Academic Notes

April 5, 2010 **AN 2009-2010**

** SPECIAL NOTICES**

FACULTY ATTENDANCE FORM FOR SPRING COMMENCEMENT

Commencement is a most important celebration for a campus. The participation of faculty in the celebration demonstrates to our graduates, their family members, and even to prospective students how important they are to us. Your participation is requested in the Commencement ceremonies that will be held on **May 8, 2010**. The Commencement Attendance Form and Faculty Academic Apparel Rental Order Form are available online at http://www.indstate.edu/academicaffairs/commencement-faculty.htm. Apparel rental deadline is **April 12, 2010**. Together we can make this celebration an event that all of our graduates will never forget. We want and need for them to leave here with nothing but fond memories of a University that provided both a quality education and a caring environment.

ACADEMIC NOTES PUBLICATION SCHEDULE FOR SPRING 2010

Below is the circulation schedule for the electronic copy of *Academic Notes* through May 10, 2010. All submissions for inclusion in Academic Notes are due in the Office of Academic Affairs no later than 10:00 a.m. on the Wednesday prior to the distribution of Academic Notes on the following Monday. Submissions must be in hard copy along with an e-mail, disk, or CD with the same information. The electronic version must be formatted either in Word with pages with signatures scanned and inserted as a picture OR PDF saved as text and image. (Do NOT send PDF just saved as an image.) Information submitted to Academic Notes that is not accompanied by an electronic version or that is incomplete or unusable will be returned to the appropriate office. Academic Notes is available using Acrobat Reader at http://www.indstate.edu/academicaffairs/academic_notes.htm

ACADEMIC NOTES PUBLICATION SCHEDULE FOR SPRING 2010

Deadline for Items	Issue Date
April 7	April 12
April 14	April 19
April 21	April 26
April 28	May 3
May 5	May 10

ACALOG NOTE

The format for curriculum proposals has changed to correspond with the structure of Acalog, the new version of the electronic catalogs. Some proposals will be published under the old structure and some under the new structure during this transition period.

Improved Electronic Catalog
The new electronic version of the undergraduate catalog is posted at http://www.indstate.edu/academics/catalogs.htm Some advantages of the new format are:

- It is easily searchable and searchable from the internet
- It is easier for students and advisors to find and choose the courses students need
- Students create a personal portfolio of courses in which they are interested
- Links to information such as department web sites, advising information, and video clips can easily be added
- Every page can easily be printed.

If you have questions, please contact Academic Affairs, extension 3662.

PROGRAMS MOVE TO DIFFERENT COLLEGES

The faculty of the Department of Family and Consumer Sciences (FCS), with the support of the Dean of the College of Arts and Sciences (CAS), proposes to relocate the degree programs in FCS to other academic units in order to create synergies with programs in those units for the mutual benefit of students and faculty alike. The faculty and deans of the units into which the programs will relocate also support the proposed relocations.

Programs

The programs in Food and Nutrition (F&N), FCS Education, FCS General, and Human Development and Family Studies (HDFS) propose to join the Department of Health, Safety, and Environmental Health Sciences (HSEHS) in the College of Nursing, Health and Human Services (CNHHS). The program in Interior Design (ID) proposes to join with the Construction Management (CM) program, and the program in Textiles and Apparel Merchandising (TAM) propose to join with the Human Resource Development for Higher Education and Industry program (HRD) in the Department of Technology Management (TM) in the College of Technology (COT). ID and CM will form a new Department of the Built Environment under a proposal from COT currently before CAAC.

The Department of Family and Consumer Sciences at ISU traces its distinguished history back over one hundred years. By the first decade of the new century, the various majors within FCS had established their own disciplinary identity, with Dietetics (within Food and Nutrition) and Interior Design having their own professional identities for their graduates and their own national professional accreditations in addition to FCS accreditation. At the same time, as budgetary constraints reduced the number of tenure-track positions in CAS, it became impossible for CAS to support all of the FCS programs with the optimal number of regular faculty. Collaborations with programs in related disciplines outside of FCS became an option to consider for the future growth and development of the programs in FCS. Moreover, the creation of CNHHS has provided a new college whose mission is more congruent with that of several of the FCS programs than is the mission of CAS. CAS has been the administrative home of FCS since CAS was established in 1962, but FCS and its current constituent programs are not traditional disciplines of the liberal arts and sciences. ID and TAM are not congruent with existing programs in CNHHS either, and so after extensive consultation, faculty and administrators identified exciting possible synergies between these programs and two programs in COT.

Such a move has historical precedents. In the 1960s, CAS included two divisions [Science and the Social Sciences] and eleven departments including the traditional liberal arts plus Home Economics [the former name of FCS], Industrial Arts, and Library Science. Industrial Arts moved to COT prior to the publication of the 1970-72 ISU *Catalog*, and Library Science moved to the College of Education prior to the publication of the 1998-2000 *Catalog*. The present proposal will complete the sharpening of the focus of CAS on the traditional liberal arts and sciences while also increasing opportunities for

collaborations between the programs in FCS and professionally related programs in CNHHS and COT that will help all programs flourish.

Food and Nutrition, Family and Consumer Sciences Education, Family and Consumer Sciences General, and Human Development and Family Studies

The mission and goals of these four programs are consistent with those of HSEHS in CNHHS. The four programs prepare men and women for critical thinking and problem solving in *professional careers influencing the psychosocial, physical and economic well-being of individuals and families in a changing global community.* The mission of Department of Health, Safety, and Environmental Health Sciences is to advance understanding about human health and well being through research, instruction and service. The central concerns of the HSEHS faculty and students are to *prevent unhealthy and dangerous conditions from harming people, to correct these situations where they exist, and to help people adopt healthy behaviors.* Our over-reaching goals are to prevent premature deaths and disability and promote productive, high- quality lives. Relocating the four FCS programs to HSEHS will allow for alignment of resources in the areas of teaching, research, service, and grant writing, which in turn will generate productive collaboration with other faculty in programs with related missions and enrich the learning environment of the students in those programs.

Food and Nutrition

The Food and Nutrition faculty have long discussed the idea of a possible move to the former College of Health and Human Performance because of the focus of their program on health. Now that ISU has created CNHHS and articulated an institutional commitment to the health sciences, the Food and Nutrition faculty believes the time is right for relocation.

The Food and Nutrition program includes undergraduate majors in Dietetics and Food Service Management and a graduate degree in FCS with a specialization in Dietetics. The program strives to help people through community nutrition, medical nutrition therapy, and management; and prepares graduates who demonstrate a commitment to improving the quality of life for individuals and families through improved health and wellness. Similarly, the mission of HSEHS is "to advance understanding about human health and well being through research, instruction and service." Both faculties are active in the community, and the Food and Nutrition faculty see the proposed move as an opportunity to revisit their curriculum in order to incorporate a stronger community/public/rural health emphasis.

Human Development and Family Studies

The Human Development and Family Studies program promotes healthy family functioning within family systems and provides a preventative approach to promoting healthy families. The program's goal of promoting a healthy family is consistent with the goal and mission of the programs in HSEHS, specifically the School, Public, and Environmental Health concentrations that promote health and improving quality of life of individuals and families. Research has consistently indicated that family education and involvement is a key component of healthy communities, and graduates from these programs work in similar settings. Dr. Linda Behrendt consulted with Dr. Virgil Sheets, Chair of the Department of Psychology, with students and professionals in her discipline, and colleagues in HSEHS. The result of these consultations is that the best fit for HDFS is with HSEHS.

Family and Consumer Sciences Education and Family and Consumer Sciences General

FCS Education combines aspects of social and natural science to prepare students to become secondary teachers in FCS. FCS teachers educate students on healthy relationships between individuals, families, communities, and the environment in which they live. Faculty in FCS Education and in the Health Sciences School Health concentration in HSEHS have discussed creating a double major and reviewing

both curricula for content overlap. The two programs complement each other in their aim to educate secondary teachers to promote healthy lifestyles in individuals and families. The FCS General program is the same as the FCS Education program except that it does not lead to teacher licensure. Both programs have graduate as well as undergraduate degrees.

The Department of HSEHS currently has eleven tenured and tenure track faculty, two undergraduate programs in Health Sciences (with Public Health, School Health, Environmental Health, and Health Administration concentrations) and in Safety Management, and one master's program in Health and Safety (with Occupational Health and Community Health Promotion specializations). In FCS, F&N, HDFS, and FCS Ed/General have six tenured and tenure-track faculty plus one EAP Dietician, the four undergraduate programs described above, and the one master's program described above. The seventeen faculty are collectively looking forward to the synergism that will be created by working together in one administrative unit to foster healthier lifestyles and promote wellbeing.

If the proposed relocation is approved, the seventeen faculty will consider a new more representative name for the department, and the Constitution and Tenure and Promotion document for the new unit will be reviewed and revised. In the interim, current FCS faculty may choose to be evaluated under either the current FCS document or the current HSEHS document but not both.

Interior Design

During the last two decades, interior design programs have been reviewing their position within the world of academia. The national trend is to locate or relocate ID programs in academic units that provide a multi-disciplinary learning environment with other industry professionals. At ISU, the ID faculty have considered two options for such an environment: the Department of Art in CAS or an affiliation with Construction Management (CM) in COT. The mission and goals of ID are consistent with the mission and goals of COT.

In exploring remaining in CAS or moving to COT, the ID faculty arranged meetings and presentations for both its Advisory Board and its students with voting taking place in September 2009. Alumni were contacted digitally and voting by them was concluded in October 2009. The result of multiple meetings and polls was that ID should join with CM in COT as part of a new synergistic focus on the built environment.

The faculty, adjunct faculty, alumni, students, and advisory board all believe that relocating ID to COT will provide the multi-disciplinary collaboration necessary for the professional development of both faculty and students. ID maintains a number of professional endorsements and academic accreditations: the National Kitchen and Bath Association (NKBA) 2000, 2009; the National Association of Schools of Art and Design (NASAD) 2002; and the Council for Interior Design Accreditation (CIDA) 2004, with a reaccreditation visit scheduled for fall 2010. ID faculty, students, and alumni look forward to ID relocating within an academic unit aligned with the goals of the program and the profession.

The ID faculty consist currently of one tenured and one tenure-track faculty member. The two faculty will join the construction management faculty in the current Department of Technology Management and look forward to proposing with them a new Department of the Built Environment within COT. Until the new department exits and creates its own Tenure and Promotion documents, the two current FCS faculty will choose to be evaluated under either the current FCS document or under the current Technology Management document but not both.

Planning for the proposed new Department of the Built Environment will include revisions to the current ID curriculum in order to create the multi-disciplinary learning environment that will mirror the professional work environment our students will enter after graduation.

Textiles and Apparel Merchandizing (TAM)

The TAM program had 56 undergraduate majors at the Fall 2009 official enrollment count. The program is currently delivered by one full-time non-tenure-track faculty member. Relocation of TAM to CNHHS, the College of Business, the Department of Communication in CAS and to COT in affiliation with HRD was explored during the fall and the early weeks of this semester. The HRD faculty expressed enthusiastic interest in linking with the TAM program to develop joint programming in retail merchandizing and training. After widespread consultation and exploration of all possible new administrative and curricular homes for TAM and with the agreement of the faculty in TAM and HRD and the Dean of COT, the CAS Dean believes that the optimal location for TAM in the future is in a collaborative union with HRD.

Funding for the full-time temporary faculty line currently in TAM will be transferred to COT along with the program. Once the relocation is approved, the TAM curriculum will be reviewed and revised for the mutual benefit of both TAM and HRD.
Preferred effective term: Fall 2010

CURRICULUM

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UNDERGRADUATE PROPOSALS

NEW COURSES

COLLEGE OF ARTS AND SCIENCES: Music

MUS 282 - Applied Composition
2 credits.
Individual instruction in composition for the composition major. An hour per week of class time. Includes development of technical skills in composition and writing works for a variety of vocal and instrumental media. May be repeated once for credit.
Prerequisite: a grade of C or better in MUS 117.
Repeatable: May be repeated once for credit.
A-F Grading
Preferred effective term: Fall 2010

MUS 482 Advanced Composition
2 credits.
Advanced individual instruction in composition for the composition major. An hour per week of class time. Includes development of technical skills in composition and writing works for a variety of vocal and instrumental media.
Prerequisites: two semesters of MUS 282 with a C or better and passage of a qualifying jury for 400-level study as applicable.
Repeatable: May be repeated three times for credit.
A-F Grading
Preferred effective term: Fall 2010

SCOTT COLLEGE OF BUSINESS: Organizational

MKTG 445 - Business Negotiations
3 credits
This course examines business negotiation principles and practices and builds skills in the process of negotiating business agreements within and across organizations.
Prerequisite: junior standing
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Electronics, Computer, and Mechanical Technology

AET 457 - Fleet Management
3 credits
This course familiarizes students with fleet maintenance operations. Topics include: transportation systems technology; fleet maintenance organizations; maintenance concepts; and safety.
Prerequisites: senior standing or consent of the instructor.
Note: open to graduate students. Graduate students are required to do additional work of a

research nature.
A-F Grading
Preferred effective term: Fall 2010

AET 458 - Technological Perspectives in Entrepreneurship
3 credits
Students examine entrepreneurism from various social, managerial and technological vantage points. Topics include risk; social capital; business/project planning; and idea evaluation and development. Projects include interviewing entrepreneurs and proposal evaluation and development. Technology applications may vary according to section.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Fall 2010

AET 477 - Advanced Vehicle Technologies
3 credits
This course focuses on electric, hybrid, and fuel cell technologies. Topics include electric, hybrid, and fuel cell control systems; energy storage systems; and fuel cell technology.
Prerequisites: students must have senior standing as an automotive engineering major or consent of instructor.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management

TCED 250 – Teaching Power and Energy
3 credits
Focuses on power, energy, and transportation as taught in secondary technology and engineering classrooms. Students explore activities and apply core content knowledge in power, energy, renewable resources, and transportation in a laboratory setting and through standards-based lesson planning, presentations, and hands-on learning activities. Outside field experience will be required.
A-F Grading
Preferred effective term: Fall 2010

TMGT 461 - Lean Six Sigma
3 credits
Management of the Six Sigma process, the Define stage of the DMAIC SS process, relationship to Lean.
Prerequisite: TMGT 361.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Spring 2011

TMGT 463 - Quality and Process Control
3 credits
Basic principles and practices of quality control.
Prerequisites: TMGT 361 and MATH 241.
A-F Grading
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
Preferred effective term: Spring 2011

TMGT 469 - Process Analysis and Improvement
3 credits
Process analysis and improvement techniques commonly used by professionals in quality.
Prerequisites: TMGT 361 and MATH 241.
A-F Grading
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
Preferred effective term: Spring 2011

COURSE REVISIONS

COLLEGE OF ARTS AND SCIENCES: Music

MUS 151 - Introduction to Musical Traditions II
2 credits
A survey of non-Western musical cultures and Western folk traditions. Emphasis is placed on critical listening, reading, basic research, and writing skills. The ability to read music is essential.
Prerequisites: MUS 150 or consent of instructor.
Note: Three class hours a week.
General Education Credit: [GE2000: Multicultural Studies-International Cultures]
Change number, title, credits, description, remove prerequisites, note, and General Education Credit to:
MUS 237 Introduction to World Music and Culture
3 credits.
Survey of non-Western and Western folk music traditions. Emphasis is placed on communicating musical diversity through an exploration of musical forms, instruments, performance practices, contexts, and the music's roles in a variety of social, cultural, and global systems. No prior technical knowledge of music is necessary.
A-F Grading
Preferred effective term: Spring 2011

MUS 211 - Music Theory III
1 credit
Continuation of 111 and 112, extending through a study of contrapuntal techniques in the invention and fugue, nineteenth-century harmonic material, and rondo and sonata forms.
Prerequisites: grade of C or better in MUS 112 and 114; concurrent enrollment in 213.

Note: Two class hours a week.
Change credits, prerequisites, and remove note to:

MUS 211 Music Theory III
2 credits.
Continuation of 111 and 112 extending through a study of contrapuntal techniques in the invention and fugue, nineteenth-century harmonic material and rondo and sonata forms.
Prerequisites: grade of C or better in 112 and 114; concurrent enrollment in 213 or consent of instructor.
A-F Grading
Preferred effective term: Spring 2011

MUS 212 - Music Theory IV
1 credit
Continuation of 111, 112, and 211, extending through a study of twentieth-century harmonic material in tonal music, set and serial procedures, and recent musical developments.
Prerequisites: grade of C or better in MUS 211; concurrent enrollment in 214 or consent of instructor.
Note: Two class hours a week.
Change credits and remove note to:
MUS 212 - Music Theory IV
2 credits
Continuation of 111, 112, and 211, extending through a study of twentieth-century harmonic material in tonal music, set and serial procedures, and recent musical developments.
Prerequisites: grade of C or better in MUS 211; concurrent enrollment in 214 or consent of instructor.
A-F Grading
Preferred effective term: Spring 2011

SCOTT COLLEGE OF BUSINESS: Organizational

MKTG 310 - Marketing for Non-Profit and Service Organizations
3 credits
The application of marketing principles and practices to the non-profit and service sectors of business.
Prerequisites: MKTG 301 or BUS 320 or 361.
Change prerequisites to:
MKTG 310 - Marketing for Non-Profit and Service Organizations
3 credits
The application of marketing principles and practices to the non-profit and service sectors of business.
Prerequisites: MKTG 301 or BUS 361.
A-F Grading
Preferred effective term: Fall 2010

MKTG 314 - International Marketing
3 credits
Theory and applications of international marketing strategies for both American and multinational concerns organized as either a business or non-profit entity. Students are placed into a decision-making environment similar to that of a marketing manager engaged in international decisions.

Prerequisites: MKTG 301 or BUS 320 or 361.

Change number and prerequisites to:

MKTG 414 - International Marketing

3 credits

Theory and applications of international marketing strategies for both American and multinational concerns organized as either a business or non-profit entity. Students are placed into a decision-making environment similar to that of a marketing manager engaged in international decisions. Prerequisite: MKTG 301 or BUS 361.

A-F Grading

Preferred effective term: Fall 2010

MKTG 332 - Buyer Behavior

3 credits

An interdisciplinary approach to the analysis and application of psychological, social, and cultural influences on the buying behavior of consumers and organizational buyers. The interrelationships of marketing actions and buyer behavior are analyzed with the goal of making effective marketing decisions.

Prerequisites: MKTG 301 or BUS 320 or 361.

Change prerequisites to:

MKTG 332 - Buyer Behavior

3 credits

An interdisciplinary approach to the analysis and application of psychological, social, and cultural influences on the buying behavior of consumers and organizational buyers. The interrelationships of marketing actions and buyer behavior are analyzed with the goal of making effective marketing decisions.

Prerequisites: MKTG 301 or BUS 361.

A-F Grading

Preferred effective term: Fall 2010

MKTG 333 - Product and Pricing Strategy

3 credits

Theory and applications of products, services, and pricing strategies for both American and multinational concerns organized as either a business or non-profit entity. Students are placed into a decision-making environment similar to that of a marketing manager engaged in product and pricing decisions.

Prerequisites: MKTG 301 or Business 320 or 361.

Change prerequisites to:

MKTG 333 - Product and Pricing Strategy

3 credits

Theory and applications of products, services, and pricing strategies for both American and multinational concerns organized as either a business or non-profit entity. Students are placed into a decision-making environment similar to that of a marketing manager engaged in product and pricing decisions.

Prerequisites: MKTG 301 or Business 361.

A-F Grading

Preferred effective term: Fall 2010

MKTG 334 - Promotional Strategy
3 credits
The promotional theory and application of the elements, advertising, personal selling, publicity, and sales promotion are examined for both American and multinational concerns organized as either a business or a non-profit entity.
Prerequisites: MKGT 301 or Business 320 or 361.

Change prerequisites to:

MKTG 334 - Promotional Strategy
3 credits
The promotional theory and application of the elements, advertising, personal selling, publicity, and sales promotion are examined for both American and multinational concerns organized as either a business or a non-profit entity.
Prerequisites: MKGT 301 or Business 361.
A-F Grading
Preferred effective term: Fall 2010

MKTG 338 - Marketing Research
3 credits
The systematic, objective, and comprehensive search for and analysis of data relevant to problems in the field of marketing. Attention is given to marketing research procedures such as project design, sampling, data collection, data analysis, and reporting.
Prerequisites: BUS 320 or 361.

Change prerequisites to:

MKTG 338 - Marketing Research
3 credits
The systematic, objective, and comprehensive search for and analysis of data relevant to problems in the field of marketing. Attention is given to marketing research procedures such as project design, sampling, data collection, data analysis, and reporting.
Prerequisites: BUS 361.
A-F Grading
Preferred effective term: Fall 2010

MKTG 345 - Business Marketing
3 credits
This course addresses the marketing questions and problems related to firms that are involved in the development, production, and marketing of products or services to the business community. Areas of study include the product/service, pricing, channels of distribution, and promotion available, as well as methods to select and apply specific plans.
Prerequisites: MKTG 301 or BUS 320 or 361.

Change number, title, description, and prerequisites to:

MKTG 443 - Business to Business Marketing
3 credits
Examines buyer behavior and purchasing procedures within the business to business sector of the economy. Based on that understanding, the course also examines the development of appropriate marketing strategies for these important customers, perhaps strategic accounts, within the commercial/industrial, governmental, and/or institutional market.
Prerequisite: MKTG 301 or BUS 361.
A-F Grading

Preferred effective term: Fall 2010

MKTG 347 - Principles of Retailing
3 credits
The practice of efficient retailing operations is studied. Subjects include: store location, pricing, promotion, personnel and organization, merchandise planning, and control.
Prerequisites: MKTG 301 or BUS 320 or 361.
Change prerequisites to:
MKTG 347 - Principles of Retailing
3 credits
The practice of efficient retailing operations is studied. Subjects include: store location, pricing, promotion, personnel and organization, merchandise planning, and control.
Prerequisites: MKTG 301 or BUS 361.
A-F Grading
Preferred effective term: Fall 2010

MKTG 353 - Marketing Channel Structure and Strategy
3 credits
This course deals with the nature, types, and roles played by marketing institutions within channels. The process of channel management is emphasized.
Prerequisites: MKTG 301 or BUS 320 or 361.
Change prerequisites to:
MKTG 353 - Marketing Channel Structure and Strategy
3 credits
This course deals with the nature, types, and roles played by marketing institutions within channels. The process of channel management is emphasized.
Prerequisites: MKTG 301 or BUS 361.
A-F Grading
Preferred effective term: Fall 2010

MKTG 439 - Marketing Internship
3 credits
Students work under supervision in a marketing-related position for an organization applying marketing principles. A written report and daily journal are required of the student and a written evaluation by the employer must be made to the supervising University instructor.
Prerequisites: MKTG 301 or BUS320 or 361, at least 6 credits of marketing courses beyond MKTG 301 or BUS 320 or 361, and consent of Department Chairperson prior to registration.
Change prerequisites to:
MKTG 439 - Marketing Internship
3 credits
Students work under supervision in a marketing-related position for an organization applying marketing principles. A written report and daily journal are required of the student and a written evaluation by the employer must be made to the supervising University instructor.
Prerequisites: At least 6 credits of marketing courses beyond MKTG 301 or BUS 361, a declared major or minor in marketing, and consent of Department Chairperson prior to registration.
A-F Grading
Preferred effective term: Fall 2010

MKTG 444 - Sales Policy and Management
3 credits
This course is structured to establish and evaluate objectives and policies for sales managers concerning managing the sales force and methods of market analysis in terms of sales forecasts and sales budgeting.
Prerequisites: MKTG 334 and 344.

Change title, description, and prerequisites to:

MKTG 444 - Salesforce Management
3 credits
Examines the strategic management of an outside salesforce within a global business to business environment. Covers salesforce recruitment, organization, motivation, and control.
Prerequisite: MKTG 301 or BUS 361.
A-F Grading
Preferred effective term: Fall 2010

MKTG 448 - Marketing Management
3 credits
Application of problem solving in the area of marketing management, emphasizing planning the marketing effort, management of the marketing organization, and control of marketing operations.
Prerequisites: senior standing, MKTG 332, 333, 334, 338, 353, and BUS 320 or 361
Note: This is the capstone course in the major.

Change prerequisites to:

MKTG 448 - Marketing Management
3 credits
Application of problem solving in the area of marketing management, emphasizing planning the marketing effort, management of the marketing organization, and control of marketing operations.
Prerequisites: MKTG 332 and 338, and senior standing.
Note: This is the capstone course in the major.
A-F Grading
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management

TCED 115 - Introduction to Technology and Engineering Technology
1 credit
An introduction to teaching technology and engineering education (for grades kindergarten-12) including: the history of the profession; its philosophies and roles in the education of children; its professional culture; and legal issues.

Change title, credits, and description to:

TCED 115 - Introduction to Career, Technology, and Engineering Education
3 credits
An introduction to teaching career and technical education, specifically, technology and engineering education. Content focuses on the history and philosophy, relationships between governmental agencies, legislation, professional development, culture, and organizations, certification, employment opportunities, terminology, resources, problem-based learning,

funding, recruitment/retention, and core areas of technology and engineering. Field experiences required.
A-F Grading
Preferred effective term: Spring 2011

TCED 222 - Material Processing
3 credits
Skill development in layout, separating, forming, joining, and finishing processes used to manipulate metals, woods, composites, and plastics.

Change title and description to:

TCED 222 – Teaching Construction
3 credits
Focuses on construction engineering and technology including materials and processes as taught in secondary classroom. Students explore activities and core technical content technical knowledge and materials and processes used in its application through standards-based lesson planning, presentations, and hands-on learning activities in a laboratory setting. Field experience required.
A-F Grading
Preferred effective term: Spring 2011

TCED 307 - Communications Systems: People and Machines
3 credits
Communication principles and media involving man and machine as employed in the transmission of a message in an information society.

Change title and description to:

TCED 307 – Teaching Design and Communications
3 credits
Focuses on design and communications as taught in secondary classroom. Students explore activities and core technical content knowledge in design and communications in a laboratory setting and apply design and communications subject matter to secondary education through standards-based lesson planning, presentations, and hands-on learning activities. Field experience required.
A-F Grading
Preferred effective term: Spring 2011

TCED 327 - Production Systems
3 credits
An enterprise approach to how things are produced ranging from manufacturing to construction; includes product and process design, scheduling, estimating, purchasing, safety, and quality.

Change title and description to:

TCED 327 – Teaching Advanced Manufacturing
3 credits
Focuses on advanced manufacturing and automation as taught in secondary technology and engineering education courses. Students explore activities and core technical content knowledge in manufacturing in a laboratory setting and apply manufacturing subject matter to secondary education through standards-based lesson planning and presentations, and hands-on learning activities. Field experience required.
A-F Grading

Preferred effective term: Spring 2011

TCED 470 - Course Development and Instructional Design
3 credits
A teacher's approach to curriculum development and instructional design. The focus is on interpreting educational standards and determining the appropriate instructional activities to meet the students' needs and educational standards.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.

Change title, description, and remove note to:

TCED 470 - Application of Instructional Design and Evaluation in the Educational Laboratory
3 credits
The course provides students with information on how to safely instruct and evaluate in, design, supply, organize, and manage the technology and engineering education laboratory and classroom. Methodologies, development and evaluation of testing instruments, student evaluation, safety, classroom and laboratory management, equipment, and supplies are addressed. Field experience required.
A-F Grading
Preferred effective term: Spring 2011

TCED 490 - Instructional Methods and Education Trends
3 credits
Effective teaching methods for technology and engineering education teachers. This course is designed to help prospective teachers gain insights into teaching methodology and continue to develop their teaching skills, including discipline, laboratory design and management, safety, and purchasing supplies and equipment.

Change title and description to:

TCED 490 – Trends in Teaching Technology and Pre-Engineering
3 credits
Focuses on ever-changing issues in technical-based education. The course provides future teachers with information and effective teaching methods in addressing trends and issues in innovative and integrated technologies. Students learn about integrated areas of technology and engineering education, design, technology, and pre-engineering and how to apply them to technology and engineering education. Field experiences required.
A-F Grading
Preferred effective term: Spring 2011

TMGT 473 - Quality Control of Industrial Products I
3 credits
Basic principles and practices of quality control in industry.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.

Change number, title, description, and remove note to:

TMGT 361 - Quality Systems and Tools
3 credits
History, philosophy, tools, processes, and systems of quality.
A-F Grading
Preferred effective term: Spring 2011

COURSE BANKING

SCOTT COLLEGE OF BUSINESS: Organizational

MKTG 442 - Advertising Policy and Management
Preferred effective term: Fall 2010

NEW PROGRAMS

SCOTT COLLEGE OF TECHNOLOGY: Organizational

Insurance Sales Certificate (15 credits)
CIP Code: 521401

Brief Summary:

This proposal is to create a Certificate in Insurance Sales. The rationale for this new Certificate follows. There is extraordinary demand for people with appropriate skills and competencies to work in sales within the insurance industry. Executives from the Insurance Advisory Council are extremely enthusiastic about the proposed new program. The Certificate in Insurance Sales will enable ISU to further enhance one of its programs of national leadership -- insurance -- with sales, an emerging focus of the College of Business. The Certificate in Insurance Sales will enable students to demonstrate an early interest in this field to recruiters and to demonstrate that they devoted substantial effort toward developing skills and competencies within the area while attending ISU. This will provide a significant advantage to ISU students over competitors when seeking employment within this field.

Student Learning:

We have carefully reviewed our student outcomes assessment and determined that we need to make this adjustment to our current offering.

Proposed Catalog Copy:

Insurance Sales Certificate (15 credits)
CIP Code: 521701

This program is available to students pursuing majors within the Scott College of Business. The Insurance Sales Certificate provides students with an opportunity to develop and document selling skills while also acquiring some product knowledge within the insurance sector.

Required Courses (12 credits):

BUS 361 Principles of Marketing 3 credits
MKTG 344 Professional Selling 3 credits
INS 340 Introduction to Risk and Insurance 3 credits

Choose one from the following:

MKTG 444 Salesforce Management 3 credits
MKTG 445 Business Negotiations credits

Elective Courses (3 credits):
Any other insurance course
Preferred effective term: Fall 2010

SCOTT COLLEGE OF BUSINESS: Organizational

Medical Sales Certificate (15 credits)
CIP Code: 521401

Brief Summary:

This proposal is to create a Certificate in Medical Sales. The rationale for this new Certificate follows. Within Indiana, one of the areas with extraordinary growth potential over the next decade is medical, health care, and/or life sciences. This new Certificate in Medical Sales is intended to enhance the career preparation of ISU students with an interest in selling products or services within this growing field. The Certificate in Medical Sales will enable students to demonstrate an early interest in this field to recruiters and to show that they devoted substantial effort toward developing skills and competencies within the area while attending ISU. This will provide a significant advantage to ISU students over competitors when seeking employment within this profession.

Student Learning:

We have carefully reviewed our student outcomes assessment and determined that we need to make this adjustment to our current offering.

Proposed Catalog Copy:

Medical Sales Certificate (15 credits)
CIP Code: 521401

This program is available to students pursuing majors within the Scott College of Business. The Medical Sales Certificate provides students with an opportunity to develop and document selling skills while also acquiring some product knowledge within the medical, life sciences, or health care sectors.

Required Courses (9 credits):
- BUS 361 Principles of Marketing 3 credits
- MKTG 344 Professional Selling 3 credits
- MKTG 444 Salesforce Management 3 credits

Elective Courses (choose 6 credits from the following):
- ATTR 110 Introduction to Health Professions 3 credits
- ATTR 225 Medical Terminology for Allied Health Professions 3 credits
- BIO 112 Human Aspects of Biology 3 credits

- BIO 231 Human Anatomy 2 credits
- BIO 231L Human Anatomy Laboratory 1 credit
- BIO 241 Human Physiology 2 credits
- BIO 241L Human Physiology Laboratory 1 credit
- HLTH 111 Personal Health Science and Wellness 3 credits
- HLTH 221 Community Health Concepts 3 credits
- HLTH 340 Health Biostatistics 3 credits
- HLTH 360 Epidemiology 3 credits
- NURS 104 Introduction to Professional Nursing 2 credits
- NURS 228 Clinical Pharmacology 3 credits
- PSY 458 Psychopharmacology 3 credits
- SOC 424 Sociology of Mental Health and Illness 3 credits
- Other courses that involve the study of medical, life sciences, or health care issues that are approved by the Director of the Undergraduate Student Services Office in the College of Business.

Preferred effective term: Fall 2010

SCOTT COLLEGE OF BUSINESS: Organizational

Sales and Negotiations Minor (18 credits)*
CIP Code: 521401

Brief Summary:

This proposal is to create a new Minor in Sales and Negotiations. The rationale for the proposing this new minor is as follows. This new Minor provides the opportunity for ISU students to develop and document skills within this important career area. A recent study reported that sales was second only to teaching in the number of job offers made to new college graduates (see: http://www.bnet.com/2403-13074_23-325280.html). While students will develop content knowledge in their major fields, the minor is an excellent way for students from other majors (especially in the hard sciences) to supplement that important factual knowledge with the skills developed from the Sales and Negotiation Minor. This combination of technical knowledge plus selling skills is an extremely attractive form of career preparation for students with an interest in selling complex products or services. Attracting students from the hard sciences to our program also contributes to the learning experience for College of Business students enrolled in the same classes alongside these students pusuing the Minor. Oftentimes, excellent learing synergies emerge when bright students from different fields work together on projects together in a class.

Student Learning:

We have carefully reviewed our student outcomes assessment and determined that we need to make this adjustment to our current offering.

Proposed Catalog Copy:

Sales and Negotiations Minor (18 credits)*
CIP Code: 521401

The Sales and Negotiations Minor provides an opportunity for students to develop and document sales and negotiations skills. These are valuable workplace skills that can be utilized by students from a variety of majors and in a number of different work environments.

*The Sales and Negotiations Minor is not available to students who select the Sales Management Track within the Marketing Major. For all other students, completion of the Sales and Negotiations Minor requires at least 9 credit hours beyond the requirements for any other major, minor, or certificate.

Required Courses (15 credits):

- BUS 361 Principles of Marketing 3 credits
  OR
- MKTG 301 Introduction to Marketing 3 credits

  AND
- MKTG 344 Professional Selling 3 credits
- MKTG 443 Business to Business Marketing 3 credits
- MKTG 444 Salesforce Management 3 credits
- MKTG 445 Business Negotiations 3 credits

Elective Courses (Select 3 credits):

- COMM 312 Introduction to Persuasion Theory 3 credits
- MKTG 310 Marketing for Non-Profit and Service Organizations 3 credits
- MKTG 314 International Marketing 3 credits
- MKTG 333 Product and Pricing Strategy 3 credits
- MKTG 334 Promotional Strategy 3 credits
- MKTG 347 Principles of Retailing 3 credits
- MKTG 353 Marketing Channel Structure and Strategy 3 credits
- MKTG 439 Marketing Internship 3 credits
- MKTG 449 Individual Study in Marketing 3 credits
- MKTG 475 Seminar in Current Marketing Topics 3 credits
- OMA 490 Supply Chain Management 3 credits [Please note prerequisites]

Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management

Lean Six Sigma Minor (21 credits)
CIP Code: 150612

Brief Summary:

This minor will focus on the body of knowledge related to the certification in quality known as Six Sigma (a quality profession problem solving improvement method). The focus will be on Lean techniques (process improvement and performance strategies aimed at reducing waste and increasing efficiency). See the cover document for more details.

Student Learning:

As a proposed new program, the program has yet to implement student outcomes assessment . The outcomes assessment for this minor will use the outcomes assessment plan for the BS in Technology Management program. Feedback via other program's outcome assessment was a major factor in proposing this minor. The Advanced Manufacturing Management program's advisory committee, quality practitioners in the PhD in Technology Management program, members of local industry, members of the local chapter of the American Society for Quality, and several faculty members and students have called for more courses and programs in quality. See the cover document for more details.

Proposed Catalog Copy:
Lean Six Sigma Minor (21 credits)
CIP Code: 150612

The Lean Six Sigma minor is open to all majors. The minor melds two compatible methodologies: Lean and Six Sigma. Lean focuses on increasing efficiencies and eliminating waste in the supply chain, especially the processing stage. Six Sigma is a quality-focused problem solving methodology. Though both Lean and Six Sigma have their roots in the manufacturing setting, both, expecially in combination, are being widely applied to construction, mechanical design, banking, education, health care, and many other service and technology industries.

Required Courses:

Mathematics (3 credits):

•MATH 241 - Principles of Statistics 3 credits

Technology Management (18 credits):

•TMGT 361 - Quality Systems and Tools 3 credits
•TMGT 374 - Lean Manufacturing Systems 3 credits
•TMGT 461 - Lean Six Sigma 3 credits
•TMGT 463 - Quality and Process Control 3 credits
•TMGT 469 - Process Analysis and Improvement 3 credits
•TMGT 471 - Producation Planning and Control 3 credits
Preferred effective term: Fall 2010

PROGRAM REVISIONS

SCOTT COLLEGE OF BUSINESS: Organizational

Marketing Major (72 credits)
CIP Code: 521401 Major Code: 6230

Brief Summary:

This proposal changes the requirements for the Marketing Major and introduces a two track system providing students with a choice of the nearly the current offering within marketing or the chance to pursue a track in sales. The rationale for proposing these changes includes the following issues. First, the Marketing Major has experienced significant declines in enrollment over the past several years. An important goal of this substantial change is to increase the overall enrollment within the Marketing Major. The goal is to maintain current enrollment in the marketing area and to attract a substantial number of new students who will pursue the new track in Sales Management. The logic of future enrollment increases follows. This new track in Sales Management will develop a skill set among our students which is in very high demand by employers (sales is second only to teaching as a source of jobs for all college graduates, see: http://www.bnet.com/2403-13074_23-325280.html). The skills developed in the Sales Management track by our graduates will lead to a substantial improvement in career placement and this should lead to a subsequent increase in enrollment.

Secondly, the development of a focus on sales education within the marketing program at ISU is consistent with national trends. In 1990, there were fewer than five universities in the USA with a significant offering in sales education. Today, there are about 40 universities doing so and the numbers are increasing.

Thirdly, the development of the Sales Management Track is an attempt to revitalize what was once an ISU area of strength. Several years ago, ISU had a very good reputation for developing Marketing majors with the potential for sales success. Due to faculty retirements and other factors, this strength had faded. Based on recent faculty recruitment and a commitment from the Dean to this subset of the marketing field, ISU is now poised to move forward and become a national leader in sales education. The proposed revisions are an important step in that regard.

Fourth, the College of Business now has a Sales and Negotiation Lab that provides a substantial resource for teaching within this area. The proposed revision of the Marketing curriculum will facilitate usage of this outstanding teaching resource and will significantly enhance our experiential eduation focus with the College of Business.

Student Learning:

We have carefully reviewed our student outcomes assessment and determined that we need to make this adjustment to our current offering.

Proposed Catalog Copy:

Marketing Major (72 credits)
CIP Code: 521401 Major Code: _____

Required Courses on all Four-Year Professional Programs (45 credits):

Business:

BUS 100 - Introduction to Contemporary Business 3 credits
BUS 180 - Business Information Tools 3 credits
BUS 201 - Principles of Accounting I 3 credits

BUS 202 - Principles of Accounting II 3 credits
BUS 205 - Business Statistics I 3 credits
BUS 263 - Legal Environment and Business 3 credits
BUS 305 - Business Statistics II 3 credits
BUS 311 - Business Finance 3 credits
BUS 321 - Introduction to Management Information Systems 3 credits
BUS 351 - Introduction to Operations Management 3 credits
BUS 361 - Principles of Marketing 3 credits
BUS 371 - Management and Organizational Behavior 3 credits
BUS 401 - Senior Business Experience 3 credits

Economics:

ECON 200 - Principles of Macroeconomics 3 credits
ECON 201 - Principles of Microeconomics 3 credits

Required Courses for Marketing Majors (27 credits)

All Marketing Majors Must Complete these Required Core Courses:

Required Core Courses for All Marketing Majors Regardless of Track (9 credits):
MKTG 332 Buyer Behavior 3 credits
MKTG 338 Marketing Research 3 credits
MKTG 448 Marketing Management 3 credits

Select One of Two Available Tracks:

EITHER:

Marketing Management Track:
Required Courses for Marketing Management Track (9 credits):
MKTG 333 Product and Pricing Strategy 3 credits
MKTG 334 Promotional Strategy 3 credits
MKTG 353 Marketing Channel Structure and Strategy 3 credits
AND
Elective Courses for Marketing Management Track (Select 9 credits):
Working with an advisor, the student will select 9 credits of 300-400 level MKTG courses

OR:

Sales Management Track:
Required Courses for Sales Management Track (12 credits):
MKTG 344 Professional Selling 3 credits
MKTG 443 Business to Business Marketing 3 credits
MKTG 444 Salesforce Management 3 credits
MKTG 445 Business Negotiations 3 credits
AND
Elective Courses for Sales Management Track (Select 6 credits):

COMM 312 Introduction to Persuasion Theory 3 credits
MKTG 310 Marketing for Non-Profit and Service Organizations 3 credits
MKTG 314 International Marketing 3 credits
MKTG 333 Product and Pricing Strategy 3 credits
MKTG 334 Promotional Strategy 3 credits
MKTG 347 Principles of Retailing 3 credits
MKTG 353 Marketing Channel Structure and Strategy 3 credits
MKTG 439 Marketing Internship 3 credits
MKTG 449 Individual Study in Marketing 3 credits
MKTG 475 Seminar in Current Marketing Topics 3 credits
OMA 490 Supply Chain Management 3 credits [Please note prerequisites]
Preferred effective term: Fall 2010

SCOTT COLLEGE OF BUSINESS: Organizational

Marketing Minor (18 credits)
CIP Code: 521401

Brief Summary:

This proposal changes the requirements for the Marketing Minor. The rationale for proposing this change includes the following issues. First, the Marketing faculty has reached a consensus that all Marketing Minors should complete courses across the fundamental strategic dimensions of marketing: product, price, promotion, and place. This was possible with the prior minor, but not a requirement. To our regret, many students had been selecting courses for the minor based on scheduling convenience and some finished without a well rounded array of courses. This revision will remedy this problem.

Secondly, the revised list of required courses will facilitate faculty scheduling and increase productivity. The revision will lead to increased enrollment in the required courses and enhance faculty productivity. The revision will reduce the need for a wider variety of elective courses to be offered which might not attract substantial enrollment.

Thirdly, this change is necessary because with the flexibility that had been allowed in the past, a student could have selected the Sales Management Track in the new major, complete those courses, then ask that the Marketing Minor be added to his or her credentials because the course work for the old highly flexible Marketing Minor would have met. The proposed revision to the Marketing Minor will avoid this problem.

Student Learning:

We have carefully reviewed our student outcomes assessment and determined that we need to make this adjustment to our current offering.

Proposed Catalog Copy:

Marketing Minor (18 credits)*
CIP Code: 521401

*The Marketing Minor is not available to students who select the Marketing Major.

Required Courses (15 credits):

MKTG 332 Buyer Behavior 3 credits
MKTG 333 Product and Pricing Strategy 3 credits
MKTG 334 Promotional Strategy 3 credits
MKTG 353 Marketing Channel Structure and Strategy 3 credits

Choose one from the following:
BUS 361 Principles of Marketing 3 credits
MKTG 301 Introduction to Marketing 3 credits

Elective Courses (3 credits):

Choose 3 credits from the following:
MKTG 310 Marketing for Non-Profit and Service Organizations 3 credits
MKTG 314 International Marketing 3 credits
MKTG 344 Professional Selling 3 credits
MKTG 347 Principles of Retailing 3 credits
MKTG 439 Marketing Internship 3 credits
MKTG 443 Business to Business Marketing 3 credits
MKTG 444 Salesforce Management 3 credits
MKTG 445 Business Negotiations 3 credits
MKTG 449 Individual Study in Marketing 3 credits
MKTG 475 Seminar in Current Marketing Topics 3 credits

Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Electronics, Computer, and Mechanical Engineering Technlogy

Automotive Engineering Technology Major (69 credits)
CIP Code: 150803 Major Code: D734

Brief Summary:

As the new Foundational Studies program is finalized, the Automotive Engineering Technology program is being revised to reflect those changes. In addition to revisions caused by the Foundational Studies program:
(1)Three new AET courses have been proposed to enhance the experience of students: AET 457-Fleet Management, AET 458 – Technological Perspectives in Entrepreneurship, and AET 477 – Advance Vehicle Technologies. These courses are incorporated into the program without increasing the total hours by allowing students to choose three courses from an array of seven courses. AET 330 Survey of Motorsports, an already existing course, was added to the seven course array which is comprised of three already existing and previously required automotive management courses. While all seven courses are relevant and important to the degree, current faculty are unable to roll out these courses in a timely fashion to ensure every student the opportunity to complete all seven courses. By allowing faculty to rollout the courses in a staggered fashion the faculty will be able to stay current with the material.

(2)MET 215 – Graphic Analysis and MATH 115 – College Algebra and Trig essentially serve the same purpose and the redundancy has been eliminated. The Foundational Studies program recognizes both MET 215 and MATH 115 as the only two courses meeting the Mathematical category. After careful review of both syllabi it is evident the two are significantly equal.
(3)The experience component is quite essential for automotive students, as indicated in minutes of advisory committee meetings. Students now have a choice of AET 493 Practicum in Mechanical or Automotive Engineering Technology - Motorsports Practicum for 3 credits or they may take MET 351 – Internship/Coop Experience.
(4)In addition to automotive management courses, students are also required to take one of two management courses from outside the discipline. We are proposing to add another existing course to the possibility. MET 405 – Economic Analysis incorporates many qualities addressing the AET Program Objectives.

It should be noted that the two degree completion options in the proposed catalog copy reflect the changes of Foundational Studies. These degree completion options are a part of the current catalog and are merely being revised to coincide with the changes being incorporated into the four-year degree program.

Student Learning:

The automotive program has been accredited by the National Association of Industrial Technology for more than 20 years. NAIT has recently reorganized and changed its name to the Association of Technology, Management, and Applied Engineering (ATMAE). A review of the last NAIT Accreditation Team Visit, the mission and vision of the program, and advisory committee minutes from the last four years were used to propose the new courses and modifications to the AET program.
The proposed changes should enhance the Program Objectives: (what a student is expected to have accomplished a few years following graduation).
Graduates of the program will:
1. be competent in the application of computer technologies commonly used in industry
2. have a working knowledge of the design, manufacture, and maintenance of automotive major subsystems and technologies
3. demonstrate the ability to apply modern and effective management skills in identification and investigation of problems, analysis of data, synthesis and implementation of solutions, and operations of facilities
4. have technical and managerial skills necessary to enter careers in manufacturing, marketing, operation, and maintenance in the field of automotive technology.

Proposed Catalog Copy:

Automotive Engineering Technology Major (66 credits)
CIP Code: 150803 Major Code: _____

Program Vision

The Automotive Engineering Technology Program at Indiana State University is a leader in integrating teaching, research, and creative activity in an engaging, challenging, and supportive learning environment that prepares productive citizens for Indiana and the world while creating

and maintaining a credible presence within the confines of the automotive sector of education and industry.

Program Mission

The mission of the Automotive Engineering Technology Program at Indiana State University is to prepare application oriented graduates with the technical and managerial skills necessary to enter globally competitive automotive careers. Current automotive technology and design considerations are explored with emphasis on experiential learning opportunities engaging students in engine research, testing, design, and analysis. Students also develop essential managerial knowledge, skills, and abilities, thus assuring a comprehensive understanding of automotive operations ranging from retail to industrial applications.

Program Guiding Principles:

The program:

- Inculcates high standards for learning, teaching, and inquiry
- Provides a well-rounded education that integrates professional preparation and study in the arts and sciences with co-curricular involvement
- Demonstrates integrity through honesty, civility, and fairness
- Embraces the diversity of individuals, ideas, and expressions
- Fosters personal growth within an environment in which every individual matters
- Upholds the responsibility of university citizenship
- Exercises stewardship of the global community

Program Educational Objectives:

Graduates of the program:

1. Are competent in the application of computer technologies commonly used in industry
2. Have a working knowledge of the design, manufacture, and maintenance of automotive major subsystems and technologies
3. Can demonstrate the ability to apply modern and effective management skills in identification and investigation of problems, analysis of data, synthesis and implementation of solutions, and operations of facilities
4. Have the technical and managerial skills necessary to enter careers in manufacturing, marketing, operation, and maintenance in the field of automotive technology

Program Outcomes:

Students completing the program are expected to demonstrate an appropriate mastery of the knowledge, techniques, skills, and modern tools of automotive engineering technology. Specifically, students must demonstrate:

1. An ability to read, interpret, and edit technical drawings
2. Knowledge of the principles of industrial health and safety
3. How to apply theory through practical experience in industrial settings
4. Knowledge of automotive engine systems and design considerations
5. An understanding of service facilities management and organization

6. An ability to apply current knowledge and adapt to emerging applications of mathematics, science, engineering, and technology
7. An ability to conduct, analyze, and interpret experiments, and apply experimental results to improve processes
8. An ability to apply creativity in the design of automotive systems, components, or processes
9. An ability to function effectively on teams
10. An ability to identify, analyze, and solve technical automotive related problems
11. An ability to communicate effectively
12. The ability to plan, organize, prepare, and deliver effective automotive technical reports in written, oral, and other formats
13. A recognition of the need for, and an ability to engage in lifelong learning
14. An ability to utilize appropriate automotive literature and use it as a principal means of staying current in the automotive industry
15. An ability to understand professional, ethical, and social responsibilities
16. A respect for diversity and a knowledge of contemporary professional, societal, and global issues
17. A commitment to quality, timeliness, and continuous improvement

Required courses:

Automotive Engineering Technology: 132—3 credits; 233—3 credits; 239—3credits; 335—3 credits; 336—3 credits; 435—3 credits; 436—3credits; Choose 3 courses from 330—3 credits, 432—3 credits, 433—3 credits, 440—3 credits, 457—3 credits, 458—3 credits, 477—3 credits
Automotive Engineering Technology: 493—3 credits or Mechanical Engineering Technology: 351—3 credits
Electronics and Computer Technology: 160—3 credits
Health, Safety, and Environmental Health Sciences: 212—3 credits
Management: 301—3 credits or Mechanical Engineering Technology: 405—3 credits or Technology Management: 492—3credits
Manufacturing: 370 or 371 or 372—3 credits
Mechanical Engineering Technology: 103—3 credits; 329—3 credits; 333—3 credits; 430—1 credit
Physics: 101—3 credits; 101L—1 credit or 105—3 credits; 105L—1 credit

Directed Foundational Studies
Science with Lab: Chemistry: 100—3 credits; 100L—1 credit
Mathematics: Mechanical Engineering Technology: 215—3 credits

* includes 7 credits of Foundational Studies

Or
Degree completion with an Associate of Science (A.S.) from a regionally accredited institution in an automotive program accredited by the National Automotive Technicians Education Foundation (NATEF).

B.S. in Automotive Engineering Technology, A.S. Transfer option (64 credits)**

Required courses:
Automotive Engineering Technology: 336—3 credits; 435—3 credits; 436—3credits; Choose 3 courses from 330—3 credits, 432—3 credits, 433—3 credits, 440—3 credits, 457—3 credits, 458—3 credits, 477—3 credits
Automotive Engineering Technology: 493—3 credits or Mechanical Engineering Technology: 351—3 credits
Mechanical Engineering Technology: 103—3 credits; 215—3 credits; 430—1 credit
Management: 301—3 credits or Mechanical Engineering Technology: 405—3 credits or Technology Management: 492—3credits
Electives: 15 – credits upper division approved electives

Foundational Studies
Composition: upper division course requirement 3 – credits
Global Perspectives and Cultural Diversity: 3 – credits
Ethics and Social Responsibility: 3 – credits
Integrative Upper Division Electives: 9 – credits (6 credits can be part of minor)

** This option is designed as a degree completion articulation for NATEF accredited automotive service programs from regionally accredited institutions. This degree completion option includes all coursework for satisfying graduation requirements at Indiana State University.

Or
Degree completion with an Associate of Applied Science (A.A.S.) from a regionally accredited institution in an automotive program accredited by the National Automotive Technicians Education Foundation (NATEF)

B.S. in Automotive Engineering Technology, A.A.S. Transfer option (64 credits) **

Required courses:
Automotive Engineering Technology: 336—3 credits; 435—3 credits; 436—3credits; Choose 3 courses from 330—3 credits, 432—3 credits, 433—3 credits, 440—3 credits, 457—3 credits, 458—3 credits, 477—3 credits
Automotive Engineering Technology: 493—3 credits or Mechanical Engineering Technology: 351—3 credits
Mechanical Engineering Technology: 103—3 credits; 215—3 credits; 430—1 credit
Management: 301—3 credits or Mechanical Engineering Technology: 405—3 credits or Technology Management: 492—3credits

Required Foundational Studies (unless satisfied in course by course transfer)
Composition: upper division course requirement 3 – credits
Mathematics: Mechanical Engineering Technology: 215—3 credits
Science with Lab: Chemistry: 100—3 credits; 100L—1 credit
Social or Behavioral Sciences: 3 – credits
Literary Studies: 3 – credits
Fine and Performing Arts: 3 – credits
Historical Studies: 3 – credits
Global Perspectives and Cultural Diversity: 3 – credits

Ethics and Social Responsibility: 3 – credits
Integrative Upper Division Electives: 9 – credits (6 credits can be part of minor)

Electives: as necessary to reach 64 credits beyond AAS degree
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management

Technology and Engineering Education Major–Secondary (54 credits)
CIP Code: 131320 Major Code: E536

Brief Summary:

The proposed program will provide flexibility allowing pre-service technology and engineering education students to not only obtain their licensure in Technology and Engineering Education (TEE), but also have the option to systematically obtain a second licensure in Career and Technical Education (CTE) (if transferring in the specialized technical core electives and work experience), automatic eligibility for Interdisciplinary Cooperative Education (ICE) endorsement, and experience in and possible future certifications to teach in multiple pre-engineering areas at the secondary level while condensing the program down to a true four-year degree.

Currently over 300 secondary schools in Indiana are teaching pre-engineering, with the majority teaching it through the national Project Lead the Way (PLTW) curriculum—making Indiana the most populated PLTW state in the nation. In addition, approximately two-thirds of the current Indiana technology and engineering education teacher population is already at retirement age (as per the Indiana Department of Education). The obvious implication of these combined situations is a vast need for teachers who are both qualified to teach Technology and Engineering Education and pre-engineering courses such as PLTW. The current (not proposed) TEE program does not allow student's curricular experiences in pre-engineering that are relevant with state and national practices.

If the student transfers in the CTE required 24 core technical hours and 4,000 hours of documented work experience, there will be no need to add any additional coursework the TEE program of study to obtain both the TEE and CTE licenses. However, if students do not have the required 24 core technical hours of course work they can obtain them through Indiana State University or one of its technical partners or a combination of both. If students do not have the required work experience they can obtain it while pursuing their TEE degree at Indiana State University. Work experience can be met through in a variety of ways within the program area. One efficient approach would be successful completion of TMGT 351, Professional Internship, three different times throughout the course of the student's college career (for a total of 1,500 supervised work hours). Students could also work towards the completion of work experience through approved transfer or on-campus technical course work —one three credit hour course would equate to 48 work hours. Students can use a combination of the above options in addition to past documented work experience to fulfill the 1,500 supervised work hours in a teacher education program area. ***The student must complete the experiences in the same trade and industrial area.*** *Some of the specific program areas are aviation maintenance technology, building trades technology, building facilities technology, advanced manufacturing, diesel*

service technology, drafting and computer aided design, industrial repair and maintenance, 3-D computer animation and visualization, computer networking technology, computer integrated manufacturing, computer repair and maintenance, commercial art and graphic design, commercial photography, graphic imaging technology welding technology, precision machine technology, and plastics.

Student Learning:

Changes to the TEE program are not being proposed without a thorough review of the current program. Changes to the program were suggested, designed, and reviewed based upon preliminary program review based upon criteria that will be used on the future NCATE visit and upon on the TEE advisory board, which is part of the NCA assessment plan for the program and will also be part of our Special Program Review (SPA) for NCATE accreditation. The TEE advisory board is comprised of practicing professionals such as representatives from the Department of Education, CTE directors, secondary TEE teachers from varying backgrounds, representatives from Indiana State University's College of Technology and College of Education, Technology representatives, College of Education representatives, current TEE students, President of Engineering-Technology Educators of Indiana (State Professional Association), and President of the International Technology Education Association (International Professional Association).

In addition to the above mentioned rationale, the proposed program changes are also being submitted upon the current secondary course offerings by the Indiana Department of Education. According to the Indiana Department of Education approved course titles for secondary schools in the area of Engineering and Technology Education are Technology Education (middle school program), Technology Systems, Introduction to Engineering Design, Communication Systems, Communication Processes, Transportation Systems, Transportation Processes, Construction Systems, Construction Processes, Manufacturing Systems, Manufacturing Processes, Principles of Engineering, Advanced Manufacturing, Digital Electronics, Engineering Design and Development, Aerospace Engineering Technology, Biotechnical Engineering, Civil Engineering and Architecture, Computer Integrated Manufacturing, Fundamental of Engineering, and Technology and Society. The proposed program would be more comprehensive and representative of the state offerings, thus better preparing Indiana State University graduates to teach them.

The proposed program will offer the additional options by creating hybrid courses that will meet requirements of each area—making it the only program of its type in Indiana and the nation. The obvious benefits of this proposed program change is the advantages and extensive education it would bring future graduates and the versatility they will have within Indiana schools. The proposed changes will also make the TEE major more attractive to potential traditional students and transfer students from Ivy Technical College, Vincennes University, and individuals making career changes from business and industry—thus boosting enrollment.

Adding the CTE licensure to the program of study will allow students to be more versatile after graduating from the university and aid schools in receiving State and Federal funding for many secondary courses. In addition, making this systematic addition to the program will also help recruit highly qualified students into the program from Ivy Technical College, Vincennes University, and individuals making career changes from business and industry.

Proposed Catalog Copy:

Technology and Engineering Education Major–Secondary (79 credits)
CIP Code: 131320 Major Code: _____

This major may be added to the Senior High-Junior High/Middle School Instructional License as described in the Department of Curriculum, Instruction, and Media Technology. This major requires a cumulative grade point average of 2.5.

Required Courses:

Technology Engineering Education (21 credits):
TCED 115 - Introduction to Technology and Engineering Technology 3 credits
TCED 222 - Material Processing 3 credits
TCED 250 – Teaching Power and Energy 3 credits
TCED 307 - Communications Systems: People and Machines 3 credits
TCED 327 - Production Systems 3 credits
TCED 470 - Course Development and Instructional Design 3 credits
TCED 490 - Instructional Methods and Education Trends 3 credits

Construction Technology (3 credits):
CNST 111 - Construction Materials, Methods, and Equipment 3 credits

Manufacturing and Technology Management (6 credits):
MFG 225 - Introduction to Materials, Processes, and Testing 3 credits
Choose one from the following:
MFG 370 – Fundamentals of Manufacturing Processes 3 credits
MFG 371 – Manufacturing Processes and Materials 3 credits
TMGT 478 – Industrial Organization and Functions 3 credits

Mechanical Engineering Technology (3 credits):
MET 103 - Introduction to Technical Graphics with CAD 3 credits

Electronics and Computer Technology (6 credits):
ECT 280 – Introduction to Automation 3 credits
Choose one from the following:
ECT 160 - Electronic Fundamentals 3 credits
ECT 174 - Fundamentals of Electronics 3 credits

Directed Electives (9 - 24 credits):

Required 9 credit hours electives selected in consultation with the advisor, or an 18 – 24 hour Minor.

Teacher Education Program (31 credits):

Senior High-Junior High/Middle School Instructional License as described in the Department of

Curriculum, Instruction, and Media Technology.
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management

Packaging Major (65 credits)
CIP Code: 150612 Major Code: E533

Brief Summary:

The program name is being changed to better fit the pattern with in the College of Technology in embracing the term "Engineering Technology" as a descriptor. This should also make the program more marketable to prospective students, as the term engineering in the program name seems to be attractive to potential students. Finally, most of the graduates of the packaging program take jobs with the title of engineer or work in an engineering department, so this change will tend to more accurately reflect the focus of the program.

The new Foundational Studies program effective Fall 2010 has necessitated some minor changes to the Packaging program. The wording 'Directed Basic Studies' and 'Directed Liberal Studies' was replaced with 'Directed Foundational Studies'. Phys 106/L was removed as an option under Laboratory Science so that all students will take Chem 100/L, thus meeting the Foundational Studies requirement. Phys 105/L is now listed with the major courses and MET 215 was added as an option along with Math 115 under Directed Foundational Studies.

On the recommendation of the program Advisor Board, Math 241 was added to provide students with a background in statistics. MET 329 and MET 333 were removed from the program because the committee believes the components of those courses needed by Packaging majors can be covered in PKG 486 'Packaging Machinery Systems'.

Student Learning:

The advisory committee evaluated current assessment data and the body of knowledge required in the Packaging industry as the basis for these changes. Ongoing assessment will determine the success of these changes.

Proposed Catalog Copy:

Packaging Engineering Technology Major (65 credits)
CIP Code: 150612 Major Code: _____

Required Courses:
Packaging Engineering Technology (24 credits):

- PKG 180 - Introduction to Packaging Design 3 credits
- PKG 280 - Packaging Materials and Testing I 3 credits
- PKG 380 - Packaging Materials and Testing II 3 credits
- PKG 381 - Environmental Issues of Packaging 3 credits
- PKG 482 - Package Development and Analysis 3 credits
- PKG 484 - Distribution Packaging Design, Analysis and Testing 3 credits

- PKG 486 - Packaging Machinery Systems 3 credits
- PKG 489 - Packaging Industry Projects 3 credits

Manufacturing (3 credits):

Choose one from the following:

- MFG 370 - Fundamentals of Manufacturing Processes 3 credits
- MFG 371 - Manufacturing Processes and Materials 3 credits
- MFG 372 - Plastics Technology 3 credits

Mechanical Engineering Technology (3 credits):

- MET 103 - Introduction to Technical Graphics with CAD 3 credits

Technology Management (21 credits):

- TMGT 131 - Introduction to Manufacturing Technology 2 credits
- TMGT 351 - Professional Internship 3 credits
- TMGT 429 - Workplace Law for the Technical Manager 3 credits
- TMGT 430 - Senior Seminar 1 credits
- TMGT 471 - Production Planning and Control I 3 credits
- TMGT 473 - Quality Control of Industrial Products I 3 credits
- TMGT 478 - Industrial Organization and Functions 3 credits
- TMGT 492 - Industrial Supervision 3 credits

Mathematics (3 credits):

- MATH 241 – Principles of Statistics 3 credits

Physics (4 credits):

- PHYS 105 - General Physics I 3 credits
- PHYS 105L - General Physics I Laboratory 1 credits

Directed Foundational Studies (7 credits):

Quantitative Literacy – Choose one of the following:

- MATH 115 - College Algebra and Trigonometry 3 credits
- MET 215 – Graphic Analysis 3 credits

Laboratory Science

- CHEM 100 - Chemistry: Reactions and Reason 3 credits
- CHEM 100L - Chemistry: Reactions and Reason Laboratory 1 credits

Preferred effective term: Fall 2010

GRADUATE PROPOSALS

NEW COURSES

SCOTT COLLEGE OF BUSINESS: Analytical

OMA 505 - Business Statistics III

3 credits. This course emphasizes more advanced topics of business statistical applications. Students cannot receive credit for both OMA 505 and OMA 405 unless they have consent of the Department Chairperson.

Prerequisite: BUS 305 or equivalent with a minimum grade of C or consent of Department Chairperson.
A-F Grading
Preferred effective term: Fall 2010

OMA 545 – Advanced Operations Management
3 credits
This course extends the work done in MBA 623. Some of the latest techniques and concepts in production and service operations management are taught. Possible topics include operations strategy, service system design, supply chain management, project management, production planning and control, and enterprise resource planning. The main emphasis of the course is to focus on current and strategic issues.
Prerequisite: MBA 623 or equivalent with a minimum grade of C+, or consent of Department Chairperson. Students cannot receive credit for both OMA 445 and OMA 545 unless they receive the consent of the Department Chairperson.
A-F Grading
Preferred effective term: Fall 2010

SCOTT COLLEGE OF BUSINESS: Organizational

MKTG 514 - International Marketing
3 credits
Theory and applications of international marketing strategies for both American and multinational concerns organized as either a business or non-profit entity. Students are placed into a decision-making environment similar to that of a marketing manager engaged in international decisions. This is a graduate alternative of MKTG 414 and additional work of a research nature will be required. MKTG 514 may not be taken if MKTG 414 was taken as an undergraduate.
Prerequisite: consent of the M.B.A. Director.
A-F Grading
Preferred effective term: Fall 2010

MKTG 543 Business to Business Marketing
3 credits
Examines buyer behavior and purchasing procedures within the business to business sector of the economy. Based on that understanding, the course also examines the development of appropriate marketing strategies for these important customers, perhaps strategic accounts, within the commercial/industrial, governmental, and/or institutional market. This is a graduate alternative of MKTG 443 and additional work of a research nature will be required. MKTG 543 may not be taken if MKTG 443 was taken as an undergraduate.
Prerequisite: consent of the M.B.A. Director.
A-F Grading
Preferred effective term: Fall 2010

MKTG 544 Salesforce Management
3 credits
Examines the strategic management of an outside salesforce within a global business to business environment. Covers salesforce recruitment, organization, motivation, and control. MKTG 544

is a graduate alternative for MKTG 444 and additional work of a research nature will be required for graduate credit. MKTG 544 may not be taken if MKTG 444 was taken as an undergraduate.
Prerequisite: consent of the M.B.A. Director.
A-F Grading
Preferred effective term: Fall 2010

MKTG 545 - Business Negotiations
3 credits
Examines business negotiation principles and practices. Builds skills in the process of negotiating business agreements within and across organizations. MKTG 545 is a graduate alternative for MKTG 445 and additional work of a research nature will be required for graduate credit. MKTG 545 may not be taken if MKTG 445 was taken as an undergraduate.
Prerequisite: consent of the M.B.A. Director.
A-F Grading
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management

TMGT 561 - Lean Six Sigma
3 credits
Management of the Six Sigma process, the Define stage of the DMAIC SS process, relationship to Lean.
Prerequisite: TMGT 361.
A-F Grading
Preferred effective term: Spring 2011

TMGT 563 - Quality and Process Control
3 credits
Basic principles and practices of quality control.
Prerequisites: TMGT 361 and MATH 241.
A-F Grading
Preferred effective term: Spring 2011

TMGT 569 - Process Analysis and Improvement
3 credits
Process analysis and improvement techniques commonly used by professionals in quality.
Prerequisites: TMGT 361 and MATH 241.
A-F Grading
Preferred effective term: Spring 2011

COURSE REVISIONS

SCOTT COLLEGE OF BUSINESS: Organizational

MKTG 649 - Seminar in Marketing Management
3 credits
Provides an opportunity for advanced students in marketing to examine recent marketing developments and to intensively study selected facets of marketing management.

Prerequisites: MKTG 648 or consent of M.B.A. Director.

Change prerequisites to:

MKTG 649 - Seminar in Marketing Management
3 credits
Provides an opportunity for advanced students in marketing to examine recent marketing developments and to intensively study selected facets of marketing management.
Prerequisites: MBA 624 or consent of the M.B.A. Director.
A-F Grading
Preferred effective term: Fall 2010

UNDERGRADUATE APPROVALS

NEW COURSES

COLLEGE OF ARTS AND SCIENCES: Chemistry and Physics

CHEM 300 - Seminar in Chemistry
1 credit
A series of presentations by speakers in the fields of chemistry and physics from academia and industry, and discussion of a variety of chemistry-related topics. The course is not repeatable.
Prerequisite: sophomore standing or higher
A-F Grading
Preferred effective term: Fall 2010

COURSE REVISIONS

COLLEGE OF ARTS AND SCIENCES: Mathematics and Computer Science

MATH 111 - Intermediate Algebra
3 credits
Polynomials, rational algebraic expressions, functions, graphs, inequalities, and theory of equations.
Prerequisites: appropriate placement examination (MAPLE T.A.) score or MATH 011.
Note: not open to students with credit for any higher-numbered mathematics course.

Change number and note to:

MATH 099 - Intermediate Algebra
3 credits
Polynomials, rational algebraic expressions, functions, graphs, inequalities, and theory of equations.
Prerequisites: appropriate placement examination (MAPLE T.A.) score or MATH 011.
Note: does not count as credit towards graduation. Not open to students with credit for any higher-numbered mathematics course.
S-U Grading
Preferred effective term: Fall 2010

COURSE REVISIONS

FOUNDATIONAL STUDIES CREDIT

COLLEGE OF ARTS AND SCIENCES: African and African American Studies

AFRI 113 - Foundations of African and African American Studies
3 credits
An exploration of the philosophical, political, historical, and sociological components that form the basis of African and African American studies.
General Education Credit: [GE2000: Multicultural Studies-U.S. Diversity]
Change General Education Credit to Foundational Studies Credit:
AFRI 113 - Foundations of African and African American Studies
3 credits
An exploration of the philosophical, political, historical, and sociological components that form the basis of African and African American studies.
Foundational Studies Credit: [FS 2010: Global Perspectives and Cultural Diversity]
Preferred effective term: Fall 2010

AFRI 212 - African American Cultural Traditions
3 credits
A focused and analytical examination of Black thought, ideology, and culture, as well as the institutional aspects of Black American life.
General Education Credit: [GE2000: Multicultural Studies-U.S. Diversity]
Change General Education Credit to Foundational Studies Credit:
AFRI 212 - African American Cultural Traditions
3 credits
A focused and analytical examination of Black thought, ideology, and culture, as well as the institutional aspects of Black American life.
Foundational Studies Credit: [FS 2010: Global Perspectives and Cultural Diversity]
Preferred effective term: Fall 2010

AFRI 222 - African Cultural Traditions
3 credits
An overview of African cultural thought and practice. Emphasis on understanding specific aspects of African cultural life, such as religion, aesthetics, political organization, and social institutions, and how these cultural areas relate to the struggle for liberation.
General Education Credit: [GE2000: Multicultural Studies-International Cultures]
Change General Education Credit to Foundational Studies Credit:
AFRI 222 - African Cultural Traditions
3 credits
An overview of African cultural thought and practice. Emphasis on understanding specific aspects of African cultural life, such as religion, aesthetics, political organization, and social institutions, and how these cultural areas relate to the struggle for liberation.
Foundational Studies Credit: [FS 2010: Global Perspectives and Cultural Diversity]
Preferred effective term: Fall 2010

COLLEGE OF ARTS AND SCIENCES: Earth and Environmental Health Systems

ENVI 130 - World Cultures and Environments
3 credits
A study of cultural variability and human interaction with the environment in selected regions of the world.
General Education Credit: [GE2000: Multicultural Studies-International Cultures]
Change General Education Credit to Foundational Studies Credit:
ENVI 130 - World Cultures and Environments
3 credits
A study of cultural variability and human interaction with the environment in selected regions of the world.
Foundational Studies Credit: [FS 2010: Global Perspectives and Cultural Diversity]
Preferred effective term: Fall 2010

COLLEGE OF ARTS AND SCIENCES: English

ENG 340 - Multicultural American Literature
3 credits
Language and cultural diversity in the literature of minority writers in the United States.
General Education Credit: [GE2000: Multicultural Studies-U.S. Diversity]
Cross-listed: (Also listed as African and African American Studies 340.)
Change General Education Credit to Foundational Studies Credit:
ENG 340 - Multicultural American Literature
3 credits
Language and cultural diversity in the literature of minority writers in the United States.
Foundational Studies Credit: [FS 2010: Global Perspectives and Cultural Diversity]
Cross-listed: (Also listed as African and African American Studies 340.)
Preferred effective term: Fall 2010

COLLEGE OF ARTS AND SCIENCES: History

HIST 101 - Studies in World Civilization to 1500
3 credits
Link: (This course is part of the "Transfer Indiana" [TransferIN] initiative. For additional information, link to www.transferin.net/ctl.)
Studies in selected world civilizations from the beginnings to the early modern age. Those themes which have a direct bearing upon contemporary culture and society will be stressed.
Note: May be taken independently of History 102 for General Education credit.
General Education Credit: [GE2000: Historical Studies]
Change General Education Credit to Foundational Studies Credit:
HIST 101 - Studies in World Civilization to 1500
3 credits
Link: (This course is part of the "Transfer Indiana" [TransferIN] initiative. For additional information, link to www.transferin.net/ctl.)
Studies in selected world civilizations from the beginnings to the early modern age. Those themes which have a direct bearing upon contemporary culture and society will be stressed.
Note: May be taken independently of History 102 for Foundational Studies credit.
Foundational Studies Credit: [FS 2010: Global Perspectives and Cultural Diversity]
Preferred effective term: Fall 2010

COLLEGE OF ARTS AND SCIENCES: Political Science

PSCI 105 - Issues of Our Times
3 credits
Examination of selected controversial issues, emphasizing those of a multicultural nature (that is, related to such matters as race, ethnicity, religion, language, gender, age, and/or class) throughout the world, including the United States. This course is conducted in a democratic spirit, allowing all sides of issues to be aired and involving much oral participation by the students as well as structured written exercises while de-emphasizing lectures and tests.
Note: does not count toward a major in political science.
General Education Credit: [GE2000: Multicultural Studies-International Cultures]

Change description and General Education Credit to Foundational Studies Credit:

PSCI 105 - Issues of Our Times
3 credits
Examination of selected global issues to understand how political, social, economic, and cultural factors shape individual and national perspectives on these topics. Student participation, including through discussion and oral presentations, is emphasized.
Foundational Studies Credit: [FS 2010: Global Perspectives and Cultural Diversity]
Preferred effective term: Fall 2010

COLLEGE OF ARTS AND SCIENCES: Psychology

SOC 110 - United States Diversity: Sociological Perspectives
3 credits
This course is an introduction to the sociological analysis of diversity in the United States, with particular emphasis on ethnic/racial, gender/sex, and social class issues. Through reading, writing, discussion, and co-curricular activities, students will develop a better understanding of the various facets of a pluralistic American society. Enrollment is limited in order to enhance participation. The primary goal of the course is to provide a foundation for living in an increasingly diverse American society.
General Education Credit: [GE2000: Multicultural Studies-U.S. Diversity]

Change title, description, and General Education Credit to Foundational Studies Credit:

SOC 110 - United States and Global Diversity: Sociological Perspectives
3 credits
This course is an introduction to the sociological analysis of diversity in the United States and the world, with particular emphasis on ethnic/racial, gender/sex, and social class issues. Through reading, writing, discussion, and co-curricular activities, students will develop a better understanding of the various facets of a pluralistic American society that is part of an interconnected world. Enrollment is limited in order to enhance participation. The primary goal of the course is to provide a foundation for living in an increasingly diverse American society and interacting in a global environment.
Foundational Studies Credit: [FS 2010: Global Perspectives and Cultural Diversity]
Preferred effective term: Fall 2010

SOC 465 - Comparative Societies
3 credits
Concepts of pluralism are used to compare societies, especially India and the United States, in

terms of their value systems, social structures, and orientations to change.
Prerequisites: SOC 280 plus junior/senior class standing.
Note: Open to graduate students. Graduate students are required to do additional work of a research nature.

Change prerequisites and add Foundational Studies Credit to:

SOC 465 - Comparative Societies
3 credits
Concepts of pluralism are used to compare societies, especially India and the United States, in terms of their value systems, social structures, and orientations to change. [FS 2010: Global Perspectives and Cultural Diversity]
Prerequisites: SOC 101 or 280 plus junior/senior class standing.
Foundational Studies Credit: [FS 2010: Global Perspectives and Cultural Diversity]
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Fall 2010

COLLEGE OF ARTS AND SCIENCES: Women's Studies

WS 301 - Gender, Nation, and Class
3 credits
An interdisciplinary and international study of the dynamics and intersections of gender, nation, and class. Using material from the humanities, art, social sciences, and sciences, this course examines the impact of race, ethnicity, national origin, sexuality, and class on women.
Prerequisites: WS 201
Note: students who have taken WS 200 may petition the Women's Studies Director to take the course.

Add Foundational Studies to:

WS 301 - Gender, Nation, and Class
3 credits
An interdisciplinary and international study of the dynamics and intersections of gender, race, and nation. Using material from the humanities, art, social sciences, and sciences, this course examines the impact of race, ethnicity, national origin, sexuality, and class on women.
Prerequisites: WS 201
Foundational Studies: [FS 2010: Global Perspectives and Cultural Diversity]
Note: Students who have taken WS 200 may petition the Women's Studies Director to take the course.
A-F Grading:
Preferred effective term: Fall 2010

BAYH COLLEGE OF EDUCATION: Communication Disorders and Counseling, School, and Educational Psychology

EPSY 341 - Education in a Multicultural Society
3 credits
An in-depth study of multicultural issues in contemporary society, with particular emphasis on public school settings. Attention given to students' development of personal identity and societal awareness.
General Education Credit: [GE2000: Multicultural Studies-U.S. Diversity]

Change General Education Credit to Foundational Studies Credit:

EPSY 341 - Education in a Multicultural Society
3 credits
An in-depth study of multicultural issues in contemporary society, with particular emphasis on public school settings. Attention given to students' development of personal identity and societal awareness.
Foundational Studies Credit: [FS 2010: Global Perspectives and Cultural Diversity]
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management

TMGT 335 - Technology and International Development
3 credits
The study of technological development in an international arena. Emphasis will be placed upon the impact of technology on world societies. Technology transfer and its implication in those societies will be explored. How modern technologies interface with various cultures, and

resistance to change will also be examined.
General Education Credit: [GE89: B1E2; GE2000: Multicultural Studies-International Cultures]

Change title, description, and General Education Credit to Foundational Studies Credit:
TMGT 335 - Technology and International Development
3 credits
The study of technological development in an international arena. Emphasis is placed upon the impact of technology on world societies. Technology transfer and its implication in those societies is explored. How modern technologies interface with various cultures, and resistance to change are also examined.
Foundational Studies Credit: [FS 2010: Global Perspectives and Cultural Diversity]
Preferred effective term: Fall 2010

PROGRAM REVISIONS

COLLEGE OF ARTS AND SCIENCES: Art

Art Education Major – All Grade (58 credits)
CIP Code: 131302 Major Code: 0326

Brief Summary:

In order to make the program easier for students to complete, the department wishes to do the following:

1. Lower the number of credits required under the Art Studio courses from 4 to 3. With the elimination of one credit courses in recent years, the students must take two 3 credit courses to fill this requirement. Also, the department wishes to remove the option of theory and criticism, and museology courses are not currently being offered in these electives, as the courses are not currently being taught.

2. The department wishes to add ARTH 371 as an option in the required Art Education courses.

3. The department also wishes to show the required professional education courses that the students will take in the Department of Education at the bottom of their program. These credits will not be part of the program total. This will keep all the information for students on one catalog page instead of in two separate areas.

Student Learning: N/A

Proposed Catalog Copy:

Art Education Major – All Grade (57 credits)
CIP Code: 131302 Major Code: _____

This major may be added to the All Grade Instructional License; its coverage is grade K-12.

(ART) Core Curriculum (18 credits):

The core curriculum is a prescribed program of study required of all studio art, art history, and art education majors and is basic to a student's choice of an area of concentration. (271 or 272 also count for General Education credit for studio and art education majors).

ARTH 170 - Introduction to the Visual Arts 3 credits
ARTH 271 - Survey of Art History I 3 credits
ARTH 272 - Survey of Art History II 3 credits
ARTS 101 - Fundamentals of Drawing 3 credits
ARTS 102 - Fundamentals of Two-Dimensional Design and Color 3 credits
ARTS 104 - Fundamentals of Three-Dimensional Design and Color 3 credits

Required Art Studio Courses (22 credits):

ARTS 210 - Introduction to Ceramics 3 credits
ARTS 215 - Fundamentals of Drawing II 3 credits
ARTS 230 - Introduction to Painting 3 credits
ARTS 240 - Introduction to Beginning Printmaking 3 credits
ARTS 245 - Introduction to Sculpture 3 credits
ARTS 251 - Introduction to Computer Art 3 credits

Required Art Education Courses (15 credits):

ARTE 290 - Introduction to Art Education 3 credits
ARTE 391 - Secondary Art Education 3 credits
ARTE 392 - Elementary Art Education 3 credits
ARTE 491 - Visual Arts for Special Students 3 credits
ARTE 494 - Current Problems in Art Education 3 credits

Choose one from the following (3 credits):

ARTH 371 - History of Art: Survey of the Twentieth Century 3 credits
ARTH 479A - Modern Art from 1880-1920 3 credits
ARTH 479B - Modern Art from 1920-1945 3 credits
ARTH 479C - Modern Art-Post-World War II Developments 3 credits

Electives:

3 credits selected from the areas of studio art, art history, or graphic design.

Professional Education Courses taught in the College of Education (30 credits):
(Not counted in Major)

CIMT 301 - Teaching I 3 credits
CIMT 302 - Teaching II 3 credits
CIMT 350 - Collaborating for Student Development 3 credits
CIMT 401 - Student Teaching 11 credits

CIMT 402 - Teaching in an Integrated Unit 1 credit
ELED 225 - The Elementary School Community 3 credits
EPSY 202 - Psychology of Childhood and Adolescence 3 credits
EPSY 341 - Education in a Multicultural Society 3 credits
Preferred effective term: Fall 2010

COLLEGE OF ARTS AND SCIENCES: Chemistry and Physics

Physics Major (61-66 credits)
CIP Code: 400801 Major Code: 3521

Brief Summary:

We are introducing a new sequential two-semester laboratory course in physics (PHYS 315-Advanced Laboratory I and PHYS 316-Advanced Laboratory II) at the junior/senior level. Each of these courses carries one credit credit and will be part of the physics program requirements. These two courses will replace the currently required 2-3 credit credits of PHYS 499 (Introduction to Research in Physics) . Therefore the two new courses will not increase the total credit credits required by the physics program. The pre-requisite for PHYS 315 is PHYS 216L which is the second-semester laboratory course that physics majors are required to take in their sophomore year. The pre-requisite for PHYS 316 is PHYS 315. Each of the two Advanced Laboratory courses (PHYS 315 and 316) will consist of four advanced experiments. Each experiment will be done over three weeks. The three physics faculty will share the instruction, supervision and grading of the experiments in each course. Therefore no new faculty and/or instructors will be needed.

Student Learning:

Two of the student learning outcomes of the physics program are:
- ability of students to carry out basic laboratory procedures demonstrating appropriate use of instrumentation, quantitative measurement, and data analysis, and
- ability of students to demonstrate professional communication skills.

Currently physics majors have laboratory courses in their freshman and sophomore years. After reviewing students' performance in these laboratory courses, including written reports and poster presentations in the sophomore year laboratories, the Physics Assessment Committee concluded that, while students have a good laboratory experience in their first two years, this experience is not sufficient. The committee recommended the introduction of a two-semester advanced laboratory course that will expose physics majors later in their college career (i.e., junior or senior year) to advanced laboratory techniques, scientific report writing, and oral presentation of scientific results. The experiments planned for both PHYS 315 and 316 will have an advanced data and error analysis component using the Mathematica software package already available in the department. Students will be required to set up and become intimately familiar with each apparatus in order to collect precise as well as accurate data. The laboratory reports for each experiment will have to be written according to guidelines for scientific papers. At the end of the semester students will be required to make an oral presentation of their work to an audience consisting of physics faculty and students.

The advanced laboratory courses proposed here (PHYS 315 and 316) are thus expected to increase the program effectiveness by advancing the learning outcomes mentioned above.

Proposed Catalog Copy:

Physics Major (62-64 credits)
CIP Code: 400801 Major Code: _____

Core Curriculum (40 credits):

Required Chemistry:

- CHEM 105 - General Chemistry I 3 credits
- CHEM 105L - General Chemistry I Laboratory 1 credits
- CHEM 106 - General Chemistry II 3 credits
- CHEM 106L - General Chemistry II Laboratory 1 credits

Required Mathematics:

- MATH 131 - Calculus I 4 credits
- MATH 132 - Calculus II 4 credits

Required Physics Courses:

- PHYS 205 - University Physics I 4 credits
- PHYS 205L - University Physics I Laboratory 1 credits
- PHYS 206 - University Physics II 4 credits
- PHYS 206L - University Physics II Laboratory 1 credits
- PHYS 215 - Modern Physics I 3 credits
- PHYS 215L - Modern Physics I Laboratory 1 credits
- PHYS 216 - Modern Physics II 3 credits
- PHYS 216L - Modern Physics II Laboratory 1 credits
- PHYS 310 - Analytical Mechanics 3 credits
- PHYS 341 - Electricity and Magnetism 3 credits

Professional Physics Concentration:
(24 credits)
This concentration is built around the physics core curriculum to supply the background and experience needed to enter graduate school or become a research physicist.

Required Courses:

Mathematics:
- MATH 231 - Calculus III 4 credits
- MATH 333 - Differential Equations 3 credits

Physics:
- PHYS 311 - Analytical Mechanics II 3 credits
- PHYS 342 - Electricity and Magnetism II 3 credits

- PHYS 355 - Introduction to Mathematical Physics 3 credits
- PHYS 315 Advanced Laboratory I 1 credit
- PHYS 316 Advanced Laboratory I I 1 credit
- PHYS 420 - Thermodynamics and Statistical Mechanics 3 credits
- PHYS 497 - Introduction to Quantum Mechanics 3 credits

Chemical Physics Concentration:
(22 credits)
Chemical physics focuses on areas where the techniques of chemistry and physics are brought together for the study of atoms and molecules; their interactions in gases, liquids, and solids; and the detailed structure and dynamics of material changes. Chemical physicists are employed by a wide range of businesses, particularly the pharmaceutical, photographic and microelectronic industries.

Required Courses:

Chemistry:
- CHEM 321 - Analytical Chemistry 4 credits
- CHEM 461 - Physical Chemistry I 4 credits
- CHEM 461L - Experimental Physical Chemistry I 1 credits
- CHEM 462 - Physical Chemistry II 4 credits
- CHEM 462L - Experimental Physical Chemistry II 1 credits

Mathematics:
- MATH 333 - Differential Equations 3 credits

Physics:
- PHYS 315 Advanced Laboratory I 1 credit
- PHYS 316 Advanced Laboratory I I 1 credit
- PHYS 497 - Introduction to Quantum Mechanics 3 credits

Engineering Physics Concentration:
(22 credits)
The engineering physics concentration focuses on applying the principles of physics to develop new technologies and solve interdisciplinary engineering problems. Graduates may pursue an advanced degree in applied physics or engineering, or function as productive engineering professionals.
Required courses:

Physics
- PHYS 356 - Computational Physics 3 credits
- PHYS 315 Advanced Laboratory I 1 credit
- PHYS 316 Advanced Laboratory I I 1 credit

Mechanical Engineering Technology:
- MET 103 - Introduction to Technical Graphics with CAD 3 credits
- MET 130 - Introduction to Engineering and Technology 2 credits
- MET 203 - Introduction to Solid Modeling 3 credits
- MET 404 - Engineering Design and Management 3 credits

Computer Science:
- CS 256 - Principles of Structured Design 3 credits

Electives:
3 credits from approved courses.
Preferred effective term: Fall 2010

COLLEGE OF ARTS AND SCIENCES: Languages, Literatures, and Linguistics

Language Studies – Teaching Major (31 credits)
CIP Code: 169999 Major Code: 1242

Brief Summary:

In order to eliminate confusion about the content methods courses required in the "professional education sequence" for Language Studies--Teaching, the Department requests to add a section of the catalog in the program description that includes the content methods course requirements. Since the credit credits are calculated within the "professional education sequence," there is no change of credit credits to the Language Studies--Teaching program.

Student Learning:

These course requirements were historically included in the CoE section of the catalog. The CoE catalog now refers to the CAS program descriptions. Therefore, students need accurate information in the catalog program descriptions.

Proposed Catalog Copy:

Language Studies Teaching Major (31 credits)
CIP Code: 169999 Major Code:_____

Required Languages, Literatures, and Linguistics courses (7 credits):

LING 420 - Language Acquisition 3 credits
LLL 200 - Introduction to Language and Culture for Students of Languages, Literatures, and Linguistics 3 credits
LLL 402 - Teaching an Integrated Unit 1 credits

Additional Requirements:

Follow the requirements for elected concentration area.
An applied experience component within the 31 credits. Must consist of at least 6 credits of 300/400-level course work taken as an LLL Department Study Abroad Course as approved by advisor.
A minimum 2.5 grade point average for all course work required in the major.
Note: Students who enter with a strong language background are eligible to receive credit by examination through various sources such as the University's placement test or CLEP tests for beginning and intermediate level credit, and the ACTFL test for advanced level credit.

Concentration in Spanish Teaching (24 credits)*:
*Six credits of the 300/400 level Spanish teaching courses maybe fulfilled by six credits of

study abroad.

Required courses:

SPAN 201 - Intermediate Spanish I 3 credits
SPAN 202 - Intermediate Spanish II 3 credits
SPAN 301 - Advanced Spanish Grammar 3 credits
SPAN 303 - Readings in Spanish 3 credits
SPAN 311 - Introduction to Spanish and Spanish American Culture 3 credits
SPAN 321 - Advanced Spanish Conversation 3 credits
SPAN 404 - Spanish Phonetics 3 credits
or approved 400-level culture course.

Choose one from the following:

SPAN 312A - Introduction to Spanish Literature 3 credits
SPAN 312B - Introduction to Spanish American Literature 3 credits

Concentration in World Languages (24 credits)

Students should be aware that in the case of less commonly taught languages some courses may not be routinely available on campus. Credit can be earned via appropriate study abroad or transfer work.

Required courses:

Choose one pair from the following:

FREN 201 - Intermediate French I 3 credits
FREN 202 - Intermediate French II 3 credits

or

GERM 201 - Intermediate German I 3 credits
GERM 202 - Intermediate German II 3 credits
or

GRK 201 - Intermediate Greek I 3 credits
GRK 202 - Intermediate Greek II 3 credits

or

ITAL 201 - Intermediate Italian I 3 credits
ITAL 202 - Intermediate Italian II 3 credits

or

JAPN 201 - Intermediate Japanese I 3 credits

JAPN 202 - Intermediate Japanese II 3 credits

or

LAT 201 - Intermediate Latin I 3 credits
LAT 202 - Intermediate Latin II 3 credits

or

RUSS 201 - Intermediate Russian I 3 credits
RUSS 202 - Intermediate Russian II 3 credits

or

SPAN 201 - Intermediate Spanish I 3 credits
SPAN 202 - Intermediate Spanish II 3 credits

Electives (18 credits):

18 credits 300/400-level appropriate course work in LLL, Linguistics or a language to include a minimum of 6 credits of culture, 3 credits of literature, 3 credits of advanced grammar and 3 credits of oral communication.

Concentration in Teaching English as a Second Language (24 credits)

LING 210 - Introduction to Linguistics 3 credits
LING 311 - Linguistic Analysis of English 3 credits

Choose one from the following:

FREN 201 - Intermediate French I 3 credits
GERM 201 - Intermediate German I 3 credits
GRK 201 – Intermediate Greek 3 credits
ITAL 201 - Intermediate Italian I 3 credits
JAPN 201 - Intermediate Japanese I 3 credits
LAT 201 - Intermediate Latin I 3 credits
RUSS 201 - Intermediate Russian I 3 credits
SPAN 201 - Intermediate Spanish I 3 credits

Choose one from the following:

LING 414 - Lexicology: Word Form and Function 3 credits
LING 417 - Language Differences and Linguistic Universals 3 credits

Choose one from the following:

LING 413 - Linguistic Diversity in the United States 3 credits
LING 415 - Topics in Sociolinguistics 3 credits

Electives:

Nine credits at the 300/400 level in LLL 409, LLL 490, or LING.

Teacher Education Program

Students pursuing the Language Studies-Teaching major must also fulfill the requirements of the teacher education program listed below.

Professional education courses taught in the College of Education (30 credits):

CIMT 301 - Teaching I 3 credits
CIMT 302 - Teaching II 3 credits
CIMT 400 - Teaching III 3 credits
CIMT 400L - Teaching III Practicum 1 credits
CIMT 401 - Student Teaching 11 credits
EPSY 202 - Psychology of Childhood and Adolescence 3 credits
EPSY 341 - Education in a Multicultural Society 3 credits
SPED 226 - The Exceptional Learner in the Regular Classroom 3 credits

Professional education courses taught in the College of Arts and Sciences (3 credits):

Required for Spanish Teaching and World Languages Teaching:

3 credits of content methods coursework are required in the Senior High-Junior High/Middle School Professional Education sequence described in the Department of Curriculum, Instruction, and Media Technology.

LLL 490—Language Teaching Methods 3 credits

Required for Teaching English as a Second Language:

3 credits of content methods coursework are required in the All-Grades Professional Education sequence described in the Department of Curriculum, Instruction, and Media Technology.

LING 316—Introduction to Teaching English as a Second Language 3 credits
Preferred effective term: Fall 2010

COLLEGE OF ARTS AND SCIENCES: Languages, Literatures, and Linguistics

Language Studies Minor (21 credits)
CIP Code: 169999 Major Code: 1242

Brief Summary:

The current requirement in the current Language Studies Minor that one course must be outside

the student's main area of interest has been found not to be in the best interest of some students, especially those who would like to solidify their knowledge in one language by taking another course in that language. The proposed change of eliminating that requirement would not impact students who do want to take a course in another area and having it count toward the minor.

Student Learning:

The routine assessment of upper-division language students at the end of each course reveals that minors would benefit from one more course in the language. Currently, students are required to take LLL200 (3 credits), plus a course outside their main area (3 credits), leaving just 12 credit credits for language study. 6 of those 12 credits must be at the 300 or 400 level, giving the student credit for 201 and 202 of that language, thus completing the minor. Student learning in the language will thus increase by changing the requirement to 15 credit credits of language study. The program has always tried to be flexible so that it can meet the needs of its students, and for students who particularly want to achieve as much language fluency in the minor as possible, it makes sense for them to take another course in the language rather than in another language or area. The proposed change will not impact students who do want to take a course in another area and having it count toward the minor.

Proposed Catalog Copy:

Language Studies Minor (21 credits)
CIP Code: 169999 Major Code: _____

Required courses:

15 credits from within the department to include at least 6 credits at the 300/400 level, and
• LLL 200 - Introduction to Language and Culture for Students of Languages, Literatures, and Linguistics 3 credits

Additional Requirements:

A minimum 2.5 grade point average in all course work required for the minor.
Up to 3 credits of 100-level study in a second area may be counted toward the minor.
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Aviation Technology

Aviation Management Major (78 credits)
CIP Code: 490104 Major Code: D532

Brief Summary:

Program changes are a result of two external accreditation reviews and recommendations from the Aviation Departments' Industrial Advisory Board.

Student Learning:

Proposed changes will better prepare students for current marketplace.

Proposed Catalog Copy:

Aviation Management Major (76 credits)
CIP Code: 490104 Major Code: _____

Required Aviation courses (52 credits):

Aviation Department Core Courses: 130—2 credits.; 141—6 credits.; 223—3 credits.; 307—3 credits.; 325—3 credits.; 403—3 credits.; 405—3 credits.; 425—3 credits.; 430—1 credit.

Aviation Management Core Courses: 143—1 credit; 205—3 credits.; 305—3 credits.; 309—3 credits.; 323—3 credits.; 471—3 credits.; 491—3 credits.; Upper Division AVT Elective—3 credits.; Upper Division AVT Elective—3 credits.; Upper Division AVT Elective—3 credits.

Technical support courses (3 semester credits):
Communications 269—3 credits.

Complete 1 of the 3 options below (18 credits minimum):

Option 1:
Any university minor (must be completed)

Option 2:
Any ROTC courses

Option 3:
Any aviation courses not included in aviation management core courses listed above.

NOTE: Additional aviation courses, not included in the core courses above, may be used to complete credit credit shortage in options 1 or 2 above.

All aviation management students are encouraged to complete their private pilot certificate.

All aviation management students must pass each aviation course, used in their degree, with a C grade (2.0 points) or higher.
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Aviation Technology

Aviation Technology Minor (17 credits)
CIP Code: 490104 Major Code: D537

Brief Summary:

Program changes are a result of two external accreditation reviews and recommendations from the Aviation Industrial Advisory Board.

Student Learning:

Proposed changes will better prepare students for current marketplace.

Proposed Catalog Copy:

Aviation Technology Minor (16-17 credits)
CIP Code: 490104

Required courses (12 credits):

Aviation Department Courses: 141—6 credits; 305—3 credits; 471—3 credits

Aviation Elective Courses (4-5 credits):

Complete 1 of the 2 Options Below:

Option 1:
142—1 credits; 144—1 credits; Upper Division AVT Elective—3 credits

Option 2:
143—1 credits; Upper Division AVT Elective—3 credits

All students are encouraged to obtain a private pilot certificate.

All students must pass each aviation course with a C grade (2.0 points) or higher.
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Electronics, Computer, and Mechanical Engineering Technology

Automation and Control Engineering Technology Major (79 credits)
CIP Code: 150405 Major Code: D733

Brief Summary:

The new Foundational Studies program effective Fall 2010 has necessitated a minor wording change to the Automation and Control Engineering Technology program, as well as a change in the number of credits counted in the major. The wording 'Directed Basic Studies' was replaced with 'Directed Foundational Studies'. The number of credits changed from 79 to 82 since it is now necessary to count all Directed Foundational Studies credits with the major. English 305T is being removed from the directed courses since any course in the Junior Composition array will meet accreditation requirements.

Student Learning:

N/A

Proposed Catalog Copy:

Automation and Control Engineering Tehnology Major (82 credits)
CIP Code: 150405 Major Code: _____

Required Courses:

Electronics and Computer Technology (27 credits):
ECT 165 - D.C. Circuits and Design 3 credits
ECT 167 - A.C. Circuits and Design 3 credits
ECT 170 - Introduction to Information Technology 3 credits
ECT 231 - Digital Computer Logic 3 credits
ECT 280 - Introduction to Automation 3 credits
ECT 281 - Robotic Controls 3 credits
ECT 381 - Robotic Control Systems 3 credits
ECT 444 - Programmable Logic Controllers and Control Systems 3 credits
ECT 480 - Applications of Robotic and Automation Systems 3 credits

Manufacturing Technology (15 credits):
MFG 225 - Introduction to Materials, Processes, and Testing 3 credits
MFG 370 - Fundamentals of Manufacturing Processes 3 credits
MFG 371 - Manufacturing Processes and Materials 3 credits
MFG 372 - Plastics Technology 3 credits
MFG 376 - Computer Numerical Control Systems 3 credits

Mathematics/Computer Science and Physical Science Requirements (14 credits):
Courses in Chemistry, Geology, Biology, or Physics 8 credits.
CS 256 - Principles of Structured Design 3 credits
or higher level structured language.
MATH 301 - Fundamentals and Applications of Calculus 3 credits

Mechanical Engineering Technology (15 credits):
MET 103 - Introduction to Technical Graphics with CAD 3 credits
MET 203 - Introduction to Solid Modeling 3 credits

MET 299 - CAD Fundamentals 3 credits
MET 329 - Fluid Power Technology 3 credits
MET 407 - Tool and Die Design 3 credits

Technology Management (8 credits):
TMGT 131 - Introduction to Manufacturing Technology 2 credits
TMGT 478 - Industrial Organization and Functions 3 credits
TMGT 492 - Industrial Supervision 3 credits

Directed Foundational Studies (3 credits):
MATH 115 - College Algebra and Trigonometry 3 credits
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Electronics, Computer, and Mechanical Engineering Technology

Computer Engineering Technology Major (71 credits)
CIP Code: 151291 Major Code: D731

Brief Summary:

Based on a change in accreditation requirements the Technical Electives (6 hrs.) has been eliminated.

The new Foundational Studies program effective Fall 2010 has necessitated a minor wording change to the Computer Engineering Technology program, as well as a change in the number of credits counted in the major. The wording 'Directed Basic Studies' was replaced with 'Directed Foundational Studies.' Because MATH 115 is now part of Directed Foundational Studies its 3 credits must be counted in the total number of program credits.

The above two items have changed the total number of credits from 71 to 68.

Student Learning:

Student learning is not impacted by this change.

Proposed Catalog Copy:

Computer Engineering Technology Major (68 credits)
CIP Code: 151291 Major Code: _____

Program Mission
The mission of the Computer Engineering Technology Program at Indiana State University is to prepare students for careers as technical professionals in an environment that involves applications in design, manufacturing, control, and integration of electro-mechanical products or systems, and requires a practical problem-solving approach emphasizing hands-on skills with modern productivity tools (e.g. design, analysis, control, diagnostic, and project management tools).

Program Educational Objectives

Graduates of the Indiana State University Computer Engineering Technology Program are expected to be able to demonstrate:

1. Technical competency and technical proficiency by applying general and disciplinary reasoning and critical thinking to identify, analyze, and solve problems.
2. Communication skills in both oral and written form to articulate technical knowledge, ideas, and proposals to peers, senior management, and other potentially diverse audience.
3. Managerial organizational skills, and increasing managerial skills at higher levels of management in their chosen field.
4. Ethical, social, and professional responsibility through an awareness of the impact of professional, ethical, and social responsibility in the practice of engineering technology in the State of Indiana and in a diversified world.
5. Teamwork mentality through the ability to function effectively and think independently in a multi-disciplinary team environment.
6. Lifelong learning by a continuing individual desire and commitment to remain technically current by engaging in continuous self-improvement and lifelong learning.

Student Learning Outcomes

The Computer Engineering Technology Program learning outcomes are developed to fulfill program educational objectives, encompass **the Technology Accreditation Commission/Accreditation Board for Engineering and Technology, Inc.** general criteria, and address specific criteria for a computer engineering technology program. To this end, the following outcomes have been developed to represent the desired capabilities of students who, upon graduation, should have the ability to:

1. Apply principles of mathematics, science, engineering technology, and programming languages to solve technical problems in broad technical areas including digital systems, computer hardware, electronics, and networking.
2. Use modern computational and simulation tools for technical problem solving, analysis, and design.
3. Incorporate systematic methods and emerging technology to identify, formulate, and generate original solutions within the fields of computer engineering technology.
4. Conduct experiments competently in a laboratory setting including making measurement and operating equipments; collecting and critically examine data; interpreting, reporting, and applying results for the purpose of understanding and improving practical systems.
5. Apply fundamental management principles and techniques in business operations, and display leadership qualities in organizing teams and reconciling differences.
6. Understand the impact of technology in a global and social context, and develop professional and ethical responsibility.
7. Engage in lifelong learning to pursue increasing knowledge of current and emerging technical and non-technical issues.
8. Communicate effectively and respectfully with members of various backgrounds and personalities in multi-disciplinary teams, and to value and respect cultural diversity.
9. Communicate with clarity and conciseness both verbally and in writing with peers, clients, and targeted audience.

Required Courses:

Electronics and Computer Technology Courses (45 credits):

ECT 130 - Introduction to Electronics and Computer Technology 2 credits
ECT 165 - D.C. Circuits and Design 3 credits *
ECT 167 - A.C. Circuits and Design 3 credits *
ECT 168 - Computer Design Technology 3 credits *
ECT 231 - Digital Computer Logic 3 credits
ECT 232 - Digital Computer Circuits 3 credits *
ECT 281 - Robotic Controls 3 credits *
ECT 301 - Computer Network Management Technology 3 credits *
ECT 303 - Microcontroller Hardware and Software 3 credits *
ECT 306 - Technical Data Management and Applications 3 credits
ECT 308 - Microcontroller Applications and Interfacing 3 credits *
ECT 401 - Data Communications and Internet Technology 3 credits
ECT 403 - Practical Digital Logic Design 3 credits *
ECT 406 - Computer Systems Integration 3 credits
ECT 430 - Senior Seminar 1 credits
ECT 437 - Industrial Computer Systems Management 3 credits

Management (6 credits from courses such as):

MET 404 - Engineering Design and Management 3 credits
MET 405 - Economic Analysis for Engineering and Technology 3 credits
TMGT 471 - Production Planning and Control I 3 credits
TMGT 478 - Industrial Organization and Functions 3 credits
TMGT 492 - Industrial Supervision 3 credits

Mathematics/Computer Science and Physical Science Requirements (14 credits):

Courses in Physics, Chemistry, Biology, or Geology– 8 credits

CS 256 - Principles of Structured Design 3 credits
(or higher level structured language.)
MATH 301 - Fundamentals and Applications of Calculus 3 credits

Directed Foundational Studies (3 credits)

Quantitative Literacy: MATH 115 - College Algebra and Trigonometry 3 credits

Note: *Denotes a course having a laboratory component requiring additional contact credits.
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Electronics, Computer, and Mechanical Engineering Technology

Electronics Technology Major (82 credits)
CIP Code: 150303 Major Code: D730

Brief Summary:

The change to Electronics Engineering Technology is a better representation of the actual degree program. Over the past twenty years, names for this type of program have varied from

Technology to Engineering Technology. In order to remain competitive, it is important to modify the name of the program to parallel that which students are familiar with especially at the two year institutions that many are articulating from. Schools as; IUPU -FW, Lincoln College, ITT Technical Institute, IVY Tech and Vincennes University now use the title Engineering or Engineering Technology for their programs as opposed to just Technology.

The Electronics Technology Degree has been accredited by the National Association of Industrial Technology (NAIT) for over thirty years. NAIT recently reorganized and changed their name to the Association of Technology, Management, and Applied Engineering (ATMAE). NAIT did not allow the use of the term "Engineering Technology" for an accredited program. The change in organization to ATMAE included a paradigm shift that has lifted that restriction and the organization now embraces the term as part of their foundation. The Electronics Technology program is undergoing re-accreditation this year. Plans in the next year include the seeking of accreditation through ABET, formally the Accreditation Board of Engineering and Technology. ABET provides a clear path for accreditation of the EET program. At the November meeting of our Industrial Advisory Board, they voted unanimously to change the name to Electronics Engineering Technology. Graduate surveys show that the majority of students hold positions with "engineer" in the title.

Changes in program content are minimal at this time with only a change to reflect the Foundational Studies requirements, and a reduction in electives required due to changes in ATMAE requirements.

Student Learning:

Student learning is not impacted by these changes.

Proposed Catalog Copy:

Electronics Engineering Technology Major (80 credits)
CIP Code: 150303 Major Code: _____

Required Courses:
Electronics Technology Courses (42 credits):

ECT 130 - Introduction to Electronics and Computer Technology 2 credits
ECT 165 - D.C. Circuits and Design 3 credits *
ECT 167 - A.C. Circuits and Design 3 credits *
ECT 221 - Circuit Analysis I 3 credits
ECT 231 - Digital Computer Logic 3 credits
ECT 232 - Digital Computer Circuits 3 credits *
ECT 321 - Circuit Analysis II 3 credits
ECT 324 - Discrete Transistor Theory and Circuit Design 3 credits *
ECT 325 - Analog Integrated Precision Circuits 3 credits *
ECT 343 - Industrial Electronic Pulse Circuits 3 credits *
ECT 421 - Circuit Analysis by Calculus 3 credits
ECT 430 - Senior Seminar 1 credits
ECT 437 - Industrial Computer Systems Management 3 credits
ECT 444 - Programmable Logic Controllers and Control Systems 3 credits *

ECT 448 - Industrial Electronic Current Control Systems 3 credits *

Mechanical Engineering Technology (6 credits):
MET 103 - Introduction to Technical Graphics with CAD 3 credits
MET 329 - Fluid Power Technology 3 credits

Technology Management (9 credits):
TMGT 471 - Production Planning and Control I 3 credits
TMGT 478 - Industrial Organization and Functions 3 credits
TMGT 492 - Industrial Supervision 3 credits

Required elective (3 credits):
Select one from the following:
ECT 280 - Introduction to Automation 3 credits
ECT 281 - Robotic Controls 3 credits *
MFG 370 - Fundamentals of Manufacturing Processes 3 credits
MFG 371 - Manufacturing Processes and Materials 3 credits

Mathematics/Computer Science and Physical Science Requirements (14 credits):
Courses in Physics, Chemistry, Biology, or Geology 8-hrs.
CS 256 - Principles of Structured Design 3 credits
(or higher level structured language.)
MATH 301 - Fundamentals and Applications of Calculus 3 credits

Technical Elective (3 credits)

Directed Foundational studies (3 credits):
Quantitative Literacy: MATH 115 - College Algebra and Trigonometry 3 credits

*Denotes a course having a laboratory component requiring additional contact credits.
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management

Advanced Manufacturing Management Major (73 credits)
CIP Code: 150613 Major Code: E534

Brief Summary:

The new Foundational Studies program effective Fall 2010 has necessitated some minor changes to the Advanced Manufacturing Management program. The wording 'Directed Basic Studies' and 'Directed Liberal Studies' was replaced with 'Directed Foundational Studies', and CS 151 was moved from 'Directed Liberal Studies' to the 'Directed Electives' area of the program. TMGT 195 was removed since it is no longer part of Foundational Studies. MATH 111 was removed from the directed Quantitative Literacy area since Met 215 now fulfills the requirement on its own.

Student Learning:

Student learning is not impacted by these changes.

Proposed Catalog Copy:

Advanced Manufacturing Management Major (76 credits)
CIP Code: 150613 Major Code: _____

Required Courses:

Electronics and Computer Technology (12 credits):
ECT 160 - Electronic Fundamentals 3 credits
ECT 280 - Introduction to Automation 3 credits
ECT 281 - Robotic Controls 3 credits
Choose one of the following:
ECT 444 - Programmable Logic Controllers and Control Systems 3 credits
ECT 480 - Applications of Robotic and Automation Systems 3 credits

Manufacturing (12 credits):
MFG 225 - Introduction to Materials, Processes, and Testing 3 credits
MFG 370 - Fundamentals of Manufacturing Processes 3 credits
MFG 371 - Manufacturing Processes and Materials 3 credits
MFG 376 - Computer Numerical Control Systems 3 credits

Mechanical Engineering Technology (9 credits):
MET 103 - Introduction to Technical Graphics with CAD 3 credits
MET 203 - Introduction to Solid Modeling 3 credits
MET 329 - Fluid Power Technology 3 credits
Technology Management (24 credits):
TMGT 131 - Introduction to Manufacturing Technology 2 credits
TMGT 351 - Professional Internship 3 credits
TMGT 374 - Lean Manufacturing Systems 3 credits
TMGT 430 - Senior Seminar 1 credits
TMGT 471 - Production Planning and Control I 3 credits
TMGT 473 - Quality Control of Industrial Products I 3 credits
TMGT 478 - Industrial Organization and Functions 3 credits
TMGT 492 - Industrial Supervision 3 credits
TMGT 497 - Problem Solving Techniques: A Team Approach 3 credits

Directed Electives (9 credits):
HLTH 318 - Industrial Accident Prevention I 3 credits
Physical Science 3 credits
CS 151 - Introduction to Computer Science 3 credits

Directed Foundational Studies (10 credits):
Laboratory Science**:**
PHYS 101 - Introduction to the Physical Sciences 3 credits
PHYS 101L - Introduction to the Physical Sciences Laboratory 1 credits

Social or Behavioral Studies:
ECON 100 - Basic Economics 3 credits

Quantitative Literacy – choose one of the following:
MATH 115 - College Algebra and Trigonometry 3 credits
MET 215 - Graphic Analysis 3 credits

Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management

Construction Management Major (86 credits)
CIP Code: 150101 Major Code: E530

Brief Summary:

The new Foundational Studies Program effective Fall 2010 has necessitated some minor changes to the Construction Management Program. The wording 'Directed Basic Studies' and 'Directed Liberal Studies' was replaced with 'Directed Foundational Studies', and two of the courses that were previously in the Social and Behavioral Studies area were moved into the major. TMGT 195 was removed since it is no longer part of Foundational Studies, and PHYS 106/L was removed as an option under Laboratory Science so that the two required lab courses will come from different science disciplines, thus meeting the Foundational Studies requirement. MATH 241 was previously listed as Directed Basic Studies and is now grouped with program courses. MATH 115 or MET 215 were previously listed with program courses and are now listed with Directed Foundational Studies.

Student Learning:

N/A

Proposed Catalog Copy:

Construction Management Major (89 credits)
CIP Code: 150101 Major Code: _____

Required Courses:

Construction Management (50 credits):
CNST 101 - Introduction to Construction Management 2 credits
CNST 106 - Architectural Graphics 3 credits
CNST 111 - Construction Materials, Methods, and Equipment 3 credits
CNST 201 - Construction Contract Documents and Project Delivery 3 credits
CNST 213 - Environmental and Mechanical Systems for Buildings 3 credits
CNST 214 - Plan Interpretation and Quantity Take-Off 3 credits
CNST 304 - Construction Scheduling 3 credits
CNST 306 - Commercial Design and Construction 3 credits
CNST 310 - Construction Safety 3 credits

CNST 314 - Estimating and Bid Preparation 3 credits
CNST 318 - Strength of Building Materials 3 credits
CNST 320 - Soil Analysis and Testing 3 credits
CNST 414 - Construction Quality Control and Assurance– 3 credits
CNST 418 - Design of Temporary Structures 3 credits
CNST 420 - Plane Surveying 3 credits
CNST 450 - Construction Management 3 credits

Choose one from the following:

CNST 218 - Statics 3 credits
MET 302 - Applied Statics 3 credits

Electronics and Computer Technology (3 credits):
ECT 369 - Electrical Construction 3 credits

Technology Management (10 credits):
TMGT 351 - Professional Internship 3 credits
TMGT 430 - Senior Seminar 1 credits

Choose one from the following:

BUS 263 - Legal Environment and Business 3 credits
TMGT 429 - Workplace Law for the Technical Manager 3 credits

Choose one from the following:

MGT 301 - Survey of Management 3 credits
TMGT 492 - Industrial Supervision 3 credits

Accounting (3 credits):
ACCT 200 - Survey of Accounting 3 credits

Management (3 credits):
MGT 140 – Introduction to Business 3 credits

Economics (3 credits):
ECON 351 – Survey of Labor Economics 3 credits

Mathematics (3 credits):
MATH 241 3 credits

Directed Foundational Studies (14 credits):
Quantitative Literacy – Choose one of the following:
Math 115 – College Algebra & Trigonometry 3 credits
MET 215 – Graphic Analysis 3 credits

Laboratory Science:

PHYS 105 - General Physics I 3 credits
PHYS 105L - General Physics I Laboratory 1 credit
and
CHEM 105 - General Chemistry I 3 credits
CHEM 105L - General Chemistry I Laboratory 1 credit

Social or Behavioral Sciences:
ECON 100 – Basic Economics 3 credits
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management

Construction Management Minor (19 credits)
CIP Code: 150101

Brief Summary:

The new Foundational Studies program effective Fall 2010 has necessitated some minor changes to the Construction Management Minor. The wording 'Directed Basic Studies' and 'Directed Liberal Studies' was replaced with 'Directed Foundational Studies', and PHYS 105/L was moved out of the Foundational Studies area since it is not part of that array.

Student Learning:

N/A

Proposed Catalog Copy:

Construction Management Minor (22 credits)

Required Courses:

Construction Management (12 credits):
CNST 111 - Construction Materials, Methods, and Equipment 3 credits
CNST 201 - Construction Contract Documents and Project Delivery 3 credits
CNST 214 - Plan Interpretation and Quantity Take-Off 3 credits
CNST 414 - Construction Quality Control and Assurance– 3 credits

Physical Science (7 credits):
PHYS 105 - General Physics I 3 credits
PHYS 105L - General Physics I Laboratory 1 credits

Choose one from the following:
CNST 310 - Construction Safety 3 credits
HLTH 314 - Industrial Health and Safety Legislation 3 credits

Directed Foundational Studies (3 credits):
MATH 115 - College Algebra and Trigonometry 3 credits

Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management

Packaging Major (65 credits)
CIP Code: 150612 Major Code: E533

Brief Summary:

The program name is being changed to better fit the pattern with in the College of Technology in embracing the term "Engineering Technology" as a descriptor. This should also make the program more marketable to prospective students, as the term engineering in the program name seems to be attractive to potential students. Finally, most of the graduates of the packaging program take jobs with the title of engineer or work in an engineering department, so this change will tend to more accurately reflect the focus of the program.

The new Foundational Studies program effective Fall 2010 has necessitated some minor changes to the Packaging program. The wording 'Directed Basic Studies' and 'Directed Liberal Studies' was replaced with 'Directed Foundational Studies'. Phys 106/L was removed as an option under Laboratory Science so that all students will take Chem 100/L, thus meeting the Foundational Studies requirement. Phys 105/L is now listed with the major courses and MET 215 was added as an option along with Math 115 under Directed Foundational Studies.

On the recommendation of the program Advisor Board, Math 241 was added to provide students with a background in statistics. MET 329 and MET 333 were removed from the program because the committee believes the components of those courses needed by Packaging majors can be covered in PKG 486 'Packaging Machinery Systems'.

Student Learning:

The advisory committee evaluated current assessment data and the body of knowledge required in the Packaging industry as the basis for these changes. Ongoing assessment will determine the success of these changes.

Proposed Catalog Copy:

Packaging Engineering Technology Major (65 credits)
CIP Code: 150612 Major Code: _____

Required Courses:

Packaging Engineering Technology (24 credits):

- PKG 180 - Introduction to Packaging Design 3 credits
- PKG 280 - Packaging Materials and Testing I 3 credits
- PKG 380 - Packaging Materials and Testing II 3 credits
- PKG 381 - Environmental Issues of Packaging 3 credits
- PKG 482 - Package Development and Analysis 3 credits
- PKG 484 - Distribution Packaging Design, Analysis and Testing 3 credits

- PKG 486 - Packaging Machinery Systems 3 credits
- PKG 489 - Packaging Industry Projects 3 credits

Manufacturing (3 credits):

Choose one from the following:

- MFG 370 - Fundamentals of Manufacturing Processes 3 credits
- MFG 371 - Manufacturing Processes and Materials 3 credits
- MFG 372 - Plastics Technology 3 credits

Mechanical Engineering Technology (3 credits):

- MET 103 - Introduction to Technical Graphics with CAD 3 credits

Technology Management (21 credits):

- TMGT 131 - Introduction to Manufacturing Technology 2 credits
- TMGT 351 - Professional Internship 3 credits
- TMGT 429 - Workplace Law for the Technical Manager 3 credits
- TMGT 430 - Senior Seminar 1 credits
- TMGT 471 - Production Planning and Control I 3 credits
- TMGT 473 - Quality Control of Industrial Products I 3 credits
- TMGT 478 - Industrial Organization and Functions 3 credits
- TMGT 492 - Industrial Supervision 3 credits

Mathematics (3 credits):

- MATH 241 – Principles of Statistics 3 credits

Physics (4 credits):

- PHYS 105 - General Physics I 3 credits
- PHYS 105L - General Physics I Laboratory 1 credits

Directed Foundational Studies (7 credits):

Quantitative Literacy – Choose one of the following:

- MATH 115 - College Algebra and Trigonometry 3 credits
- MET 215 – Graphic Analysis 3 credits

Laboratory Science

- CHEM 100 - Chemistry: Reactions and Reason 3 credits
- CHEM 100L - Chemistry: Reactions and Reason Laboratory 1 credits

Preferred effective term: Fall 2010

GRADUATE APPROVALS

NEW COURSES

COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Athletic Training

ATTR 626 – Leadership and Administration in Athletic Training

3 credits

This course provides a forum of open discussion and debate of administration issues, and controversial, moral and ethical questions facing the athletic trainer. Students gain a greater understanding of diverse philosophies and populations in sports medicine, the roles that allied

health/sports medicine specialists play; how they interrelate with the athletic training profession, and their contribution to the overall care of the injured athlete.
A-F Grading
Preferred effective term: Fall 2010

ATTR 660 – Environmental Illnesses
3 credits
This course explores the prevention, recognition, and treatment of injuries and illness that result from various environmental situations. It also examines the interrelationship between the physical environment and the human while exercising under different states of fitness and acclimatization.
A-F Grading
Preferred effective term: Fall 2010

COURSE REVISIONS

COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Athletic Training

ATTR 625 - Administration and Teaching
3 credits
Comprehensive examination (through reading, discussion, and role-playing) of clinical teaching, learning, and assessment; facility management; insurance; and reimbursement issues are presented in this course. Current literature regarding technique efficacy is included and provides the foundation of the course.

Change title and description to:

ATTR 625 – Athletic Training Educator
A comprehensive examination (through reading, discussion, and role-playing) of athletic training education including teaching, learning, and assessment. Current literature regarding technique efficacy is included and provides the foundation of the course.
A-F Grading
Preferred effective term: Fall 2010

ATTR 661 - Diagnostics and Rehabilitation-Lower Extremity
3 credits
Comprehensive examination (through reading, discussion, and hands-on practice) of athletic injuries to the lower extremity using advanced evaluation and rehabilitation techniques will be presented in this course. Current literature regarding efficacy of special tests and rehabilitation will be included and provide the foundation of the course. Particular emphasis will be placed on the gait analysis and lower back evaluation.
Note: current literature will be read and abstracted by the students.

Change title and description to:

ATTR 661 – Evidence-Based Rehabilitation of the Kinetic Chain
Comprehensive examination (through reading, discussion, and hands-on practice) of rehabilitation techniques is presented in this course. Current literature regarding efficacy of rehabilitation is included and provide the foundation of the course.
A-F Grading

Preferred effective term: Fall 2010

ATTR 662 - Diagnostics and Rehabilitation-Upper Extremity
3 credits
Comprehensive examination (through reading, discussion, and hands-on practice) of athletic injuries to the upper extremity using advanced evaluation and rehabilitation techniques will be presented in this course. Current literature regarding efficacy of special tests and rehabilitation will be included and provide the foundation of the course. Particular emphasis will be placed on the overhead athlete.
Note: current literature will be read and abstracted by the students.
Change title and description to:
ATTR 662 – Evidence-Based Diagnosis of Orthopedic Injuries
Comprehensive examination of current literature identifies advanced evaluation techniques for orthopedic injuries. Diagnostic accuracy of clinical tests is the foundation of this course.
A-F Grading
Preferred effective term: Fall 2010

ATTR 698 - Research Project
3 credits
By arrangement with the chairperson of the student's project committee. Student identifies a research question and then designs and carries out a research study to answer the question. Additionally, student develops an oral and poster presentation and an abstract to be submitted for presentation at a professional conference.
Change credits, description, and add repeatble to:
ATTR 698 - Research Project
2-6 credits
By arrangement with the chairperson of the student's project committee. Students identify a research question and then complete a research study to answer the question.
Repeatable: Students are required to repeat for a total of six credits.
A-F Grading
Preferred effective term: Fall 2010

ATTR 699 - Master's Thesis
3 or 6 credits
By arrangement with the chairperson of the student's thesis committee.
Change credits, description, and add repeatble to:
ATTR 699 - Master's Thesis
2-6 credits
By arrangement with the chairperson of the student's thesis committee. Students will take this class in two credit intervals for the last 3 semesters.
A-F Grading
Preferred effective term: Fall 2010

COURSE BANKING

COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Athletic Training

ATTR 686 – Advanced Functional Human Anatomy Lecture
ATTR 686L - Advanced Functional Human Anatomy Laboratory

Preferred effective term: Fall 2010

COURSE ELIMINATIONs

COLLEGE OF ARTS AND SCIENCES: Earth and Environmental Systems

GEOG 613 – Recent Geographic Thought
Preferred effective term: Fall 2010

PROGRAM REVISIONS

COLLEGE OF ARTS AND SCIENCES: English

M.A. English-Specialization in Writing (32 credits minimum)
CIP Code: 230101 Major Code: 1073

Brief Summary:

The Department aims to change the Writing specialization by reinstituting a general elective of three hours taken either within the specialization, within the Department, or outside the Department.

Student Learning:

The proposed change will increase student learning by giving students the option to take a course that complements their study of writing, such as another literature course or a course in a related discipline, for instance History. If students are best served by electing one more writing course within the specialization, they may elect to do so.

Proposed Catalog Copy:

M.A. English-Specialization in Writing (32 credits minimum)
CIP Code: 230101 Major Code: 1073

Research and Theory:

ENG 600 - Bibliography and Research Methods in English 3 credits
ENG 635 - Literary Theory and Criticism 3 credits

English Core:
600-level course in American literature-3 credits
600-level course in English literature before 1800-3 credits
600-level course in English literature since 1800-3 credits

Electives:

Electives: at least 18 credits of directed electives in composition/rhetoric, creative writing, or

technical writing, including the culminating experience and a general elective of 3 credits chosen from a course either within the specialization, outside the specialization, or outside the department.

Other Requirements:

Reading knowledge of one classical or modern language approved by the Director of Graduate Studies in English. This requirement may be met by completing at the undergraduate level at least 12 credit hours in the language, or by passing a foreign language proficiency examination.

Culminating Experience:

Choose one of the following:

ENG 692 - Master's Paper 3 credits
ENG 698 - Creative Project 3-6 credits
ENG 699 - Master's Thesis 6 credits

Note: No more than 6 hours of transfer credit will be accepted for this program.
Preferred effective term: Fall 2010

BAYH COLLEGE OF EDUCATION: Curriculum, Instruction, and Media Technology

Ph.D. Curriculum and Instruction (72 credits minimum)
CIP Code: 130301 Major Code: 8394

Brief Summary:

In the previous revision of the Ph.D. program, the purpose was to take advantage of the newly established concentrations in Banner to move from multiple majors with Ph.D. in Curriculum and Instruction (each specialization having it's own major code) to one major code with multiple concentrations. This limited major codes while allowing us to track student data in each concentration. The purpose of this proposal is to add another concentration (literacy education) to the Ph.D.

In addition, this proposal also seeks to list in catalog copy another option to the CIMT electives for the major (CIMT 665 - previously approved course), and recommended ELAF courses in the Teaching and Learning concentration (ELAF 686 - previously approved course). It also includes recommended ELED and SPED courses in the Literacy concentration (all previously approved courses.)

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Student Learning:

The proposal for the addition of the literacy education concentration is not driven by student assessment outcomes. Rather, it is driven by a need nationwide for professionals able to develop and deliver educational programs for preservice and inservice teachers who are tasked with developing reading and reading comprehension skills for k-12 pupils and adult learners. The format of the current Ph.D. program in Curriculum and Instruction provides a logical foundation to address this need.

The Ph.D. in Curriculum and Instruction allows for substantive coursework in both curriculum and instruction (minimum of 24 credits), and in the area of concentration, in this case, literacy education (minimum of 24 credits). Moreover, the program allows for advisement in the area of concentration by content/discipline faculty in addition to advisement by the Dept. of Curriculum, Instruction, and Media Technology. The dissertation allows for further inquiry into literacy education, and guidance may be provided by both secondary (CIMT) and elementary (EESE) faculty.

Proposed Catalog Copy:

Ph.D. Curriculum and Instruction (72 credits minimum)
CIP Code: 130301 Major Code: _____

Degree Requirements:

A. Foundational Studies (6 credits minimum)
To develop competencies through understanding of contributions from philosophical, sociological, historical, and psychological foundations of education.
Courses:
Doctoral Level Foundations Course (3 credits)
Foundations Specific Elective (3 credits)

B. Inquiry Studies (12 credits minimum)
To develop competency in statistics, measurement, and research in education.
Courses:
CIMT 610 (3 credits) required
CIMT 800B (3 credits) required
Choose one of the following groups:
Quantitative Analysis: EPSY 612 (3 credits), EPSY 712 (3 credits); minimum grade of "B" required in each course
OR

Qualitative Analysis: EPSY 710 (3 credits), EPSY 711 (3 credits); minimum grade of "B" required in each course

C. Core Area—Curriculum and Instruction (24 credits minimum)

To provide the knowledge and understanding essential to every specialist in curriculum, instruction, and supervision.

Courses:

Curriculum: CIMT 660 (3 credits), CIMT 860 (3 credits)
Design: CIMT 620 (3 credits), CIMT 720 (3 credits)
Instruction: CIMT 862 (3 credits), CIMT 868 (3 credits)
C&I: Content specific and/or directed electives (6 credits). Recommended electives include CIMT 665 (3 credits), 675 (3 credits), 689 (3 credits), 740 (3 credits), 770 (3 credits), 864 (3 credits), 866 (3 credits).

D. Area of Concentration (24 credits minimum)

To enable the student to develop either (a) further study in curriculum, instruction, or supervision, or (b) a specialized program emphasizing an academic area as appears below. Below are the approved concentrations. If a course or set of courses is required, that notation appears with the area of concentration.

Early Childhood Education
Educational Technology
Elementary Education
English Education

A balance of course work in the three main subdivisions of English studies (literature, language, composition/rhetoric) is required in this area. Five courses in the Department of English provide students with an overview of English studies: English 601A, 635, 685A, 685B, and 685C. Other English course requirements in this area are broadly defined, allowing students to specialize in composition or an area of literature.

History Education

Courses in the area of application must include at least one two-course sequence (6 credits) from Section 1, a minimum of 3 credits (History 650 required) and a maximum of 9 credits from Section 2, a minimum of 3 credits from Section 3, and a minimum of 3 credits from Section 4.

Section 1

a. History 620, Proseminar: The United States-3 hrs., and History 621, Seminar: The United States-3 credits
b. History 660, Proseminar: Modern Europe-3 hrs., and History 661, Seminar: Modern Europe-3 credits
c. History 670, Proseminar: The Wider World-3 hrs., and History 671, Seminar: The Wider World-3 credits

Section 2

a. History 650, Historical Method and Theory-3 credits
b. Social Sciences 604, Improving Social Science Instruction-2-3 credits
c. Social Sciences 605, Seminar in Social Studies Education-1-6 credits
d. Social Sciences 606, Social Studies Curriculum-2-3 credits
e. Social Sciences 607, Instructional Materials in Social Studies-2-3 credits
f. Social Sciences 608, Readings in Social Science Education-1-3 credits

Section 3
a. History 622, Seminar on Popular Movements in the United States I-3 credits
b. History 623, Proseminar: Topics in United States History-3 credits
c. History 690, History Workshop-1-6 credits
d. History 695, Readings in History-2-3 credits

Section 4
a. History 720, Major Issues in United States History-3 credits
b. History 782, Major Issues in World History-3 credits
Industrial Technology Education
Math Education
Secondary Education
Language Education
Post Secondary Teaching and Learning
Recommended courses:
ELAF 686 - Academic Leadership in Higher Education
ELAF 687 - Higher Education in the United States
ELAF 752 - Organization and Governance in Higher Education
ELAF 763 - Seminar on Students in Higher Education
Special Education
The concentration in special education requires 24 graduate credits in the field of special education. Students will take 12 credits from:
SPED—690 Directed Study in Special Education
SPED—695 Research in Special Education
SPED—698 Advanced Topics in Special Education
SPED—685 Grant Development and Program Evaluation
SPED—790 Individual Research and Study
An additional 12 credits in graduate courses as directed by the doctoral committee are required to complete additional prerequisite course work.
Literacy Education
The concentration in literacy education requires a minimum of 24 graduate credits in the fields of literacy education. Students will complete:
ELED 670—Leadership of Reading Programs
ELED 681—Literacy Assessment
ELED 682—Action Research in Elementary Education
ELED 685—Literacy Intervention Strategies
SPED 685—Grant Development and Program Evaluation
ELED 686—Building Innovative Curriculum in Literacy (Writing)
ELED 690—Individual Study in Elementary Education
ELED 890—Individual Research and Study

E. Related Studies (0-6 credits)

Courses from content areas may be selected to enhance special competencies in the area of specialization. Independent study, field experiences, and internship assignments are utilized in this program as a means for achieving thorough preparation and competence. The final program for each student is cooperatively developed by the student, the advisor, and the doctoral committee.

Preferred effective term: Fall 2010

BAYH COLLEGE OF EDUCATION: Educational Leadership, Administration, and Foundations

Director of Exceptional Needs—Initial License Post-Master's Non-degree (33-48 credits)
CIP Code: 130401 Major Code: 8497

Brief Summary:

ELAF 753 - Public School Finance is proposed as an alternative to SPED 685 - Grant development and Program Evaluation.

COUN 620 is being removed from the choices because it is a class reserved for majors in CDCSEP. It will be an approved alternative, and will be coded into DARS as an approved alternative. The language requiring CIMT 610 or EPSY 620 has been clarified also.

The proposal also corrects the number of credit hours required, and some ambiguous catalog language.

Student Learning:
Fedback from students in the programs indicate problems scheduling required courses on the current program, and substitutions have been made to accommodate students on a case-by-case basis. This proposed change should eliminate scheduling problems. The professional standards for licensure will still be met and assessed with the revisions.

Proposed Catalog Copy:

Director of Exceptional Needs—Initial License Post-Master's Non-degree (33-48 credits)
CIP Code: 130401 Major Code:_____

Students who have completed a master's degree with a minimum graduate grade point average of 3.25; hold the minimum of either a standard or proficient practitioner teaching or school services license in the field of exceptional needs, speech pathology, or school psychology; and have a minimum of two years experience in the appropriate license area may become eligible for the initial Director of Exceptional Needs License by completing the program outlined below.

The student must complete the following courses. At least 15 semester hours must be taken from Indiana State University after admission to the program.

CIMT 610 - Research in Education 3 credits
or
EPSY 620 - Foundations of Resarch 3 credits
ELAF 605 - Philosophy of Education 3 credits
ELAF 650 - Foundations of Educational Leadership 3 credits
ELAF 655 - Legal Aspects of Educational Administration 3 credits
ELAF 656 - School and Community: Collaborating for Effective Schools 3 credits
ELAF 751 - Administration of School Personnel 3 credits
ELAF 753 - Public School Finance 3 credits

or
SPED 685 - Grant Development and Program Evaluation 3 credits
ELAF 754 - School Business Administration 3 credits
ELAF 759 - Seminar in School Superintendency (must be taken concurrently with SPED 684) 3 credits
SPED 601 - Education of Exceptional Children
or
SPED 607 - Diversity and Disability in Today's Schools 3 credits
SPED 674 - Administration of Special Education 3 credits
SPED 684 - Internship in Administration (must be taken concurrently with ELAF 759) 3-6 credits
SPED 698D - Advanced Topics in Special Education 1-3 credits
CIMT 660 - Curriculum Fundamentals
EPSY 621 - Development through the Lifespan 3 credits

Licensure Regulations
Interested individuals are encouraged to consult Education Student Services in the College of Education before pursuing a program intended to result in licensure.
Preferred effective term: Fall 2010

BAYH COLLEGE OF EDUCATION: Educational Leadership, Administration, and Foundations

Ed.S. School Administration (66 credits minimum)
CIP Code: 130401 Major Code: 8489

Brief Summary:

This proposal is for:

1. The elimination of SPED 770, which is no longer offered and is cross listed with CIMT 770, which is offered regularly.
2. The addition of EPSY 620 as an alternative to CIMT 610.
3. The addition of ELAF 607 as an alterantive to ELAF 605 - Philosophy of Education and ELAF 608 - School and Society
4. Removes required classes from the Campus Option and replaces them with approved electives. Many of the required courses are no longer taught.

Brief Summary:

The curiculum requirements in this program are driven by state licensure requirements.

Proposed Catalog Copy:

Ed.S. School Administration (66 credits minimum)
CIP Code: 130401 Major Code: _____

Degree Requirements:

ELAF 605 - Philosophy of Education 3 credits
or
ELAF 607 - History of American Education 3 credits
or
ELAF 608 - School and Society 3 credits
ELAF 650 - Foundations of Educational Leadership 3 credits
ELAF 655 - Legal Aspects of Educational Administration 3 credits
ELAF 656 - School and Community: Collaborating for Effective Schools 3 credits
ELAF 681 - The School Principal: Leadership for Changing Schools 3 credits
ELAF 710 - Social Foundations of Leadership 3 credits
ELAF 754 - School Business Administration 3 credits
ELAF 751 - Administration of School Personnel 3 credits
ELAF 753 - Public School Finance 3 credits
ELAF 757 - Educational Facility Planning 3 credits
ELAF 759 - Seminar in School Superintendency 3 credits
EPSY 621 - Development Through the Lifespan 3 credits
CIMT 610 - Research in Education 3 credits
or
EPSY 620 - Foundations of Qualitative and Quantitative Research 3 credits
CIMT 611 - Measurement and Evaluation in Education 3 credits
ELED 660 - The Elementary Curriculum 3 credits
or
CIMT 660 - Curriculum Fundamentals 3 credits
ELAF 683 - Leadership for Learning 3 credits
or
CIMT 770 - Curriculum Development 3 credits
Complete the 12 hour Campus or Field Option:
Campus Option:
12 hours of approved electives

Field Option:
ELAF 758 - Principal Internship 3 credits (taken twice)
ELAF 793 - Seminar in Effective Practices for Principals 3 credits (taken twice)

Thesis or Field Study:
ELAF 790 - Individual Research and Study 1-3 credits
ELAF 792 - Field Research Projects 1-3 credits
Preferred effective term: Fall 2010

COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Athletic Training

M.S. Athletic Training (33 credits minimum)
CIP Code: 510913 Major Code: A873

Brief Summary:

Due to changes in NATA accreditation standards and in the specialization of departmental faculty we have altered our program to include clinical classes and classes that align with our

program outcomes. We have added four (4) credits hours (ATTR 655 and 656) to the program due to changes in accreditationstandards and guidelines, in addition to the addition of two(2) new course (ATTR 626 and ATTR 660) and modified course titles and descriptions for five (5) courses (ATTR 625, 661, 662, 698, 699). We also banked two (2) courses (ATTR 686 and 686L).

Student Learning:

The department voted (6-0-0) to change the graduate athletic training program outcomes based on program assessment and the lack of alignment with current accreditation standards, evident after perfoming the Self Study for re-accreditation. The program outcomes have been altered to reflect current trends and faculty specialties and include:
1. Athletic Trainer Educator
2. Leadership and Administration
3. Evidence Based Practice

Specific Long and Short term Objectives of the program include:

1. Increasing the students depth and breadth of understanding in athletic training subject matter to become an advanced practitioner.
2. Enhance students' critical thinking skills through the use of evidence based practice.
3. Enhance students' ability to discover and develop new knowledge .
4. Provide students' advance knowledge and skills to prepare tehm for leadership roles in athletic training.
5. Provide students' the tools and knowledge to be athletic trainer educators in the broad sense of educating athletic training students, patients/athletes, coaches, parents and the community.
6. Provide students' experiences and engagement with the community to augments critical thining skills, leadership skill and athletic trainer educator skills aquired throught eh program.

We have included a course matrix indicating progress through the curriculum, as well as where program outcomes are imbeded in program courses. Individual classes also provide a guide to the program outcome goals for course objective. Program asseessment indicated that sutdents were not completing research projects in a timely manner, therefore, a stepwise progression for the research project and thesis was created to advance students through the process and increase graduation rates. The addition of ATTR 626 leadership and administartion in athletic training is a base course for one of our program outcomes. Alterations to the other courses reflect the changes in our program outcomes. The reactivation of the ATTR 655 and ATTR 656 graduate atheltic training clinical experience are needed for future accreditation standards and will be used to monitor the students clinical expereince and outcomes. Although after the original department vote, the recent accreditation visit itterated the need for clinical courses validating the reactivation. Each class has assignments designed to measure certain program outcomes dependent on the courses (see course syllabi).

Proposed Catalog Copy:

M.S. Athletic Training (33 credits minimum)
CIP Code: 510913 Major Code: _____

Research (12 credits):

- ATTR 691 - Research Methods 3 credits
- and
- ATTR 698 - Research Project 6 credits
- or
- ATTR 699 - Master's Thesis 6 credits

Choose one from the following statistics courses:

- EPSY 612 - Statistical Methods 3 credits
- HLTH 604 - Research Design and Data Analysis in Health and Human Performance 3 credits
- PE 605 - Quantitative Analysis and Application to Exercise and Sport Science 3 credits

Major (25 credits):

- ATTR 625 - Athletic Trainer Educator. 3 credits
- ATTR 626- Administration and Leadership. 3 credits
- ATTR 655- Clinical Experience in Athletic Training. 2 credits
- ATTR 656- Clinical Experience in Athletic Training 2. 2 credits
- ATTR 660-Environmental Illness. 3 Credits
- ATTR 661 - Evidence Based Rehabilitation of the kinetic chain 3 credits
- ATTR 662 - Evidence Based Diagnosis of Injuries 3 credits
- ATTR 675 - Therapeutic Modalities 3 credits
- ATTR 676 - Manual Therapy 3 credits

Culminating Experience:

Successful completion of thesis or research project, prepared abstract to be submitted for presentation at a professional conference, and the development of an oral and poster presentation.
Preferred effective term: Fall 2010

CORRECTIONS

The Conservation Minor from the Departmentof Earth and Environmental Systems was published as approved in Academic Notes of September 8, 2009. BIO 455 was listed twice. BIO 113 was to be included. The correction is listed in bold and italics.

Conservation Minor for non-Biology Majors (26 credits)
CIP Code: 450701 Major Code: _____

Required Courses: ENVI 110-3 credits; 170- 3 credits; 460-3 credits; Biology 101-3 credits; BIO 101L – 1 credit; 102-3 credits; 102L – 1 credit; ***113-3 credits;*** 455-3 credits; RCSM 361-3 credits.