: 10th grade Credit: .5 (one semester) Prerequisite: Principles of Business **NOTE: This course is to be used only by approved High School of Business programs.**	1010 Marketing 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
121605	**HSB Principles of Marketing (BA 0105)** Principles of Marketing is a project-based business course that develops student understanding and skills in the functional areas of marketing: channel management, marketing-information management, market planning, pricing, product/service management, promotion, and selling. Students acquire an understanding and appreciation of each of the marketing functions and their ethical and legal issues. Decision matrices are employed to aid in market planning. Recommended: 11th grade Credit: .5 (one semester) Prerequisites: Principles of Business and Business Economics **NOTE: This course is to be used only by approved High School of Business programs.**	1010 Marketing 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
121606	**HSB Principles of Finance (BA 0106)** Principles of Finance furthers student understanding of two specific business activities—accounting and finance—that were introduced in an earlier High School of Business course, Principles of Business. Through multiple projects, students make connections between accounting, with an emphasis on cash flow, and finance, with an emphasis on decision-making. Students acquire an understanding of financial statements, calculate financial ratios, and make business decisions based on their interpretation of those financial statements and ratios. In addition, students determine business-financing options, as well as develop an appreciation for types of financial service providers and financial markets. Decision matrices are employed to aid in financial planning. Recommended: 11th or 12th grade Credit: .5 (one semester) Prerequisites: Principles of Business and Business Economics **NOTE: This course is to be used only by approved High School of Business programs.**	1010 Marketing 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12

Assignment Code		Endorsement Requirement
121607	**HSB Principles of Management (BA 0107)** Principles of Management is a project-based business course that expands student understanding of management. Students acquire an appreciation for aspects of management, such as project management, human resources management, knowledge management, quality management, and risk management. In addition, ethical and legal considerations affecting business activities are stressed, and students develop managerial and supervisory skills through interaction with lower grade-level High School of Business™ students. Decision matrices are employed to aid in management planning. Recommended: 11th or 12th grade Credit: .5 (one semester) Prerequisites: Principles of Business and Business Economics **NOTE: This course is to be used only by approved High School of Business programs.**	1010 Marketing 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
121608	**HSB Business Strategies (BA 0108)** Business Strategies serves as the capstone course for the High School of Business™ program. Students employ their decision matrices to finalize marketing, financial, and management plans developed previously, incorporating them into a business plan for a non-profit organization. The non-profit venture is actualized during the course, requiring students to engage in risk assessment, strategic planning, and performance assessment. Recommended: 12th grade Credit: .5 (one semester) Prerequisites: Principles of Business, Business Economics, Principles of Marketing, Principles of Finance, and Principles of Management **NOTE: This course is to be used only by approved High School of Business programs.**	7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
129986	**Marketing Education Lab (ME 0700)** A course which provides students with the opportunity to work in the school store lab and experience the various responsibilities of operating a store, or to participate in and complete marketing projects that allow the student to utilize all the skill and knowledge gained throughout the marketing education program.	1010 Marketing 4015 Business Mgt/Finance 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12
129984	**Marketing Work Site Experience (ME 9800)** A course designed as a community based work-experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This class may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experiences must be supervised and monitored by the teacher. **NOTE: This course must be approved on an individual program basis by the ICTE.**	0076 Multi-Occ 6/12 1010 Marketing 4015 Business Mgt/Finance 4075 Accounting 6/12 7016 Career Counselor 5/12 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7095 Voc Off Occ-Clerk 6/12

Assignment Code		Endorsement Requirement
		7096 Multi-Occupations 6/12 7099 Work-Based Learn 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7960 Marketing Ed 6/12
129981	**Business Occupational and Career Experience (BE 9800)** A course designed as a community based work-experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This class may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experiences must be supervised and monitored by the teacher. **NOTE: This course must be approved on an individual program basis by the State Division.**	0076 Multi-Occ 6/12 1010 Marketing 4015 Business Mgt/Finance 4075 Accounting 6/12 7016 Career Counselor 5/12 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7095 Voc Off Occ-Clerk 6/12 7096 Multi-Occupations 6/12 7099 Work-Based Learn 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7960 Marketing Ed 6/12
129982	**Marketing Cooperative Education (ME 9900)** Cooperative Education is the coordinated work experience segment of any of the advanced business courses listed above. Community based instruction organized and planned to provide specialized skills unique to an occupation or industry. Students are placed in businesses which provide paid on-the-job experience which is related to the student's primary area of study. The experience must be supervised by the teacher and students must have a training plan.	0076 Multi-Occ 6/12 1010 Marketing 4015 Business Mgt/Finance 4075 Accounting 6/12 7016 Career Counselor 5/12 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7095 Voc Off Occ-Clerk 6/12 7096 Multi-Occupations 6/12 7099 Work-Based Learn 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7960 Marketing Ed 6/12

Assignment Code		Endorsement Requirement
129983	**Business Cooperative Education (BE 9900)** Cooperative Education is the coordinated work experience segment of any of the advanced business courses listed above. Community based instruction is organized and planned to provide specialized skills unique to an occupation or industry. Students are placed in businesses which provide paid on-the-job experience which is related to the student's primary area of study. The experience must be supervised by the teacher and students must have a training plan.	0076 Multi-Occ 6/12 1010 Marketing 4015 Business Mgt/Finance 4075 Accounting 6/12 7016 Career Counselor 5/12 7092 Marketing Tech Ed 6/12 7093 Business Tech Ed 6/12 7095 Voc Off Occ-Clerk 6/12 7096 Multi-Occupations 6/12 7099 Work-Based Learn 6/12 7930 Bus Ed-Office Occ 6/12 7935 Business Ed 6/12 7937 Bus Ed Accounting 6/12 7939 Basic Business 6/12 7960 Marketing Ed 6/12
13: MANUFACTURING ***CTE***		
130020	**Manufacturing Systems (TE 1931)** Manufacturing Systems I is a comprehensive course involving a multitude of applications in the manufacturing fields and is designed for a broad approach to the field of study. A course designed for students to study general concepts and principles of manufacturing systems. Working individually and in teams, students design products, develop and conduct market surveys, develop financial and personnel strategies, advertise, market, and produce products using contemporary manufacturing methods. The course is designed for students interested in product design, creative problem solving, creation of prototypes, computer-assisted design and manufacturing, basic entrepreneurial skills, and engineering concepts.	7980 Industrial Arts 6/12 7981 Tech Ed 6/12 7982 Industrial Tech 6/12
130021	**Manufacturing Systems II (TE 1932)** Manufacturing Systems II is a comprehensive course involving a multitude of applications in the manufacturing fields and is designed for a broad approach to the field of study and to build on the knowledge and skills gained from Manufacturing Systems I. Students pursue more detailed and integrated manufacturing and production projects and will study and design manufacturing systems. Students continue to use creative problem solving skills, design tools and processes, and apply manufacturing techniques with increasing sophistication. Projects are designed and produced using computer-assisted manufacturing applications, computer numerically-controlled machines and robotics. This course has been developed for students pursuing careers in manufacturing as a designer, drafter, industrial manager, technician or engineer.	7980 Industrial Arts 6/12 7981 Tech Ed 6/12 7982 Industrial Tech 6/12

Assignment Code		Endorsement Requirement
130022	**Industrial Mechanics Level I (TI 0801)** This is the beginning level course of the Industrial Mechanics technology program. Industrial mechanics is a program designed to prepare students with skills in shop practices, welding, basic machine shop, metal working, trouble shooting, rigging, equipment installation, maintenance, and repair for a variety of systems found in industrial operations including drive components, piping systems, pumps, hydraulic and pneumatic systems, electronic systems, and bearings and seals, as well as skills in the set-up and operation of preventive maintenance programs. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. A course designed to introduce students to basic industrial mechanics.	5022 Manufacture Tech 6/12 6109 Indust Maint Mech 6/12 6232 Machine Tech 6/12
130023	**Industrial Mechanics Level II (TI 0802)** This is the second course in a three course program leading to industry certification in Industrial Mechanics. A course designed to provide students with industrial mechanics applications.	5022 Manufacture Tech 6/12 6109 Indust Maint Mech 6/12 6232 Machine Tech 6/12
130024	**Industrial Mechanics Level III (TI 0803)** This is the third course in a three course program leading to industry certification in Industrial Mechanics. A course designed to provide students with team work, critical thinking, problem solving, diagnostics, and repairing to industry standards.	5022 Manufacture Tech 6/12 6109 Indust Maint Mech 6/12 6232 Machine Tech 6/12
139980	**Occupational & Career Experience—Industrial Mechanics (TI 9808)** A school district, community, or industry (preferred) based work experience/internship activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experience must be supervised and monitored by the teacher.	6109 Indust Maint Mech 6/12 7016 Career Counselor 6/12 7099 Work-Based Learn 6/12
132030	**Precision Machining Level I (TI 1001)** This is an introductory course, in a three course program, leading to industry certification in precision machining. Precision machining is a program designed to prepare students with skills to shape metal parts on machines such as lathes, grinders, drill presses, milling machines, and shapers. Includes instruction in making computations related to work dimensions, CNC and EDM machines, testing feeds, and speeds of machines using precision measuring instruments such as layout tools, micrometers, and gauges; machining and heat treating various metals; and in laying out machine parts. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. A course designed to introduce students to basic precision machining.	6232 Machine Tech 6/12
132031	**Precision Machining Level II (TI 1002)** This is the second course in a three course program. A course designed to provide students with precision machining applications.	6232 Machine Tech 6/12

Assignment Code		Endorsement Requirement
132032	**Precision Machining Level III (TI 1003)** This is the third course in a three course program. A course designed to provide student with team work, critical thinking, problem solving, diagnostics, and repairing/producing to industry standards.	6232 Machine Tech 6/12
132580	**Occupational & Career Experience – Precision Machining/Automated Manufacturing (TI 9810)** A school district, community, or industry (preferred) based work experience/internship activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experience must be supervised and monitored by the teacher.	5022 Manufacture Tech 6/12 6232 Machine Tech 6/12 7016 Career Counselor 6/12 7099 Work-Based Learn 6/12
130025	**Automated Manufacturing Level I (TI 1004)** This is an introductory course, in a three course program, leading to industry certification in automated manufacturing. Course includes measurement, safety, and circuit diagrams as they relate to automated manufacturing controls. Course includes theory and laboratory practice in CNC milling, Computer Aided Design (CAD), and Computer Aided Manufacturing (CAM) concepts. Introduction to laser and plasma manufacturing devices will be incorporated.	5022 Manufacture Tech 6/12
130026	**Automated Manufacturing Level II (TI 1005)** This is the second course in a three course program. Continued work in measurement, safety, circuit diagrams, and CNC milling. Overview of electronics as it relates to sensors, servos, solenoids, and other automated manufacturing controls. Overview of automated manufacturing using 3-D picks and place technology, articulated arm robotics, conveyors, and materials handling. Course will emphasize limits of precision and accuracy, stepper motor control, and connectivity with other computerized manufacturing operations. Overview of pneumatics and hydraulics used to control manufacturing processes. Course includes air theory, hydraulic theory, pneumatic/hydraulic circuit diagrams and components, PLC control, and circuit simulation.	5022 Manufacture Tech 6/12
130027	**Automated Manufacturing Level III (TI 1006)** This is the third course in a three course program. Continued work in measurement, safety, circuit diagrams, CNC milling, pneumatics, and hydraulics. Course includes theory and laboratory practice in CNC lathe and robotic welding. A senior project that combines all automated manufacturing processes learned to-date will be undertaken.	5022 Manufacture Tech 6/12
132070	**Welding Level I (TI 1401)** This is an introductory course, in a three course program, The content includes use of blue prints and shop drawing; use of gases and/or welding processes; and brazing parts according to diagrams, blueprints, or written specification. Laboratory activities are an integral part of this program and provide instruction in various processes and techniques of welding and fabrication skills including oxyacetylene welding and cutting, brazing, arc welding, MIG welding, flux core arc welding, TIG welding, certification test preparation and use of current industry standards and techniques. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. A course	6236 Welding 6/12

Assignment Code		Endorsement Requirement
	designed to introduce students to basic welding. The course introduces students to the metallic processes used in metals fabrication and provides them instruction on measurement and layout of material to be welded. Blueprint reading and fundamentals of welding applications is the main component of instruction.	
132071	**Welding Level II (TI 1402)** This is the second course in a three course. A course designed to provide students with welding applications. Students will be provided the initial stages of instruction that will prepare them for certification as an entry level welder.	6236 Welding 6/12
132072	**Welding Level III (TI 1403)** This is the third course in a three course program. A course designed to provide student with team work, problem solving, diagnostics, and designing, repairing, fabricating, or building to industry standards.	6236 Welding 6/12
139982	**Occupational & Career Experience -- Welding (TI 9814)** A school district, community, or industry (preferred) based work experience/internship activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experience must be supervised and monitored by the teacher.	6236 Welding 6/12 7016 Career Counselor 6/12 7099 Work-Based Learn 6/12
14: HEALTH CARE SCIENCES ***CTE***		
140010	**Fundamentals for Health Professions (HP 0130)** An exploratory course that provides the student initial exposure and acquisition of knowledge, skills and attitudes associated with a broad range of occupations relating to careers in health including job requirements and tasks performed. This course will assist students in making informed decisions regarding their future academic and professional goals in the health care field. This is the prerequisite course for all other Health Care Sciences courses.	2000 Orient Health Occ 6/12 2011 Dental Assisting 6/12 2013 Dental Lab Tech 2030 Dietitian 6/12 2032 Practical Nursing 6/12 2033 Nursing Assistant 6/12 2035 Surgical Tech 2050 Rehab/Therapy 2060 Radiology Tech 6/12 2080 Mental Health Assist 2085 Emerg Med Tech 6/12 2094 Med Assist 2095 Pharm Assist 2097 Health Informatics 2098 Sports Med/Athl 6/12 2099 Personal Trainer

Assignment Code		Endorsement Requirement
08051	**Fundamentals for Health Professions (HP 0130)** **Credit is for SECOND Semester of Fundamental for Health Professions (HP 0130) ONLY. Student must complete full year of Fundamentals courses to earn second semester heath education credit.]** **AND:** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 140010** An exploratory course that provides the student initial exposure and acquisition of knowledge, skills and attitudes associated with a broad range of occupations relating to careers in health including job requirements and tasks performed. This course will assist students in making informed decisions regarding their future academic and professional goals in the health care field. This is the prerequisite course for all other Health Care Sciences courses.	**Additional Endorsement Required:** 7520 Health 6/12 7521 Health K/12 8520 Health 6/9
140510	**Nursing Assistant (HP 0230)** A 120 hour course designed to prepare students for beginning employment as nursing assistants in nursing homes, hospitals, and other settings. Successful completion of the course qualifies the student to test to become a Certified Nursing Assistant. Their name will then be placed on the Idaho State Registry for Nursing Assistants. Content includes medical terminology, anatomy and physiology, care of the patient, and assisting as a member of the health care team. Pre-requisite: Orientation **or** Fundamentals of Health Professions and Medical Terminology or Anatomy & Physiology.	2032 Practical Nursing 6/12 2033 Nursing Assistant 6/12
140020	**Mental Health Assistant (HP 0233)** A program of study that prepares the student to assist with the care of persons requiring services in the specialized field of mental health/mental illness. Students are prepared for employability and advanced study. Pre-requisite: Orientation **or** Fundamentals of Health Professions and Medical Terminology or Anatomy & Physiology.	2032 Practical Nursing 6/12 2033 Nursing Assistant 6/12 2080 Mental Health Assist
141510	**Health Unit Clerk/Coordinator (HP 0234)** A course designed to prepare students as unit clerks in health care facilities. Students develop the knowledge, skills and attitudes necessary for employment as nonclinical workers within healthcare units. Areas of instruction include applied anatomy and medical terminology, communications (personal and communication devices), problem solving, environmental management, transcription of physicians' orders and problem solving. Student completion of actual work experience is desired. Pre-requisite: Orientation **or** Fundamentals of Health Professions and Medical Terminology.	2032 Practical Nursing 6/12 2033 Nursing Assistant 6/12 2094 Medical Assisting 6/12
140549	**Emergency Medical Responder (HP 0236)** Uses simple knowledge of the Emergency Medical Services (EMS) system, safety/well-being of the Emergency Medical Responder (EMR), medical/legal issues at the scene of an emergency while awaiting a	2085 Emerg Med Tech 6/12

Assignment Code		Endorsement Requirement
	higher level of care. Pre-requisite: Orientation **or** Fundamentals of Health Professions and Medical Terminology.	
140550	**Emergency Medical Technician – Basic (HP 0237)** A course designed to instruct senior level high school students to the level of Emergency Medical Technician-Basic, a person who serves as a vital link in the chain of the health care team at a basic life support level with an ambulance service or other specialized service. Pre-requisite: Orientation **or** Fundamentals of Health Professions and Emergency Medical Responder or Medical Terminology.	2085 Emerg Med Tech 6/12
141520	**Pharmacy Technician (HP 0238)** A course designed to prepare senior level students for entry-level employment as a Pharmacy Technician under the supervision of pharmacists in retail pharmacies, hospitals and other settings. Successful completion of the course qualifies the student to take the Pharmacy Technician Certifying Board certification exam. Content includes pharmaceutical terminology, drug identification, measurement techniques, record keeping, business operations, prescription preparation, logistics and dispensing operations and applicable standards and regulations. Pre-requisite: Orientation **or** Fundamentals of Health Professions and Medical Terminology or Anatomy & Physiology.	2095 Pharm Assist 2032 Practical Nursing 6/12 2033 Nursing Assistant 6/12
140540	**Fundamentals of Dental Assisting (HP 0330)** A course designed to provide the student with basic background knowledge, skills and attitudes for employment in a dental office as a beginning dental assistant. Areas of instruction include dental terminology, charting, cavity classification, infection control, assisting with local anesthesia, and oral surgery, and ethics and jurisprudence. Pre-requisite: Orientation **or** Fundamentals of Health Professions.	2011 Dental Assisting 6/12 2013 Dental Lab Tech
140600	**Physical Therapy Aide (HP 0432)** A course that introduces students to the basic knowledge, skills and attitudes for success in the field of physical therapy at the aide level. Content includes terminology, clerical, technical and therapeutic methods and the roles/responsibilities of each member of the physical therapy team. . Pre-requisite: Orientation **or** Fundamentals of Health Professions and Medical Terminology or Anatomy & Physiology.	2032 Practical Nursing 6/12 2033 Nursing Assistant 6/12 2050 Rehab/Therap Svc 6/12 2098 Sports Med/Athl 6/12
140511	**Combined Nursing Assistant and Providing Services to People with Disabilities (HP 0442)** A course that combines the essentials of the Nursing Assistant Course with the Providing Services to People with Disabilities course. Students earn a certificate that qualifies them to be Personal Care Providers. Pre-requisite: Orientation **or** Fundamentals of Health Professions and Medical Terminology or Anatomy & Physiology.	2032 Practical Nursing 6/12 2033 Nursing Assistant 6/12
140620	**Sports Medicine/Athletic Training (HP 0445)** A program that introduces students to the basic knowledge, skills and attitudes needed to assist in the career fields of Sports Medicine and Athletic Training. Students explore related careers and may assist, with permission, with athletic training teams.	2098 Sports Med/Athl 6/12

Assignment Code		Endorsement Requirement
140621	**Personal Trainer (HP 0446)** A program that prepares students to be a personal trainer, working one-on-one with an individual to develop an exercise prescription based on health status, goals and the like. Upon completion of the program the student will be eligible to take a national certification exam. Pre-requisite: Orientation **or** Fundamentals of Health Professions.	2098 Sports Med/Athl 6/12 2099 Personal Trainer
141530	**Health Information Technology I (HP 0634)** This course presents an overview of the medical record and coding procedures, to include the International Classification of Diseases, Clinical Manifestation and Common Procedural Terminology. It includes transcription of medical reports from individual case studies taken from hospital medical records. The reports include history and physical examinations, radiology reports, operative reports, pathology reports, requests for consultations, death summaries, discharge summaries, and autopsy reports. Specialty areas related to the body systems are emphasized. Helps prepare students to take the Certified Medical Transcription examination. Pre-requisite: Orientation **or** Fundamentals of Health Professions and Medical Terminology.	2096 Medical Administrative Assisting 2097 Health Informatics
141531	**Health Information Technology II (HP 0635)** This course presents an overview of computer technology concepts related to health care and application of the tools and techniques for collecting, storing and retrieving data. An overview of CPT-4 coding systems with emphasis on basic coding rules and application of CPT coding procedures in the ambulatory care setting; coding and reimbursement methodologies inclusive of Prospective Payment Systems, Diagnosis Related Groups, Resource Based Relative Value system, Ambulatory Patient Groups, and other payment methods. Also covered are legal aspects of health information, study of the court system, terminology, health record as a legal document, consent, confidentiality laws, and data security applied to health record practice. Pre-requisite: Health Information Technology I	2096 Medical Administrative Assisting 2097 Health Informatics
141540	**Medical Terminology for Healthcare (HP 0630)** This course presents a study of medical terminology. Prefixes, suffixes, word roots, combining forms, special endings, plural forms, abbreviations, and symbols are included in the content. All body systems, anatomical reference, pharmacology, and medical specialties will be considered. Emphasis is placed on spelling, definition, usage, and pronunciation. Pre-requisite: Orientation **or** Fundamentals of Health Professions.	2000 Orient Health Occ 6/12 2011 Dental Assisting 6/12 2030 Dietitian 6/12 2032 Practical Nursing 6/12 2033 Nursing Assistant 6/12 2085 Emerg Med Tech 6/12 2094 Medical Assisting 6/12 2095 Pharm Assist 2097 Health Informatics 2098 Sports Med/Ath 6/12
141544	**Medical Administrative Assistant I (HP 0636)** This semester course will cover the administrative and clerical duties necessary to efficiently manage the front office of a healthcare service provider. These duties include answering phones, billing and bookkeeping, creating and updating patients' electronic health records, verifying and submitting patient insurance,	2096 Medical Administrative Assisting

Assignment Code		Endorsement Requirement
	procedure and diagnosis coding, preparing correspondence between medical providers and their patients and providing quality customer service to patients.	
141545	**Medical Administrative Assistant II (HP 0637)** This semester course involves hands on approach using a Practice Management & Electronic Healthcare Records software package. Students will learn how to use software to manage billing, schedule and input patient information, recording procedure and diagnosis codes, bill third-party payers, post payments, create statements, and run financial and clinical reports.	2096 Medical Administrative Assisting
141550	**Medical Math for Health Care Professionals (HP 0632)** This course includes instruction in fractions; decimals; solving equations in one variable; ratio and proportion involving dimensions; equivalents and conversions between different systems of measurement, and dosage calculations involving both oral and intravenous drugs. Includes instruction in systems of measurement (including metric and apothecary); conversions; reductions; ratios and proportions; solving linear equations, formulas, and solution; and mixture problems. Pre-requisite: Orientation **or** Fundamentals of Health Professions.	2000 Orient Health Occ 6/12 2011 Dental Assisting 6/12 2030 Dietitian 6/12 2032 Practical Nursing 6/12 2033 Nursing Assistant 6/12 2094 Medical Assisting 6/12 2095 Pharm Assist 2097 Health Informatics
141551	**Anatomy and Physiology for Health Professions (HP 0730)** A course designed to help students master the structural and functional elements and relationships of the human body as they pertain to the health professions. Pre-requisite: Orientation **or** Fundamentals of Health Professions.	2000 Orient Health Occ 6/12 2030 Dietitian 6/12 2032 Practical Nursing 6/12 2033 Nursing Assistant 6/12 2085 Emerg Med Tech 6/12 2094 Medical Assisting 6/12 2098 Sports Med/Athl 6/12
030530	**Anatomy and Physiology for Health Professions (HP 0730)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 141551** A course designed to help students master the structural and functional elements and relationships of the human body as they pertain to the health professions.	**Additional Endorsement Required:** 7420 Natural Science 7421 Biological Science
149980	**Clinical Education (HP 9800)** A community based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the	2000 Orient Health Occ 6/12 2011 Dental Assisting 6/12 2030 Dietitian 6/12

Assignment Code		Endorsement Requirement
	teacher. (Note: This course must be approved on an individual program basis by the State Division.) Pre-requisite: Orientation **or** Fundamentals of Health Professions, plus Nursing Assistant, Dental Assistant, or Sports Medicine.	2032 Practical Nursing 6/12 2033 Nursing Assistant 6/12 2035 Surgical Tech 2050 Rehab/Therap Svc 6/12 2080 Mental Health 2085 Emerg Med Techn 6/12 2093 Resp Therapy 2094 Medical Assisting 6/12 2095 Pharm Assist 2097 Health Informatics 2098 Sports Med/Athl 6/12 7016 Career Counselor 6/12 7099 Work-Based Learn 6/12
149981	**Cooperative Education (HP 9900)** Community based instruction organized and planned to provide specialized skills unique to an occupation or industry. Students are placed in businesses which provide paid on-the-job experience which is related to the student's primary area of study. The experience must be supervised by the teacher and students must have a training plan. Pre-requisite: Orientation **or** Fundamentals of Health Professions, plus Nursing Assistant, Dental Assistant, or Sports Medicine.	2000 Orient Health Occ 6/12 2030 Dietitian 6/12 2032 Practical Nursing 6/12 2033 Nursing Assistant 6/12 2097 Health Informatics 2098 Sports Med/Athl 6/12 7016 Career Counselor 6/12 7099 Work-Based Learn 6/12
15: PUBLIC, PROTECTIVE, AND GOVERNMENTAL SERVICES ***CTE**		
150990	**Orientation to Police, Fire, and Emergency Services (TI 1801)** This three year program is designed to prepare students for the various occupations in law enforcement from police officer, criminal justice or probation officer, correctional officers, or auxiliary officers, firefighting, and emergency services. Students will not be able to certify as firefighters, police officers or correctional officers during the high school years but will have the necessary preparation to continue into advance level preparation at the postsecondary institutions. Course work will cover all aspects of the occupational field, including social and psychological sciences, community, city, county, and state regulations and laws. The program consists of a series of courses beginning with introductory level classes to explore the occupation. Foundational work will be completed in general police work, criminal justice, fire science and emergency standards. Students will study the national, state, and local laws related to the civil and criminal aspects of society. Students will understand agency requirements and standard operating procedures within all of these areas. Students will understand how agencies and organizations are related and work together. Topics to be covered include: ethics and professionalism, fitness readiness, introduction to report writing, introduction to	2085 Emerg Med Techn 6/12 6280 Fire Control/Safety Technology 6282 Law Enforcement 6/12 6283 Security

Assignment Code		Endorsement Requirement
	criminal justice, fire service history, health and safety, personal protective equipment, fire behavior, fire extinguishers, ropes and knots, search and rescue, fire detection and control, EMS system, wellbeing of an EMT, the human body, baseline vital signs, lifting and moving procedures, first aid and CPR training and the NIMS system.	
150991	**Law Enforcement, Detention, and Corrections Level I (TI 1802)** This is the second course in a three course program. This course is designed to prepare students for an occupation within the criminal justice or law enforcement fields. Students will study basic criminal investigation techniques, mechanics of search, communications, emergency medical procedures, rescue and safety, traffic and crowd control, and related scenarios.	6282 Law Enforcement 6/12 6283 Security
150992	**Law Enforcement, Detention, and Corrections Level II (TI 1803)** This is the third course in a three course program. This class is designed to prepare students for entry into occupations in law enforcement, corrections, or criminal justice. While students will not be able to be certified as police, corrections or criminal justice officers, they will be given the necessary skills to perform basic tasks in the occupation as auxiliary personnel and go on for further training at a postsecondary institution. Additional training will be provided in patrol techniques, weapons, investigations, court systems, defensive tactics, vehicle operations, fingerprinting and identification systems, and accident and criminal action prevention/investigation.	6282 Law Enforcement 6/12 6283 Security
150994	**Essentials of Firefighting (TI 1804)** This is the second course in a three course program. This course is designed to prepare students for an occupation within the firefighting career field. Students will study basic firefighting techniques, mechanics of search and rescue, communications, emergency medical procedures, rescue and safety, and related scenarios. Students will learn how to write good reports, the language to use in reports and reporting under the Idaho Criminal Code. Students will learn health and safety as it relates to preventing injuries and personal protective equipment. Students will learn about fire behavior, building construction, extinguishers, ropes and knots, rescue and extrication, forcible entry, ladders, ventilation, water supply, fire hoses, fire streams, fire controls, alarms, and loss of control. Students will learn about fire department communication systems, protecting the public, prevention and public education, and hazardous material procedures.	6280 Fire Control/Safety Technology
150995	**Firefighting Level II (TI1805)** This is the third course in a three course program. This course is designed to prepare students for an occupation within the firefighting career field. Students will study EMT basics, ambulance operations, extrication/gaining access, and incident command systems. Students will learn how to write good reports, the language to use in reports and reporting under the Idaho Criminal Code. Students will learn health and safety as it relates to preventing injuries and personal protective equipment. Students will learn about fire behavior, building construction, extinguishers, ropes and knots, rescue and extrication, forcible entry, ladders, ventilation, water supply, fire hoses, fire streams, fire controls, alarms, and loss of control. Students will learn about fire department communication systems, protecting the public, prevention and public education, and hazardous material procedures.	6280 Fire Control/Safety Technology

Assignment Code		Endorsement Requirement
150993	**Occupational & Career Experience – Law Enforcement/Criminal Justice/Firefighting (TI 9818)** A school district, community, or industry (preferred) based work experience/internship activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experience must be supervised and monitored by the teacher.	6280 Fire Control/Safety Technology 6282 Law Enforcement 6/12 6283 Security 7016 Career Counselor 6/12 7099 Work-Based Learn 6/12
16: HOSPITALITY AND TOURISM ***CTE***		
161510	**Hospitality/Tourism (ME 0250) (OF 0560)** A course designed to provide students skills and knowledge important within hospitality and tourism industries. Students will have the opportunity to explore career opportunities and develop an awareness and understanding of one of the largest industries in the world.	1085 Hospitality 3023 Food Service 6/12 3025 Culinary Arts 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12 7960 Marketing Ed 6/12
161511	**Introduction to Travel & Tourism (MT 0200)** A course of study which provides an introduction to the travel and tourism industry. Students are given an overview of the various components of the industry, a history of the industry, an introduction to marketing and to the various exciting careers available in travel & tourism. Students also engage in a case study of their own particular city and study the latest trends which are impacting on the way people travel both for leisure and for business.	7092 Marketing Tech Ed 6/12 7960 Marketing Ed 6/12
161512	**Intro to Hospitality—Entrepreneurism (OF 0559)** This course will offer an introduction to the hospitality and tourism industry. The course will include an industry overview and preparation for employment or entrepreneurship in a variety of occupations utilizing the knowledge and skills in the hospitality field and related to family and consumer sciences content. Skill development will be achieved through classroom laboratory, project based learning, and school-based enterprise.	1085 Hospitality 3023 Food Service 6/12 3025 Culinary Arts 6/12 7971 Family/Consumer 6/12
161513	**Hospitality (FC 0561) (Cluster)** A semester only course designed to introduce students to the skills and knowledge important within hospitality and tourism industries. FCCLA activities should be integrated into this course. Grades 11 – 12	1085 Hospitality 3023 Food Service 6/12 3025 Culinary Arts 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12

Assignment Code		Endorsement Requirement
161520	**English for Travel & Tourism (MT 0201)** A course of study in American literature (selected works are travel related) combined with an emphasis on oral as well as written communication. Students are prepared for the work world through a series of lessons on resume preparation and job-interview techniques.	7092 Marketing Tech Ed 6/12 7960 Marketing Ed 6/12
161521	**Geography for Travel & Tourism (MT 0202)** A course of study which is geared at having students develop broad geographic skills. In addition to learning how to utilize the basic tools of the geographer, students learn how economics, culture, history and political issues all impact upon geography and how geography impacts upon these other disciplines.	7092 Marketing Tech Ed 6/12 7960 Marketing Ed 6/12
161522	**Travel & Tourism II: Travel as a Business (MT 0203)** A course of study which provides students with a more in-depth study of particular components of the travel and tourism industry. Through an examination of the airline, hotel, cruise line and other industries within hospitality and travel, students are able to explore the various career opportunities and trends which are affecting each component of this vast industry.	7092 Marketing Tech Ed 6/12 7960 Marketing Ed 6/12
160522	**International Cuisine (FC 0200)** International Cuisine is a research based cooking class. Students will study foods as a method of furthering their appreciation of other cultures. Geography, history and sociology will also play a part in this course. In this course students will identify food contributions of countries throughout the world. Students will learn geographical location of counties and recognize the influence of geography and climate on food habits. Students will identify foods, equipment, and preparation techniques for typical foods for countries studied. Research projects and cooking labs will be key components of this course. Nutrition and Foods is a prerequisite for this course. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 3023 Food Service 6/12 3025 Culinary Arts 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
160523	**Food Production, Management and Service (OF 0540)** A year-long course in professional food preparation with practical applications emphasizing: career opportunities, reinforced basic skills, food safety and sanitation, use of commercial equipment, industrial food preparation, business management, food service techniques and employability skills. Work experiences may be in a school-based enterprise, district food service, local restaurants or other food production establishments. Articulation agreements with postsecondary technical programs provide credit and a smooth transition to further education. FCCLA activities should be integrated into this course.	3023 Food Service 6/12 3025 Culinary Arts 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
160524	**Advanced Food Production, Management and Service (Advanced Culinary Arts) (OF 0545)** Advanced Food Production, Management and Services (AFPMS), a year-long course, is the third level of FPM&S and it serves as a Professional-Technical School (PTS) capstone course. This PTS capstone course prepares students for gainful employment and/or entry into post-secondary education in the food production and service industry. Content provides students the opportunity to apply the marketable culinary arts and food service skills they have acquired by assuming increasingly responsible positions, including participation in a cooperative education experience. Family, Career and Community Leaders of America, FCCLA,	3023 Food Service 6/12 3025 Culinary Arts 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12

Assignment Code		Endorsement Requirement
	leadership activities are an integral part of this course. Advanced Food Production, Management and Services may articulate to a culinary arts program at a postsecondary technical college.	
160525	**Culinary Arts/Food Production-Cluster (FC 0546)** A semester only course in food preparation with practical applications emphasizing: career opportunities, reinforced basic skills, food safety and sanitation, use of commercial equipment, industrial food preparation, and employability skills. FCCLA activities should be integrated into this course. Grades 11 – 12	3023 Food Service 6/12 3025 Culinary Arts 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
17: ARCHITECTURE AND CONSTRUCTION ***CTE***		
170020	**Construction Systems I (TE 1920)** Construction Systems I is a comprehensive course involving a multitude of applications in the construction field and is designed for a broad approach to the field of study. The course is designed to introduce classical and contemporary elements, principles and processes of structural systems. Architectural and engineering subjects are studied through research, design, project development and assessment. Students explore the relationship of materials, form, function, and culture of notable past and present structures through practical applications and modeling techniques.	5022 Manufacture Tech 6/12 6108 Bldg Trades Const 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
170021	**Construction Systems II (TE 1921)** Construction Systems II is a comprehensive course involving a multitude of applications in the construction fields and is designed for a broad approach to the field of study. Students of Construction Systems II continue their study of structural systems through research, developing solutions, creating designs, building models and critiquing their work. Working individually and as team members, students apply the skills and insights from the previous course to pursue progressively demanding concepts and relationships of structural systems. Advanced level students are given greater freedom to explore individual topics of interest within the area of structural systems.	5022 Manufacture Tech 6/12 6108 Bldg Trades Const 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
170070	**Introduction to Cabinetry (TE 1922)** This course is provided as a base level for students interested in careers in construction but more specifically for finish carpentry. Students will be given opportunities to build basic cabinet style models and learn finishing and staining techniques. Projects developed in this class may be craft related and are designed so that students learn how to properly use the equipment commonly found in commercial cabinetmaking businesses.	6105 Cabinet & Millwork 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
170074	**Advanced Cabinetry (TE 1923)** Students taking this course are exposed to advanced woodworking applications and specialized equipment commonly found in industrial shops. Tables, curios, desks, and residential furnishings will be constructed. Specialized finishing techniques will be taught with emphasis on accuracy and detail of the finished product. Design, function, and durability of the product will be established as outcomes for the course.	6105 Cabinet & Millwork 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12

Assignment Code		Endorsement Requirement
171060	**Introduction to Electronics Technology (TE 0501)** An entry level course in Power, Energy and Transportation Systems which provides critical information about the vast number of Electrical/Electronic Technological applications important to daily living. Primary instruction will center on the major Laws of electronics with simple circuits and electronic components found in industrial and consumer equipment and appliances. This course provides the flexibility for many laboratory activities that reflect the technical and social nature of our modern society.	5018 Electronic Tech 6/12 5030 Electrical Technology 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
171061	**Electronics Applications (TE 0502)** This is an advanced level course in electronics that covers theory and application of electronic principles and practices. Students will be expected to design, build and troubleshoot circuits and electronic components. Significant laboratory time is required to offer the students the skills necessary to complete advanced level assignments on working models and training devices.	5018 Electronic Tech 6/12 5030 Electrical Technology 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
179980	**Occupational & Career Experience – Electronics (TI 9805)** A school district, community, or industry (preferred) based work experience/internship activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experience must be supervised and monitored by the teacher.	5018 Electronic Tech 6/12 7016 Career Counselor 6/12 7099 Work-Based Learn 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
170030	**Residential Carpentry/Building Construction Level I (TI 1101)** This is the beginning level course of the Residential carpentry/building construction program. Residential carpentry/building construction is a program designed to prepare students with skills to layout, fabricate, erect, install, and repair structures and fixtures, using hand and power tools. The program includes instruction in common systems of framing, construction materials, estimating, and blueprint reading. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. A course designed to introduce students to basic residential carpentry and building construction.	6101 Carpentry 6/12 6108 Bldg Trades Const 6/12
170031	**Residential Carpentry/Building Construction Level II (TI 1102)** This is the second course in a three course program. A course designed to provide students with residential carpentry and building construction applications.	6101 Carpentry 6/12 6108 Bldg Trades Const 6/12
170032	**Residential Carpentry/Building Construction Level III (TI 1103)** This is the third course in a three course program. A course designed to provide student with team work, critical thinking, problem solving, diagnostics, and repairing/building to industry standards. Emphasis of work site skills is expected at this level with the majority of the students participating in off campus work experiences.	6101 Carpentry 6/12 6108 Bldg Trades Const 6/12

Assignment Code		Endorsement Requirement
172001	**Fundamentals of Renewable Energy (TI 0505)** This is the second course in a three course program. This course will cover the basics of different types of renewable energy that are currently available. This survey course covers fundamentals of renewable energy including green construction, energy conservation, load assessment, renewable energy production practices, appropriate technology application and energy policy.	6101 Carpentry 6/12 6108 Bldg Trades Const 6/12 6148 Alt Energy Technology 7981 Technology Ed 6/12
172003	**Advanced Renewable Energy (TI 0506)** This is the third course in a three course program. This course covers the fundamentals of wind energy focusing on wind production practices for all sizes of turbines, power distribution, net metering, and green construction.	6101 Carpentry 6/12 6108 Bldg Trades Const 6/12 6148 Alt Energy Technology 7981 Technology Ed 6/12
179981	**Occupational & Career Experience – Residential Carpentry/Building Construction/Renewable Energy (TI 9811)** A school district, community, or industry (preferred) based work experience/internship activity organized and planned to develop advanced skills necessary to gain and maintain employment to include OSHA 10HR. This course may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experience must be supervised and monitored by the teacher.	6101 Carpentry 6/12 6103 Masons & Tile Setters 6108 Bldg Trades Const 6/12 6112 Digital Home Tech 6148 Alt Energy Technology 7016 Career Counselor 6/12 7099 Work-Based Learn 6/12
170080	**Masonry Level I (TI 1104)** This is the beginning level course of the masonry program. Masonry is a program designed to prepare students with skills to work with mortar, brick, masonry, block, stone, and building construction applications, using hand and power tools. The program includes instruction in common systems of brickwork, construction materials, estimating, and blueprint reading. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. A course designed to introduce students to basic brick, masonry, block, stone and building construction.	6103 Masons & Tile Setters
170081	**Masonry Level II (TI 1105)** This is the second course in a three course program. A course designed to provide students with mortar, brick, masonry, block, stone, and building construction applications.	6103 Masons & Tile Setters
170082	**Masonry Level III (TI 1106)** This is the third course in a three course program. A course designed to provide student with team work, critical thinking, problem solving, diagnostics, and repairing/building to industry standards. Emphasis of work site skills is expected at this level with the majority of the students participating in off campus work experiences.	6103 Masons & Tile Setters

Assignment Code		Endorsement Requirement
170090	**Home Technology Integration Level I (TI 1107)** This is the beginning level course of the home technology integration program. Home Technology Integration is a program designed to prepare students with skills to work with elements of home technology integration including electronic sensors, internetworking techniques, HVAC controls, and home wiring, using hand and power tools. The program includes instruction in common systems of home technology integration, construction materials, estimating, and blueprint reading. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices.	6112 Digital Home Tech
170091	**Home Technology Integration Level II (TI 1108)** This is the second course in a two course program. A course designed to provide students with electronic sensors, internetworking techniques, HVAC controls, and home wiring applications.	6112 Digital Home Tech
170071	**Cabinetmaking and Millwork Level I (TI 0401)** This is the beginning level course of the cabinetmaking and millwork program. Cabinetmaking and millwork is a program designed to prepare students with skills to engage in the mass production of such articles as windows and frames, moldings, trim and panels; and such products as home fixtures, kitchen cabinets, and office equipment. The program includes instruction in cutting, shaping, assembling, and refinishing articles; installing hinges, catches, drawer pulls, and other hardware; and planning and drafting layouts. The course also includes training in applied communications and employability skills including leadership, human relations, and safe efficient work practices. A course designed to introduce students to basic cabinetmaking and millwork.	6101 Carpentry 6/12 6105 Cabinet & Millwork 6/12 6108 Bldg Trades Const 6/12
170072	**Cabinetmaking and Millwork Level II (TI 0402)** This is the second course in a three course program. A course designed to provide students with cabinetmaking and millwork applications.	6101 Carpentry 6/12 6105 Cabinet & Millwork 6/12 6108 Bldg Trades Const 6/12
170073	**Cabinetmaking and Millwork Level III (TI 0403)** This is the third course in a three course program. A course designed to provide student with team work, critical thinking, problem solving, diagnostics, and repairing/building to industry standards.	6101 Carpentry 6/12 6105 Cabinet & Millwork 6/12 6108 Bldg Trades Const 6/12
179983	**Occupational & Career Experience – Cabinetmaking and Millwork (TI 9804)** A school district, community, or industry (preferred) based work experience/internship activity organized and planned to develop advanced skills necessary to gain and maintain employment to include OSHA 10 HR. This course may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experience must be supervised and monitored by the teacher.	6101 Carpentry 6/12 6105 Cabinet & Millwork 6/12 6108 Bldg Trades Const 6/12 7016 Career Counselor 6/12 7099 Work-Based Learn 6/12
171062	**Basic Electronics Technology (TI 0501)** This is the beginning level course of the electronics technology program. Students should have completed or be currently enrolled in algebra I prior to enrolling in the course. The course will reinforce skill development in	5018 Electronic Tech 6/12 5030 Electrical Tech 6/12

Assignment Code		Endorsement Requirement
	applied mathematics and physics through theory and laboratory assignments based on industry procedures. Students will be provided instruction on safety, introduction to the electronics industry, tool and equipment use, soldering techniques, and employability skills, and habits. Students will be involved in activities which will reinforce problem solving, teaming, language arts, science, and mathematics skills which use real-life industry examples and procedures. The course will give students the opportunity to study devices that use DC to series-parallel circuits and AC concepts.	
171063	**Intermediate Electronics Technology (TI 0502)** This is the second level course in the electronics technology program. Students will be required to develop a project development plan and do research on the various projects they will build as a part of the course. Students will be involved in projects which will reinforce problem solving, teaming, language arts, science, and mathematics skills through real-life industry examples and procedures. The course will give students the opportunity to build and test devices that use DC to series-parallel circuits, AC concepts, digital, and solid state circuits.	5018 Electronic Tech 6/12 5030 Electrical Tech 6/12
171064	**Advanced Electronics Technology (TI 0503)** This is the third level course in electronics technology. Students will refine their project development plan and develop more detailed projects in final form during the course. The course will give students the opportunity to build and test advanced level devices that use DC principles for RC and RL circuits and AC concepts. Digital and solid state circuits including FET, IC, and combinational logic applications will be studied and tested. Academic subject fields will be reinforced throughout all aspects of the course and students will be expected to practice proper customer relations skills at all times.	5018 Electronic Tech 6/12 5030 Electrical Tech 6/12
18: AGRICULTURE, FOOD, AND NATURAL RESOURCES ***CTE***		
180010	**Introduction to Agricultural Education (AG 0110)** Introduction to Agriculture courses survey a wide array of topics within the agricultural industry, exposing students to the many and varied types of agriculture and livestock career opportunities and to those in related fields (such as natural resources). These courses serve to introduce students to the agricultural field, providing them an opportunity to identify an area for continued study or to determine that their interest lies elsewhere. They often focus on developing communication skills, business principles, and leadership skills.	0071 Vocational Ag 6/12 0076 Multi-Occupations 6/12 0108 Animal Hlth/Vet Sci 6/12 0109 Ag Business/Mgmt 6/12 0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 0130 Ag Power Mach 6/12 0150 Horticulture 6/12 0161 Aquaculture 0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7092 Marketing Tech Ed 6/12

Assignment Code		Endorsement Requirement
		7921 Ag Science & Tech 6/12
180020	**Introduction to the Agricultural Industry (AG 0120)** A basic applied course designed to enhance students' perceptions of agriculture, its applications, and career opportunities.	0108 Animal Hlth/Vet Sci 6/12 0109 Ag Business/Mgmt 6/12 0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 0130 Ag Power Mach 6/12 0150 Horticulture 6/12 0161 Aquaculture 0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Science & Tech 6/12
184010	**Introduction to Agricultural Mechanics (AG 0130)** Agriculture Mechanics/Equipment/Structures courses provide students with the skills and knowledge that are specifically applicable to the tools and equipment used in the agricultural industry. While learning to apply basic industrial knowledge and skills (engine mechanics, power systems, welding, and carpentry, among others), students may explore a broad range of topics, including the operation, mechanics, and care of farm tools and machines; the construction and repair of structures integral to farm operations; a study of electricity and power principles; and safety procedures.	0108 Animal Hlth/Vet Sci 6/12 0109 Ag Business/Mgmt 6/12 0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 0130 Ag Power Mach 6/12 0150 Horticulture 6/12 0161 Aquaculture 0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
181010	**Introduction to Livestock Industry (AG 0140)** A course that includes principles of evaluation and selection of beef, swine, sheep, horse and dairy animals.	0108 Animal Hlth/Vet Sci 6/12 0109 Ag Business/Mgmt 6/12 0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 0130 Ag Power Mach 6/12 0150 Horticulture 6/12 0161 Aquaculture 0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12

Assignment Code		Endorsement Requirement
		7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
180510	**Introduction to the Agricultural Plant Industry (AG 0150)** A course designed to examine soil and plant relationships that affect the production of food and fiber. Topics include soils, irrigation, land judging, plants, crop and weed identification, diseases, insets and chemicals.	0108 Animal Hlth/Vet Sci 6/12 0109 Ag Business/Mgmt 6/12 0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 0130 Ag Power Mach 6/12 0150 Horticulture 6/12 0161 Aquaculture 0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Science & Tech 6/12
180015	**Introduction to Natural Resources and Ecosystem Services (AG 0170)** A course that will provide the foundation for courses in the Natural Resources pathway, including Natural Resources, Fish and Wildlife, Range Science, Environmental Science, and Forestry Science. Students will understand principles of ecology and natural resources, the relationship between natural resources and ecosystem services, and the role ecosystem services play in various aspects of agricultural production.	0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7920 General Ag 6/12 7921 Ag Science & Tech 6/12
184040	**Agricultural Welding (AG 0210)** A course designed to develop skills in Arc and Oxy-Acetylene welding as well as implement advanced fabrication and manufacturing technology practices.	0130 Ag Power Machine 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
184041	**Advanced Agricultural Welding (AG 0211)** A course designed to reinforce foundational process skills in Arc and Oxy-Acetylene welding as well as implement advanced fabrication and manufacturing technology practices.	0130 Ag Power Machine 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
184042	**Agricultural Power Technology (AG 0220)** A course designed to develop skills in selection, operation and maintenance of small air-cooled engines, multi-cylinder engines, hydraulics, electric motors, and agricultural machinery and tractors.	0130 Ag Power Machine 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12

Assignment Code		Endorsement Requirement
184011	**Small Gasoline Engines (AG 0221)** A course designed to develop skills ins election, operation, and maintenance of small air-cooled engines.	0130 Ag Power Machine 6/12 0150 Horticulture 6/12 6310 Sm Engine Repair 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
184012	**Agricultural Power Technology/Large Engines (AG 0222)** A course designed to develop skills in selection, operation and maintenance of multi-cylinder engines, hydraulics, electric motors, and agricultural machinery and tractors.	0130 Ag Power Machine 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
184013	**Agricultural Systems/Electricity and Hydraulic (AG 0225)** A course designed to develop skills in operation of tools and equipment, wiring, controls, electric motors, and hydraulics.	0130 Ag Power Machine 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
184014	**Agricultural Machinery (AG 0227)** A course designed to develop skills in selection, operation, maintenance and management of agricultural machinery.	0130 Ag Power Machine 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
184015	**Agricultural Structures (AG 0230)** A course preparing students to maintain, evaluate, design, and build agriculture structures using approved construction techniques.	0130 Ag Power Machine 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
184016	**Advanced Small Gasoline Engines (AG 0223)** A course designed to cover the theory of operation along with actual hands on experience. Students will demonstrate applied techniques in the repair and maintenance of 2 and 4 cycle small engines.	0130 Ag Power Machine 6/12 0150 Horticulture 6/12 6310 Sm Engine Repair 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12

Assignment Code		Endorsement Requirement
184050	**Agricultural Fabrication (AG 0240)** A course to develop skills in metal equipment assembly and joining processes.	0130 Ag Power Machine 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
181013	**Applied Livestock Management (AG 0310)** A course that includes principles of animal production and management. Topics include health, evaluation, selection, feeding, and management.	0108 Animal Hlth/Vet Sci 6/12 0109 Ag Business/Mgmt 6/12 0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
180512	**Applied Crop Management (AG 0320)** A course that prepares students to operate enterprises concerned with the production of various field crops.	0109 Ag Business/Mgmt 6/12 0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 0150 Horticulture 6/12 0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Science & Tech 6/12
180520	**Landscape Design (AG 0330)** A course that prepares students to design, construct, and maintain planted areas and devices for the beautification of home grounds and other areas of human habitation and recreation.	0076 Multi-Occupations 6/12 0109 Ag Business/Mgmt 6/12 0150 Horticulture 6/12 0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7096 Multi-Occupations 6/12 7920 General Ag 6/12 7921 Ag Science & Tech 6/12

Assignment Code		Endorsement Requirement
180521	**Floral Design and Marketing (AG 0335)** A course designed to develop skills in floriculture and the techniques used to develop and complete a variety of retail items normally sold in a retail florist business. The skills learned are necessary to gain and maintain employment in the retail florist industry.	0076 Multi-Occupations 6/12 0109 Ag Business/Mgmt 6/12 0150 Horticulture 6/12 0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7096 Multi-Occupations 6/12 7920 General Ag 6/12 7921 Ag Science & Tech 6/12
180522	**Advanced Floral Design and Marketing (AG 0337)** A course designed to enhance skills in floriculture and the techniques used to develop and complete a variety of retail items normally sold in a retail florist business and expand to include specialty materials for weddings, funerals, and similar special occasions. Business and inventory skills and well as job shadowing components will be required. The skills learned are necessary to gain and maintain employment in the retail florist industry.	0076 Multi-Occupations 6/12 0109 Ag Business/Mgmt 6/12 0150 Horticulture 6/12 0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7096 Multi-Occupations 6/12 7920 General Ag 6/12 7921 Ag Science & Tech 6/12
180523	**Applied Greenhouse and Nursery Management (AG 0340)** A course designed to prepare students in greenhouse and nursery operation and management.	0076 Multi-Occupations 6/12 0109 Ag Business/Mgmt 6/12 0150 Horticulture 6/12 0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Science & Tech 6/12
185053	**Forestry and Wildlife Management (AG 0350)** A course designed to examine the importance of forestry, wildlife, and outdoor recreation with emphasis on efficient use of natural resources.	0108 Animal Hlth/Vet Sci 6/12 0109 Ag Business/Mgmt 6/12 0161 Aquaculture 0170 Forestry 6/12 0174 Natural Res Mgt 6/12 7091 Voc Agriculture 6/12 7921 Ag Sci & Tech 6/12

Assignment Code		Endorsement Requirement
182030	**Personal Skill Development (AG 0410)** A comprehensive course in developing agricultural leadership, citizenship, and cooperation. It includes topics in personal development, employee/employer relations, and group and individual interpersonal communications skills.	0108 Animal Hlth/Vet Sci 6/12 0109 Ag Business/Mgmt 6/12 0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 0130 Ag Power Mach 6/12 0150 Horticulture 6/12 0161 Aquaculture 0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
182031	**Advanced Leadership in Agriculture and Marketing (AG 0435)** A course designed to develop advanced skills related to agribusiness and marketing focused on customer service and demonstrated leadership in agriculture.	0109 Ag Business Mgmt 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
182005	**Agricultural Economics (AG 0450)** A course designed to introduce the student to agribusiness management in the free enterprise system. It includes a study of economic principles, budgeting, record keeping, finance, decision making, risk management, business law, marketing and careers in agribusiness.	0109 Ag Business Mgmt 6/12 0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 0150 Horticulture 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
042017	**Agricultural Economics (AG 0450)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 182005** A course designed to introduce the student to agribusiness management in the free enterprise system. It includes a study of economic principles, budgeting, record keeping, finance, decision making, risk management, business law, marketing and careers in agribusiness.	**Additional Endorsement Required:** 7200 Social Studies 6/12 7228 Economics 6/12
182010	**Agribusiness Management and Marketing (AG 0460)**	0109 Ag Business Mgmt 6/12

Assignment Code		Endorsement Requirement
	A course designed to introduce the student to agribusiness management in the free enterprise system. It includes a study of economic principles, budgeting, record keeping, finance, risk management, business law, marketing and careers in agribusiness.	0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 0150 Horticulture 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
182012	**Agricultural Sales (AG 0470)** A course designed to develop skills in preparing, developing, and practicing agribusiness sales competencies. The skills learned are necessary to gain and maintain employment in the wholesale/retail agriculture sales field.	0109 Ag Business Mgmt 6/12 0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 0150 Horticulture 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
030509	**Agricultural Biology (AG 502)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL: Additional Endorsement Required** A course designed to examine the importance of plant and animal cell structure, functions of the cells, plant and animal processes, heredity and genetics, and the basic factors that affect life and quality relating to agriculture and natural resources. The course provides contextual, inquiry-based instruction with experimental design and research based projects in the areas of zoology, botany and ecology with specific emphasis based on the needs of the local school district.	0108 Animal Hlth/Vet Sci 6/12 **OR** 0109 Ag Business/Mgmt 6/12 **OR** 0110 Ag Production 6/12 **OR** 0114 Farm/Ranch Mgt 6/12 **OR** 0130 Ag Power Mach 6/12 **OR** 0150 Horticulture 6/12 **OR** 0161 Aquaculture **OR** 0170 Forestry 6/12 **OR** 0174 Natural Res Mgmt 6/12 **OR** 7091 Voc Agriculture 6/12 **OR** 7920 General Ag 6/12 **OR** 7921 Ag Sci & Tech 6/12 **AND one of the following:** 7420 Natural Science 6/12 7421 Biological Science 6/12 8420 Natural Science 6/9 8421 Biological Science 6/9
180513	**Botany/Plant and Soil Science (AG 0510)** A course designed to examine soil and plant relationships that affect the production of food and fiber. Topics include soils, plants, plant ID, and plant pests.	0110 Ag Production 6/12 0150 Horticulture 6/12

Assignment Code		Endorsement Requirement
		0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Science & Tech 6/12
030580	**Botany/Plant and Soil Science (AG 0510)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 180513** A course designed to examine soil and plant relationships that affect the production of food and fiber. Topics include soils, plants, plant ID, and plant pests.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science 8420 Natural Science 6/9 8421 Biological Science 6/9
180511	**Botany/Science of Plant Growth and Development (AG 0512)** A course designed to examine the importance of plant cell structure, functions of cells, plant processes, nonvascular plants, vascular plants, roots, stems, leaves, flowers and reproduction of plants.	0110 Ag Production 6/12 0150 Horticulture 6/12 0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Science & Tech 6/12
030581	**Botany/Science of Plant Growth and Development (AG 0512)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 180511** A course designed to examine the importance of plant cell structure, functions of cells, plant processes, nonvascular plants, vascular plants, roots, stems, leaves, flowers and reproduction of plants	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science
185055	**Botany/Horticulture Plant Science (AG 0514)** A course that prepares students to produce greenhouse/nursery plants and to maintain plant growth and propagation structures.	0110 Ag Production 6/12 0150 Horticulture 6/12 0170 Forestry 6/12 0174 Natural Res Mgmt 6/12 7091 Voc Agriculture 6/12 7420 Natural Science 6/12 7421 Biological Science 6/12

Assignment Code		Endorsement Requirement
		7920 General Ag 6/12 7921 Ag Science & Tech 6/12
030582	**Botany/Horticulture Plant Science (AG 0514)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 185055** A course that prepares students to produce greenhouse/nursery plants and to maintain plant growth and propagation structures.	**Additional Endorsement Required**: 7420 Natural Science 6/12 7421 Biological Science 6/12 8420 Natural Science 6/9 8421 Biological Science 6/9
185021	**Botany/Forestry Science (AG 0516)** A course designed to introduce students to the biological, environmental and ecological concepts encountered in a temporal forest environment.	0150 Horticulture 6/12 0170 Forestry 6/12 0174 Natural Res Mgt 6/12 7091 Voc Agriculture 6/12 7921 Ag Sci & Tech 6/12
030583	**Botany/Forestry Science (AG 0516)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 185021** A course designed to introduce students to the biological, environmental and ecological concepts encountered in a temporal forest environment.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science 8420 Natural Science 6/9 8421 Biological Science 6/9
185056	**Botany/Advanced Forestry Science (AG 0517)** This course is a companion course to AG 0516 Botany/Forestry Science. It provides an advanced level of instruction in the biological, environmental and ecological concepts that are encountered in a temporal forest environment. AG 0516 should be taken as a prerequisite course to provide fundamental instruction in the forestry sequence.	0110 Ag Production 6/12 0150 Horticulture 6/12 0170 Forestry 6/12 0174 Natural Res Mgt 6/12 7091 Voc Agriculture 6/12 7921 Ag Sci & Tech 6/12
030584	**Botany/Advanced Forestry Science (AG 0517**	**Additional Endorsement Required**:

Assignment Code		Endorsement Requirement
	FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 185056 This course is a companion course to AG 0516 Botany/Forestry Science. It provides an advanced level of instruction in the biological, environmental and ecological concepts that are encountered in a temporal forest environment. AG 0516 should be taken as a prerequisite course to provide fundamental instruction in the forestry sequence.	7420 Natural Science 7421 Biological Science
185057	**Botany/Range Science (AG 0518)** A course designed to acquaint students with principles of conservation, natural resources, ecology, and range science.	0110 Ag Production 6/12 0150 Horticulture 6/12 0170 Forestry 6/12 0174 Natural Res Mgt 6/12 7091 Voc Agriculture 6/12 7921 Ag Sci & Tech 6/12
030585	**Botany/Range Science (AG 0518)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 185057** A course designed to acquaint students with principles of conservation, natural resources, ecology, and range science.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science 8420 Natural Science 6/9 8421 Biological Science 6/9
185058	**Ecology/Natural Resource Science (AG 0520)** A course designed to teach the concepts of conservation, natural resources, ecology, and fish/ wildlife science.	0161 Aquaculture 0170 Forestry 6/12 0174 Natural Res Mgt 6/12 7091 Voc Agriculture 6/12 7921 Ag Sci & Tech 6/12
030031	**Ecology/Natural Resource Science (AG 0520)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 185058** A course designed to teach the concepts of conservation, natural resources, ecology, and fish/ wildlife science.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science 8420 Natural Science 6/9 8421 Biological Science 6/9

Assignment Code		Endorsement Requirement
185059	**Environmental Science (AG 0525)** A course that provides science instruction and practical experiences in environmental science including agricultural/industrial chemical issues, habitat preservation/restoration, remediation of damaged resources, conservation practices and current environmental issues.	0161 Aquaculture 0170 Forestry 6/12 0174 Natural Res Mgt 6/12 7091 Voc Agriculture 6/12 7921 Ag Sci & Tech 6/12
030032	**Environmental Science (AG 0525)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 185059** A course that provides science instruction and practical experiences in environmental science including agricultural/industrial chemical issues, habitat preservation/restoration, remediation of damaged resources, conservation practices and current environmental issues.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science 8420 Natural Science 6/9 8421 Biological Science 6/9
185050	**Intro to Environmental Science Technology (AG 0526)** A course designed to provide students with team work, critical thinking, problem solving, diagnostics and creative designing to industry standards. Students will be given a variety of skills development situations in which they will be required to solve problems relating to water, ground and air contaminations or abnormalities. A strong science background is suggested prior to enrollment. Basic instrument and tool use will be provided, along with computer/instrumentation applications and applied physical and chemical science laboratory exercises.	0108 Animal Hlth/Vet Sci 6/12 0161 Aquaculture 0170 Forestry 6/12 0174 Natural Res Mgt 6/12 7091 Voc Agriculture 6/12 7921 Ag Sci & Tech 6/12
030033	**Intro to Environmental Science Technology (AG 0526)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 185050** A course designed to provide students with team work, critical thinking, problem solving, diagnostics and creative designing to industry standards. Students will be given a variety of skills development situations in which they will be required to solve problems relating to water, ground and air contaminations or abnormalities. A strong science background is suggested prior to enrollment. Basic instrument and tool use will be provided, along with computer/instrumentation applications and applied physical and chemical science laboratory exercises.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science 8420 Natural Science 6/9 8421 Biological Science 6/9

Assignment Code		Endorsement Requirement
185051	**Environmental Sciences Technology Applications (AG 0527)** This course is a full year in length and introduces students to the multitude of scenarios of hazardous material conditions which exist in the nation's waterways, soil, and air. Air and water pollution examples will be studied and models of controlling pollution or contamination will be examined.	0170 Forestry 6/12 0174 Natural Res Mgt 6/12 7091 Voc Agriculture 6/12 7921 Ag Sci & Tech 6/12
030034	**Environmental Sciences Technology Applications (AG 0527)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 185051** This course is a full year in length and introduces students to the multitude of scenarios of hazardous material conditions which exist in the nation's waterways, soil, and air. Air and water pollution examples will be studied and models of controlling pollution or contamination will be examined.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science
185052	**Advanced Environmental Sciences Applications/Internship (AG 0528)** Students will be involved in examining and studying existing pollution and contamination solutions in area industries. Single family, community, and industry applications of models to prevent contamination and pollution of soil, water, and air will be presented to students. On-site industry and field experiences will be an integral component of this course. This course should be offered as a multiple period block for a full year.	0170 Forestry 6/12 0174 Natural Res Mgt 6/12 7091 Voc Agriculture 6/12 7921 Ag Sci & Tech 6/12
030035	**Advanced Environmental Sciences Applications/Internship (AG 0528)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 185052** Students will be involved in examining and studying existing pollution and contamination solutions in area industries. Single family, community, and industry applications of models to prevent contamination and pollution of soil, water, and air will be presented to students. On-site industry and field experiences will be an integral component of this course. This course should be offered as a multiple period block for a full year.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science
181011	**Zoology/Animal Science (AG 0530)** A course designed to develop knowledge and skills pertaining to nutrition, reproduction, diseases, breeding, genetics, anatomy, and physiology in livestock.	0108 Animal Hlth/Vet Sci 6/12 0110 Ag Production 6/12 0161 Aquaculture 7091 Voc Agriculture 6/12 7920 General Ag 6/12

Assignment Code		Endorsement Requirement
		7921 Ag Sci & Tech 6/12
030610	**Zoology/Animal Science (AG 0530)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 181011** A course designed to develop knowledge and skills pertaining to nutrition, reproduction, diseases, breeding, genetics, anatomy, and physiology in livestock.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science
181016	**Zoology/Science of Animal Nutrition (AG 0532)** A course of study designed to provide learning experiences for students in the areas of animal nutrition and physiology.	0108 Animal Hlth/Vet Sci 6/12 0110 Ag Production 6/12 0161 Aquaculture 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
030611	**Zoology/Science of Animal Nutrition (AG 0532)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 181016** A course of study designed to provide learning experiences for students in the areas of animal nutrition and physiology.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science
181017	**Zoology/Science of Animal Reproduction (AG 0534)** A course of study which provides learning experiences in the subject matter relating to anatomy and physiology of animal reproduction.	0108 Animal Hlth/Vet Sci 6/12 0110 Ag Production 6/12 0161 Aquaculture 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
030612	**Zoology/Science of Animal Reproduction (AG 0534)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 181017**	**Additional Endorsement Required**: 7420 Natural Science

Assignment Code		Endorsement Requirement
	A course of study which provides learning experiences in the subject matter relating to anatomy and physiology of animal reproduction.	7421 Biological Science
185054	**Zoology/Fish and Wildlife Science (AG 0536)** A course designed to examine the importance of fish and wildlife science, outdoor recreation and natural resources.	0108 Animal Hlth/Vet Sci 6/12 0110 Ag Production 6/12 0161 Aquaculture 0170 Forestry 6/12 0174 Natural Res Mgt 6/12 7091 Voc Agriculture 6/12 7921 Ag Sci & Tech 6/12
030613	**Zoology/Fish and Wildlife Science (AG 0536)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 185054** A course designed to examine the importance of fish and wildlife science, outdoor recreation and natural resources.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science
181012	**Zoology/Small Animal Care (AG 0538)** A course the focuses on the care and management of small animals. Animal nutrition, health, behavior, reproduction and breeding, anatomy, physiology, facilities, handling and training, and grooming are typical areas of study.	0108 Animal Hlth/Vet Sci 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
030614	**Zoology/Small Animal Care (AG 0538)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 181012** A course the focuses on the care and management of small animals. Animal nutrition, health, behavior, reproduction and breeding, anatomy, physiology, facilities, handling and training, and grooming are typical areas of study.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science

Assignment Code		Endorsement Requirement
183080	**Ag Biotechnology (AG 0540)** A course designed to explore a variety of technology applications that are used to modify living organisms in the areas of plant and animal science, plant and animal health, environmental science, and food science.	0108 Animal Hlth/Vet Sci 6/12 0110 Ag Production 6/12 0161 Aquaculture 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
030510	**Biology/Ag Biotechnology (AG 0540)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 183080** A course designed to explore a variety of technology applications that are used to modify living organisms in the areas of plant and animal science, plant and animal health, environmental science, and food science.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science 8420 Natural Science 6/9 8421 Biological Science 6/9
183081	**Food Science (AG 0550)** An applied science course in the science of food production, processing, transporting, storage, toxicology and quality control. Students apply the scientific method of discovery as they study the biological and chemical basis of food preparation, processing and preservation. Students develop writing and critical thinking skills through data collection, laboratory procedures, science-based experimentation, and written lab reports. This course focuses primarily on the food processing industry and may be used as a companion course to the Family and Consumer Sciences course in Food Science.	0108 Animal Hlth/Vet Sci 6/12 0110 Ag Production 6/12 0150 Horticulture 6/12 0161 Aquaculture 7091 Voc Agriculture 6/12 7420 Natural Science 6/12 7421 Biological Science 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
030511	**Biology/Food Science (AG 0550)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 183081** An applied science course in the science of food production, processing, transporting, storage, toxicology and quality control. Students apply the scientific method of discovery as they study the biological and chemical basis of food preparation, processing and preservation. Students develop writing and critical thinking skills through data collection, laboratory procedures, science-based experimentation, and written lab reports.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science 8420 Natural Science 6/9 8421 Biological Science 6/9

Assignment Code		Endorsement Requirement
181019	**Zoology/Aquaculture Science (AG 0560)** A course that provides science instruction and practical applications of science principles in the context of fish production. It focuses on such issues as water quality, nutrition, health, and aquatic environments and the plants and animals that live in water. Opportunities are provided for laboratory experiences related to aquaculture.	0108 Animal Hlth/Vet Sci 6/12 0110 Ag Production 6/12 0161 Aquaculture 0170 Forestry 6/12 0174 Natural Res Mgt 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
030615	**Zoology/Aquaculture Science (AG 0560)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 181019** A course that provides science instruction and practical applications of science principles in the context of fish production. It focuses on such issues as water quality, nutrition, health, and aquatic environments and the plants and animals that live in water. Opportunities are provided for laboratory experiences related to aquaculture.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science
181014	**Zoology/Equine Science (AG 0570)** A course of instruction designed to provide science and practical management instruction in the care of horses. The applied science curriculum component has a focus on physiology, anatomy, nutrition, genetics, health and reproduction.	0108 Animal Hlth/Vet Sci 6/12 0110 Ag Production 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
030616	**Zoology/Equine Science (AG 0570)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 181014** A course of instruction designed to provide science and practical management instruction in the care of horses. The applied science curriculum component has a focus on physiology, anatomy, nutrition, genetics, health and reproduction.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science

Assignment Code		Endorsement Requirement
181015	**Zoology/Advanced Equine Science (AG 0572)** A course of designed to focus on the uniqueness of the equine, focusing on the species specific need in areas of physiology, anatomy, nutrition, genetics, health, reproduction, diseases, breeding, as well as the anatomy and physiology of equine reproduction.	0108 Animal Hlth/Vet Sci 6/12 0110 Ag Production 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
030617	**Zoology/Advanced Equine Science (AG 0572)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 181015** A course of designed to focus on the uniqueness of the equine, focusing on the species specific need in areas of physiology, anatomy, nutrition, genetics, health, reproduction, diseases, breeding, as well as the anatomy and physiology of equine reproduction.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science
181018	**Zoology/Veterinary Science (AG 0590)** A course of designed to impart information about the causes, diagnosis, and treatment of diseases and injuries in animals, typically emphasizing domestic and farm animals. Business management and interpersonal skills required for a successful veterinary practice will also be emphasized.	0108 Animal Hlth/Vet Sci 6/12 0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 7091 Voc Agriculture 6/12 7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
030618	**Zoology/Veterinary Science (AG 0590)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 181018** A course of designed to impart information about the causes, diagnosis, and treatment of diseases and injuries in animals, typically emphasizing domestic and farm animals. Business management and interpersonal skills required for a successful veterinary practice will also be emphasized.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science
182011	**Agricultural Business and Economics (AG 0660)** A course designed to introduce the student to agribusiness management in the free enterprise system. It includes a study of economic principles, budgeting, record keeping, finance, decision making, risk management, business law, marketing and careers in agribusiness.	0109 Ag Business Mgmt 6/12 0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 0150 Horticulture 6/12 7091 Voc Agriculture 6/12

Assignment Code		Endorsement Requirement
		7920 General Ag 6/12 7921 Ag Sci & Tech 6/12
042010	**Agricultural Business and Economics (AG 0660)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 182011** A course designed to introduce the student to agribusiness management in the free enterprise system. It includes a study of economic principles, budgeting, record keeping, finance, decision making, risk management, business law, marketing and careers in agribusiness.	**Additional Endorsement Required**: 7228 Economics 7950 Consumer Economics
189980	**Occupational and Career Experience – (AG 9800)** A community based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. (Note: This course must be approved on an Individual program basis by the State Division.)	0108 Animal Hlth/Vet Sci 6/12 0109 Ag Business Mgmt 6/12 0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 0130 Ag Power Mach 6/12 0150 Horticulture 6/12 0161 Aquaculture 0170 Forestry 6/12 0174 Natural Res Mgt 6/12 7016 Career Counselor 6/12 7091 Voc Agriculture 6/12 7099 Work-Based Learn 6/12 7921 Ag Sci & Tech 6/12
189981	**Cooperative Education (AG 9900)** Community based instruction organized and planned to provide specialized skills unique to an occupation or industry. Students are placed in businesses which provide paid on-the-job experience which is related to the student's primary area of study. The experience must be supervised by the teacher and students must have a training plan.	0108 Animal Hlth/Vet Sci 6/12 0109 Ag Business Mgmt 6/12 0110 Ag Production 6/12 0114 Farm/Ranch Mgt 6/12 0130 Ag Power Mach 6/12 0150 Horticulture 6/12 0161 Aquaculture 0170 Forestry 6/12 0174 Natural Res Mgt 6/12 7016 Career Counselor 6/12 7091 Voc Agriculture 6/12 7099 Work-Based Learn 6/12

Assignment Code		Endorsement Requirement
		7921 Ag Sci & Tech 6/12
180554	**Introduction to Environmental Science Technology (TI 1901)** A program designed to provide students with team work, critical thinking, problem solving, diagnostics, and creative designing to industry standards. Basic instrument and tool use will be provided, along with computer/instrumentation applications and applied physical and chemical science laboratory exercises.	0108 Animal Hlth/Vet Sci 6/12 0170 Forestry 6/12 0174 Natural Res Mgt 6/12 5992 Water Tech 6204 Env & Pollution 7091 Voc Agriculture 6/12 7921 Ag Sci & Tech 6/12
030030	**Introduction to Environmental Science Technology (TI 1901)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 180554** A program designed to provide students with team work, critical thinking, problem solving, diagnostics, and creative designing to industry standards. Basic instrument and tool use will be provided, along with computer/instrumentation applications and applied physical and chemical science laboratory exercises.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science 8420 Natural Science 6/9 8421 Biological Science 6/9
180556	**Environmental Science Technology Applications (TI 1902)** This course is offered for a full year and introduces students to the multitude of scenarios of hazardous material conditions which exist in the nation's waterways, soil, and air. Air and water pollution examples will be studied and models of controlling pollution or contamination will be examined.	0108 Animal Hlth/Vet Sci 6/12 0170 Forestry 6/12 0174 Natural Res Mgt 6/12 5992 Water Tech 6204 Env & Pollution 7091 Voc Agriculture 6/12 7921 Ag Sci & Tech 6/12
030036	**Environmental Science Technology Applications (TI 1902)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 180556** This course is offered for a full year and introduces students to the multitude of scenarios of hazardous material conditions which exist in the nation's waterways, soil, and air. Air and water pollution examples will be studied and models of controlling pollution or contamination will be examined.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science

Assignment Code		Endorsement Requirement
180555	**Advanced Environmental Applications/Internships (TI 1903)** Students will be involved in examining and studying existing pollution and contamination solutions in area industries. Single family, community, and industry applications of models to prevent contamination and pollution of soil, water, and air will be presented to students. On-site industry and field experiences will be an integral component of the third level of this program. Instruction also includes communication, leadership, human relations, employability, and safe and efficient work practices. This course is offered as a multiple period block of instruction for a full year.	0108 Animal Hlth/Vet Sci 6/12 0170 Forestry 6/12 0174 Natural Res Mgt 6/12 5992 Water Tech 6204 Env & Pollution 7091 Voc Agriculture 6/12 7921 Ag Sci & Tech 6/12
030037	**Advanced Environmental Applications/Internships (TI 1903)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 180555** Students will be involved in examining and studying existing pollution and contamination solutions in area industries. Single family, community, and industry applications of models to prevent contamination and pollution of soil, water, and air will be presented to students. On-site industry and field experiences will be an integral component of the third level of this program. Instruction also includes communication, leadership, human relations, employability, and safe and efficient work practices. This course is offered as a multiple period block of instruction for a full year.	**Additional Endorsement Required**: 7420 Natural Science 7421 Biological Science
189982	**Occupational & Career Experience – Environmental Science Technology (TI 9819)** A school district, community, or industry (preferred) based work experience/internship activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experience must be supervised and monitored by the teacher.	0109 Ag Business Mgmt 6/12 0110 Ag Production 6/12 0130 Ag Power Mach 6/12 5992 Water Tech 6204 Env & Pollution 7016 Career Counselor 6/12 7091 Voc Agriculture 6/12 7099 Work-Based Learn 6/12 7921 Ag Sci & Tech 6/12
19: HUMAN SERVICES ***CTE***		
192009	**Fashion Strategies—Grade 9 (FC 0106)** Fashion Strategies prepares individuals to understand the social, psychological, and physiological aspects of apparel and textiles. Focus is on the nature, acquisition, and use of apparel and textile products. Consumer and career information relative to the personal collection, design, knowledge of basic	7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12

Assignment Code		Endorsement Requirement
	construction and maintenance of apparel and textiles products, and their effect of consumer choices on the individual and family. FCCLA activities should be integrated into this course.	
192010	**Fashion/Design and Merchandising – Grades 11-12 (OF 0550)** This course introduces students to the various aspects of apparel, garment construction and textiles including selection, characteristics, care, and repair techniques. It helps to prepare students for employment in the apparel design and merchandising industry. Emphasis is on career opportunities; textile and garment design; trends and cycles; manufacturing and production; and business procedures in buying, selling, displaying, publicizing and advertising. Skill development in design, production and alteration will be included. Work-based experiences may be through a school-based enterprise or a community business partner. FCCLA activities should be integrated into this course.	7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
192012	**Fashion/Design and Merchandising-Cluster (FC 0551)** A semester only course that introduces students to the various aspects of apparel, garment construction and textiles including selection, characteristics, care, and repair techniques. Textile and garment design; trends and cycles; manufacturing and production will be covered. FCCLA activities should be integrated into this course. Grades 11 – 12	7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
192011	**Fashion/Textiles – Grades 10-12 (FC 0555)** This course introduces students to the various aspects of fashion, textiles, and garment construction including selection, characteristics, care, and repair techniques. This course reflects on fashion history, exposes students to the science of textiles, and requires students to demonstrate knowledge and skill in various applications of basic design. Students examine the social and psychological aspects of fashion, understanding how acquisition of clothing has changed over time. While Fashion and Textiles provides the preliminary essential component of an occupational sequence in Fashion Design and Merchandising, course work is beneficial to students as consumers today and in the future. This course is a prerequisite for Fashion Design and Merchandising. FCCLA activities should be integrated into this course.	7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
192050	**Housing, Interiors and Furnishings – Grades 10-12 (OF 0570)** A year-long course that integrates knowledge, skills and practices required for careers in the housing, interiors and furnishings industry. Students will evaluate housing decisions, develop and practice design techniques, and demonstrate skills through visual presentations. Instruction includes design principles, construction techniques, and materials and equipment selection. A work experience in the housing, interiors and furnishing industry or real estate is a part of this course. FCCLA activities should be integrated into this course. Interiors and Furnishings may also be taught as one semester introductory courses and will be funded as a non-occupational Family and Consumer Sciences course.	7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
192051	**Housing, Interiors and Furnishings Design-Cluster (FC 0571)**	0074 Family Cons Sci 6/12 7094 Voc Home Ec 6/12

Assignment Code		Endorsement Requirement
	A semester only course that integrates knowledge, skills and practices required for careers in the housing, interiors and furnishings industry. Instruction includes design principles, construction techniques, and materials and equipment selection. FCCLA activities should be integrated into this course. Grades 11/12	7971 Family/Consumer 6/12
190651	**Fundamentals of Cosmetology (TI 1501)** This course is an introduction to the cosmetology industry and its career opportunities. The student will have an opportunity to study the basic elements of hair design, skin and nail care. An emphasis on safety as it relates to the cosmetology industry will be studied. Topics of: History & Careers, Safety & Sanitation, Scientific Concepts, Elements of Hair Design, Hair Styling, Skin Care, and Nail Care will be discussed.	6262 Cosmetology
190652	**Cosmetology I (TI 1502)** This course will introduce students to the basic application of cosmetology services and the study of hair chemistry and biology. Students will practice basic hair design techniques and learn the importance of professionalism in the industry. Students will perform services on manikins and in mock scenarios to gain an understanding of the salon communications requirements. Topics of: Professional Image, Safety & Sanitation, Salon Related Business Skills, Physical Services, and Hair Design Techniques will be discussed.	6262 Cosmetology
190653	**Cosmetology II (TI 1503)** This is the capstone course for the cosmetology program and students will practice techniques and concepts learned in prior courses. Students will be introduced to permanent waving chemistry, hair cutting and styling. Students will practice good safety and sanitation as it applies to the cosmetology industry and will study the fundamentals of salon business practices and expectations to include: Safety & Sanitation, Scientific Concepts, Salon Related Business Skills, Physical Services, Chemical Services, Hair Designing. Students are encouraged to have industry experience in this course.	6262 Cosmetology
191530	**Early Childhood Professions (OF 0530)** A year-long course designed to prepare students to work with young children in a variety of occupational settings related to the young child. Emphasis is on employability skills, human development, care-giving techniques, lesson planning, and management skills. Work site experiences provide opportunities to observe, plan and direct activities for young children. Articulation agreements with postsecondary technical programs provide credit and a smooth transition to further education. FCCLA activities should be integrated into this course.	3020 Child Dev Care/Gu 6/12 7094 Voc Home Ed 6/12 7971 Family/Consumer 6/12
191531	**Early Childhood Professions-Cluster (FC 0532)** A semester only course designed to prepare students to work with young children in a variety of occupational settings related to the young child. Emphasis is on employability skills, human development, care-giving techniques, lesson planning, and management skills. FCCLA activities should be integrated into this course. Grades 11 – 12	3023 Food Service 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12

Assignment Code		Endorsement Requirement
191510	**Education Assistant (OF 0580)** Following an orientation period, students are assigned to a preschool, elementary or middle school classroom where they assist the teacher and have the opportunity to try out the role of a teacher. This year-long course prepares individuals for further education opportunities at the postsecondary level in paraprofessional or teacher education programs. Students work one-on-one with students who need extra help, assist with academic progress and support the classroom teacher's instructional, behavioral and management plans. Students work on developing self-management, communication, social and organizational skills needed to enter the education field. Articulation agreements with postsecondary schools provide credit and a smooth transition to further education. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
191511	**Advanced Education Assistant (OF 0585)** Advanced Education Assistant, a year-long course, is the third level of the Education Assistant program of study and it serves as a Professional-Technical School (PTS) capstone course. This PTS capstone course prepares students for gainful employment and/or entry into post-secondary education in the education and training pathway. Content provides students the opportunity to apply the marketable education related skills they have acquired by assuming greater responsibilities in the education experience. Family, Career and Community Leaders of America, FCCLA, leadership activities are an integral part of this course. Advanced Education Assistant may articulate to an education program at a postsecondary technical college.	0074 Family Cons Sci 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
191512	**Education Assistant-Cluster (FC 0586)** A semester only course offers the opportunity to become familiar with careers as a paraprofessional. Students work one-on-one with students who need extra help, assist with academic progress and support the classroom teacher's instruction. Students work on developing self-management, communication, social and organizational skills needed in this career choice. FCCLA activities should be integrated into this course. Successful completion of Parenting and Child Development and Early Childhood Professions are a requirement of this course. Grades 11/12	0074 Family Cons Sci 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
190010	**Human Services (OF 0590)** A year-long course that focuses on the functional roles and responsibilities of human services professionals and how they apply their skills to assist individuals and families in the areas of consumer services, personal services, family and community services, counseling and early childhood services. Students in human services gain knowledge and skills through coordinated workplace learning experiences such as site visits, job shadowing and internships. This course may articulate to a variety of human services programs at the postsecondary level to prepare learners for professional and technical careers.	7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12

Assignment Code		Endorsement Requirement
190011	**Human Services-Cluster (FC 0591)** A semester only course that focuses on the functional roles and responsibilities of human services professionals. Students in human services gain knowledge and skills through coordinated workplace learning experiences. FCCLA activities should be integrated into this course. Grades 11/12	7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
199980	**Occupational and Career Experience (OF 9800)** A community-based work experience organized and planned to develop knowledge and skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work or service learning experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher through a training plan. FCCLA activities should be integrated into this course.	3020 Child Dev Care 6/12 3023 Food Service 6/12 3025 Culinary Arts 6/12 7016 Career Counselor 6/12 7094 Voc Home Ec 6/12 7099 Work-Based Learn 6/12 7971 Family/Cons Sci 6/12
199981	**Cooperative Education (OF 9900)** Community-based instruction organized and planned to provide specialized skills unique to an occupation or industry following an occupational FCS class. Students are placed in businesses that provide paid on-the-job experience related to the student's primary area of study in one of the FCS occupational programs. The experience must be supervised by the teacher and students must have a training plan and agreement with the business partner. FCCLA activities should be integrated into this course.	7016 Career Counselor 6/12 7094 Voc Home Ec 6/12 7099 Work-Based Learn 6/12 7971 Family/Cons Sci 6/12
20: TRANSPORTATION, DISTRIBUTION AND LOGISTICS ***CTE***		
201010	**Power, Energy and Transportation Systems I (TE 1940)** Power/Energy and Transportation Systems I is a comprehensive course involving a multitude of applications in the transportation, power and energy fields and is designed for a broad approach to the field of study. Students enrolled in this course will explore sources, storage, transportation, consumption, control, environmental impacts, and conservation of power, energy and transportation. Land, ground effects, water, air, space and inter-modal transportation systems will be explored with practical activities emphasizing relevant scientific and engineering concepts. Activities include defining problems, designing prototypes, using computer-assisted applications, constructing models, and testing prototypes using appropriate tools such as wind tunnels and performance tests.	7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Ind Tech 6/12
201011	**Power, Energy and Transportation Systems II (TE 1941)** Power/Energy and Transportation Systems II is an advanced level comprehensive course involving a multitude of applications in the transportation, power and energy fields and is designed for a broad approach to the field of study. Students will continue to build on their knowledge of transportation systems by experimenting with increasingly complex systems and concepts. Guidance, inter-modal and urban transportation systems are explored. Students continue to seek solutions to problems through research	7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Ind Tech 6/12

Assignment Code		Endorsement Requirement
	and design, prototype development and experimentation. Students perform technological assessments on transportation topics of interest.	
201012	**Fundamentals of Mechanical Technology (TE 0200)** A course designed to provide fundamental mechanical skills to students who are considering a career in the mechanical, industrial, agricultural, or related trades. It is intended to serve as a basic course, not as an occupational preparation course. Students completing this course will be able to enter any of the advanced mechanical related courses of study and will be familiar with welding, engines, drive trains, cooling, fuel, electrical, and suspension systems.	5022 Manufacturing Tech 6/12
201101	**Small Engine Repair Level I (TI 1201)** This is the beginning level course of the small engine repair program. Small engine repair is a program designed to prepare students with skills to read service manuals; use microfiche, parts catalogs and the internet; use hand tools, power tools, and overhaul tools; service and recondition engines; troubleshoot and repair governors, speed controls, lubrication, ignition, fuel, power transfer, cooling exhaust, and starting systems. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe, efficient work practices. A course designed to introduce students to basic small engine repair. This will involve exploration, dis-assembly, and minor repairs of various small engine equipment components, and the use of tools and measurement devices. A study of two and four stroke cycles, cooling, and lubrication systems will be covered.	6310 Sm Engine Repair
201102	**Small Engine Repair Level II (TI 1202)** This is the second course in a three course program. A course designed to provide students with small engine repair applications. Students will be expected to diagnose and repair common equipment failures and make proper recommendations for maintenance of equipment to customers.	6310 Sm Engine Repair
201103	**Small Engine Repair Level III (TI 1203)** This is the third course in a three course program. A course designed to provide student with team work, critical thinking, problem solving, diagnostics, and repairing to industry standards. Students should be familiar with all types of equipment, engines, and power trains associated with small engines This will include lawn and garden equipment as well as recreational equipment such a outboard engines, snowmobiles, motorcycles, watercraft, and industrial applications.	6310 Sm Engine Repair
201160	**Auto Body (Collision Repair) Technology Level I (TI 0101)** This is the beginning level course of the Auto body (collision repair) technology program. Auto body (collision repair) technology is a program designed to prepare students with skills that include basic trade skills, refinishing, sheet metal repair, welding, thermoplastic and fiberglass repair, painting, electrical systems, trim accessories and hardware, body, frame and suspension systems, estimating and preparation for delivery, and miscellaneous services. The course also includes training in applied communications, and employability skills including leadership, human relations, problem solving, critical thinking, and safe	6031 Auto Body Repair 6/12

Assignment Code		Endorsement Requirement
	efficient work practices. A course designed to introduce students to basic auto body (collision repair) technology.	
201161	**Auto Body (Collision Repair) Technology Level II (TI 0102)** This is the second course in a three course program. A course designed to provide students with auto body (collision repair) technology applications including dent repair, alignment, and painting.	6031 Auto Body Repair 6/12
201162	**Auto Body (Collision Repair) Technology Level III (TI 0103)** This is the third course in a three course program. A course designed to provide student with team work, critical thinking, problem solving, diagnostics, and repairing to industry standards. Students will be given advanced level training in all aspects of collision repair including frame, body, electrical, plastics, painting, and finishing.	6031 Auto Body Repair 6/12
209984	**Occupational & Career Experience – Auto Body Technology (TI 9801)** A school district, community, or industry (preferred) based work experience/internship activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experience must be supervised and monitored by the teacher.	6031 Auto Body Repair 6/12 7016 Career Counselor 6/12 7099 Work-Based Learn 6/12
201030	**Automotive Technology Level I (TI 0201)** This is the beginning level course of the Automotive technology program. Automotive technology is a program designed to prepare students with skills that include servicing and maintenance of all types of automobiles. Automotive technology includes instruction in the diagnosis of malfunctions in and repair of engines; engine performance and controls and emission controls, fuel, electrical, cooling, and brake systems; and drive train and suspension systems. Also instruction is given in the adjustment, maintenance, replacement, and repair of individual components and systems. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. A course designed to introduce students to basic automotive technology.	6032 Auto Technology 6/12
201031	**Automotive Technology Level II (TI 0202)** This is the second course in a three course program. A course designed to provide students with automotive technology applications.	6032 Auto Technology 6/12
201032	**Automotive Technology Level III (TI 0203)** This is the third course in a three course program. A course designed to provide student with team work, critical thinking, problem solving, diagnostics, and repairing to industry standards. Students are provided advanced level instruction according to NATEF Standards.	6032 Auto Technology 6/12
209985	**Occupational & Career Experience – Automotive Technology (TI 9802)** A school district, community, or industry (preferred) based work experience/internship activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may	6032 Auto Technology 6/12 7016 Career Counselor 6/12

Assignment Code		Endorsement Requirement
	encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experience must be supervised and monitored by the teacher.	7099 Work-Based Learn 6/12
201070	**Heavy Equipment/Diesel Level I (TI 0601)** This is the beginning level course of the diesel technology program. Heavy equipment/diesel is a program designed to prepare students with skills for the field maintenance of heavy equipment, and in general maintenance and overhaul of such equipment. Heavy equipment/diesel includes instruction in inspection, maintenance, and repair of tracks, wheels, brakes, operating controls, pneumatic and hydraulic systems, electrical circuitry, engines, and in techniques of welding and brazing. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. A course designed to introduce students to basic heavy equipment/diesel applications.	6120 Diesel Engine 6/12
201071	**Heavy Equipment/Diesel Level II (TI 0602)** This is the second course in a three course program. A course designed to provide students with heavy equipment/diesel applications.	6120 Diesel Engine 6/12
201072	**Heavy Equipment/Diesel Level III (TI 0603)** This is the third course in a three course program. A course designed to provide students with team work, critical thinking, problem solving, diagnostics, and repairing to industry standards.	6120 Diesel Engine 6/12
209986	**Occupational & Career Experience – Heavy Equipment/Diesel (TI 9806)** A school district, community, or industry (preferred) based work experience/internship activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experience must be supervised and monitored by the teacher.	6120 Diesel Engine 6/12 7016 Career Counselor 6/12 7099 Work-Based Learn 6/12
21: ENGINEERING AND TECHNOLOGY ***CTE**		
210010	**Principles of Engineering (TE 1501)** A course that helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes helps students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Ind Tech 6/12
210011	**Technological Design (TE 2000)** In Engineering Design, engineering scope, content, and professional practices are presented through practical applications. Students in engineering teams apply technology, science, and mathematics	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12

Assignment Code		Endorsement Requirement
	concepts and skills to solve engineering design problems and innovate designs. Students research, develop, test, and analyze engineering designs using criteria such as design effectiveness, public safety, human factors, and ethics. This course is the capstone experience for students who are interested in technology, innovation, design and engineering.	5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210012	**Systems & Cycles (TE 2100)** Systems and Cycles course is designed to introduce students to basic technological principles. These topics include: mechanisms, robotics, pneumatics, programming, materials science, modeling, programming, careers, analog and digital electronics, core concepts of technology, advanced mechanisms, and the engineering design process. Each quarter ends with a hands-on challenge that integrates the themes of the quarter.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210013	**Introduction to Engineering (TE 2200)** This STEM course is a basic introduction to engineering for all students. Students who complete this course will learn the concepts necessary in order to develop their ideas into solutions that will improve our lives. Exciting hands-on learning activities like data comparison of heart rates, rating consumer products, destructive testing and 3D solid modeling apply math, science, history and English content from other courses in a STEM experience.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210015	**Robotics Engineering (TE 2300)** Engineering Design builds foundational design skills for students by starting with the most basic sketching applications and ends with advanced assemblies and automated manufacturing machining projects. This rigorous two year program fits at a high school level and at the community and technical college level. The DFEA training program includes instructional videos on each facet of design and manufacturing and culminates with challenging projects that students keep in a portfolio to present to employers or admissions to engineering schools.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7981 Technology Ed 6/12 7980 Industrial Arts 6/12 7982 Industrial Tech 6/12
210060	**Introduction to Engineering Design (TE 1502)** A course that teaches problem-solving skills using a design development process. Models of product solutions are created, analyzed and communicated using solid modeling computer design software.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210061	**Digital Electronics (TE 1503)** A course in applied logic that encompasses the application of electronic circuits and devices. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices.	5014 Gen Engineering 6/12 5018 Electronic Tech 5019 Electromechanical Tech 5025 Semiconduct

Assignment Code		Endorsement Requirement
		5112 Instrumentation Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210062	**Engineering Design (TE 2020)** Engineering Design will offer students the opportunity to understand and apply knowledge and skills required to create and transform ideas and concepts into a product that satisfies specific customer requirements. Students will experience design engineering in the creation, synthesis, iteration, and presentation of design solutions. Students will coordinate and interact in authentic ways to produce the form, fit, and function documentation with appropriate models to completely define a product. This course will maintain a focus on how engineers apply their creativity, resourcefulness, mathematical, scientific, and technical knowledge and skills in the creation or refinement of technological products/systems. A key approach will be the employment of a sophisticated, sequential, and iterative design and development process to solve authentic engineering tasks/problems. Students will be challenged to participate as members of engineering teams within a typical business organization. Independent and group work will be reflective of authentic engineering projects found in the designed world. Student performance within this structure will be assessed in numerous and diverse ways. It is important to note that measurement of student performance will be reflective of actual professional engineering evaluative processes currently used in this career field. Both independent and collaborative work will be carefully analyzed as students perform within an authentic engineering enterprise environment. The following major 'topics' or 'chapters' will be included to organize instruction of appropriate standards and benchmarks and reflect contemporary engineering industry practices: • Principles of Design • Engineering Resources • Engineering Design Process • Project Management	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210063	**PCS Engineering Design (TE 2120)** PCS Engineering Design caps the themes begun in the previous courses. Topics include: advanced mechanisms, MPR programming, advanced CAD, careers, programming in AVR Studio, the engineer design process, and core engineering technologies. Each quarter ends with a hands-on challenge that integrates the themes of the quarter, and the final challenge is a capstone project that will ask students to apply their knowledge to an engineering project.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210090	**Applications of Technology (TE 2110)** Applications of Technology advances the themes begun in Systems and Cycles. Topics include: digital video production, mechanisms, motor control, robotics, pneumatics, programming, careers, energy technologies, advanced mechanisms, the engineering design process, and a study of the consequences of technology. Each quarter ends with a hands-on challenge that integrates the themes of the quarter.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12

Assignment Code		Endorsement Requirement
210100	**Computer Integrated Manufacturing (TE 1510)** A course that applies principles of robotics and automation. The course builds on computer solid modeling skills developed in Introduction to Engineering Design. Students use CNC equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing, and design analysis are included.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5025 Semiconduct 5112 Instrumentation Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210101	**Design for Manufacturing (TE 2230)** Design for Manufacturing teaches general manufacturing techniques. Calculations and analysis tools are used to design and redesign student's concepts. This course applies and integrates ideas that have been generated in other courses and generates life size models and prototypes. Industry standard software and machinery are used to manufacture student's ideas with verification programs to determine the ability for a plan to be mass produced. Certification will advance students toward continuing education and career opportunities in the fields of engineering, design and machine operation.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210102	**Robotics & Automation (TE 2310)** Machining made easy! CAMWorks is an easy to use intuitive solids based CAM solution that helps manufacturers increase productivity and profitability through best-in-class technologies and adaptable automation tools that maximize machining efficiencies. CAMWorks seamless integration within SolidWorks allows for instant changes from the part to the model and thereby eliminates time consuming CAM system rework due to design updates. CAMWorks thus enabling true associative machining. CAMWorks helps manufacturers across aerospace, automotive, electronics and medical industries optimize and evolve their automation process.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210150	**Civil Engineering and Architecture (TE 1520)** This course provides an overview of the fields of Civil Engineering and Architecture, while emphasizing the interrelationship and dependence of both fields on each other. Students use state of the art software to solve real world problems and communicate solutions to hands-on projects and activities. The course covers topics such as: the roles of Civil Engineers and Architects; project planning; site planning; building design; project documentation; and, presentation.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210064	**Engineering Design and Development (TE 1525)** An engineering research course in which students work in teams to research, design and construct a solution to an open-ended engineering problem. Students apply principles developed in the four preceding courses and are guided by a community mentor. They must present progress reports, submit a final written report and defend their solutions to a panel of outside reviewers at the end of the school year.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12

Assignment Code		Endorsement Requirement
210152	**Aerospace Engineering (TE 1526)** Through hands-on engineering projects developed with NASA, students learn about aerodynamics, astronautics, space-life sciences, and systems engineering (which includes the study of intelligent vehicles like the Mars rovers Spirit and Opportunity).	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210151	**Biotechnical Engineering (TE 1527)** Relevant projects from the diverse fields of bio-technology, bio-engineering, bio-medical engineering, and bio-molecular engineering enable students to apply and concurrently develop secondary-level knowledge and skills in biology, physics, technology, and mathematics.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210512	**Advanced Design Applications (TE 2010)** Advanced Design Applications consists of four units including Manufacturing, Energy and Power, Construction and Transportation. The Manufacturing unit examines the advances that maintain manufacturing efficiency, how human consumption affects manufacturing, how manufacturing affects the standard of living of various peoples, and how processing and changing raw materials can produce more desirable products. The Construction unit examines a number of the factors influencing the design and construction of permanent and semi-permanent structures, the practices related to construction maintenance, alteration, and renovation, and the functions of the primary systems installed in those structures. The Energy & Power unit explores the relationship between energy and power technologies and all other technologies, and how modern energy and power systems impact cultures, societies, and the environment. It also offers an examination of how energy and power systems can be made more efficient and how they may be utilized in problem solving. The Transportation unit examines the complex networks of interconnected subsystems that each transportation system comprises and the roles of these components in the overall functional process of the system. It also analyzes of the improvements and the impacts of transportation technologies on the environment, society, and culture.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210520	**Fundamentals of Engineering Technology (TE 1905)** Fundamentals of Technology is a prerequisite course for most of the Technology Education systems. The computer and other electronic devices are necessary for teaching an understanding of contemporary communications, manufacturing, power/energy/ transportation and construction systems. An engineering focus of problem solving requires students to define a given problem, conduct appropriate research, develop solutions to the problem, construct prototypes, and evaluate their work. This course is designed to introduce students to those principles and skills used in subsequent technology courses. Students learn to sketch solutions to problems, create technical drawings and presentations, build models, and apply creative problem solving methods. Emphasis is placed on accessing and	5014 Gen Engineering 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12

Assignment Code		Endorsement Requirement
	communicating information, using simple and complex tools in a safe manner, and increasing the students' awareness of the historical and contemporary implications of technology. Students are introduced to computer-aided graphics, design software, and computer-aided manufacturing. Students develop an understanding of the tools, techniques, and processes of technology using design principles, computers, problem solving and model making.	
210092	**Introduction to Robotics (TE 1933)** This is an introductory course in the design, use and technology of robots commonly found in industrial and consumer applications. Students will design model robots using mechanical devices and explore computer controlled applications. Applications of specialized materials and composites will be studied to determine structural and durability characteristics. Electronic components and electro-mechanical devices will be studied and used in model development. Basic programming languages will be introduced.	5014 Gen Engineering 6/12 5018 Electronics Tec 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
210091	**Robotics Applications (TE 1934)** Advanced level design and applications of robots in industrial and consumer markets will be explored. Students will design multi-level robotic applications for use in manufacturing, transportation, storage and handling, chemical, biological and other industrial areas. Sophisticated electronic circuitry and advanced type materials and composites will be used in the design and construction of working models. Student will program industrial-type robots and design manufacturing models that will distinguish between materials, shapes, quality, and other characteristics of products to be sorted and stored. Transportation models and consumer robots may be designed and studied as an alternative to manufacturing applications.	5014 Gen Engineering 6/12 5018 Electronics Tec 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
130028	**Design for Manufacturing (TE 2220)** Design for Manufacturing teaches general manufacturing techniques. Calculations and analysis tools are used to design and redesign student's concepts. This course applies and integrates ideas that have been generated in other courses and generates life size models and prototypes. Industry standard software and machinery are used to manufacture student's ideas with verification programs to determine the ability for a plan to be mass produced. Certification will advance students toward continuing education and career opportunities in the fields of engineering, design and machine operation.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
211020	**Introduction to Drafting/Design Technology (TE 0220)** An entry level course in Communications Systems which addresses the concepts needed to transfer ideas into easily understood graphic languages, designs or drawings. The use of drawing tools, including mechanical devices and computer software, are essential for student studies. Each of the major areas of drafting and design should be explored on an introductory level.	5014 Gen Engineering 6/12 6130 Drafting 6/12 6131 Architectural Draft 6/12 6132 Mech Drafting 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12 7988 Drafting 6/12

Assignment Code		Endorsement Requirement
211021	**Introduction to Drafting Level I (TI 0301)** A course designed to introduce students to basic concepts in drafting, whether by board or computer-aided.	5014 Gen Engineering 6/12 6130 Drafting 6/12 6131 Architectural Draft 6/12 6132 Mech Drafting 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12 7988 Drafting 6/12
211022	**Introduction to Drafting Level II (TI 0302)** A course designed to provide students with architectural drafting applications.	5014 Gen Engineering 6/12 6130 Drafting 6/12 6131 Architectural Draft 6/12 6132 Mech Drafting 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12 7988 Drafting 6/12
211023	**Introduction to Drafting Level III (TI 0303)** A course designed to provide student with team work, critical thinking, problem solving, diagnostics and repairing/developing to industry standards.	5014 Gen Engineering 6/12 6130 Drafting 6/12 6131 Architectural Draft 6/12 6132 Mech Drafting 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12 7988 Drafting 6/12
211024	**Drafting – 3D Modeling/Senior Design (TI 0904)** Course designed to give the student experience in 3D modeling and in the knowledge, skills, and attitudes necessary to succeed at an independent design project.	5014 Gen Engineering 6/12 6130 Drafting 6/12 6131 Architectural Draft 6/12 6132 Mech Drafting 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12 7988 Drafting 6/12

Assignment Code		Endorsement Requirement
211030	**Introduction to Architectural Design (TE 0224)** An entry level course in Communications Systems designed to prepare students with basic skills that support the fields of architectural development. Architectural drawings include assignments that relate to residential, light commercial, marine and aerospace-related structures. Course must include the use of computer applications.	5014 Gen Engineering 6/12 6130 Drafting 6/12 6131 Architectural Draft 6/12 6132 Mech Drafting 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12 7988 Drafting 6/12
211031	**Architectural Design (TE 2210)** Sustainable design is the philosophy of designing physical objects, the built environment and services to comply with the principles of economic, social and ecological sustainability. ArchiCAD is the most powerful BIM solution available for architects and now features EcoDesigner. EcoDesigner provides invaluable feedback on the energy performance of buildings so designers can make educated decisions on energy efficiencies and conformity to regulations.	5014 Gen Engineering 6/12 6130 Drafting 6/12 6131 Architectural Draft 6/12 6132 Mech Drafting 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12 7988 Drafting 6/12
211060	**3D Solid Modeling (TE 2201)** Learning 3D design is an interactive process. Students learn best when they can explore the practical applications of the concepts that they learn. This STEM course has many activities and exercises that enable students to put design concepts into practice. Students create their ideas such as artificial heart components, extreme sports equipment, hip replacement parts, robotic arm components, musical instruments and their parts as well as many others. Ideas become reality in this course.	5014 Gen Engineering 6/12 6130 Drafting 6/12 6131 Architectural Draft 6/12 6132 Mech Drafting 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12 7988 Drafting 6/12
211061	**Mechanical Drafting Level II (TI 0902)** A course designed to provide students with mechanical drafting applications.	5014 Gen Engineering 6/12 6130 Drafting 6/12 6132 Mech Drafting 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12 7988 Drafting 6/12

Assignment Code		Endorsement Requirement
211062	**Mechanical Drafting Level III (TI 0903)** A course designed to provide student with team work, critical thinking, problem solving, diagnostics, and repairing/developing to industry standards.	5014 Gen Engineering 6/12 6130 Drafting 6/12 6132 Mech Drafting 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12 7988 Drafting 6/12
211063	**Introduction to Mechanical Drafting/Design (TE 0222)** A course in Manufacturing Systems designed to develop students' basic entry level skills in the development of multi-view and pictorial drawings. Instruction includes work on detailed drawings, gears and cams, sectioning, threads/fasteners and piping. ANSI standards will be incorporated into each assignment. Course must include the use of computer applications.	5014 Gen Engineering 6/12 6130 Drafting 6/12 6132 Mech Drafting 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12 7988 Drafting 6/12
211070	**Introduction to Computer Aided Drafting/Design (TE 0303)** An entry level course in Communications Systems designed to provide students with an understanding of the operation and features of a current industry standard computer aided drafting/design (CADD) system. Emphasis is placed on the application of computer software in solving basic architectural, structural, electronic or mechanical drafting problems. The purpose of the course is to assist individuals in making meaningful occupational and educational choices. Basic technical information and laboratory experiences directly related to the operation and application of computer software is provided in a hands-on approach.	5014 Gen Engineering 6/12 6130 Drafting 6/12 6131 Architectural Draft 6/12 6132 Mech Drafting 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12 7988 Drafting 6/12
211071	**Sustainable Methods (TE 2211)** Sustainable Design will account for an estimated 4 million jobs in the United States by 2012. Green Regulation is impacting and will continue to impact design decisions as it relates to energy performance, material selection and manufacturer location. Preparation for green and sustainable design careers is provided through a design suite of resources used by leading industry professionals the world over for building and manufacturing industries in green and sustainable professions.	5014 Gen Engineering 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
219980	**Occupational & Career Experience (TE 9800)** A community based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be monitored by the teacher.	5014 Gen Engineering 6/12 6130 Drafting 6/12 6131 Architectural Draft 6/12 6132 Mech Drafting 6/12 7016 Career Counselor 6/12

Assignment Code		Endorsement Requirement
		7099 Work-Based Learn 6/12 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12 7988 Drafting 6/12
219981	**Principles of Engineering (TE 2240)** This STEM course makes a contribution to the curriculum by providing opportunities for students and teachers to link content together and apply it to solve problems. More and more jobs demand advanced skills, requiring that people be able to learn, reason, think creatively, make decisions, and solve problems. An understanding of science, technology, engineering and math and their methods contribute in an essential way to these skills. Principles of Engineering is a team based advanced course designed for most students. Students who complete this course will engage in real world case studies and learning activities that focus on the engineering process and making the world a better place to live and work in.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
219983	**Engineering Technology Design & Development (TE 2320)** An engineering research course in which students work in teams to research, design and construct a solution to an open-ended engineering problem. Students apply principles developed in the four preceding courses and are guided by a community mentor. They must present progress reports, submit a final written report and defend their solutions to a panel of outside reviewers at the end of the school year. The EDD course allows students to apply all the skills and knowledge learned in previous Design for Engineering courses. The use of 3D design software helps students design solutions to the problem their team has chosen. This course also engages students in time management and teamwork skills, a valuable set for students in the future. This course is designed for 12th grade students.	5014 Gen Engineering 6/12 5015 Princ of Engineer 6/12 5016 Civil Engineering Tech 7980 Industrial Arts 6/12 7981 Technology Ed 6/12 7982 Industrial Tech 6/12
22: MISCELLANEOUS		
220000	**Prep (PR 0001)**	Valid Idaho Certificate
221510	**Strategies for Success (BT 0101) (MT 0101) (FC 0100)** A course of study which helps to orient students to the world of work and school. Ideally, this course is offered in the ninth and tenth grades as it addresses the needs of students to develop good work and study habits, helps students to prepare portfolios, learn about school resources, develop career plans, start preparing for college and develop solid interpersonal skills, with an emphasis on communication and building self-esteem.	0074 Family Cons Sci 6/12 7016 Career Counselor 7099 Work-Based Learn 6/12 7094 Voc Home Ec 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12 7971 Family/Consumer 6/12
221515	**Family and Consumer Sciences (FCS) Professions (FC 0303)** An introduction to professional Family and Consumer Sciences related careers, particularly teaching. Course will include career expectations, career options, balancing work and family, and a variety	0074 Family Cons Sci 6/12 7094 Voc Home Ec 6/12

Assignment Code		Endorsement Requirement
	professional publications and interviews. Course may align with postsecondary institution requirements. FCCLA activities should be integrated into this course. Grades 11-12	7971 Family/Consumer Sci
722010	**Exploratory Family and Consumer Sciences (FC 0020)** A course designed to help early adolescents explore the areas of personal development, relationships, personal resources, child care, personal living space, appearance, sewing, and foods for wellness. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 3020 Child Dev Care/Gu 6/12 7094 Voc Home Ec 6/12 7970 General Home Ec 6/12 7971 Family/Consumer Sci
722060	**Young Living (FC 0030)** A course designed to be offered for the young adolescent. The emphasis of the course will be to develop knowledge and skills in the areas of goal setting, decision-making, personal development, careers, clothing, relationships, personal finance, personal living space, foods and wellness. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 7094 Voc Home Ec 6/12 7935 Business Ed 6/12 7970 Gen Home Ec 6/12 7971 Family/Consum 6/12
722061	**Life and Careers Exploration (FC 0040)** An introductory interdisciplinary offering that allows young adolescents to explore a variety of occupations in Idaho's Career Clusters. The content includes basic knowledge, skills and attitudes needed for success in all occupations. Students will develop technology skills, explore career interests, the world of work, human relations, health and safety, and process skills. It is recommended that students have an opportunity to observe or volunteer in work and community settings. Students who complete this experience will be better prepared to develop a four-year student learning plan. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 7094 Voc Home Ec 6/12 7970 Gen Home Ec 6/12 7971 Family/Consum 6/12
222060	**Teen Living – Grades 9-10 (FC 0101)** The emphasis of this course is to build on skills in the areas of personal development, relationships, human and family development, clothing, resource management, personal living space, nutrition and wellness, career choices and leadership skills. This course focuses on the student's role and responsibility as a teen participating in the family, school and community. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 3020 Child Dev Care/Gu 6/12 3023 Food Service 6/12 3025 Culinary Arts 6/12 7094 Voc Home Ec 6/12 7970 Gen Home Ec 6/12 7971 Family/Consum 6/12
222020	**Nutrition & Foods – Grades 10-12 (FC 0201)** A course designed to provide students with an understanding of food's role in society, instruction in how to plan and prepare meals, wellness and personal lifestyle. Content includes food safety and sanitation, proper use of equipment and utensils, meal management skills, nutrition, food purchasing, preparation techniques and careers in related fields. This course is a prerequisite for Food Production, Management and Services; Hospitality Services/Tourism. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 3023 Food Service 6/12 3025 Culinary Arts 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12

Assignment Code		Endorsement Requirement
222041	**Parenting & Child Development (FC 0202)** This course emphasizes parenting choices and parenting decisions. Content includes stages of prenatal development and the physical, intellectual, social and emotional development of the infant and young child. This course is designed to strengthen parenting and guidance skills, positive family relationships, safety, and health practices. Students will learn to evaluate child care services, and to explore careers related to young children. This course is a prerequisite for Early Childhood Professions and Education Assistant. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 3020 Child Dev Care/Gu 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
222090	**Career & Personal Development (FC 0204)** The concepts included in this course provide the foundations for all programs of study. This course helps students identify and evaluate personal goals, priorities, aptitudes and interests with the goal of making informed decisions about their careers. The focus is on the practical aspects of investigating, pursuing, achieving, and keeping employment in a global society. The curriculum emphasizes communication, employability skills, leadership and balancing work and family. This course is a prerequisite for Human Services and Entrepreneurship. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
221010	**Leadership – Grades 9-12 (FC 0205)** This leadership course is designed to strengthen students' personal and group leadership skills. It provides students an opportunity to explore character traits and characteristics that are needed to become an effective leader. Students practice their leadership skills through community service projects and a variety of leadership activities through the FCCLA student organization. This course covers topics such as public speaking, effective communication, human relations, parliamentary laws and procedures, organization and management and group dynamics.	0074 Family Cons Sci 6/12 7094 Voc Home Ec 6/12 7971 Family/Consum 6/12
222100	**Personal and Family Finance/Economics – Grades 11-12 (FC 0207)** This course provides an understanding of basic economic concepts, use of economic reasoning skills, the impact of economics systems and the role of the government. It provides students with financial skills for personal and family well-being, financial services, responsible use of credit, consumer decisions, saving and investing, insurance, spending patterns, contracts and budget planning. This course is a prerequisite for Human Services. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer Sci
042011	**Personal and Family Finance/Economics – Grades 11-12 (FC 0207)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 222100** This course provides an understanding of basic economic concepts, use of economic reasoning skills, the impact of economics systems and the role of the government. It provides students with financial skills for personal and family well-being, financial services, responsible use of credit, consumer decisions, saving	**Additional Endorsement Required:** 7200 Social Studies 6/12 7228 Economics 6/12

Assignment Code		Endorsement Requirement
	and investing, insurance, spending patterns, contracts and budget planning. Idaho Content Standards for Economics and Personal Finance have been included in this course. This course is a prerequisite for Human Services. FCCLA activities should be integrated into this course.	
222070	**Adult Living – Grades 11-12 (FC 0301)** A course designed to focus on the young adult as an individual preparing for responsibilities in the home, family, community and work environment. The student will gain relationship skills and life management skills, utilize problem-solving methods, management processes, employment, and leadership skills. Adult Living is designed as two independent but sequential semesters/ trimesters with one semester focusing on independent living skills and one semester on building and maintaining healthy interpersonal relationship among family members and other members of society. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
222072	**FCS Professions (FC 0303)** An introduction to professional Family and Consumer Sciences related careers, particularly teaching. Course will include career expectations, career options, balancing work and family, and a variety of professional publications and interviews. Course may align with postsecondary institution requirements. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
222030	**Food Science and Nutrition – Grades 10-12 (FC 0551)** The focus of this course is on the scientific and chemical basis of nutrition, preparation, preservation and processing of food products. Students will study the composition, structure, and properties of foods and the chemical changes that occur during the processing, storage, preparation and consumption of food. Scientific methods are used to conduct lab experiments with food. Students with interest/career plans in food science or dietetics will benefit from this course. Students may earn a lab science credit for when the course is taught by a Family and Consumer Sciences instructor who has a Natural Science endorsement. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 3023 Food Service 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
030512	**Food Science and Nutrition – Grades 10-12 (FC 0551)** **FOR HIGH SCHOOL GRADUATION CREDIT ONLY – HIGH SCHOOL CONTENT STANDARDS MUST BE IMBEDDED AND THE TEACHER MUST DEMONSTRATE CONTENT MASTERY AT THE SECONDARY LEVEL—OTHERWISE USE ASSIGNMENT CODE 222030** The focus of this course is on the scientific and chemical basis of nutrition, preparation, preservation and processing of food products. Students will study the composition, structure, and properties of foods and the chemical changes that occur during the processing, storage, preparation and consumption of food. Scientific methods are used to conduct lab experiments with food. Students with interest/career plans in food science or dietetics will benefit from this course. This course is a prerequisite for Food Production, Management and Service. FCCLA activities should be integrated into this course.	**Additional Endorsement Required:** 7420 Natural Science 6/12 **OR** 7421 Biological Science

Assignment Code		Endorsement Requirement
222040	**Teen Parenting – Grades 9-12 (FC0501)** A course designed to help pregnant and parenting teens with their unique roles and responsibilities. Emphasis is on pregnancy, pre-natal development, postnatal care, health and well-being of young parents, early childhood development, nurturing and guidance, decision making and goal setting, stress management, child nutrition, health and safety, parenting resources, and child care services. The course may also include academic assistance, career exploration and financial management. A guided laboratory experience in working with infants and young children is highly recommended. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 3020 Child Dev Care/Gu 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
221511	**Career Exploration and Employment Preparation (OT 0100)** An introductory course designed to assist students in establishing career and educational direction, and to prepare them for a work-based learning experience suited to their strengths and motivations.	0074 Family Cons Sci 6/12 7016 Career Counselor 7094 Voc Home Ec 6/12 7099 Work-Based Learn 6/12 7935 Business Ed 6/12 7960 Marketing Ed 6/12 7971 Family/Consumer 6/12
222080	**Family Health and Wellness – Grades 10-12 (FC0302)** A course designed to prepare individuals with the basic principles of physical, emotional, social and mental well-being. Key content includes personal health and wellness, (nutrition, mental health, stress management, drug/alcohol abuse prevention, disease prevention and first aid) healthy growth and development, family health issues; managing health resources; careers in the health field; and community, national and world health issues. This course is a prerequisite for Human Services. FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 3020 Child Dev Care/Gu 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
229980	**Work-Based Learning Experience I (OT 0110)** This is the first semester of a student's work-based learning experience at an approved worksite. Technical instruction is provided by a community worksite mentor/trainer and coordinated by a certified work-based learning coordinator. Training plans and agreements are required. All students must have training plans developed from an occupational training outline that meets current industry standards. The use of VTECS Connect software for the preparation of these training plans and the tracking of the work-based learning experience is a requirement.	7016 Career Counselor 6/12 7093 Business Tech Ed 6/12 7099 Work-Based Learn 6/12
229981	**Work-Based Learning Experience II (OT 0120)** This is the second semester of a work-based learning experience. Training plans and agreements are required. All students must have training plans developed from an occupational training outline that meets current industry standards. The use of VTECS Connect software for the preparation of these training plans and the tracking of the work-based learning experience is a requirement.	7016 Career Counselor 6/12 7093 Business Tech Ed 6/12 7099 Work-Based Learn 6/12
229982	**Work-Based Learning Experience III (OT 0130)** This is the third semester of a work-based learning experience at an approved worksite. Training plans and agreements are required. All students must have training plans developed from an occupational	7016 Career Counselor 6/12 7093 Business Tech Ed 6/12

Assignment Code		Endorsement Requirement
	training outline that meets current industry standards. The use of VTECS Connect software for the preparation of these training plans and the tracking of the work-based learning experience is a requirement.	7099 Work-Based Learn 6/12
229983	**Work-Based Learning Experience IV (OT 0140)** This is the fourth semester of a work-based learning experience at an approved worksite. Training plans and agreements are required. All students must have training plans developed from an occupational training outline that meets current industry standards. Work-Based Learning Experience V should be taken during the second semester of the student's Senior year and should include a work-based learning project completed by the student. The use of VTECS Connect software for the preparation of these training plans and the tracking of the work-based learning experience is a requirement.	7016 Career Counselor 6/12 7093 Business Tech Ed 6/12 7099 Work-Based Learn 6/12
229984	**Entrepreneurship Experience (OF0520)** A year-long course preparing individuals for employment or entrepreneurship in a variety of occupations utilizing knowledge and skills related to family and consumer sciences content. Skill development is achieved through the classroom laboratory, and a school-based enterprise or cooperative work experience. Classroom instruction includes developing a business plan, marketing, and workplace knowledge and skills. (Articulation agreements with postsecondary technical programs provide credit and a smooth transition to further education.) FCCLA activities should be integrated into this course.	0074 Family Cons Sci 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
229985	**Entrepreneurship-FCS (FC 0521) (Cluster)** A semester only course preparing individuals for employment or entrepreneurship in a variety of occupations utilizing knowledge and skills related to family and consumer sciences content. Skill development is achieved through the classroom laboratory, and a school-based enterprise. FCCLA activities should be integrated into this course. Grades 11/12	0074 Family Cons Sci 6/12 7094 Voc Home Ec 6/12 7971 Family/Consumer 6/12
4X: ADMINISTRATION – CERTIFIED		
460600	**Career & Technical Education Administrator** Coordinates, manages or directs services within a career technical education program.	0055 CTE Administrator