



8R001S College and Career Readiness (R)

1 Semester

Gr: 7-8

Prerequisite: None

Description: This course will provide the students with the opportunity to use decision-making and problem solving skills for college and career planning. Students will explore valid, reliable educational and career information to learn more about themselves and their interests and abilities. Exploring Careers is designed to guide the students through the process of investigation and in the development of a college and career achievement plan. Students will use interest inventory software and other tools to explore areas of personal interest. Students will use this information to explore educational requirements for a variety of chosen career paths. This course is not offered for high school credit.

8R020S Investigating Careers - Architecture and Construction (R)

1 Semester

Gr: 7-8

Prerequisite: None

Description: The goal of this course is to create a culture of high expectation and continuous improvement that provides middle school students with a foundation for success in high school, future studies, and careers. This course provides an overview to the various fields of architecture, interior design, construction science, and construction technology. Students will explore college and career planning within the Architecture and Construction cluster. The students research labor market information, learn job-seeking skills, and create documents required for employment. Students use self-knowledge to explore and set realistic goals. Career exploration knowledge and skills will be offered in a variety of instructional arrangements.

8R030S Investigating Careers - Arts, A/V Technology & Communication (R)

1 Semester

Gr: 7-8

Prerequisite: None

Description: The goal of this course is to create a culture of high expectation and continuous improvement that provides middle school students with a foundation for success in high school, future studies, and careers. This course provides an overview to the various fields of creative and computer technology applications. Students will explore college and career planning within the Arts, A/V Technology & Communications cluster. The students research labor market information, learn job-seeking skills, and create documents required for employment. Students use self-knowledge to explore and set realistic goals. Career exploration knowledge and skills will be offered in a variety of instructional arrangements.

8R035S Investigating Careers – (MST) Arts, A/V Technology & Communications (H) 1 Semester Gr: 7-8

MST

Prerequisite: None

Description: (Magnet course offered at Jackson Technology Center only) This Arts, A/V Technology & Communications class will provide an advanced Level II of instruction and activities beyond that of course #8887. Please see course description for #8887. Additional modular instruction will be provided in the areas of Desktop Publishing, Digital Photography, Digital Video Editing, Radio Broadcasting, Video Production, and Web Development.

Note: All Courses may not be offered on every campus.

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8R041S Investigating Careers - Business, Finance and Marketing **1 Semester** **Gr: 7-8**

Prerequisite: None

Description: The goal of this course is to create a culture of high expectation and continuous improvement that provides middle school students with a foundation for success in high school, future studies, and careers. Students explore college and career planning within specific career cluster(s). The students research labor market information, learn job-seeking skills, and create documents required for employment. Students use self-knowledge to explore and set realistic goals. Districts have the flexibility of offering career exploration knowledge and skills in a variety of instructional arrangements.

8R120S Investigating Careers - Manufacturing (R) **1 Semester** **Gr: 7-8**

Prerequisite: None

Description: The goal of this course is to create a culture of high expectation and continuous improvement that provides middle school students with a foundation for success in high school, future studies, and careers. This course provides an overview to the various fields of, design, production, and assessment of products, services, and systems and how those knowledge and skills are applied to manufacturing applications and computer and technology applications. Specific areas of manufacturing to be explored include Conceptual and Applied Physics, Design and Construction, Engineering and Stress Analysis, Exploratory Electronics, and CNC Lathe/Mill. Students will explore college and career planning within the Manufacturing cluster. The students research labor market information, learn job-seeking skills, and create documents required for employment. Students use self-knowledge to explore and set realistic goals. Career exploration knowledge and skills will be offered in a variety of instructional arrangements.

8R150S Investigating Careers – Applied Engineering (Robotics) **1 Semester(s)** **Gr: 7-8**

Prerequisite: None

Description: The goal of this course is to create a culture of high expectations and continuous improvement that provides middle school students with a foundation for success in high school, future studies, and careers. Students enrolled in this course will demonstrate basic knowledge and skills necessary for the robotic and automation industry. The students will focus on basic mechanisms and programming to complete various tasks from simple to more complex systems as the course progresses. Career exploration knowledge and skills will be offered in a variety of instructional arrangements.

8R040S Investigating Careers (GBL) - Business Administration & Management, Finance and Marketing
GBL **1 Semester(s)** **Gr: 7-8**

Prerequisite: None

Description: (Magnet course offered at Sellers only) the goal of this course is to create a culture of high expectation and continuous improvement that provides middle school students with a foundation for success in high school, future studies, and careers. Students explore college and career planning within specific career cluster(s). The students research labor market information, learn job-seeking skills, and create documents required for employment. Students use self-knowledge to explore and set realistic goals. Districts have the flexibility of offering career exploration knowledge and skills in a variety of instructional arrangements.

Note: All Courses may not be offered on every campus.
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8R150S Investigating Careers Applied Engineering (MST) (R)

1 Semester

Gr: 7-8

MST

Prerequisite: None

Description: (Magnet course offered at Jackson Technology Center only) This course provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will use a variety of computer hardware and software applications to complete assignments and projects. Students will work on a design team to develop a product or system. Students will use multiple software applications to prepare and present course assignments. Students will have the opportunity to experience activities in artificial intelligence, automation and robotics, environmental technology, fiber optics, and the VEX Robotics program.

Courses Offering High School Credit

8P053S Introduction to Transportation (R)

.5 Credit

Gr: 8

Prerequisite: None

Description: The goal of this course is to create a culture of high expectation and continuous improvement that provides middle school students with a foundation for success in high school, future studies, and careers. This course provides an overview of the design, production and assessment of products, services and systems used in the logistics of warehousing and transportation systems. Students will explore college and career planning within the Transportation, Distribution and Logistics cluster. The students research labor market information, learn job-seeking skills, and create documents required for employment. Students use self-knowledge to explore and set realistic goals. Career exploration knowledge and skills will be provided in a variety of instructional arrangements.

8R505A/B Principles of Business, Marketing and Finance (GBL) (H)

1 credit

Gr: 8

GBL

Prerequisite: None

Description: (Magnet course offered at Sellers only) GBL Students interested in pursuing a pathway in the School of Global Business, Language and Leadership at NFHS. Students will gain knowledge and skills in economics, personal finance, marketing of goods and services including advertising and product pricing and the impact of global business. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities using challenged based learning problems and settings in business, marketing, and finance.

8I050A/B Principles of Hospitality and Tourism (R)

1 Credit

Gr: 8

Prerequisite: None

Description: The hospitality and tourism industry encompasses lodging; travel and tourism; recreation, amusements, attractions, and resorts; and restaurants and food beverage service. The hospitality and tourism industry maintains the largest national employment base in the private sector. Students gain exposure to various positions within this industry. This course prepares students for additional courses in the Hospitality and Tourism Cluster.

Note: All Courses may not be offered on every campus.

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8J050A/B Principles of Human Services (R)

1 Credit

Gr: 8

Prerequisite: None

Description: This laboratory course will enable students to investigate careers in the human services cluster, including counseling and mental health, early childhood development, family and community, and personal care services. Each student will learn the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

8C050S Professional Communication (R)

.5 Credit

Gr: 8

Prerequisite: None

Description: Professional Communications blends written, oral, and graphic communication in a career-based environment. Careers in the global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communication. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct Internet research.

8C051S Professional Communication + AVID (R)

.5 Credit

Gr: 8

Prerequisite: Participation in the AVID Program

Description: This course, which can be completed in middle school to meet the High School Speech credit. This course embeds the TEKS for Professional Communications in to the AVID elective course allowing students to earn 0.5 credit and Regular Grade Points for Professional Communications as well as completing the AVID elective.

8O054S Project Lead The Way (MST) –Gateway to Technology –Architecture & Biomedical Sciences (R)

MST

.5 Credit

Gr: 7-8

Prerequisite: None

Description: (Magnet course offered only at Jackson Technology Center) 0.5 credit High School Elective, Green Architecture (9 weeks) today’s students have grown up in an age of “green” choices. In this unit, students will learn how to apply this concept to the fields of architecture and construction by exploring dimensioning, measuring, and architectural sustainability as they design affordable housing units using Autodesk architectural design software. Medical Detectives (9 weeks) Students play the role of real-life medical detectives as they analyze genetic testing results to diagnose disease and study DNA evidence found at a crime scene. Students solve problems/mysteries through hands-on projects and labs, investigate how to measure and interpret vital signs, and learn how the systems of the human body work together to maintain health.

Note: All Courses may not be offered on every campus.

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80052S Project Lead The Way (MST) – Gateway to Technology – Applied Science and Technology(R)

MST

.5 Credit

Gr: 7-8

Prerequisite: None

Description: (Magnet Course offered only at Jackson Technology Center), The Energy and the Environment unit, students investigate the impact of energy on our lives and the environment. They design and model alternative energy sources and participate in an energy expo to demonstrate energy concepts and innovative ideas. Students evaluate ways to reduce energy consumption through energy efficiency and sustainability. In the Flight and Space unit, the rich history of aerospace comes alive through hands-on activities, research, and short informational video. Students explore the science behind aeronautics and use their knowledge to design, build and test an airfoil. Custom-built simulation software allows students to experience space travel. Students use industry standard 3D modeling software to create a virtual image of their designs and produce a portfolio to showcase their creative solutions. In the Automation and Robotics unit, students trace the history, development, and influence of automation and robotics. They learn about mechanical systems, energy transfer, machine automation and computer control systems. Students use a robust robotics platform to design, build, and program a solution to solve an existing problem.

80051S Project Lead The Way (MST) – Gateway to Technology - Design & Modeling and Automation & Robotics(R)

MST

.5 Credit

Gr: 7

Prerequisite: None

Description: (Magnet course offered only at Jackson Technology Center) , 0.5 credit High School Elective, In the Design and Modeling unit, students begin to recognize the value of an engineering notebook to document and capture their ideas. They are introduced to and use the design process to solve problems and understand the influence that creative and innovative design has on our lives.

80053S Project Lead The Way (MST)– Gateway to Technology - Energy, Environment, and Flight (R)

MST

.5 Credit

Gr: 7-8

Prerequisite: None

Description: (Magnet course offered only at Jackson Technology Center), In the Energy and the Environment unit, students investigate the impact of energy on our lives and the environment. They design and model alternative energy sources and participate in an energy expo to demonstrate energy concepts and innovative ideas. Students evaluate ways to reduce energy consumption through energy efficiency and sustainability. In the Flight and Space unit, the rich history of aerospace comes alive through hands-on activities, research, and a presentation in the form of a short informational video. Students explore the science behind aeronautics and use their knowledge to design, build and test an airfoil. Custom-built simulation software allows students to experience space travel.

Note: All Courses may not be offered on every campus.

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8D050S Touch System Data Entry - Keyboarding (R)

.5 Credit

Gr: 8

Prerequisite: None

Description: 0.5 credit High School Elective, Students apply technical skills to address business applications of emerging technologies. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students apply the proper keyboarding technique, correct posture, correct numeric and symbol keys, and the correct command and function keys, to input data when using a computer. Students develop the ability to improve speed and accuracy, proofread and edit writing papers for proper format, voice, tense and syntax. Students will need to apply touch system data entry for production of business documents such as letter, memos, emails, press releases, announcements, tables, reports, and legal documents

8D501S Touch System Data Entry (GBL) – Keyboarding (R)

.5 Credit

Gr: 8

GBL

Prerequisite: None

Description: (Magnet course offered at Sellers only): 0.5 credit High School Elective, The students will learn the alphabetic letters, numbers and symbols by touch, while achieving acceptable speed and accuracy level. This course emphasizes the mastery of touch control keyboarding and correct key stroking. Students will be provided opportunities for applying keyboarding skills in real-life situations. Skill development in proofreading, spelling, word division and punctuation are also included. Students will demonstrate the ability to compose personal and business letters and envelopes. They will also produce reports, memorandums and tabulations for both personal and business use.

Note: All Courses may not be offered on every campus.

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