

Business & Industry Endorsement Pathways Leading to Certification

An endorsement requires four or more credits in one career cluster, with two of the courses in the same pathway and one advanced course from the pathway.

National Career Cluster	Pathway/Program of Study	9 th	10 th	11 th	12 th	Certification Opportunities
Agriculture, Food, & Natural Resources	Animal Science	Principles of Agriculture, Food & Natural Resources (1 credit)	Small Animal Management (1 credit)	Livestock Production (1 credit)	Advanced Animal Science (1 credit) and/or Practicum of Agriculture (2 credits)	Certified Veterinary Assistant
	Applied Agricultural Engineering	Principles of Agriculture, Food & Natural Resources (1 credit)	Ag Mechanics and Metal Technologies (1 credit)	Ag Structures Design & Fabrication/ or Ag Equipment Design & Fabrication (1 credit)	Ag Structures Design & Fabrication/ or Ag Equipment Design & Fabrication (1 credit)	AWS D9.1 Sheet Metal Welding
Animation, Arts, Audio Video Technology &	Graphic Design & Animation	Journalism (1 credit)	Graphic Design I (1 credit)	Graphic Design II (1 credit)	Practicum in Graphic Design or Career Prep (2 credits)	Adobe Certified Associate Photoshop
Business, Marketing, and Finance	Entrepreneurship	Principles of Business, Marketing, and Finance (1 credit) or BIM 1 w/ Lab (1 credit)	Entrepreneurs hip (1 credit)	Mobile Application Development (1 credit) or Entrepreneurs hip II (1 credit)	Practicum in Entrepreneurs hip or Career Prep 1 (2 credits)	Microsoft Office Expert – Excel Microsoft Office Expert – Word

Public Service Endorsement Pathways Leading to Certification

National Career Cluster	Pathway/ Program of Study	9 th	10 th	11 th	12 th	Certification Opportunities
Education & Training	Teaching & Training	Principles of Human Services (1 credit)	Human Growth or Child Development (1 credit)	Teacher Intern 1 (Instructional Practices) (2 credits)	Teacher Intern II (Instructional Practices II) (2 credits)	

AGRICULTURE, FOOD & NATURAL RESOURCES

PRINCIPLES OF AGRICULTURE, FOOD & NATURAL RESOURCES Grade Placement: 9 | Prerequisite: None | Credit: 1.0

This course introduces students to the National FFA Organization by explaining the history and opportunities offered in the Agriculture field. Discussed in this course will be topics covering leadership skills, the agriculture industry and skills needed to be successful in the agriculture industry. Students taking the class will develop public speaking skills and increase their knowledge of parliamentary procedure. This course is an introduction to global agriculture and includes topics in leadership development, communications, personal finance and mechanized agriculture.

SMALL ANIMAL MANAGEMENT

Grade Placement: 10, 11, 12 | Prerequisite: None | Credit: 1.0

Students acquire knowledge and skills related to small animals and the small animal management industry. The course may address topics related to small mammals such as dogs and cats, amphibians, reptiles, and birds.

LIVESTOCK PRODUCTION

Grade Placement: 10, 11, 12 | Prerequisite: None | Credit: 1.0

This course introduces the common veterinary skills and procedures used on livestock, anatomy of livestock, genetics and reproduction, and diseases that can affect all livestock animals. This course is recommended for those that have an interest in the Veterinary Science field.

ADVANCED ANIMAL SCIENCE

Grade Placement: 11, 12 | Prerequisite: In addition to credit for Livestock or Equine Science, students must also have credit for Algebra I, Biology, and Chemistry or IPC before taking this course | Credit: 1.0

This course examines the interrelatedness of human, scientific and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences. Develop and investigate the scientific and technological dimensions of scientific animal agriculture, genetics, and reproduction, anatomy and physiology of various livestock species, nutritional requirements and disease and parasites of livestock.

PRACTICUM OF AGRICULTURE

Grade Placement: 11, 12 | Prerequisite: Minimum of one credit from the Agriculture Cluster | Credit: 2.0

This course gives students supervised practical application of knowledge and skills such as employment, independent study, internships, assistantships, mentorships or laboratories. The practicum course is a paid or unpaid capstone experience for students

AG MECHANICS & METAL TECHNOLOGIES Grade Placement: 10, 11, 12 | Prerequisite: Principles of Agriculture | Credit:

This lab course is designed to develop an understanding of agricultural mechanics as it relates to safety and skills in tool operation, electrical wiring, plumbing, carpentry, fencing, concrete and metal working techniques. Students will develop skills in metal equipment construction and joining processes. Emphasis will be placed on the use of stick welders, wire feed welders and oxygen-acetylene torches.

AG STRUCTURES DESIGN & FABRICATION Grade Placement: 11, 12 | Prerequisite: Ag Mechanics and Metal Technologies | Credit: 1.0

This lab course prepares for careers in mechanized agriculture and technical systems, students attain knowledge and skills related to agricultural facilities design and fabrication. Students explore career opportunities, entry requirements and industry expectations. To prepare for success, students reinforce, apply and transfer their academic knowledge and technical skills in a variety of settings.

AG EQUIPMENT DESIGN & FABRICATION Grade Placement: 11, 12 | Prerequisite: Ag Mechanics and Metal Technologies | Credit: 1.0

In Agricultural Equipment Design and Fabrication, students will acquire knowledge and skills related to the design and fabrication of agricultural equipment.

WILDLIFE, FISHERIES & ECO MANAGEMENT

Grade Placement: 10, 11, 12 | Credit: 1.0

This course examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences. Develop and investigate the scientific and technological dimensions of scientific animal agriculture, genetics and reproduction, anatomy and physiology of various livestock species, nutritional requirements and disease and parasites of livestock

CAREER PREPARATION (WORK CO-OP)

CAREER PREPARATION I

Grade Placement: 11, 12 | Credits: 2.0-3.0

This course provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

CAREER PREPARATION II

Grade Placement: 11, 12 | Prerequisite: Career Preparation I | Credits: 2.0-3.0

This course is designed to build on Career Prep I classroom instructions, preparing students with a variety of skills for a changing workplace

GRAPHIC DESIGN AND JOURNALISM

JOURNALISM Grade Placement: 9 | Prerequisite: None | Credit: 1.0

Students enrolled in Journalism write in a variety of forms for a variety of audiences and purposes. High school students enrolled in this course are expected to plan, draft, and complete written compositions on a regular basis, carefully examining their papers for clarity, engaging language, and the correct use of the conventions and mechanics of written English. In Journalism, students are expected to write in a variety of forms and for a variety of audiences and purposes. Students will become analytical consumers of media and technology to enhance their communication skills. Published work of professional journalists, technology, and visual and electronic media are used as tools for learning as students create, clarify, critique, write, and produce effective communications. Students enrolled in Journalism will learn journalistic traditions, research self-selected topics, write journalistic texts, and learn the principles of publishing

GRAPHIC DESIGN AND ILLUSTRATION I (Lion's Roar) Grade Placement: 10, 11, 12 | Recommended Prerequisite: Principles of Audio Video Production | Credit: 1.0

Students will be expected to develop an understanding of the industry with a focus on fundamental elements and principles of visual art and design.

GRAPHIC DESIGN AND ILLUSTRATION II (Lion's Roar 2) Grade Placement: 11 | Prerequisite: Graphic Design and Illustration I | Credit: 1.0

Students will build on the knowledge from graphic design and more fully explore the interaction of text and image. Emphasis is placed on page layout and design.

PRACTICUM IN GRAPHIC DESIGN (Lion's Roar III)

Grade Placement: 12 | Prerequisite: Graphic Design II | Credit: 1.0

In addition to developing technical knowledge and skills needed for success in the Arts, Audio/ Video Technology, and Communications Career Cluster, students will be expected to develop a technical understanding of the industry with a focus on skill proficiency. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

COMMERCIAL PHOTOGRAPHY I

Grade Placement: 10, 11, 12 | Prerequisite: None | Credit: 1.0

Students will be expected to develop an understanding of the commercial photography industry with a focus on creating quality photographs.

HEALTH SCIENCES

ANATOMY & PHYSIOLOGY

Grade Placement: 11, 12 | Prerequisite: Biology and a second science | Credit: 1.0

This course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology will study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

EDUCATION & TRAINING

PRINCIPLES OF HUMAN SERVICES

Grade Placement: 9 | Prerequisite: None | Credit: 1.0

This course will enable students to investigate careers in the Human Services Career Cluster, including counseling and mental health, early childhood development, family and community, personal care, and consumer services. Each student is expected to complete the knowledge and skills essential for success in high-skill, high-wage, or high-demand human services careers

HUMAN GROWTH & DEVELOPMENT

Grade Placement: 10, 11, 12 | Recommended Prerequisite: Principles of Human Services | Credit: 1.0

This course is an examination of human development across the lifespan with emphasis on research, theoretical perspectives, and common physical, cognitive, emotional, and social developmental milestones. The course covers material that is generally taught in a postsecondary, one-semester introductory course in developmental psychology or human development.

CHILD DEVELOPMENT

Grade Placement: 10, 11, 12 | Recommended Prerequisite: Principles of Human Services | Credits: 1.0

Child Development is a technical laboratory course that addresses knowledge and skills related to child growth and development from prenatal through school-age children, equipping students with child development skills. Students use these skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children.

TEACHER INTERN I

Grade Placement: 10, 11, 12 | Prerequisite: None | Credits: 2.0

This course is a field-based (practicum) internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators or trainers in direct instructional roles with elementary, middle school, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teacher trainers, paraprofessionals, or other educational personnel.

TEACHER INTERN 2

Grade Placement: 11,12 Prerequisite: Teacher Intern I Credits: 2.0

This course is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators in direct instructional roles with elementary, middle school, and high school-aged students.

BUSINESS, MARKETING, & FINANCE

PRINCIPLES OF BUSINESS, MARKETING & FINANCE

Grade Placement: 9 | Prerequisite: None | Credit: 1.0

In this course, students gain knowledge and skills in economics and private enterprise systems, the impact of global business, the marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings in business, marketing, and finance.

BUSINESS INFORMATION MANAGEMENT I

1626A/1626B Grade Placement: 10, 11, 12 | Prerequisite: None | Credit: 1.0

Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

ENTREPRENEURSHIP

Grade Placement: 10, 11, 12 | Recommended

Prerequisite:

Principles of Business, Marketing & Finance | Credit: 1.0

In this course, students gain the knowledge and skills needed to become an entrepreneur. Students learn the principles necessary to begin and operate a business. The focus of the course is to understand the process of analyzing a business opportunity, preparing a business plan, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services. In addition, students will understand the capital required, the return on investment desired, and the potential for profit.

PRACTICUM IN ENTREPRENEURSHIP

Grade Placement: 11-12 | Prerequisite: Minimum of one credit from the Business cluster | Credit: 2.0

Designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences occur in an unpaid arrangement of 10 or more hours and a variety of locations appropriate to the nature and level of experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or post-secondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international and social and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication and reasoning skills and apply them to the business environment. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical and international dimensions of business to make appropriate business decisions. Students must provide their own transportation.

FINANCIAL MATH

Grade Placement: 11, 12 | Prerequisite: Algebra I |

Recommended Prerequisite: Accounting I | Credit: 1.0

This course is about personal money management. Students will apply critical-thinking skills to analyze personal financial decisions based on current and projected economic factors. *This course meets graduation requirements for a mathematics credit.*

GRADUATION PLAN

The goal of Albany ISD is that all students will graduate on the Foundation + Endorsement or Distinguished Level of Achievement graduation plan and that all students will be college and career ready.

	Foundation with Endorsement(s) Or Distinguished Achievement	Foundation HS Program <i>(student may only consider at the conclusion of the 11th grade year)</i>
English Language Arts	4 Credits English I English II English III Advanced English course	4 Credits English I English II English III Advanced English course
Mathematics	4 Credits Algebra I Geometry Algebra II An advanced Math Course	3 Credits Algebra I Geometry An advanced math course
Science	4 Credits Biology IPC Two additional advanced science courses (Chemistry and/or Physics required for some endorsements.)	3 Credits Biology IPC One additional advanced science courses
Social Studies	3 Credits World Geography and/or World History US History Government/Economics <i>(A 4th social studies is required for some endorsements)</i>	3 Credits World Geography and/or World History US History Government/Economics
Physical Education	1 Credit	1 Credit
Languages Other Than English (LOTE)	2 Credits from the same language	2 Credits from the same language
Fine Arts	1 Credit	1 Credit
Electives	6-7 Credits <i>(Includes the credit requirements of the student's declared endorsement)</i>	5 Elective Credits
Total Credits	26	22