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**TITLE 511 INDIANA STATE BOARD OF  
EDUCATION**

LSA Document #01-33(F)

DIGEST

Amends 511 IAC 6.1-5.1-1 dealing with multidisciplinary courses. Amends 511 IAC 6.1-5.1-9 dealing with business technology education, family and consumer sciences, and technology education. Amends 511 IAC 6.1-5.1-10.1 dealing with vocational-technical courses. Effective 30 days after filing with the secretary of state.

**511 IAC 6.1-5.1-1**

**511 IAC 6.1-5.1-9**

**511 IAC 6.1-5.1-10.1**

SECTION 1. 511 IAC 6.1-5.1-1 IS AMENDED TO READ AS FOLLOWS:

**511 IAC 6.1-5.1-1     **Multidisciplinary courses****

**Authority:** IC 20-1-1-6; IC 20-1-1.2-18

**Affected:** IC 20-10.1

Sec. 1. (a) The following multidisciplinary courses may be offered:

- (1) Basic skills development.
- (2) Cadet teaching experience.
- (3) Introduction to computer applications.
- (4) Environmental studies (L).
- (5) Humanities.
- (6) Junior reserve officer training corps.
- (7) Musical theatre (L).
- (8) Peer tutoring.
- (9) Career information and exploration.
- (10) Driver education (L).
- (11) Motorcycle safety education (L).

**(b) After July 1, 2001, schools involved in Project Lead the Way, a pre-engineering program, may offer the following:**

- (1) Engineering design and development (L).**
- (2) Digital electronics (L).**

~~(b)~~ (c) For establishing majors and minors, multidisciplinary courses shall be applied to an area of study to which a significant portion of the course content is closely related.

~~(c)~~ (d) In order to use the courses listed in this section toward the thirty-eight (38) credit requirements, any course that is suffixed with a capital "L" in parentheses is to be presented as a laboratory course, as defined at 511 IAC 6.1-1-2(l).

~~(d)~~ (e) Cadet teaching experience for high school pupils is limited to kindergarten through grade 9. Credit is granted on the same basis as any other course. (*Indiana State Board of Education; 511 IAC 6.1-5.1-1; filed Nov 8, 1990, 3:05 p.m.: 14 IR 654; filed Nov 4, 1999, 10:08 a.m.: 23 IR 566, eff Jul 1, 2000; filed Dec 2, 2001, 12:22 p.m.: 25 IR 1141*)

SECTION 2. 511 IAC 6.1-5.1-9 IS AMENDED TO READ AS FOLLOWS:

**511 IAC 6.1-5.1-9 Business technology education; family and consumer sciences; technology education**

Authority: IC 20-1-1-6; IC 20-1-1.2-18

Affected: IC 20-10.1

Sec. 9. The following courses may be offered in the business technology education family and consumer sciences, and technology education areas of study:

(1) Before July 1, 2000, the following business technology education courses:

(A) The following business technology education and economics courses:

- (i) Business communications.
- (ii) Business communications, advanced.
- (iii) Business mathematics.
- (iv) Personal finance/consumer economics.
- (v) Introduction to business.
- (vi) Introduction to marketing.

(B) The following business technology education applications courses:

- (i) Accounting, beginning.
- (ii) Accounting, advanced.
- (iii) Introduction to computers and technology.
- (iv) Computer applications.
- (v) Computer applications, advanced.
- (vi) Computer programming.
- (vii) Electronic office applications/technology.
- (viii) Record keeping.
- (ix) Shorthand/notehand.
- (x) Shorthand, advanced.
- (xi) Keyboarding.
- (xii) Keyboarding applications.
- (xiii) Keyboarding production.
- (xiv) Information/word processing.

(C) The following advanced business technology education and economics courses:

- (i) International business.
- (ii) Economics of business.
- (iii) Business law.
- (iv) Business management.
- (v) Entrepreneurship.

(2) After June 30, 1998, (1) The following business technology education courses:

(A) The following business technology education and economics courses:

- (i) Accounting I.
- (ii) Accounting II.
- (iii) Business foundations.
- (iv) Computer applications.
- (v) Computer applications, advanced.
- (vi) Computer keyboarding/document formatting.
- (vii) Computer programming.
- (viii) Marketing.
- (ix) Business mathematics/personal finance.
- (x) Shorthand/notehand.

(B) The following advanced business technology education and economics courses:

- (i) Business, college level.
- (ii) Business and personal law.
- (iii) Business management.
- (iv) Entrepreneurship.
- (v) Global economics.

- (vi) International business.
- (vii) Technical/business communication.
- (3) Before July 1, 2000, the following family and consumer sciences courses:
  - (A) The following general (nonvocational) family and consumer sciences courses:
    - (i) General family and consumer sciences Level I:
    - (ii) General family and consumer sciences Level II:
    - (iii) General family and consumer sciences Level III:
    - (iv) General family and consumer sciences Level IV:
    - (v) Nutrition and food 3:
    - (vi) Nutrition and food 4:
    - (vii) Textiles and clothing 3:
    - (viii) Textiles and clothing 4:
  - (B) Any family and consumer sciences course listed in section 10.1 of this rule but not vocationally approved.

- (4) (2) The following industrial arts/technology **technology** education courses:

- (A) Before July 1, 2000, the following industrial arts courses:

- (i) Aerospace:
- (ii) Ceramics:
- (iii) Drafting:
- (iv) Electricity:
- (v) Electronics:
- (vi) Graphic arts:
- (vii) Industrial communication:
- (viii) Industrial materials and processes:
- (ix) Industrial power:
- (x) Innovative industrial research:
- (xi) Metals:
- (xii) Plastics/synthetics:
- (xiii) Power mechanics:
- (xiv) Woods:

- (B) After June 30, 1995, (A) The following technology education courses:

- (i) Communication systems (one (1) semester).
- (ii) Construction systems (one (1) semester).
- (iii) Manufacturing systems (one (1) semester).
- (iv) Transportation systems (one (1) semester).
- (v) Communication processes (one (1) or two (2) semesters).
- (vi) Construction processes (one (1) or two (2) semesters).
- (vii) Manufacturing processes (one (1) or two (2) semesters).
- (viii) Transportation processes (one (1) or two (2) semesters).
- (ix) Design processes (one (1) or two (2) semesters).
- (x) Technology enterprises (one (1) semester).
- (xi) Technology and society (one (1) semester).
- (xii) Technology systems (one (1) or two (2) semesters).
- (xiii) Fundamentals of engineering (one (1) semester).
- (xiv) Computers in design and production systems (one (1) or two (2) semesters).

- (B) After July 1, 2001, schools involved in Project Lead the Way may substitute the following pre-engineering courses:

- (i) Introduction to engineering design (two (2) semesters) in lieu of design processes.
- (ii) Principles of engineering (two (2) semesters) in lieu of fundamentals of engineering.
- (iii) Computer integrated manufacturing (two (2) semesters) in lieu of computers in design and production systems.

*(Indiana State Board of Education; 511 IAC 6.1-5.1-9; filed Nov 8, 1990, 3:05 p.m.: 14 IR 658; filed Jul 12, 1993, 10:00 a.m.: 16 IR 2853, eff Jul 1, 1993 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #92-143 was filed Jul 12, 1993.]; filed May 24, 1995, 10:00 a.m.: 18 IR 2409; filed May 28, 1998, 4:57 p.m.: 21 IR 3826; errata filed Aug 17, 1998, 10:21 a.m.: 22 IR 127; filed Dec 2, 2001, 12:22 p.m.:*

SECTION 3. 511 IAC 6.1-5.1-10.1 IS AMENDED TO READ AS FOLLOWS:

**511 IAC 6.1-5.1-10.1 Vocational-technical courses**

**Authority:** IC 20-1-1-6; IC 20-1-1.2-18

**Affected:** IC 20-10.1

Sec. 10.1. (a) The following courses may be offered in the vocational-technical area of study:

- (1) The following agricultural science and business courses:
  - (A) Fundamentals of agricultural science and business.
  - (B) The following agricultural business courses:
    - (i) Agribusiness management.
    - (ii) Agricultural mechanization.
    - (iii) Farm management.
    - (iv) Landscape management.
    - (v) Natural resource management.
    - (vi) Supervised agricultural experience.
  - (C) The following agricultural science courses:
    - (i) Animal science.
    - (ii) Food science.
    - (iii) Horticultural science.
    - (iv) Plant and soil science.
- ~~(2)~~ Before July 1, 2000, the following business services and technology education courses:
  - ~~(A)~~ The following intensive office laboratory courses:
    - ~~(i)~~ Management-administrative support services.
    - ~~(ii)~~ Business office services.
    - ~~(iii)~~ Computer operations and/or programming.
    - ~~(iv)~~ Computerized accounting services.
    - ~~(v)~~ Information processing services.
  - ~~(B)~~ The following cooperative office education courses:
    - ~~(i)~~ Related instruction.
    - ~~(ii)~~ On-the-job training.
- ~~(3)~~ After June 30, 1998, **(2)** The following business services and technology education courses:
  - (A) Career planning and success skills.
  - (B) The following business services and technology education laboratory courses:
    - (i) Business technology lab I.
    - (ii) Business technology lab II.
    - (iii) Business management and finance.
    - (iv) Computer operations and/or programming.
    - (v) Computerized accounting services.
    - (vi) Information technology network systems.**
    - (vii) Information technology information support and services.**
    - (viii) Information technology programming and software development.**
    - (ix) Information technology interactive media.**
  - (C) Business cooperative experiences (cooperative/related).
- ~~(4)~~ **(3)** The following health occupations careers education courses:
  - (A) The following health occupations careers education core courses:
    - (i) Introduction to health careers: **care systems.**
    - (ii) ~~Medical terminology:~~ **Integrated health sciences I.**
    - (iii) ~~Medical anatomy and physiology:~~ **Integrated health sciences II.**
    - (iv) Introduction to dental health careers.**
  - (B) The following health occupations careers education skill courses:
    - (i) Health careers I.

- (ii) Health careers II.
- (iii) Health careers III.
- (iv) Introduction to medical assisting.**
- (v) Introduction to health care specialties.**
- (vi) Introduction to community health services.**
- (vii) Introduction to pharmacy.**
- (viii) Introduction to physical therapy.**
- (ix) Introduction to health care technology.**
- (x) Introduction to emergency medical services.**
- (xi) Dental assisting I, II, III, and IV.**
- (C) The following health occupations, other courses:
  - (i) ~~Integrated human studies I: Medical terminology.~~
  - (ii) ~~Integrated human studies II: Anatomy and physiology.~~
- (D) Health career practicum (extended lab/related).**
- ~~(5) Before July 1, 2000, the following one (1) semester family and consumer sciences courses:~~
  - ~~(A) The following consumer education/management courses:~~
    - ~~(i) Consumer education.~~
    - ~~(ii) Family management.~~
  - ~~(B) The following nutrition/food courses:~~
    - ~~(i) Nutrition and food 1.~~
    - ~~(ii) Nutrition and food 2.~~
  - ~~(C) The following housing courses:~~
    - ~~(i) Housing and interior design.~~
    - ~~(ii) Home furnishings and interior decoration.~~
  - ~~(D) The following human development courses:~~
    - ~~(i) Interpersonal relations.~~
    - ~~(ii) Human development.~~
    - ~~(iii) Child development 1.~~
    - ~~(iv) Child development 2.~~
    - ~~(v) Family relations.~~
  - ~~(E) The following textiles and clothing courses:~~
    - ~~(i) Textiles and clothing 1.~~
    - ~~(ii) Textiles and clothing 2.~~
  - ~~(F) The following family and consumer sciences, other courses:~~
    - ~~(i) Family health.~~
    - ~~(ii) Independent living.~~
    - ~~(iii) Orientation to world of work.~~
    - ~~(iv) Parenthood education.~~
- ~~(6) After June 30, 1998, (4) The following one (1) semester family and consumer sciences courses:~~
  - (A) Orientation to life and careers.
  - (B) Nutrition and wellness.
  - (C) Child development and parenting.
  - (D) Interpersonal relationships.
  - (E) Adult roles and responsibilities.
  - (F) Consumer economics.
  - (G) Chemistry of foods.
  - (H) Advanced foods and nutrition.
  - (I) Advanced child development.
  - (J) Human development and family wellness.
  - (K) Housing and interiors.
  - (L) Textiles and fashion technologies.
  - (M) Family and consumer sciences issues and applications.
- ~~(7) Before July 1, 2000, the following one (1) year occupational family and consumer sciences courses:~~
  - ~~(A) The following child care and guidance courses:~~
    - ~~(i) Child care services I.~~

- (ii) Child care services H:
- (iii) Child care assistance:
- (iv) Teacher assistance:
- (B) The following clothing and textiles production and management courses:
  - (i) Commercial sewing I.
  - (ii) Commercial sewing H:
  - (iii) Commercial apparel construction:
  - (iv) Custom tailoring:
  - (v) Clothing maintenance:
- (C) The following food production and management courses:
  - (i) Dietetic assistance:
  - (ii) Dining room service:
  - (iii) Food service I:
  - (iv) Food service H:
  - (v) Food service management:
  - (vi) Quantity food preparation:
  - (vii) Specialty food preparation:
  - (viii) Food catering:
- (D) The following home furnishings and equipment management courses:
  - (i) Home furnishings and equipment:
  - (ii) Interior design:
  - (iii) Home service assistance:
- (E) The following institutional and home management courses:
  - (i) Homemaker's assistance:
  - (ii) Institutional housekeeping:
- (F) The following cooperative occupational family and consumer sciences courses:
  - (i) Cooperative occupational family and consumer sciences I:
  - (ii) Cooperative occupational family and consumer sciences H:
- (8) After June 30, 1998, (5) The following one (1) year occupational family and consumer sciences courses:
  - (A) The following early childhood education and services courses:
    - (i) Early childhood education and services I.
    - (ii) Early childhood education and services II.
  - (B) The following apparel and textile occupations courses:
    - (i) Apparel and textile occupations I.
    - (ii) Apparel and textile occupations II.
  - (C) The following food industry occupations courses:
    - (i) Food industry occupations I.
    - (ii) Food industry occupations II.
  - (D) The following housing occupations courses:
    - (i) Housing occupations I.
    - (ii) Housing occupations II.
  - (E) The following residential and institutional facilities and equipment courses:
    - (i) Residential and institutional facilities and equipment I.
    - (ii) Residential and institutional facilities and equipment II.
  - (F) The following human services occupations courses:
    - (i) Human services I.
    - (ii) Human services II.
  - (G) The following cooperative occupational family and consumer sciences courses:
    - (i) Cooperative occupational family and consumer sciences I.
    - (ii) Cooperative occupational family and consumer sciences II.
- (9) (6) The following trade and industrial education courses:
  - (A) The following air conditioning courses:
    - (i) Cooling and refrigeration.
    - (ii) Heating and air conditioning.
    - (iii) Solar heating and cooling.
  - (B) The following appliance repair courses:

- (i) Major appliance repair.
- (ii) Small appliance repair.
- (C) The following automotive courses:
  - (i) Body and fender repair.
  - (ii) Auto mechanics.
  - (iii) Auto specialization.
- (D) The following aviation courses:
  - (i) Aircraft maintenance.
  - (ii) Air frame mechanics.
  - (iii) Aircraft mechanics.
  - (iv) Aircraft operations.
  - (v) Ground operations.
- (E) The following business machine maintenance courses:
  - (i) Business machine maintenance.
  - (ii) Business machine repair.
- (F) The following commercial art courses:
  - (i) Commercial art.
  - (ii) Interior design.
  - (iii) Product design.
- (G) Commercial fishery.
- (H) Commercial photography.
- (I) The following construction and maintenance courses:
  - (i) Building trades.
  - (ii) Carpentry.
  - (iii) Electricity.
  - (iv) Masonry.
  - (v) Painting and decorating.
  - (vi) Plumbing and pipe fitting.
- (J) The following custodial service courses:
  - (i) Custodial service.
  - (ii) Building maintenance.
- (K) Diesel mechanics.
- (L) The following drafting courses:
  - (i) Architectural.
  - (ii) Civil/structural.
  - (iii) Engineering.
  - (iv) Blueprint reading.
  - (v) Die designer.
  - (vi) Design.
  - (vii) Drafting.
  - (viii) Electrical/electronics.
  - (ix) Mechanical.
- (M) The following electrical courses:
  - (i) Industrial electrician.
  - (ii) Lineman.
  - (iii) Motor repair.
- (N) The following electronics courses:
  - (i) Biomedical.
  - (ii) Communications.
  - (iii) Computer electronics.
  - (iv) Electronic product servicing.
  - (v) Industrial electronics.
  - (vi) Radio/television repair.
  - (vii) Robotics.
- (O) The following fabric maintenance courses:

- (i) Dry cleaning.
- (ii) Laundering.
- (P) Foremanship, supervision, and management development.
- (Q) The following graphic arts-printing courses:
  - (i) Graphic arts.
  - (ii) Printing.
- (R) Industrial atomic energy.
- (S) The following instrument maintenance and repair courses:
  - (i) Instrument maintenance and repair.
  - (ii) Watchmaking and repair.
- (T) The following maritime courses:
  - (i) Maritime.
  - (ii) Marine maintenance.
- (U) The following metalworking courses:
  - (i) Foundry.
  - (ii) Machine shop.
  - (iii) Machine tool operation.
  - (iv) Sheet metal.
  - (v) Metal fabrication.
  - (vi) Welding and cutting.
  - (vii) Gas welding.
  - (viii) Electric welding.
  - (ix) Tool and die making.
- (V) Metallurgy.
- (W) The following precision food production courses:
  - (i) Precision food production, general.
  - (ii) Meat cutting.
  - (iii) Slaughtering and butchering.
  - (iv) Precision food production.
- (X) The following personal services courses:
  - (i) Barbering.
  - (ii) Cosmetology.
  - (iii) Electrolysis.
- (Y) Plastics.
- (Z) The following public service courses:
  - (i) Fireman training.
  - (ii) Law enforcement training.
- (AA) Small engine repair.
- (BB) Stationary energy sources.
- (CC) The following textile production and fabrication courses:
  - (i) Textile production and fabrication.
  - (ii) Commercial sewing.
  - (iii) Tailoring.
- (DD) The following leather working courses:
  - (i) Leather working.
  - (ii) Shoe repair.
- (EE) Upholstering.
- (FF) The following woodworking courses:
  - (i) Cabinet making.
  - (ii) Millwork.
  - (iii) Furniture making.
  - (iv) Woodworking, general.
- (GG) The following industrial cooperative training courses:
  - (i) Related instruction.



- (ii) On-the-job training.
- (10) (7) The following interdisciplinary cooperative education courses:
  - (A) Related instruction.
  - (B) On-the-job training.
- (11) Before July 1, 2000, the following marketing education courses:
  - (A) The following marketing courses:
    - (i) Introduction to marketing.
    - (ii) Marketing.
    - (iii) Marketing, advanced (cooperative/related).
  - (B) The following specialized marketing education courses:
    - (i) Marketing management.
    - (ii) Fashion merchandising.
    - (iii) Advertising and sales.
    - (iv) Entrepreneurship/business ownership.
    - (v) Finance and credit services.
    - (vi) Retailing.
    - (vii) Hospitality and tourism.
    - (viii) Sports/entertainment marketing.
    - (ix) Radio-TV broadcasting/telecommunications.
- (12) After June 30, 1998, (8) The following marketing education courses:
  - (A) The following marketing courses:
    - (i) Marketing foundations.
    - (ii) Marketing, advanced (related).
  - (B) The following specialized marketing education courses:
    - (i) Entrepreneurship.
    - (ii) Fashion merchandising.
    - (iii) Financial services marketing.
    - (iv) Hospitality, travel, and tourism.
    - (v) Marketing seminar.
    - (vi) Sports, recreation, and entertainment marketing.
    - (vii) Radio-TV broadcasting/telecommunications.
  - (C) Marketing field experiences (cooperative).

(b) All of the courses listed in subsection (a) must also meet the requirements of 511 IAC 8.

(c) Before July 1, 2000, as an option to offering family and consumer sciences courses as nonvocational education, schools may choose to offer these courses as a vocational family and consumer sciences program by meeting the following additional requirements:

- (1) A minimum offering for vocational family and consumer sciences consists of consumer education, interpersonal relations, and at least one (1) course from each of the following areas:
  - (A) Nutrition and food.
  - (B) Housing.
  - (C) Human development.
  - (D) Textiles and clothing.

This minimum offering must be taught within any consecutive two (2) year time period.

- (2) A major in vocational family and consumer sciences education consists of consumer education or family management, interpersonal relations, or family relations, and four (4) additional courses from at least three (3) different categories in the family and consumer sciences area of study.
- (3) A minor in vocational family and consumer sciences consists of consumer education or family management, interpersonal relations or family relations, and two (2) additional courses from at least two (2) different categories in the family and consumer sciences area of study.

(d) After June 30, 1998, (c) Schools may qualify their family and consumer sciences programs for vocational status by meeting the following additional requirements:

- (1) A minimum offering for vocational family and consumer sciences consists of teaching orientation to life and careers or interpersonal relationships every year and teaching at least four (4) additional courses from the following:
- (A) Nutrition and wellness.
  - (B) Interpersonal relationships.
  - (C) Child development and parenting or human development and family wellness.
  - (D) Adult roles and responsibilities.
  - (E) Consumer economics.
  - (F) Orientation to life and careers.

**This minimum offering must be taught within any consecutive two (2) year time period.**

- (2) A major in vocational family and consumer sciences education consists of at least six (6) credits, including three (3) of the following:
- (A) Orientation to life and careers.
  - (B) Adult roles and responsibilities.
  - (C) Nutrition and wellness.
  - (D) Child development and parenting or human development and family wellness.
  - (E) Interpersonal relationships.
- (3) A minor in vocational family and consumer sciences consists of at least four (4) credits from the following:
- (A) Child development and parenting or human development and family wellness.
  - (B) Nutrition and wellness.
  - (C) Orientation to life and careers.
  - (D) Adult roles and responsibilities.
  - (E) Consumer economics.
  - (F) Interpersonal relationships.

*(Indiana State Board of Education; 511 IAC 6.1-5.1-10.1; filed Jul 12, 1993, 10:00 a.m.: 16 IR 2854, eff Jul 1, 1993 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #92-143 was filed Jul 12, 1993.]; filed May 28, 1998, 4:57 p.m.: 21 IR 3827; errata filed Aug 17, 1998, 10:21 a.m.: 22 IR 127; filed Dec 2, 2001, 12:22 p.m.: 25 IR 1143)*

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