Academic Notes

SEPTEMBER 24, 2007 **AN 2007-2008**

** SPECIAL NOTICES **

ACADEMIC NOTES PUBLICATION SCHEDULE FOR FALL 2007

Below is the circulation schedule for the electronic copy of *Academic Notes* through December 17, 2007. **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/acad-aff/79.html**

ACADEMIC NOTES PUBLICATION SCHEDULE FOR FALL 2007

Deadline for Items	Issue Date
September 26	October 1
October 3	October 8
October 10	October 15
October 17	October 22
October 24	October 29
October 31	November 5
November 7	November 12
November 14	November 19
November 21	November 27
November 28	December 3
December 5	December 10
December 12	December 17

THESES, DISSERTATIONS, AND RESEARCH PROJECTS

COLLEGE OF ARTS AND SCIENCES: Psychology

Candon Sadler will defend her dissertation entitled, *Relationship Between Premenstrual System Severity and Catastrophic Thinking*, on Friday, October 19, 2007, at 10:30 a.m., in Root Hall, room B-141. Members of her committee are: Dr. Jennifer Boothby, Chairperson; Dr. Veanne Anderson and Dr. June Sprock.

CURRICULUM

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UNDERGRADUATE PROPOSALS

PROGRAM REVISION

COLLEGE OF ARTS SCIENCES: Political Science

Public Administration Minor *(18 semester hours)*

CIP Code: 440401 Minor Code 3629

Brief Summary:

This revision to the minor in Public Administration will allow students to get the basic knowledge of the components within the field of Public Administration and while giving them the flexibility to obtain further germain knowledge within a specific field of interest. These changes will make the PA minor more accessible to students in variety of majors. Although there will be an increase in the number of credit hours needed to receive the minor (3 credits), students will find it to be much easier to complete their requirements.

Add: PSCI 305 and PSCI 409
Delete: PSCI 426, 429, 432
Revise: allow elective options

Student Learning:

Based on assessment data on the reported needs of our students, we propose these changes to the minor in Public Administration within the department of Political Science. These revisions will allow students to get the basic knowledge of the components within the field of Public Administration and allow them the flexability to obtain further germain knowledge within a specific field of interest.

Proposed Catalog Copy:

Public Administration Minor ***(21 semester hours)***
CIP Code: 440401 Minor Code:_____

Public Administration core (15 hours): 201--3 hrs.; 245--3 hrs.; 305--3 hrs; 330--hrs.; 409--3 hrs.
Electives (6 hours): Approved public administration, political science or cognate courses, including internship options.

UNDERGRADUATE APPROVALS

NEW COURSES

COLLEGE OF TECHNOLOGY: Electronics and Computer Technology

ECT 168 Computer Design Technology—3 hours. This course introduces critical thinking, problem-solving concepts using computer programming and computer aided design tools. Students will gain the knowledge to develop technical skills necessary to solve problems in computer engineering technology. *Preferred effective date: Spring 2008*

ECT †301 Computer Network Management Technology—3 hours. Introduces and defines concepts involving network topology, network devices, protocols, and the Open System Interconnect

Reference Model (OSIRM). The elements of a LAN, current issues and products, and system administration are emphasized. Prerequisite: 232.
† Indicates course has a laboratory component.
Preferred effective date: Spring 2008

ECT †303 Microcontroller Hardware and Software—3 hours. Introduces students to microcontroller principles, including hardware and software models. Students study hardware architecture, operation and function of a microcontroller, and develop programs based on its instruction set. Prerequisite: 232.
† Indicates course has a laboratory component.
Preferred effective date: Spring 2008

ECT 306 Technical Data Management and Applications—3 hours. Introduces database architectures, capabilities, data structures, and typical applications at the factory and the enterprise levels. Factory information systems, data filtering, data for quality analysis, and summary report generation are studies. Prerequisite: 301.
Preferred effective date: Spring 2008

ECT †308 Microcontroller Applications and Interfacing—3 hours. Students study microcontroller organization and its associated peripheral components focusing on embedded control applications. Interconnection, I/O interfacing, bus timing relationships, memory expansion, interrupts, serial, and parallel communication will be covered. Prerequisite: 303.
† Indicates course has a laboratory component.
Preferred effective date: Spring 2008

ECT 401 Data Communications and Internet Technology—3 hours. Introduces fundamentals for delivering information from a source through a medium to a destination. Students study data communications hardware, software components, and methodologies in networking and the Internet. Prerequisite: 301.
Preferred effective date: Spring 2008

ECT†403 Practical Digital Logic Design--3 hours. Introduces the Hardware Description Language (HDL) for developing, verifying, and synthesizing designs of digital circuits. CAE tools are used to design circuits for Application Specific Integrated Circuits (ASICs) and/or Field Programmable Gate Array (FPGA) implementation. Prerequisite: 232.
† Indicates course has a laboratory component.
Preferred effective date: Spring 2008

ECT 406 Computer Systems Integration--3 hours. The factory floor to the business enterprise and the process-to-enterprise chain are parts of computer-based system integration. Students study the methodology for accomplishing the system integration process and apply concepts through case-study exercises. Prerequisite: 306.
Preferred effective date: Spring 2008

COURSE REVISIONS

COLLEGE OF TECHNOLOGY: Electronics and Computer Technology

ECT †220 A.C. Circuits and Design—3 hours. Elementary empirical design and practical laboratory experiences involving D.C. and A.C., magnetism, impedance, tuned circuits, laboratory scopes, bridges, and time measurements. Intense study of the performances of discrete electronic components within a variety of application circuits including filters, rectifiers, power supplies, and regulators. Prerequisite: 165 (May be taken concurrently with 221.)

Change number to:

ECT†167 A.C. Circuits and Design--3 hours. Elementary design and laboratory experiences involving A.C., magnetism, impedance, tuned circuits, bridges, and time measurements. Study of discrete electronic components within a variety of applications including filters, rectifiers, power supplies, and regulators. Prerequisite: 165. †Indicates course has a laboratory component.

Preferred effective date: Spring 2008

COURSE BANKING

COLLEGE OF TECHNOLOGY: Electronics and Computer Technology

ECT †331 Large Scale Integrated and Interface Circuits—3 hours. Analysis of large scale integrated digital circuits. Basic theory and characteristics of MOS, MOS digital inverters, static and dynamic MOS logic, CMOS, charged logic devices, bipolar circuit models, TTL logic, and noise analysis. Design and construction of logic circuits typically used in the interfacing of control devices to microprocessor based systems. Prerequisite: 232.

Preferred effective date: Fall 2011

ECT †334 Microprocessor Architecture and Organization—3 hours. The architecture and interconnecting functional units of the CPU, ALU, and control units with memory, input/output devices, and communication between subsystems. The basic operation of processor cycle including machine cycle, state transition, and status information. Prerequisite: 232.

Preferred effective date: Fall 2011

ECT †335 Peripheral Control Structures—3 hours. An analysis of the digital logic structure of peripheral control devices and how they interface with microprocessor based systems. Prerequisite: 334.

Preferred effective date: Fall 2011

ECT †435 Advanced Microprocessor Architecture and Organization—3 hours. Architecture, system design, and interfacing theory of advanced microprocessor based systems are presented in this

course. Laboratory experiences will be an integral portion of this course. Prerequisite: 335
Preferred effective date: Fall 2011

ECT †436 Data Communications Technology—3 hours. A study of data communications hardware including synchronous/asynchronous communications, SDLC/HDLC protocol controllers, local area network controllers, modems, and ethernet controllers. Laboratory activities include experiences with sync/async communications, interfacing, networking, and LAN. Prerequisites: 232, 324.
Preferred effective date: Fall 2011

PROGRAM REVISIONS

COLLEGE OF TECHNOLOGY: Electronics and Computer Technology

Computer Hardware Technology Major (89 semester hours)
CIP Code: 151291 Major Code: D832

Summary:

The Computer Engineering Technology program will continue with the same fundamental focus as the Computer Hardware Technology program, however, this program will also emphasize networking, data communications, telecommunications, and information technology concepts from an infrastructure perspective that during the past decade has become an integral part of Computer Engineering Technology.

The purpose of the program is to provide quality education in the discipline of computer engineering technology for men and women who have the desire to prepare themselves for a career in this field.

The objective of this program is to provide graduates with the practical and theoretical background based on technological, mathematical, and scientific principles that will prepare them for further education and productive employment at a professional level in a wide range of careers, and to maintain an educational climate through research, service, and professional development.

Students in this program will acquire skills in digital technology, computer engineering technology, design, and analysis.

Proposed Catalog Copy:

Computer Engineering Technology Major (74 semester hours)
CIP Code: 151291 Major Code:_____

Required courses:
Electronics and Computer Technology courses (45 hours): 130--2 hrs.; †165--3 hrs.; †167--3 hrs.; †168--3 hrs.; 231--3 hrs.; †232--3 hrs.; 281--3 hrs.; †301--3 hrs.; †303--3 hrs.; †306--3 hrs.; 308--

3 hrs.; 401--3 hr.; †403--3 hrs.; †406--3 hrs.; 430--1 hr.; †437—3 hrs.

Management (6 hours from courses such as): Industrial and Mechanical Technology 404 – 3 hrs.; 405 – 3 hrs.; Manufacturing and Construction Technology 471--3 hrs.; †478--3 hrs.; 492--3 hrs.

Mathematics/Computer Science and Physical Science requirements (17 hours): courses in Physics, Chemistry, Life Sciences, or Geology--8 hrs.; Mathematics 115--3 hrs.; 301--3 hrs.; Computer Science 256--3 hrs. (or higher level structured language.)

Technical Electives: 6 hours.

† Denotes a course having a laboratory component requiring additional contact hours.
Preferred effective term: Fall 2008

COLLEGE OF TECHNOLOGY: Electronics and Computer Technology

Computer Hardware Technology Minor (24 semester hours)
CIP Code: 151291 Major Code: D832

Summary

Title Change: Change name from **Computer Hardware Technology Minor** to the **Computer Engineering Technology Minor**.

Objectives/Purpose/Clientele to be served by the Program: Computer Engineering Technology focuses on the design, analysis and application of computers and on their applications as components of systems. Emphasis will be on a broad computer engineering technology base that includes the areas of networking, data communications, telecommunications, and information technology. The changes to this program reflect the need for a minor that has a program name used by other institutions and is recognizable to industry, and fulfill the needs of industries associated with this technology. Students from the Electronics Technology program, programs in Mathematics and Computer Science, and other similar programs at this institution should find this minor as an opportunity to enhance their understanding of this field of study. Due to a decrease in the electronics technology course requirements from the older Computer Hardware Technology minor, students from a wider range of disciplines should find this minor attractive. Students articulating from other institutions with similar backgrounds should be able to acquire this minor and use it to enhance their ability to gain employment upon graduation.

Credit Hours/Miscellaneous: The overall number of credit hours will decrease from the present 24 semester hours to 18 semester hours.

A. Present # of hours in Computer Hardware Technology Minor -- 24 Future # of hours in Computer Engineering Technology Minor -- 18
B. Careers include: computer engineering technology, networking and data communications, computer engineering, hardware/software system design, maintenance, application-oriented engineering positions, and various data/software driven infrastructure-based positions.

Proposed Catalog Copy:

Computer Engineering Technology Minor (18 semester hours)
CIP Code: 151291 Major Code: _____

Required Courses:
Electronics and Computer Technology (15 hours): †165 –- 3 hrs.; 168 – 3 hrs.; 231 – 3 hrs.; †232 – 3 hrs.; †303 or †403 3 hrs.
Computer Science (3 hours): 256 – 3 hrs. or any higher level structured language.

†Denotes a course having a laboratory component requiring additional contact hours.
Preferred effective term: Fall 2008

COLLEGE OF TECHNOLOGY: Industrial Technology Education

Human Resource Development for Higher Education and Industry (78 semester hours)
CIP Code: 521001 Major Code: E135

Summary:

The department would like to eliminate ITE 345 and ITE 484 from the required HRD courses/curriculum. It is also eliminating the 3 credit hour elective from Educational and School Psychology, replacing it with ITE 489. Two new courses will be added to the required HRD courses/curriculum: ITE 420 and ITE 425. The credit hours will remain at 30 hours for the required HRD courses/curriculum.

Proposed new catalog copy incorporating these changes are in line with recent competency studies and suggested program standards from the professional organizations in our field, such as the American Society for Training and Development, Organization Development Network, and the Academy of Human Resource Development.

Specifically, the American Society for Training and Development has developed an HRD Wheel listing the three primary areas of Human Resource Development as: Training, Career Development, and Organizational Development. Our program has largely focused on the training aspect of HRD, and these changes allow for a more balanced program that would require the courses in Career Development and Organizational Development.

Student Learning:

Training and development managers and specialists conduct and supervise training and development programs for employees. Increasingly, management recognizes that training offers a way of developing skills, enhancing productivity and quality of work, and building worker loyalty to the firm, and most importantly, increasing individual and organizational performance to achieve business results. While training is widely accepted as an employee benefit and a method of improving employee morale, enhancing employee skills has become a business imperative. Increasingly, managers and leaders realize that the key to business growth and success is through developing the skills and knowledge of its

workforce.

Other factors involved in determining whether training is needed include the complexity of the work environment, the rapid pace of organizational and technological change, and the growing number of jobs in fields that constantly generate new knowledge, and thus, require new skills. In addition, advances in learning theory have provided insights into how adults learn, and how training can be organized most effectively for them.

Training managers provide worker training either in the classroom or onsite. This includes setting up teaching materials prior to the class, involving the class, and issuing completion certificates at the end of the class. They have the responsibility for the entire learning process, and its environment, to ensure that the course meets its objectives and is measured and evaluated to understand how learning impacts business results.

Training specialists plan, organize, and direct a wide range of training activities. Trainers respond to corporate and worker service requests. They consult with onsite supervisors regarding available performance improvement services and conduct orientation sessions and arrange on-the-job training for new employees. They help all employees maintain and improve their job skills, and possibly prepare for jobs requiring greater skill. They help supervisors improve their interpersonal skills in order to deal effectively with employees. They may set up individualized training plans to strengthen an employee's existing skills or teach new ones. Training specialists in some companies set up leadership or executive development programs among employees in lower level positions. These programs are designed to develop leaders to replace those leaving the organization and as part of a succession plan. Trainers also lead programs to assist employees with job transitions as a result of mergers and acquisitions, as well as technological changes. In government-supported training programs, training specialists function as case managers. They first assess the training needs of clients and then guide them through the most appropriate training method. After training, clients may either be referred to employer relations representatives or receive job placement assistance.

Lastly, the course in Educational and School Psychology is no longer offered to students; therefore, the department is changing the requirement to ITE 489.

Proposed Catalog Copy:

Human Resource Development for Higher Education and Industry (78 semester hours)
CIP Code: 521001 Major Code:_____

This major includes 28 semester hours of professional/occupational experience requiring defined occupational experience and license, competency test, or evaluated technical credit appropriate to the specialization.

Required courses: Industrial Technology Education 276—3 hrs.; 369—3 hrs.; 385—3 hrs.; 394—3 hrs.; 420—3 hrs.; 425—3 hrs.; 473—3 hrs.; 480—3 hrs.; 489—3 hrs.
Directed Electives: 3 hours.

Professional Occupation Experience:

Option A: Occupational Experience Trade or Technical: three years (6,000 clock hours) above the training level and/or validation by license or examination. Experience must have occurred within last five years. A minimum of one and one-half years (3,000 clock hours) is required. Technical course work may be used to meet the total required 28 semester hours. The appropriate occupational exam may be required.

Option B: Technical Credit: Credit may be awarded based on evaluation of previous course work taken at accredited institutions. This is not transfer credit but recognition of credit for appropriateness of courses taken in specialization area.

Advanced Technical Specialization: 20 semester hours including 12 semester hours at the 300-400 level from four year degree granting institutions, and 8 semester hours combination of technical workshops and industrial internships: Industrial Technology Education 351 and/or 495.

Preferred effective term: Fall 2008

GRADUATE APPROVALS

PROGRAM SUSPENSION

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

Master of Arts Spanish
CIP Code 160905 Major Code 1273

Summary:

We have not been accepting students into the Master's program in Spanish, since our Spanish faculty have been reduced to two tenured persons. Therefore, we think it wise to suspend the Spanish M.A. program until the university budget situation allows us to rebuild our Spanish faculty.

One of the Strategic Goals of the LLL Department is to strengthen the undergraduate program in Spanish, and by trying to maintain a graduate program as well we would be removing our faculty members in Spanish from crucial undergraduate courses.

Proposed Catalog Copy:

None.
Preferred effective date: Fall 2008

PROGRAM ELIMINATIONS

COLLEGE OF ARTS AND SCIENCES: Ecology and Organismal Biology

Ph.D. Life Sciences – Systematics
CIP Code: 260101 Major Code: 2864

Preferred effective term: Fall 2007

COLLEGE OF ARTS AND SCIENCES: English

Master of Arts or Master of Science in English—For Teacher Licensure (32 hours minimum)
CIP Code: 230101 Major Code: 1071
Preferred effective term: Fall 2007

Master of Arts in English (Theater)
CIP Code: 230101 Major Code: 1075
Preferred effective term: Fall 2007

COLLEGE OF ARTS AND SCIENCES: Life Sciences

Ph.D. Life Sciences – Sports Medicine
CIP Code: 260101 Major Code 2871

Ph.D. Life Sciences – Systematics
CIP Code: 260101 Major Code: 2864
Preferred effective term: Fall 2007

COLLEGE OF ARTS AND SCIENCES: Women's Studies

Women's Studies Graduate Certificate
CIP Code: 050207 Major Code: 4560
Preferred effective term: Fall 2007