



Academic Notes

JANUARY 23, 2006

AN 2005-2006

****SPECIAL NOTICES****

ACADEMIC NOTES PUBLICATION SCHEDULE **FOR SPRING 2006**

Below is the circulation schedule for the electronic copy of *Academic Notes* through May 1, 2006. **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, along with an E-Mail or a diskette with the same information in Microsoft Word format. Failure to submit a diskette containing this information will delay publication.** *Academic Notes* is available using Acrobat Reader at <http://web.indstate.edu/acadnotes/> –.

ACADEMIC NOTES PUBLICATION SCHEDULE **FOR SPRING 2006**

<u>Deadline for Items</u>	<u>Issue Date</u>
January 25	January 30
February 1	February 6
February 8	February 13
February 15	February 20
February 22	February 27
March 1	March 6
March 8	March 13
March 15	March 20
March 22	March 27
March 29	April 3
April 5	April 10
April 12	April 17
April 19	April 24
April 26	May 1

FACULTY GOVERNMENT

FACULTY SENATE STANDING COMMITTEES

ADMINISTRATIVE AFFAIRS COMMITTEE

The Administrative Affairs Committee will meet at 2:00 p.m. on Wednesday, January 25, 2006 in the Myers Technology Center, room 107.

Agenda

1. Minutes of December 7, 2005
2. Open time (15 minutes)
3. Old Business
 - EMC follow-up on ISU branding campaign
4. Administrative/Faculty count

FACULTY AFFAIRS COMMITTEE

The Faculty Affairs Committee will meet at 3:00 pm on Wednesday, January 25, 2006 in the College of Education, 11th floor conference room.

Agenda

1. Approval of FAC Minutes #7 (December 2, 2005))
2. Subcommittees update:
 - Faculty Advising Workload Committee
 - On-line Course Evaluation Committee
 - Handbook Reappointment Committee
 - Faculty Enrollment in Courses at ISU Committee
 - Special Purpose and Part-Time Temporary Faculty Policies
 - Faculty Grievance Committee
3. Review and discuss Provost's Program Prioritization guidelines and timeline
4. Chair's Report
 - Announcement: Yassenka Peterson has a baby girl. She is on maternity leave until March 1.
 - Faculty Award for Civic and Community Leadership
5. Provost Liaison's Report
6. Executive Committee Liaison's Report
7. New Items

THESES, DISSERTATIONS, & RESEARCH PROJECTS

COLLEGE OF EDUCATION: Educational Leadership, Administration, and Foundations

Rodney King will defend his dissertation, entitled *Indiana School Districts' Capacity to sue Student-Date Information Systems for Analysis and Decision Making*, at 9:00 a.m. on Monday, February 6, 2006, in the College of Education, room 1214. The members of his committee are Dr. Bradley Balch, chairperson, Dr. Greg Ulm, and Dr. Noble Corey.

CURRICULUM

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UNDERGRADUATE GENERAL EDUCATION PROPOSALS

NEW COURSE

COLLEGE OF ARTS AND SCIENCES: African and African American Studies

AFRI 470 **Racial Identity in African American Popular Culture**--3 hours. An analysis of the ways in which racial identity is created, expressed and contested in African American cultural forms, with particular emphasis on film, television, and popular music. Primary emphasis will be placed upon the constructions of black/white identities and the ways they are expressed and received within various communities. Pre-requisite: at least 78 credit hours and seven of nine required Liberal Studies courses. See the General Education section of the Catalog for a complete description of the capstone requirement. *General Education Credits [GE 2000: Capstone Course]*

Preferred Effective Term: Fall 2006

COLLEGE OF ARTS AND SCIENCES: Life Sciences

LIFS 496 **On Being a Scientist**--3 hours. Classroom discussion of readings on historical perspectives, multicultural aspects, and issues of controversy in science. Special emphasis on public opinion of current issues in science. Prerequisite: by arrangement and consent of instructor; and at least 78 credit hours and seven of nine required Liberal Studies courses. *General Education Credits: See the General Education section of the Catalog for a complete description of the capstone requirement. [GE2000 capstone course]* Offered Spring.

Preferred Effective Term: Summer I 2006

COURSE REVISION

COLLEGE OF ARTS AND SCIENCES: English

ENG 235 **Major World Authors**--3 hours. A critical study of major world authors, other than British and American, from antiquity to the present. [GE89: C2, E1]

Change description to:

ENG 235 **Major World Authors**--3 hours. A critical study of major world authors, other than British and American, from antiquity to the present. [GE89: C2, E1; GE2000: Multicultural Studies-International Cultures]

UNDERGRADUATE PROPOSALS

COURSE REVISION

COLLEGE OF TECHNOLOGY: Industrial and Mechanical Technology

IMT 215 **Graphic Analysis**--3 hours. Mathematical and technical problems solved by graphic methods. Includes graphic presentation of data, functional scales, graphic mathematics, empirical equation, and curve fitting. Prerequisite: working knowledge of algebra.

Change descriptions and prerequisites to:

IMT 215 **Graphic Analysis**--3 hours. Graphically and analytically solving technical mathematical problems commonly encountered by engineers and technologists utilizing elements of algebra, geometry, trigonometry, and statistics. Prerequisite: Mathematics 115 or consent of the instructor.

Preferred Effective Term: Summer I 2006

GRADUATE PROPOSAL

PROGRAM REVISION

COLLEGE OF ARTS AND SCIENCES

SCIENCE EDUCATION

M.A./M.S. SCIENCE EDUCATION, CHANGE CIP CODE FROM 260101 TO 131316

Rationale:

The MOU that provisionally housed Science Education in the Department of Life Sciences has expired. The former Department of Life Sciences has been divided into two new departments. The MOU governing that division specifies that Science Education is not considered part of the division and is governed by its own MOU.

As a result of these conditions the Science Education program will function as an interdisciplinary program, housed in the Center for Science Education, but with faculty participation from allied departments.

Transition Plan:

Science Education CIP Code Science Education will revert back to CIP Code 131316, as the MOU that moved Science Education into the former Department of Life Sciences has expired. Science Education under CIP Code 260101 should be made inactive.

Students will continue to be admitted to the MA/MS degree program. Students enrolled under the 260101 CIP code will be moved to the Science Education 131316 CIP code. Such a move will not interrupt their

degree progress. The Center for Science Education will serve as the home for the program, with the coordinator responsible for ensuring the appropriate advisement of students.

Preferred Effective Term: Fall 2006

UNDERGRADUATE APPROVALS

NEW COURSES

COLLEGE OF TECHNOLOGY: Industrial and Mechanical Technology

IMT 304 **Engineering Analysis**--3 hours. Introduction to the analysis of engineering problems including dynamics and thermodynamics using calculus based methods. The emphasis is given to the understanding of basic concepts and principles as well as the applications of related analysis in mechanical and manufacturing engineering. Prerequisite: Mathematics 301 or equivalent.

Preferred Effective Term: Fall 2006

IMT 330 **Survey of Motorsports**--3 hours. An exploration of racing on land, on water, and in the air. Current rules, regulations, and media attention are included. Emphasis is placed on popular modes of motor racing in Indiana. Prerequisite: Sophomore standing or consent of instructor.

Preferred Effective Term: Summer I 2006

COURSE REVISIONS

COLLEGE OF TECHNOLOGY: Aerospace Technology

AST 205 **Aviation Operations**--3 hours. Organization and operation of small airport aviation facilities. Included will be flight line operations, aircraft maintenance, sales, administration, state and federal regulations, and community relations. Prerequisites: 141 and 143; or consent of instructor.

Change Title to:

AST 205 **General Aviation Operations**--3 hours. Organization and operation of small airport aviation facilities. Included will be flight line operations, aircraft maintenance, sales, administration, state and federal regulations, and community relations. Prerequisites: 141 and 143; or consent of instructor.

Preferred Effective Term: Fall 2006

COLLEGE OF TECHNOLOGY: Industrial and Mechanical Technology

IMT 130 **Introduction to Industrial and Mechanical Technology**--2 hours. Orientation to the student's major field—mechanical, automotive, or packaging technology.

Change title and description to:

IMT 130 **Introduction to Engineering and Technology**--2 hours. This course introduces students into the realm of engineering and technology. It explains what the profession is, what important roles engineering technology plays, how it is different from other major

professions in the society, and the career opportunities for engineering technology students. The course also introduces the basic principles of engineering in terms of problem solving approach, methodology, knowledge, and skill involved.

Preferred Effective Term: Fall 2006

UNDERGRADUATE APPROVALS: continued.

COURSE REACTIVATIONS

COLLEGE OF ARTS AND SCIENCES: Family and Consumer Sciences

FCS 400 Study Abroad--3-6 hours. The resources of various geographic areas: selected aspects of Family and Consumer Sciences. Evidence of individual study is required. Prerequisite: Consent of instructor.

Preferred Effective Term: Summer I 2006

COLLEGE OF TECHNOLOGY: Aerospace Technology

AST 446 Multi-Engine Instructor Flight--2 hours. The advanced flight theory and skills as required for the FAA Multi-engine Flight Instructor rating. Covers aspects of instructing as related to a multi-engine airplane. A Multi-engine Flight Instructor's rating is required for completion of this course. Prerequisite: Flight Instructor Certificate or consent of instructor.

Preferred Effective Term: Summer I 2006

PROGRAM REVISIONS

COLLEGE OF TECHNOLOGY INDUSTRIAL AND MECHANICAL TECHNOLOGY B.S. AUTOMOTIVE TECHNOLOGY MANAGEMENT

Executive Summary:

To better streamline the technology portion of the Automotive Technology Management Program (A TM) and in order to comply with both the National Association of Industrial Technology (NAIT) and the National Automotive Technicians Education Foundation (NA TEF) accreditation requirements, significant refinements to the current automotive electronics are essential. In cooperation with the ECT department, ECT 160 will have a section specifically tailored to automotive electronic fundamentals. Additionally, other courses including IMT 233 and IMT 335 will have significant portions of coursework regarding automotive electronics reorganized to reflect these changes.

The requirement for PHYS 101/101L will be expanded to include the option to take PHYS 105/105L. Existing accreditation by NAIT requires four hours of physics, taught by physics professors. Either of these two courses, with their corresponding lab courses, will provide a solid foundation in physics, which is essential for Automotive Technology Management graduates. The option of taking either class provides for

more possible solutions to course scheduling or course transfers and articulation agreements without the need for special processing.

MATH 115 better prepares students for IMT 215 Graphic Analysis. In order to enhance students' mathematical problem solving abilities, MATH 115 will become the minimum math requirement for the ATM program, raising the prior standard of MATH 111.

UNDERGRADUATE APPROVALS: BS Automotive Technology Management – continued.

The Automotive Technology Management Advisory Committee (ATMAC) has addressed the need for graduates to be better prepared to work with statistics. With the requirement of MATH 115 for entrance into IMT 215, students will be better prepared for the trigonometry section of IMT 215, thus allowing more instructional time to be spent with statistics.

The need for IMT 130 Introduction to Technology will be satisfied by IMT 132 Introduction to Automotive Engines. Thus, IMT 130 will no longer be required in the ATM program.

HLTH 212 Introduction to Industrial Health and Safety is added to the major to ensure graduates have foundational knowledge in regard to safety within the occupational environment.

IMT 215 Graphic Analysis will have a prerequisite of MATH 115 or consent of the instructor as IMT 215 also serves other majors within the IMT Dept.

IMT 233 Basic Automotive Service and Testing will have its course title changed to Engine Systems and Controls, and will have the content modified accordingly. Essentially, electronics coursework will be shifted to IMT 136, while the tire and wheel content will shift to IMT 239. Engine controls content will be pulled from IMT 335 and become core content in this course, IMT 233.

IMT 239 Chassis Systems will be created covering steering, suspension, and braking systems. The bulk of existing material from IMT 434 and existing material from IMT 233 and IMT 335 will come together in this course to better organize the content into a more cohesive format. Removing a 400 level class and replacing it with a 200 level class is more reflective of the actual content and strategies previously used in IMT 434. No detrimental effects from the move regarding hours at the 3/400 level are anticipated.

The requirement for MCT 295 Industrial Computer Applications will be dropped. Students needing to fulfill the Information Technology Literacy requirement through coursework would be advised to take MCT 295. However, if students pass the ITL exam, that will be considered acceptable. If a student, perhaps a student who has changed majors or transferred, has received credit for, or wanted to take another ITL approved course, that too, would be acceptable. No significant reduction in students taking MCT 295 is expected. This change simply alleviates special administrative paperwork.

IMT 335 Electronics Diagnosis will have its course title changed to Body Control Systems, and will have the content modified accordingly. New material will be added regarding vehicle communications as advised by the ATMAC. In addition, due to the fact that Air Conditioning is now significantly electronically controlled, HV AC material will be removed from IMT 434 and incorporated into this course.

IMT 336 Automotive Materials and Related Products will have its course title changed to Engine Fuels and Lubricants. As advised by the NAIT visiting team, course material regarding alternative fuels will become a core requirement of the ATM program. The paint portion of the course will be removed and a new elective course IMT 338 Paint and Refinishing will be created in the future.

UNDERGRADUATE APPROVALS: BS Automotive Technology Management – continued.

IMT 337 Thermo Systems will be replaced by IMT 435 Contemporary Engines. IMT 337 once served many majors within the College of Technology. Currently, only Automotive Technology Management Majors are required to take this course. While thermo systems play an important role in automobiles, less than 20% of the coursework in IMT 337 used the automobile for application. IM1435 addresses thermodynamic issues and is specific to automobiles.

IMT 351 Cooperative Industrial Practice will become an added requirement of the major. The ATMAC has addressed this issue time and time again citing the need for practical experience in the automotive field as an essential element ensuring success for the graduate.

IMT 432 Parts Distribution and Marketing will become a core class in the Automotive Technology Management Program as recommended by the NAIT visiting team and the ATMAC.

IMT 434 Allied Systems will be banked. Its course content will move into IMT 239 and IMT 335. It is illogical to teach brakes, suspension, steering, and HV AC, to the depth required of the program, in the same three credit hour course.

IMT 435 Contemporary Engines will have its title changed to Engine Thermodynamics to better reflect the course content. IMT 435 will then replace IMT 337 as a core course in the Automotive Technology Management Program.

IMT 436 Diesel Engines will become a core course in the Automotive Technology Management Program as advised by the ATMAC (advisory committee).

IMT 439 Fixed Operations Management will be created addressing the financial, personnel management, and strategic planning strategies related to automotive businesses. The ATMAC addressed the need for such skills citing a lack of initial performance in such items as interpreting a spreadsheet, planning a logical course of action, and interviewing skills. This IMT 439 course will become a core course in the ATM program with IMT 433 as the prerequisite.

MCT 497 Problem Solving Techniques will be removed from the program as the need for the course is no longer apparent, based on personal interviews with recent graduates.

The requirement for MCT 492 Industrial Supervision will be modified so that either MCT 492 or MGT 301 Survey of Management can be taken. These two courses, based on graduate interviews, currently serve essentially the same purpose for the Automotive Technology Management Program.

These changes will provide for an Automotive Technology Management Program that is responsive

to the needs of the automotive industry. Based on sound teaching principles, advice from the NAIT visiting team, and on repeated advice from the Automotive Technology Management Advisory Committee, these changes will move the program in a positive direction. A more defined, refined, and perhaps most importantly, a more marketable program will result.

UNDERGRADUATE APPROVALS: BS Automotive Technology Management – continued.

Rationale:

All changes proposed to the Automotive Technology Management Program stem from interviews with recent graduates and advice from the Automotive Technology Management Advisory Committee (ATMAC), colleagues, and industry professionals. Many proposed changes are a result of issues addressed by the 2004 visiting team from the National Association of Industrial Technology (NAIT) that accredits our Automotive Technology Management Program. Further support for the changes is addressed in the following paragraphs.

As cited by NAIT in the last accreditation on-site visit, the Automotive Technology Management Program needs new technology in the lab. Further stated, we should be engaging students in the very latest technology of hybrids and alternative fuels. Since the NAIT visit, we have obtained six relatively new vehicles from Subaru of Indiana America in Lafayette, IN. Cummins Engine Inc. of Columbus has donated an engine and testing software. However, a great need still exists for new technology. With traditional funding shrinking each year, the Automotive Technology Management Program must seek new avenues for revenue. At present, new grant work and research in the automotive technology realm in areas such as bio-diesel, alternative fuels such as E-85, hybrid technology, and many other areas are hampered by our 30 and 40 year old testing equipment. While many grants will fund equipment, virtually none will provide enough funding to allow for an entire update to the lab. The competition among institutions is too great to allow for such expenditures.

The Automotive Technology Management Advisory Committee (ATMAC) has reaffirmed what the NAIT visiting team stated: we must update our program. It was argued by the faculty that since we don't train technicians, our level of technology could be a few years behind what is currently being manufactured. However, the ATMAC members, while agreeing that we indeed do not train technicians, we educate technical managers that must have a grasp of the current technology. Thus, we should strive to stay at the forefront of the technology, instead of several years behind. They also alluded to the fact that staying at the forefront of technology means staying ahead of the manufacturers.

At each of the last three ATMAC meetings the members stated emphatically that the Automotive Technology Management Program must seek and achieve accreditation by the National Association of Technicians Education Foundation (NA TEF). In addition to our current NAIT accreditation status, accreditation by NA TEF will allow the major automotive manufacturers such as OM, Ronda, Ford, Toyota, and Daimler Chrysler to donate or distribute new vehicles, equipment, and technology for our program. Acquiring NA TEF accreditation requires only minor, virtually insignificant changes to our curriculum, but does require faculty members teaching the core NA TEF courses to be certified by the National Institute of Automotive Service Excellence.

Addressing the needs of the Automotive Technology Management Program, in order to move the program into the lead position of seventeen such institutions throughout the United States, we must rework our curriculum. Simply stated, we must update current course content and then redistribute the content into courses that meet not only today's needs but has the ability to meet tomorrow's needs as well. Working with other educational institutions, NAIT, NATEF, the ISU ATMAC, and SAE (Society of Automotive Engineers), a revised program proposal has been derived. Several courses must be redefined, a few courses should be eliminated, and a few courses should be added.

UNDERGRADUATE APPROVALS: BS Automotive Technology Management – continued.

One of the more critical changes addressed at all three A TMAC meetings is the need to become certified by the National Automotive Technicians Education Foundation (NA TEF). Doing so will allow automobile manufacturers to more easily support our A TM program through donations of new vehicles, equipment, and training aids. While the A TM program does not specifically train technicians, we do develop knowledge, skills, and abilities of students within the automotive technology realm, which somewhat models the typical technician training program. Seeking core NA TEF accreditation (four areas instead of the full eight) is feasible and quite practical.

Current Catalog Copy:

Automotive Technology Management Major (68 semester hours)*

Required courses:

Industrial and Mechanical Technology: 103--3 hrs.; 130--2 hrs.; 132--3 hrs.; 215--3 hrs.; 233--3 hrs.; 329--3 hrs.; 333--3 hrs.; 334--3 hrs.; 335--3 hrs.; 336--3 hrs.; 337--3 hrs.; 430--1 hr.; 433--3 hrs.; 434--3 hrs.

Manufacturing and Construction Technology: 295--3 hrs.; 370 or 371--3 hrs.; 492--3 hrs.; 497--3 hrs.

Electronics and Computer Technology: 160--3 hrs

Mathematics: 111--3 hrs. or 115--3 hrs.

Physics: 101--3 hrs.; 101L--1 hr.

Chemistry: 100--3 hrs.; 100L--1 hr.

Management: 301--3 hrs.

* Includes 17 hours of General Education

Proposed Catalog Copy:

Automotive Technology Management Major (69 semester hours)*

Required courses:

Industrial and Mechanical Technology: 103--3 hrs.; 132--3 hrs.; 215--3 hrs.; 233--3 hrs.; 239--3 hrs.; 329--3 hrs.; 333--3 hrs.; 335--3 hrs.; 336--3 hrs.; 351--3 hrs.; 430--1 hr.; 432--3 hrs.; 433--3 hrs.; 435--3 hrs.; 436--3 hrs.; 439--3 hrs.

Electronics and Computer Technology: 160--3 hrs.

Health, Safety, and Environmental Health Sciences: 212--3 hrs.

Manufacturing and Construction Technology: 370 or 371 or 372--3 hrs.

Mathematics: 115--3 hrs.

Physics: 101--3 hrs.; 101L--1 hr. or 105--3 hrs.; 105L--1 hr.

Chemistry: 100--3 hrs.; 100L--1 hr.

Management: 301--3 hrs. or Manufacturing and Construction Technology: 492--3 hrs.

* includes 14 hours of General Education

Preferred Effective Term: Fall 2006

UNDERGRADUATE APPROVALS: continued.

PROGRAM ELIMINATION

COLLEGE OF ARTS AND SCIENCES

LIBERAL STUDIES

A.S./A.A. LIBERAL STUDIES (ON CAMPUS ONLY)

Executive Summary:

Eliminate the A.A. on-campus Liberal Studies program. Does not effect the A.A. program with concentration in Human Interaction and Expression offered in the Correctional Education Program.

Rationale:

Indiana State University is moving away from a previous mission of delivering A.A./A.S. programs. Ivy Tech Community College is developing a Liberal Studies A.A. and A.S. program that will serve the needs of regional students.

Transition Plan:

1. No new students have been admitted as of Fall 2005.
2. Those students currently enrolled in the program will be notified by the program director that the degree must be completed within two years of notification. This will allow students essentially 2 complete years to complete the degree. Notification will be sent out when the program elimination is approved.
3. Upon notification that the program elimination is approved, the DARS Coordinator and the Registrar's office will set the final date for completion.

Proposed Catalog Copy:

None.

Preferred Effective Term: Fall 2006

CORRECTION

The following is a correction to the Ph.D. Geography that appeared as an approval in the March 28, 2005 Academic Notes. The corrected portion appears below.

**COLLEGE OF ARTS AND SCIENCES
GEOGRAPHY, GEOLOGY, & ANTHROPOLOGY
Ph.D. GEOGRAPHY**

New Catalog Copy

Ph.D. Geography

The Department of Geography, Geology, and Anthropology offers a graduate curriculum leading to a doctor of philosophy degree in geography with a specialization in either economic or physical geography. The program prepares individuals for a career as a professional geographer in the academy or as an applied researcher in the public and private sectors. Each student's program draws on prior preparation in geography or a closely allied field and requires that the core courses, a preliminary examination, and dissertation be completed.

Core Course Requirements (22 semester hours minimum)

Research Methods in Geography (611)-3 hrs.

Advanced Quantitative Methods in Geographic Research (645)-3 hrs.

Advanced Cartography (512)-3 hrs.

Field Geography Techniques or Field Geography Summer Camp (610)-3hrs.

Development of Geographic Thought (612)-3 hrs.

Recent Geographic Thought (613)-1 hr.

Seminar in Geography (select 2 from 700,710,711)-6 hrs.

[A minimum of 85 semester hours of graduate credit is required, including a dissertation (GEOG 899, 18 hours). Students must also meet the School of Graduate Studies research tool proficiency by completing all courses in the program core with a grade of "B" or better prior to proceeding to the preliminary examination. In preparation for the preliminary examination and dissertation, students must develop a program of study that integrates their research interests (economic or physical) with the areas of faculty expertise. The candidate will, at all times, be guided by his or her advisor and committee to the program best suited to his or her needs.]

Diagnostic Examinations

In the first semester of residence toward the doctoral degree, the applicant will be asked to submit to an oral diagnostic examination, the results of which will be used in planning the student's program. The examination is prepared by the department.

Admission to Candidacy

Admission to candidacy is based upon successful completion or minimum residence requirements (a normal load for two consecutive semesters), research tool proficiencies, written preliminary examinations in five substantive areas within the major field, and a general oral examination in the major and minor fields.