

Acceptable Areas of Coursework for Endorsements

- Must be 100-level or higher to be used toward an endorsement
 - Must be passed with a grade of "C-" or higher
- Must be submitted on an official transcript from a regionally accredited college or institution
- **Agricultural Education (Middle School and Senior High):** Animal husbandry, agricultural machinery, agriculture management, agricultural marketing, agricultural mechanics, agricultural resources (agro-forestry, environmental protections, habitat), agricultural science, agronomy (crop production), animal science, conservation, horticulture, landscaping, occupational skills, plant management, and soil science.
- **Art (Middle School):** Art, art appreciation, art education, art history, drawing, fiber arts, painting (watercolors, pastels, etc.), photography, pottery, printmaking, sculpture, typography, and art methods.
- **Bilingual Education (PreK – Grade 12):** See [Distribution](#)
- **Biological Science (Middle School):** **Biology:** Anatomy, bacteriology, biochemistry, botany, embryology, endocrinology, ethology, evolution, genetics, herpetology, microbiology, mycology, ornithology, paleontology, physiology, plant taxonomy, synecology, zoology, **Ecology/Environmental Science:** autecology, conservation, dendrology, ecosystems, entomology, forestry courses as related to ecology and habitat management, population dynamics, and silviculture.
- **Business, Marketing, & Computer Education (Senior High):** Accounting, advertising, business, business communications, business computer applications, business computer programming, business human resources, business law, business management/sport management, business math, business strategies, consumer economics, economics, entrepreneurship, finance, global management, international business, international trade, marketing, operations, organizational behavior, shorthand, statistics, and typing.
- **Business, Marketing, & Computer Programming (Senior High):** Accounting, advertising, business, business communications, business computer applications, business computer programming, business human resources, business law, business management/sport management, business math, business strategies, consumer economics, economics, entrepreneurship, finance, global management, international business, international trade, marketing, operations, organizational behavior, shorthand, statistics, and typing.
 - 9 of the required 24 semester hours must be in any of the following: business computer programming, computer networking, operating systems, and database management with software information systems.
- **Business, Marketing, & Management (Middle School):** Accounting, advertising, business, business communications, business computer applications, business computer programming, business human resources, business law, business management/sport management, business math, business strategies, consumer

economics, economics, entrepreneurship, finance, global management, international business, international trade, marketing, operations, organizational behavior, shorthand, statistics, and typing.

- **Computer Applications (Middle School and Senior High):** How to use a computer, how to use computer software products (such as Microsoft Word, Excel, or PowerPoint), computer hardware, internet, networking, technology, using computers in education, web page construction and maintenance, and all computer science (see Computer Science).
- **Computer Science (Middle School and Senior High):** Algorithms and data structures, principles, concepts, and methods of computing, problem solving in computing, programming techniques, and programming and computer languages. *Coursework in computer applications will not be applicable.*
- **Dance (Middle School and Senior High):** Choreography, dance history, dance production, dance styles (jazz, modern, tap, ballet, etc.), rhythm analysis, and dance methods.
- **Drama/Theatre Arts (Senior High):** Acting, directing, drama, dramatic literature (contemporary and historic), play/theatre production, stage design, stage makeup, story- making and playwriting, theatre, voice and movement techniques.
- **English Language Arts (Senior High):** **English:** American and British literature, communication (in English/Communications Dept.), composition, English grammar, film (in Literature Dept.), language arts methods, language components (semantics, syntax, phonemes, morphemes), linguistics (*not ESL/bilingual*), literacy, literary forms (poetry, fiction/non-fiction, drama, etc.), literary techniques (dialect, narration, etc.), rhetoric (grammar/writing), vocabulary; **Journalism:** Broadcasting, proofreading/editing; **Reading:** See Distribution; **Speech:** Interpersonal communications, oral communication, oral interpretation and group discussion, public relations (in English/Communication Dept.), public speaking, speech, voice and movement techniques.
- **English as a New Language (Senior High):** Bilingual and ESL coursework
- **English as a New Language-Bilingual Education (Senior High):** Bilingual and ESL coursework
- **English as a Second Language (PreK – Grade 12):** See [Distribution](#)
- **Family and Consumer Science (Middle School):** Conflict resolution, consumer education/resource management, family relationships, home economics, human/child development, money management (household management, budgeting, etc.), parenting/interpersonal relationships; **Apparel and Textiles:** Clothing/apparel industry, clothing/fashion design, costume design, history of fashion, sewing, textile production, textiles, and wholesale/retail/design

operations for apparel and textiles; **Living Environments:** Architectural design, home/office furnishings, housing industry, interior/exterior design, and wholesale/retail operations (housing/interior furnishings); **Nutrition, Wellness and Hospitality:** Dietary needs, food management, food preparation, food sanitation, foods, hospitality, and nutrition.

- **Family and Consumer Science - Apparel and Textiles (Senior High):** Conflict resolution, consumer education/resource management, family relationships, home economics, human/child development, money management (household management, budgeting, etc.), parenting/interpersonal relationships, nutrition, wellness and hospitality; apparel and textiles; living environments.
 - 9 of the required 24 semester hours must be in any of the following: Clothing/apparel industry, clothing/fashion design, costume design, history of fashion, sewing, textile production, textiles, and wholesale/retail/design operations for apparel and textiles.
- **Family and Consumer Science - Living Environments (Senior High):** Conflict resolution, consumer education/resource management, family relationships, home economics, human/child development, money management (household management, budgeting, etc.), parenting/interpersonal relationships, nutrition, wellness and hospitality; apparel and textiles; living environments.
 - 9 of the required 24 semester hours must be in any of the following: Architectural design, home/office furnishings, housing industry, interior/exterior design, and wholesale/retail operations (housing/interior furnishings).
- **Family and Consumer Science – Nutrition, Wellness and Hospitality (Senior High):** Conflict resolution, consumer education/resource management, family relationships, home economics, human/child development, money management (household management, budgeting, etc.), parenting/interpersonal relationships; apparel and textiles; living environments.
 - 9 of the required 24 semester hours must be in any of the following: Dietary needs, food management, food preparation, food sanitation, foods, hospitality, and nutrition.
- **Foreign Language (PreK – Grade 12):** Communication (oral and written), culture, literature, methods of teaching, and coursework in the specific foreign language.
- **Gifted Education Teacher (PreK – Grade 12):** See [Distribution](#)
- **General Geography (Middle School):** Physical and economic geography, social cultures, and world regional geography.
- **General Science (Middle School):** [Biological science](#) and [physical science](#). *Coursework must be completed in both biological and physical sciences.*

- **Health Education (Middle School and Senior High):** Community health, consumer health, disease prevention, drug and chemical use and abuse, environmental health, first aid, mental and emotional health, nutrition, personal health (such as aerobics, fitness for life, swimming, and weight lifting), public health, safety and injury prevention, school health, sex education, sexually transmitted diseases, and theories and concepts of health.
- **Industrial Technology Education (Middle School):** Auto body repair, communication (broadcasting, computers in communication and graphic arts, drafting), construction (carpentry, masonry, plumbing, and woodworking), drafting/design, electronics (computer, radio, TV, small appliance and electronic instrument repair), energy utility, graphic communications (architectural design/AutoCAD, CAD/BIM, press photography, print shop, and printing), heating/ventilation/air conditioning, industrial (hydraulic, mechanical, pneumatic, electrical, energy and power), manufacturing (machine tool, metal working, production machine operation, tool and die, welding), production (processes in the manufacturing and construction cycle), public service (criminal justice, firefighting, police science, and security), and transportation (small engine and auto repair, auto/truck mechanical systems).
- **Language Arts (Middle School):** *English:* American and British literature, communication (in English/Communications Dept.), composition, English grammar, film (in Literature Dept.), language arts methods, language components (semantics, syntax, phonemes, morphemes), linguistics (*not ESL/bilingual*), literacy, literary forms (poetry, fiction/non-fiction, drama, etc.), literary techniques (dialect, narration, etc.), rhetoric (grammar/writing), vocabulary; *Journalism:* Broadcasting, proofreading/editing; *Reading:* See Distribution; *Speech:* Interpersonal communications, oral communication, oral interpretation and group discussion, public relations (in English/Communication Dept.), public speaking, speech, voice and movement techniques.
- **Library Information Specialist (Primary, Middle School, and Senior High):** Cataloging, classification, developing software, electronic card catalogs, instructional media, library administration, media services and production, on-line reference resources, on-line searching, production/management of information, production/management of learning technology systems, professional and ethical issues, reference, research and accessing information resources, selection of library materials appropriate to the population to be served, storytelling, and use and management of learning technology systems.
- **Mathematics (Middle School):** See [Distribution](#)
- **Mathematics (Senior High):** Abstract algebra, analytical geometry, applied matrix theory, calculus, computer science (mathematical aspects), data analysis, differential equations, discrete structures, Euclidean and non- Euclidean geometry, finite mathematics, geometry, high school mathematics methods, history of mathematics, linear algebra, modern algebra, number theory,

probability, regression analysis calculus, statistics, trigonometry, and upper-level courses such as Fourier analysis.

- **Music (Middle School and Senior High):** Band, choral music, composing, conducting, instrumental music (trombone, flute, piano, etc.), music, music history, music methods, music theory, rhythmic analysis, and vocal music.
- **Physical Education (Middle School and Senior High):** Biomechanics, coaching, dance/creative movement, exercise physiology, first aid/sports medicine, health-related fitness, human anatomy and physiology, individual and team sports, kinesiology, motor learning/behavior and development, physical education curriculum design, physical education for special populations, rhythm and dance, safety related to physical education, and physical education methods, assessment, and evaluation.
- **Physical Science (Middle School):** **Chemistry:** Analytical chemistry, atomic structures, biochemistry, organic chemistry, physical chemistry, quantitative chemistry, thermodynamics; **Earth and Space Science:** Astronomy, cosmology, earth science, environmental geography, geology, geomatics, geomorphology, hydrology, landscape ecology, meteorology, mineralogy, oceanography, physical geography (land masses, physical landscapes, etc.), weather/climatology; **Physics:** Electricity, nuclear physics, physics, quantum mechanics, radioactivity, relativity, solid state physics, and thermodynamics.
- **Reading Teacher (PreK – Grade 12):** See [Distribution](#)
- **Safety and Driver’s Education (Senior High):** See [Distribution](#)
- **Science - Biology (Senior High):** Anatomy, bacteriology, biochemistry, biology, botany, embryology, endocrinology, ethology, evolution, genetics, herpetology, microbiology, mycology, ornithology, paleontology, physiology, plant taxonomy, synecology, and zoology.
- **Science - Chemistry (Senior High):** Analytical chemistry, atomic structures, biochemistry, chemistry, organic chemistry, physical chemistry, and quantitative chemistry.
- **Science - Earth and Space Science (Senior High):** Astronomy, cosmology, earth science, environmental geography, geology, geomatics, geomorphology, hydrology, landscape ecology, meteorology, mineralogy, oceanography, physical geography (land masses, physical landscapes, etc.), and weather/climatology.
- **Science - Environmental Science (Senior High):** Autecology, conservation, dendrology, ecosystems, entomology, forestry courses as related to ecology and habitat management, population dynamics, and silviculture.
- **Science – Physics (Senior High):** Electricity, nuclear physics, physics, quantum mechanics, radioactivity, relativity, solid state physics, and thermodynamics.

- **Social Science (Middle School):** ***Economics:*** Comparative markets, economic systems, macroeconomics, market economy, microeconomics, and unemployment; ***Geography:*** Cultural, economic, and social geography and any course in the geography department, ***History:*** ancient history, comparative history (industrialization, globalization, etc.), U.S. history, and world history; ***Political Science:*** Civics, constitutional law, foreign policy, government, political science, and systems of government; ***Psychology:*** Human development, educational Psychology, personality, psychology,; ***Sociology/Anthropology:*** Ancient civilization, anthropology, cultural diversity, social classes, social deviancy, social justice, and sociology.
- **Social Science – Economics (Senior High):** Comparative markets, economic systems, macroeconomics, market economy, microeconomics, and unemployment.
- **Social Science – Geography (Senior High):** Cultural, economic, and social geography and any course in the geography department.
- **Social Science – History (Senior High):** Ancient history, comparative history (industrialization, globalization, etc.), U.S. history, and world history.
- **Social Science – Political Science (Senior High):** Civics, constitutional law, foreign policy, government, political science, and systems of government.
- **Social Science – Psychology (Senior High):** Human development, educational psychology, personality, psychology.
- **Social Science – Sociology/Anthropology (Senior High):** Ancient civilization, anthropology, cultural diversity, social classes, social deviancy, social justice, and sociology.
- **Speech (Middle School):** Interpersonal communications, oral interpretation and group discussion, public speaking, speech, voice and movement techniques.
- **Speech/Theatre (Middle School):** Coursework in **both** *Speech* **AND** *Theatre*. ***Speech:*** Interpersonal communications, oral interpretation and group discussion, public speaking, speech, voice and movement techniques; ***Theatre:*** Acting, directing, drama, dramatic literature (contemporary and historic), play/theatre production, stage design, stage makeup, story-making and playwriting, theatre, and voice and movement techniques.
- **Technology Education (Industrial Arts) (Senior High):** Auto body repair, communication (broadcasting, computers in communication and graphic arts, drafting), construction (carpentry, masonry, plumbing, and woodworking), drafting/design, electronics (computer, radio, TV, small appliance and electronic instrument repair), energy utility, graphic communications (architectural design/AutoCAD, CAD/BIM, press photography, print shop, and printing), heating/ventilation/air conditioning, industrial (hydraulic,

mechanical, pneumatic, electrical, energy and power), manufacturing (machine tool, metal working, production machine operation, tool and die, welding), production (processes in the manufacturing and construction cycle), public service (criminal justice, firefighting, police science, and security), and transportation (small engine and auto repair, auto/truck mechanical systems).

- **Technology Specialist (Computer Related) (PreK – Grade 12):** Administration of technological equipment, computer operating systems, curriculum design with computers, database management, hardware configuration and maintenance, legal implications for technology, long distance learning, managing TCP/IP networks, networking including servers and routers, page construction and maintenance, selection, design, and maintenance of software, technology infrastructure, and web systems analysis and design. *Coursework should be distributed across the standards for technology specialist.*

- **Theatre/Drama (Middle School):** Acting, directing, drama, dramatic literature (contemporary and historic), play/theatre production, stage design, stage makeup, story-making and playwriting, theatre, and voice and movement techniques.

- **Visual Arts (Senior High):** Art, art appreciation, art education, art history, drawing, fiber arts, painting (watercolors, pastels, etc.), photography, pottery, printmaking, sculpture, typography, and art methods.