2005-2006

UNIVERSITY IVISION

Planner

Bloomington Campus



HOW DO I USE THE PLANNER (and Why)?

This *Planner*'s most immediate purpose is to help you prepare for your first advising conference at Indiana University Bloomington. It contains information you need to know before you can select courses for your first term. The *Planner* is organized in a way that will make planning your courses easy. Really use this book. It is yours to read, to write in, to turn down the pages—whatever you like.

When you come to Bloomington for advising and registration, an advisor will answer your questions, explain requirements for degree programs, discuss placement and testing information, and help you finalize a schedule to meet your individual needs. But *you* must take primary responsibility for choosing your courses. Before you arrive, you should read the *Planner* and fully complete the Academic Planning Worksheet (APW) at the end of Part I.

► Follow these easy directions; you will save time and make your advising and registration experience successful!

Notice that the *Planner* is divided into two parts:

- Part I: Planning Your Academic Program. This section provides information about courses that most new students take. You need to read all of Part I and complete the Academic Planning Worksheet (APW), using both Parts I and II to assist you. List courses on your plan that you think you will either need to take or would like to take during your first semester at IUB. When you come to orientation, you will receive additional assistance with finalizing the APW at your pre-advising meeting.
- Part II: Schools and Majors. This section contains important information about IU's schools (degree-granting units) and the majors/programs they currently offer. Each school section includes admission and course requirements, which should help you complete the Academic Planning Worksheet. If you are unsure about your major, read about all majors of interest to you.
- You also have a *University Division Planner Course Descriptions* booklet. This companion publication to the *University Division Planner* contains information about courses you may take during your first year at IUB. Browsing through all of the descriptions will give you an idea of the wide variety of courses offered. Be sure to read the course description for any course you are interested in taking.

Indiana University Bulletin

University Division Planner 2005–2006

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While every effort is made to provide accurate and current information, Indiana University reserves the right to change without notice statements in the Bulletin series concerning rules, policies, fees, curricula, courses, or other matters. If you would like to request this *Planner* in an alternative format, please contact University Division to make this request.

Indiana University is an Affirmative Action/Equal Opportunity institution. Students who may need disability support services should visit the Office of Disability Services for Students Web site at www.indiana.edu/ \sim iubdss or phone (812) 855-7578. TTY, (812) 856-2264.

Glossary—Getting to Know IU Terminology

A&H Courses categorized as Arts and Humanities by the College of Arts and Sciences—also known as Humanities, Language Arts, and Oral and Written Expression courses by some other schools.

ASC Academic Support Center. Located in three of IUB's residence halls, these centers provide a wide range of free services, including tutoring, advising, workshops, review sessions, and other academic support.

Bulletin Document produced by each of IUB's schools that includes official information, degree requirements, courses taught, faculty information, etc.

Campus Access Card In addition to being a photo ID, library card, residence hall meal card, and debit card, this card will provide you with access to other convenient services (e.g., copy machines, laundry facilities).

Certify Meet admission requirements for major; records are transferred from UD to appropriate school.

CGPA Cumulative grade point average (includes grades for all graded courses taken at IUB and at other IU campuses).

Cr. (credit hour)/Unit Amount of credit earned toward graduation. You will usually need between 120 and 127 (depending on your major). Each class you take is worth a certain number of credit hours or units, e.g., ENG-W 131 (3 cr.), HPER-E 119 (2 cr.). Sometimes indicates the number of hours the class meets each week.

Degree B.A.—Bachelor of Arts; B.S.—Bachelor of Science (conferred by IU when you graduate). B.S. degrees usually require more major courses and fewer courses in general education.

Degree Progress Report Electronic degree auditing system that indicates how completed or intended courses count toward a specific major.

Enrollment and Student Academic Bulletin Contains enrollment instructions and information on accessing the online Schedule of Classes offered each term; also contains the Official Calendar with dates for dropping courses and other procedural deadlines, holidays, etc.

Enrollment System Web-based system that enables IU students to register for classes and adjust their schedules through the first week of classes.

FIGs (Freshman Interest Groups) Groups of 15–20 students often living in the same residence hall who enroll in the same two or three academic courses plus a 1 credit hour seminar—designed to enhance the transition from high school to college.

GPA Grade point average.

HPER School of Health, Physical Education, and Recreation (*not* abbreviated as HYPER).

HPPLC Health Professions and Prelaw Center, located in Maxwell Hall.

IUB Indiana University Bloomington campus.

Matriculate Enroll as a student.

Matriculation date The date you first enroll at any IU campus.

Midterm grades Grade estimates from instructors at the halfway point of the term, given to UD students.

N&M Courses categorized as Natural and Mathematical Sciences by the College of Arts and Sciences—also known as Life and Physical Sciences, Natural and Physical Sciences, Natural Sciences, and Quantitative Methods by some other schools.

Network ID (NID) Your key to University Information Technology Services' shared, central computers. Your user name and password make up the NID, which you can use to access e-mail, online classrooms, software, and other services.

OneStart Indiana University's Web-based application portal that provides a common front door to online services at all IU campuses. https://onestart.iu.edu/my/Portal.do

Permission (PERM) Permission to register for a course that is restricted to a certain student population.

Prerequisite (P:) A course that you must have completed before enrolling in another—e.g., CHEM-C 102 has a prerequisite, CHEM-C 101.

S&H Courses categorized as Social and Historical Studies by the College of Arts and Sciences—also known as Social Competency, Social Science, and Behavioral Science by some other schools.

SPEA School of Public and Environmental Affairs.

UD or UDIV University Division.

University ID (UID) Your unique 10-digit identification number used to track your university records.

Waitlist An option in the enrollment process. You may waitlist a closed class and will be automatically placed in the class when/if an opening occurs.

Here is a list of common terms that you will often see and hear, along with their definitions.

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WELCOME TO INDIANA UNIVERSITY AND THE UNIVERSITY DIVISION!

As a college student, new to the Bloomington campus of Indiana University (IUB), you are about to begin one of the most exciting times in your life. While here, you can discover the joys of learning in new ways, of expanding your intellectual and social relationships, and of realizing self-discipline amid the challenges and opportunities that are inherent in a university. You will find that faculty and staff are committed to helping you succeed in college and offer a variety of student services for that purpose. We encourage you to make the most of your experiences here!

What Is the University Division?

The University Division (UD) is the "academic home" for most new Indiana University students on the Bloomington campus. It provides academic advising and support to freshmen and transfer students, and maintains their academic records until they meet requirements to enter a degree-granting unit (College of Arts and Sciences, Kelley School of Business, etc.). This division also provides assistance to students interested in preprofessional study and the allied health sciences through its Health Professions and Prelaw Center (HPPLC).

The division includes a central academic advising office, a records office, the Freshman Interest Groups (FIGs) program, and HPPLC—all located in Maxwell Hall. The Student Academic Center located at the corner of Seventh Street and Jordan Avenue and the advising offices located in most residence halls to serve first-year students are also part of the University Division.

After students complete requirements for admission to a particular school, the UD Records Office certifies them (transfers their academic records) to that academic unit. *Students seeking admission to academic units that require an admission application must be selected for admission before the UD Records Office can certify them.* Some students leave the University Division by the end of their freshman year. Others remain in the UD longer in order to complete admission requirements.

How Long Do I Remain in University Division?

Most students remain in University Division for two terms and then certify into a degreegranting unit.

Policy: Students enrolled at IU Bloomington through University Division (UD) must *certify* into degree-granting units at the beginning of the term following the one in which they complete 70 credit hours.

Exception: All transfer students, regardless of how many credit hours they have transferred to IUB, will be allowed to enroll through University Division for at least two terms.

Who Will Help Me Plan for My First Year?

This *Planner* has been created to help you prepare for your initial term on the Bloomington campus. During new student orientation, as a part of your scheduled activities, you will meet with an academic advisor with whom you will discuss your interests and skills. The advisor will assist you in finalizing your course enrollment plan. You will find that advisor knowledgeable about the most recent developments and changes in academic programs

Your advisor expects to talk with you five to six times during your first year at IUB.

and services at IUB. Since many changes occur each year, you should not rely solely on information from friends, family, or other students attending IU.

After you are registered, you will be assigned to an advisor who will most likely be different from the advisor seen during your initial orientation/advising session. If you are a freshman living in a residence hall, you will probably be assigned a University Division advisor who maintains an office near your residence. If you have a declared major, you may be assigned a faculty advisor, but you will still be in the University Division until you certify to a school, unless you have already been directly admitted to a school. International students, transfer students, students in the Groups Student Support Services program, and students who live off campus are usually assigned an advisor who has an office in Maxwell Hall. Students in the Honors College are assigned an Honors advisor.

You will have a required meeting with your assigned advisor during fall orientation week.

What If I Am a Transfer Student?

If you are transferring 26 or more credit hours, you may need additional information before registering. This will be available when you see an advisor. Special instructions for transfer students are included in the directions for completing the Academic Planning Worksheet (APW) at the end of Part I. If you are transferring fewer than 26 credits, follow all general instructions in Part I.

What Happens Next?

You will receive information from the Office of Orientation Programs about orientation activities and about advising and registration procedures. Your full participation in preparing for your first semester at IUB is essential. Even though you will come to the orientation program with many questions and concerns, you will find the entire experience to be more productive if you read this book and complete your initial academic planning before you arrive on campus!

What Are My Responsibilities as a Student?

You are responsible for:

- Understanding the academic standards you must meet in order to stay enrolled at IUB.
- Abiding by personal conduct standards as published in the *Code of Student Rights, Responsibilities, and Conduct*.
- Understanding and completing all degree requirements by the time you wish to graduate. Advisors, faculty members, and records office personnel will help you learn the requirements; however, you alone must complete them.

What Does IUB Expect in Terms of Student E-mail Use?

The university reserves the right to send official communications to students by e-mail with the full expectation that students will receive e-mail and read these e-mails in a timely fashion. Official university e-mail accounts are available to all registered students. Official university communications will be sent to the student's official university e-mail address. For IU Bloomington, this is the @indiana.edu address. Students are expected to check their e-mail on a frequent and consistent basis in order to stay current with university-related communications.

Students who choose to have their e-mail forwarded from their official university e-mail address to another address do so at their own risk. The university is not responsible for any difficulties that may occur in the proper or timely transmission or access to e-mail forwarded to any other address, and any such problems will not absolve students of their responsibility to know and comply with the content of official communications sent to their official IU e-mail addresses. Instructions on setting up or canceling the forwarding of e-mail may be found by visiting itaccounts.iu.edu.

What Are the Academic Standards for University Division Students?

To remain in good academic standing, University Division students must maintain a cumulative grade point average (CGPA) of 2.00 or higher. If the CGPA falls below 2.00, students are placed on probation or dismissed from the university, according to the benchmarks listed below. (Exception: Students who earn a semester GPA of 2.5 or higher are not dismissed regardless of their cumulative grade point average.)

Your CGPA is computed using the following grades:				
A+ or A	4.0 points			
A-	3.7 points			
B+	3.3 points			
В	3.0 points			
B-	2.7 points			
C+	2.3 points			
C	2.0 points			
C-	1.7 points			
D+	1.3 points			
D	1.0 points			
D-	.7 points			
F (Failing)	0.0 points			

Credit Hours	Critical Probation or Dismissed If IU CGPA Is*	Probation If IU CGPA Is Less Than 2.00 and
1-18	Less than 1.33	1.33 or higher
19-36	Less than 1.63	1.63 or higher
37-45	Less than 1.83	1.83 or higher
46 or more	Less than 2.00	

^{*} The first time a student's CGPA falls below any benchmark in this column, he/she is placed on "critical probation." If the student's CGPA falls below a benchmark again, he/she is dismissed and may not enroll at IUB for at least one fall or spring term. The student may then petition to be considered for reinstatement.

Academic records of UD students are reviewed at the end of each term. Determination of academic status is based upon all credit hours (transfer and IU graded hours) and IU cumulative GPA. "Graded hours" include credit hours for courses completed with a grade of F, but do not include credit hours earned with a grade of P or S. Advanced Placement Program credit is recorded as transfer hours.



Kenneth Gros Louis, interim chancellor of the Indiana University Bloomington campus, meets with students.

WHAT CAN I EXPECT OF MY UNIVERSITY DIVISION ADVISOR?

You will be assigned an advisor who will help you explore IU's many academic options, find campus/community services and resources, and make a successful transition from high school to college. During individual conferences and/or group meetings, you can expect assistance with any of the items listed below.

Information about Schools/Majors/Careers

- · Obtaining/interpreting school bulletins and requirement sheets
- Exploring majors in order to select one appropriate for your interests
- Learning requirements for any major(s) and minor(s) that you may be considering
- Exploring careers related to your chosen or potential major(s)
- Learning about/using computer-based advising resources (online Schedule of Classes, OneStart, Degree Progress Report, etc.)

Course Scheduling/Registration/Credit

- Finding specific courses related to your personal interests
- · Planning academic programs for each semester
- Discussing any needed adjustments to your academic schedule
- Obtaining information about the registration process, waitlisting courses with contingent drops, summer school, and transfer of credit from other universities

Academic Performance

- Discussing grades and course problems
- Discussing tutoring and other appropriate academic support services as needed
- Discussing and developing time management and study skills
- Learning about academic standing and how to calculate a grade point average

Educational Enhancement

- Exploring possibilities for participation in special programs, e.g., overseas study
- · Finding academically oriented lectures, meetings, and programs
- Exploring possibilities for extracurricular activities
- Obtaining information about/referral to other campus student service units, e.g., Student Academic Center (SAC), Academic Support Centers (ASCs), Career Development Center (CDC), Health Center, Disability Services for Students

A Note about Faculty and Departmental Advising

After you certify to your major (in a degree-granting school), you will no longer meet with your University Division advisor. A faculty or departmental advisor will help you fine-tune your academic program and keep you informed about special departmental programs and opportunities—honors programs, internships, career fairs, special major tracks, and specialized upper-level courses.



Visit the University Division Web site often throughout the year. This site includes information about advising, UD advisors, majors and careers, HPPLC, SAC, and FIGs.

PART I—PLANNING YOUR ACADEMIC PROGRAM

How Does College Planning Differ from That for High School?

Indiana University classes are organized around what is called a "term system," formerly referred to as a "semester system." This means that you register for courses and complete them in *one* term. Fall term concludes in mid-December and spring term in early May. There are also additional summer sessions that begin in mid-May and end in mid-August.

As you are using this book, you are planning primarily for one term of course work. It is useful, however, to consider courses you will need for an *entire year*. In many instances it will not matter which term you take a course. For example, a course such as ENG-W 131 Elementary Composition may be taken during your first or second term.

As you complete your planning, consider the wide range of courses that you will want or need to take *during your first year* at IUB. Listing your first choices for fall term courses *plus* many alternate courses on your Academic Planning Worksheet at the end of Part I will give you much more flexibility when you actually design your schedule (choose the days/times of your classes) and register for classes.

The number of credit hours designated for a course usually determines the amount of work required in that course and the amount of time each week you will spend in class. When registering for courses, you will learn that courses may be formatted differently, even when equal in number of credit hours. For example, a 3 credit hour course might meet three times per week for two lectures and one smaller discussion period, or twice per week for 75 minutes. For many courses, you will have some flexibility in choosing the course format most comfortable for you.

You may be surprised to learn that the amount of study time *outside* of *classroom* attendance substantially increases from high school to college. A good rule of thumb for college students is to plan to study (complete homework, read, review and rewrite notes, write papers, look up information, etc.) at least two hours outside the classroom per week for each credit hour enrolled. This means if you take 15 credit hours you will need to study for no fewer than 30 hours per week. Some classes require even more study time outside of class, especially when term papers or outside lab work are needed *or* when the course content is difficult for you.

You will want to learn quickly the vocabulary that will become a part of your college life! Be sure to read "Glossary—Getting to Know IU Terminology" on p. 2 to learn the meanings of terms such as *credit hour*, *NID*, and *UID*.

How Do I Know What Courses to Select?

Part I of the *Planner* will help you understand how to explore your academic options at IUB. It contains information about the various components of undergraduate degrees that can help you determine what courses you will take. As you develop a list of options for your first term, you will include some skills and general education courses. In addition, you will identify courses offered for your major or courses that will help you explore your interests in several majors. You may also want to include some elective courses.

There is no one plan of study for all students entering IU. All degree-granting units have some similar course requirements, but each academic unit (or school) defines these requirements somewhat differently. Together with your advisor, you will tailor your plan of study individually to meet your interests and abilities.

Remember that advisors recommend and advise about academic courses but do not plan your program of study for you.

As you read Part I, you should refer to Part II of this book for descriptions of schools and majors that interest you. In that section, you will find suggestions for selecting courses that meet specific school and major requirements.

It's also important that you read the course descriptions that accompany this *Planner* before listing courses on your Academic Planning Worksheet at the end of Part I.

What Are My Options for a Major?

When you earn your degree, it will be awarded for a specific major or concentration within your degree-granting school. A list of majors and concentrations can be found on the next two pages. If you have not already done so, check this list to find one or more majors of interest to you. If you are undecided about your major, you should circle several areas of possible interest. (You will need to list one or more majors or interest areas on the Academic Planning Worksheet at the end of Part I.)

Read the information about schools and majors in Part II. You will probably be unfamiliar with some of the majors offered at IUB. Take time to read about any majors that appear interesting and to reflect on what you want to learn in your courses and in a major.

If you are not ready to declare a major and are still in the process of discovering and linking your interests to the curriculum, you may enter Indiana University as an exploratory student. While classified in this way, you will take courses and use campus resources that will assist you in deciding upon an appropriate major. To earn a degree, you must eventually declare a major and enter one of the schools (degree-granting units) that are described in Part II.

As you select courses for your first semester and complete the Academic Planning Worksheet (APW), be guided by your interests. Read the chart on pp. 18-21, entitled *Courses That Are Required for Degree Programs and/or Match Your Interests.* Actively explore one or more majors by selecting a required or recommended course. When you are on campus, advisors can help identify possible majors that could mesh with your interests, skills, and goals.

Majors, Minors, and Certificate Programs

Following is an alphabetical list of all majors, interdepartmental majors, minors, and certificate programs available at IUB. The page numbers listed after each major refer to Part II, where you will find information about each program. Footnotes indicate special information about each major, such as whether it can also be a minor. You can also find, in Part II, listings of majors available within each school that has more than one major.

As indicated, some programs are available *only* as minors or certificate programs. Note also that some programs allow for prerequisite course work to be taken at IUB, but require completion of the degree at another IU campus.

If you are considering a career in dentistry, law, library science, medicine, pharmacy, occupational therapy, physical therapy, optometry, or veterinary medicine, see the section on preprofessional studies on pp. 75–76.

Schools are listed after the major/minor/certificate with the following abbreviations: College of Arts and Sciences (COLL); Business (BUS); Continuing Studies (SCS); Dentistry (DENT); Education (EDUC); Health, Physical Education, and Recreation (HPER); Informatics (INFO); Journalism (JOUR); Medicine—Health Professions Programs (MED); Labor Studies (LSTU); Music (MUS); Nursing (NURS); Optometry (OPT); Public and Environmental Affairs (SPEA); Social Work (SWK).

IU offers more than 140 majors!

Minors enable you to complement and enhance your major field of study.

Majors, Minors, and Certificate Programs

Accounting—BUS p. 45 African studies (certificate program)—COLL p. 27 African American and African Diaspora studies-COLL² p. 27 African American and African Diaspora studies/ English— $COLL^3$ African American and African Diaspora studies/ History—COLL³ African American and African Diaspora studies/ Religious studies—COLL³
African American and African Diaspora studies/ Sociology—COLL³ African languages (minor only)—COLL American studies (minor only)—COLL p. 27 Animal behavior (certificate and minor program only)-COLL Anthropology—COLL² p. 28 Apparel merchandising—COLL² p. 28 Astronomy and astrophysics—COLL² p. 28 Athletic training (Nonteaching)—HPER p. 53 Athletic training (Teacher preparation)—HPER Audio recording arts¹—MUS pp. 66, 67, 68 Audiology and hearing science—COLL p. 42

Ballet—MUS p. 66
Biochemistry—COLL p. 29
Biology—COLL² p. 28
Biotechnology—COLL p. 29
Business economics and public policy—Public policy analysis track—BUS p. 45
Business economics and public policy—Economic consulting track—BUS p. 45
Business foundations (certificate only)—BUS
Business Information Systems (second major only)—BUS p. 45
Business (minor)—BUS
Business process management—BUS p. 45

Central Eurasian studies (certificate program only)—COLL p. 29 Chemistry—COLL² p. 29 Choral Teaching—MUS p. 66 Classical civilization—COLL² p. 29 Art and archaeology Culture and literature Classical studies (Latin and Greek)—COLL² p. 29 Clinical laboratory science—MED⁴ p. 62 Coaching (minor only)—HPER
Cognitive science—COLL² p. 30
Communication and culture—COLL² p. 30 Comparative literature—COLL² p. 30 Composition—MUS p. 66 Computer information systems—BUS p. 45 Computer science—COLL² p. 31 Costume construction technology—MUS⁵ p. 68 Criminal justice—COLL² p. 31 Cytotechnology—MED⁴ p. 62

Dance (minor only)—HPER
Dental hygiene—DENT^{4,5} p. 47
Dietetics—HPER p. 51
Dutch studies (minor only)—COLL

Early music—Instrument—MUS p. 66
Early music—Voice—MUS p. 66
East Asian languages and cultures (Chinese, Japanese, and Korean)—COLL² p. 31
East Asian studies—COLL² p. 31
Economics—COLL² p. 32
Economics/Mathematics—COLL³ p. 32
Economics/Political science—COLL^{2,3} p. 32

Education—All-grade (grades K-12)—EDUC p. 49 Education—Early childhood education—EDUC Education—Elementary (grades 1-6)—EDUC p. 49 Education—Exceptional needs/Early and late adolescence—EDUC p. 49 Education—Middle school, junior high, or high school (grades 6-12)—EDUC p. 49 Education—Teaching All Learners (Special education/Elementary)—EDUC p. 49 English—COLL² p. 32 English/African American and African Diaspora studies—COLL3 Entrepreneurship—BUS² p. 45 Environmental management—SPEA² p. 72 Environmental science (COLL and SPEA) p. 32, p. 73 Environmental science and health (minor only)-SPEA Environmental studies—COLL² (must complete a second major in COLL) Environmental studies (certificate only)—SPEA Exercise science—HPER² p. 53

Finance—BUS p. 45 Finance/Real estate—BUS p. 45 Fitness specialist—HPER p. 53 Folklore—COLL² p. 33 French—COLL² p. 33 Fundraising (minor only)—HPER

Gender studies—COLL² p. 33 General Music Teaching—MUS General studies (bachelor's degree)—SCS p. 46 General studies (associate degree)—SCS p. 46 Geography—COLL² p. 34 Geological sciences—COLL² p. 34 Germanic studies (German)—COLL² p. 34 Gerontology (minor only)—HPER Global Human Diversity (certificate only)—COLL Guitar (Classical)—MUS p. 66

Health administration—SPEA² p. 72
Health information administration—INFO⁴ p. 58
Health education—Secondary teacher
preparation—HPER p. 51
Hebrew (minor only)—COLL
History—COLL^{1,2} p. 34
History/African American and African Diaspora
studies—COLL³
History and philosophy of science—COLL
(certificate and minor only) p. 35
History of art—COLL² p. 32
Human development/Family studies—HPER²
p. 51
Human resources (minor only)—SPEA
Human sexuality (minor only)—HPER

India studies—COLL² p. 35 Individualized Major Program—COLL p. 35 Informatics—INFO² p. 57 Information systems (minor only)—SPEA

¹ Associate degree is also offered.

² A minor and/or certificate is also available in the program.

³ Interdepartmental major.

⁴ Students may take prerequisite courses at IUB but must complete this degree on another IU campus.

⁵ Associate degree only.

Information technology (minor only)—INFO
Instrumental teaching–Band—MUS p. 66
Instrumental teaching–Strings—MUS p. 66
Interior design—COLL p. 28
International business (must complete a second major in business)—BUS p. 45
International studies—COLL² p. 36
Italian—COLL² p. 36

Jazz studies—MUS p. 66 Jewish studies—COLL² p. 37 Journalism—JOUR² p. 59

Kinesiology (minor only)—HPER

Labor studies—LSTU^{1,2} p. 60
Latin American and Caribbean studies—COLL
(certificate and minor only)
Leadership (minor only)—HPER
Leadership, ethics, and social action (minor only)—
COLL p. 37
Legal studies—BUS p. 45
Legal studies—SPEA² p. 72
Liberal arts and management (certificate only)—
COLL p. 38
Linguistics—COLL² p. 38
Linguistics—COLL³

Management—BUS p. 45
Management—SPEA² p. 72
Marketing—BUS p. 45
Martial arts (certificate only)—HPER
Mathematics—COLL² p. 38
Mathematics/Economics—COLL³ p. 38
Medical imaging technology—MED⁴ p. 62
Medieval studies (certificate and minor only)—
COLL
Microbiology—COLL p. 29
Music—COLL² and MUS² pp. 39, 66
Music and an outside field—MUS p. 66

Near Eastern languages and cultures (Arabic, Persian)—COLL² p. 39

New Media and Interactive Storytelling (certificate only)—COLL

Nonprofit management—SPEA² p. 72

Nuclear medicine technology—MED⁴ p. 62

Nursing—NURS p. 69

Nutrition science—HPER² p. 52

Opera scenic technique—MUS p. 68 Optometric technology—OPT⁵ p. 70 Orchestral instrument (any) performance— MUS p. 66 Organ—MUS p. 66 Outdoor recreation and resource management— HPER² p. 55

Paramedic science—MED^{4,5} p. 63
Park and recreation management—HPER p. 56
Philosophy—COLL² p. 39
Philosophy/Political science—COLL³ p. 39
Philosophy/Religious studies—COLL³ p. 39
Physical education teacher education (All-grade)—
HPER p. 54
Physics—COLL² p. 40
Piano—MUS p. 66
Policy analysis—SPEA² p. 72
Political science—COLL² p. 40
Political science/Economics—COLL^{2,3} p. 40
Political science/Philosophy—COLL³ p. 40
Portuguese—COLL² p. 42
Production/Operations Management—BUS p. 45

Psychology—ČOLL² p. 40

Psychology/Speech and hearing sciences—COLL³
Public affairs—SPEA² p. 71
Public affairs/health administration (11 different minors)—SPEA
Public and environmental affairs (minor)—SPEA
Public financial management—SPEA² p. 72
Public health—SPEA² p. 72
Public health education—HPER² p. 51
Public management—SPEA² p. 72

Radiation therapy—MED⁴ p. 62
Radiography—MED^{4,5} p. 63
Recreation (minor)—HPER
Recreational sport management—HPER² p. 56
Religious studies—COLL² p. 41
Religious studies/African American and African
Diaspora studies—COLL³ p. 41
Religious studies/Philosophy—COLL³ p. 41
Respiratory therapy—MED⁴ p. 62
Russian and East European studies (minor only)—
COLL

Safety Management—HPER^{1,2} p. 52 Slavic languages and literatures (Russian)—
COLL² p. 41
Social science and medicine (minor only)—COLL Social work—SWK p. 74 Sociology—COLL² p. 42 Sociology of work and business (minor only)— Sociology/African American and African Diaspora studies—COLL³ Spanish—COLL² p. 42 Speech and hearing sciences—COLL² p. 42 Speech and hearing sciences/Linguistics—COLL³ Speech and hearing sciences/Psychology—COLL³ Speech and language sciences—COLL p. 42 Sport communication (broadcast emphasis)-HPER p. 54 Sport communication (print emphasis)—HPER p. 54 Sport marketing and management—HPER $^2\,$ p. $54\,$ Stagecraft technology—MUS⁵ p. 68 Statistics—COLL p. 38 String instrument technology—MUS⁵ p. 68 Studio art—COLL² p. 32

Telecommunications—COLL² p. 42 Theatre and drama—COLL² p. 43 Therapeutic recreation—HPER p. 56 Tourism management—HPER² p. 56

Underwater Resource Management—HPER (certificate only)
Urban studies (certificate)—COLL
Urban studies (certificate)—SPEA

Voice-MUS p. 66

West European studies (minor only)—COLL p. 43
Woodwind—multiple instruments—MUS p. 66

Yiddish studies (minor only)—COLL

¹ Associate degree is also offered.

² A minor and/or certificate is also available in the program.

³ Interdepartmental major.

⁴ Students may take prerequisite courses at IUB but must complete this degree on another IU campus.

 $^{^{5}}$ Associate degree only.

What English Composition Course Should I Take?

All schools at IUB have a composition requirement. Students typically fulfill this requirement by successfully completing one or more designated writing classes; however, you may be able to establish exemption from this requirement on the basis of scores from standardized tests.

Am I Exempt from the English Composition Requirement?

- 1. Exemption without composition credit: If you have achieved one of the following test scores, you have fulfilled the English composition requirement and will be exempted from it without credit:
 - a. SAT (recentered) Verbal score of 670 or higher; or
 - b. ACT English score of 32 or higher; or
 - c. AP Program English: Composition and Literature score of 4 or 5; or
 - d. AP Program English: Language and Composition score of 4 or 5.
- 2. Exemption with composition credit: If you have achieved one of the above test scores and you scored 660 or higher on the SAT II: Writing Test, you are exempt from the English composition requirement, and are eligible to apply for 2 credit hours in English W143 with a grade of S (satisfactory).

What Are the English Composition Course Options?

If you have not established exemption from the English composition requirement (as previously described), you will need to fulfill this requirement by satisfactorily completing appropriate course work. Majors in health professions programs; business; education; health and physical education teacher education; informatics; recreation; music education; journalism; and nursing require a minimum grade of C. The School of Social Work requires a passing grade. Other majors require a grade of C- or higher.

Your advisor will help you determine your placement course based on your SAT/ACT scores, your high school background, and possible majors. Depending on your scores, you may be placed in a smaller section of ENG-W 131. The smaller sections are for students who need more basic instruction in writing (some are for international students). If you do not place into a basic writing section, most majors allow you to choose either of the options below. Read descriptions for the courses indicated. Also look at the composition options in Part II of this booklet for any major(s) you are considering. Some majors recommend or require that you take a particular option to complete this requirement.

OPTION I: ONE-SEMESTER COURSE IN COMPOSITION

ENG-W 131 Elementary Composition and ENG-W 170 Projects in Reading and Writing are one-semester, 3 credit hour courses that focus on the skills required in college writing. Completion of either one, with at least the minimum grade required by your major, fulfills the composition requirement. Reading materials are used as sources for the writing, but the emphasis is on written assignments that require synthesis, analysis, argument, and the handling of evidence. ENG-W 131 and W 170 are offered both fall and spring terms.

OPTION II: TWO SEMESTERS OF DESIGNATED COURSES IN WRITING AND READING

Option II consists of two courses for a total of 8 credit hours (4 credit hours each term), distributed within degree requirements as follows: 2 credit hours fulfill the English composition requirement; 6 credit hours count toward arts and humanities requirements or elective credits (some education and preprofessional programs are exceptions to this).

ENG-L 141-142 Introduction to Writing and the Study of Literature and AAAD-A 141-142 Introduction to Black Literature and Composition are two-semester sequences. Each course provides both analysis of texts and instruction in writing. These courses typically meet twice a week for lectures and twice a week in discussion sections of about 25 students.

AP English Composition and Literature test scores of 4 or 5 award 3 college credits for ENG-L 198 (literature). ENG-W 143 (1 cr.) taken in conjunction with one of the following 3 credit hour courses also counts toward fulfilling the composition requirement: CMLT-C 145 Major Characters in Literature/146 Major Themes in Literature.

OPTION I Offered both fall and spring term (take only one course for one term)

ENG-W 131 (3 cr.) or ENG-W 170 (3 cr.)

OPTION II Fall term Spring term

ENG-L 141 (4 cr.) ENG-L 142 (4 cr.)

AAAD-A 141 (4 cr.) AAAD-A 142 (4 cr.)

CMLT-C 145 (3 cr.) CMLT-C 146 (3 cr.) and ENG-W 143 (1 cr.)

Note: For Option II, you are not required to take both courses in a single sequence. You may take any two of the courses listed in Option II, one each semester. For example, the following combinations of courses could be used: AAAD-A 141 first semester and CMLT-C 146 (plus ENG-W 143) second semester; or CMLT-C 145 (plus ENG-W 143) first term and ENG-L 142 second term. Some courses are offered only in the first term and some only in the second term. Because these courses often fill up quickly during registration, you should plan several different combinations of courses to fulfill this requirement.

Read descriptions of these courses in the *Planner Course Descriptions* booklet that accompanies this *Planner*; then list them according to your preference on your Academic Planning Worksheet. Be sure that you list only courses that are offered during the fall term.

What Is the University Division English Composition Policy?

University Division strongly recommends that you fulfill the fundamental English composition requirement by the end of your freshman year. The skills you develop are important for success in most of your courses and fulfillment of the requirement is necessary for admission to most schools. You must complete the fundamental composition requirement within your first 55 credit hours of study, or within two terms if you are a transfer student who will complete 55 credit hours during your first semester at IUB. For additional information, access the following Web site; then click on Important Policies and Procedures: www.indiana.edu/~udivadv/udivweb/.

Your advisor will help you decide which composition course is best for you.

Do All Undergraduates at IUB Take Mathematics?

Almost all students will need one or more mathematics courses to fulfill degree requirements. You should consider taking a math course during your first term while your mathematical skills developed in high school are still fresh. Read the information in Part II of this booklet for each school and major you are considering before writing your course choice(s) on the Academic Planning Worksheet.

Why Am I Required to Take a Mathematics Placement Exam?

IUB administers its own placement exams because students come to IUB with quite different mathematical backgrounds. High school courses vary from state to state, and even from one school to another within the same locale. IUB's exams provide a common measure for all students. The Department of Mathematics placement exams are given during summer and fall advising and registration. The Mathematical Skills Assessment Test is a general-purpose assessment that everyone takes. The Calculus Advanced Placement Exam is taken only by students who have completed a one-year high school calculus course.

The Mathematical Skills Assessment Test

This general-purpose assessment will measure your readiness for IUB's freshman math courses. All students take the assessment because almost all students will take mathematics courses sometime during their studies here. Although you may now be planning a program of study that omits mathematics, you may well discover that because of a change in your major you will need to take at least one math course.

The 30-minute test, consisting of 26 multiple-choice questions, is designed to measure your knowledge of first-year through college algebra (pre-calculus). The problems range from easy to difficult because the assessment test measures readiness for IUB math courses from MATH-M 014 Basic Algebra to MATH-M 211 Calculus I. You will probably think that some questions are too easy and others are too hard. That is the way it should be.

Your score on the assessment test will indicate to you and your advisor whether you are ready to take the courses you select, and will neither appear on your grade transcript nor count as part of any grade. The test results are advisory. You will make the final decision about what courses you will register to take.

You should review material from your most recent mathematics courses and the sample problems located on pp. 80–81 of the *Planner* before you come to new student orientation. Bring a #2 pencil to use for the assessment test. Calculators are prohibited.

How Do I Decide Which Mathematics Courses Are Appropriate for Me?

Your choice of a mathematics course will depend on several factors: requirements for the degree(s) you are considering, high school preparation, your score(s) on the SAT and/or ACT exams, your score on the IUB Mathematical Skills Assessment Test, your advanced placement results (if applicable), and other academic and personal considerations. If you have already studied calculus, you may be ready for MATH-M 212 or M 213 as indicated by your performance on the CEEB–AP exam and/or the IUB Calculus Advanced Placement Exam.

Because college courses are much more difficult than those taken in high school, many students discover that they have to take one or more preparatory courses before attempting the courses required for the major(s) they are considering.

Following these steps will help you choose an appropriate math course:

If you took calculus in high school, read carefully the course descriptions in your *Planner Course Descriptions* booklet for MATH-M 212, M 213, and MATH-S 212.

Complete the sample Mathematical Skills Assessment/Calculus Placement sample test questions on pp. 80–81.

Read about the major(s) you are considering in Part II of this booklet and learn which math courses are appropriate.

Read the mathematics course descriptions in your *Planner Course Descriptions* booklet. Pay special attention to the courses that you could use to fulfill requirements.

List the courses you may need to take on the Academic Program Plan.

What Other Skills Courses Should I Take?

You may wish to consider courses that help you develop computer, foreign language, and/or oral communication skills. Refer to Part II of this booklet to determine which majors require or recommend them. If you want to take such courses, read their descriptions in your *Planner Course Descriptions* booklet and list your choice(s) on your Academic Planning Worksheet.

You will take the IUB Mathematical Skills Assessment Test—see pp. 80–81 for sample problems.

Your advisor will help you decide which math course is best for you.

The Foreign Language Placement Test

If you have studied one or more years of foreign language in high school, you will be required to take a foreign language placement test at IUB (regardless of whether you currently plan to continue foreign language study). Even if you have already taken another foreign language test such as the AP or CEEB Achievement test, you are still required to test at IUB to validate your placement.

If you are an international student whose native language is not English, you are not eligible for special credit in your native language, but you may be able to use placement (if a test is available in your native language) toward fulfilling or partially fulfilling the foreign language requirement in some schools.

Testing opportunities are available in French, German, Hebrew (modern), Italian, Japanese, Latin, Russian, and Spanish when you come to campus for advising and registration. You may be able to earn special credit depending on results of your placement test and the language in which you test.

If you continue studying the language you took in high school, your advisor will help you determine the placement level based on your test score.

How Do I Choose Major and General Education Courses?

Major Courses

Most degree programs require a group of courses referred to as the major, concentration, or core. These courses provide you with an opportunity to study a particular subject matter in depth.

As you read in Part II about the major(s) you are considering, you will find recommendations for courses to take during your first year. Read the descriptions for these introductory courses; then choose courses that will help you learn more about the particular major(s) of interest to you.

General Education Courses

All majors require that you take a certain number of general education courses. These courses are usually divided into several broad categories, although different schools use slightly different terminology to specify the four areas.

Arts and Humanities: These courses teach students to understand human values, emotions, and thought, and to be open to diversity of expression. Examples: English, fine arts, philosophy, religious studies.

Social and Historical Studies: These courses provide an objective understanding of social institutions and human behavior. Examples: History, political science, sociology.

Natural and Mathematical Sciences: These courses explore, through scientific inquiry, our environment through the physical and biological world. Examples: Biology, chemistry, geology, mathematics.

Culture Studies: These courses study ethnic and international communities. Through them, students are encouraged to become involved in the contemporary world and to cultivate an informed sensitivity to global issues. School bulletins provide a list of approved courses. Not all degree programs require culture studies.

Choose a balanced selection of courses from arts and humanities, social and historical studies, and natural and mathematical sciences. If you are considering several majors (even several within different schools), try to choose general education courses that are appropriate for at least two of the majors or are widely applicable to all of the majors you are considering. Read a wide variety of course descriptions in order to become familiar with IUB's broad selection and to find courses that really interest you.

IUB offers instruction in more than two dozen languages (see your Planner Course Descriptions booklet).

Should I Take Elective Courses?

Electives are courses that do not fulfill any particular requirement for your degree but count in the total credits you need for graduation. Different majors classify different courses as electives. You can take such courses to satisfy your own personal interests, enhance your major, and develop additional skills. Besides the usual 3-5 credit hour academic elective courses, you may want to consider some of the 1 and 2 credit hour options listed below. You will find them described in the *Planner Course Descriptions* booklet.

COLL-X 112
Traditions and
Cultures of
Indiana
University is a
Web-based
course—an
excellent choice for
freshmen.

SLIS-L 161 Library Skills/Resources
COLL-Q 294 Basic Career Development
COLL-X 112 Traditions and Cultures of Indiana University
EDUC-F 200 Examining Self as a Teacher
EDUC-X 101, 150, 151, 152, 156—Critical thinking, listening, and reading
skills courses (see "Student Academic Center" in the *Planner Course Descriptions* booklet)
EDUC-U 205, 211, 212—Student development courses

HPER-E courses—Physical activity instruction
Music ensembles, individual lessons, or group instruction
AERO-A 100, 101, 201—Aerospace studies (ROTC courses)

MIL-G 101 or 201—Military science (ROTC courses)

Some majors allow a very limited number of electives to count toward graduation hours. Discuss with your advisor how elective credit hours will count in your academic program.

Should I Take the Chemistry Placement Exam?

The Chemistry Placement Exam (CPE) is one of the prerequisites for CHEM-C 117. If you plan to take CHEM-C 117 during your first term, please consider taking the exam during orientation so that you and your advisor can use the placement information to plan your fall schedule. The exam will also be offered the week before classes on August 25, 2005.

The CPE is used to evaluate each student's chemistry background and preparation for C 117 so that they can be placed into the chemistry course that is appropriate for them. Based on the CPE score, students are placed into one of the following: CHEM-C 103 (a course specially designed to prepare students for C 117), CHEM-C 117, or CHEM-S 117 (the honors version of C 117).

For information on how to prepare for the CPE and the mathematics prerequisites for CHEM-C 117, please visit the following site: www.chem.indiana.edu/academics/ugrad/cps.asp. You may also contact the Chemistry Undergraduate Office at (812) 855-2700 or chemound@indiana.edu.

Should I Take Placement Exams to Earn Advanced Credit?

Special tests can be used to earn advanced credit and placement or exemption. You may have taken some of these tests through your high school; others are available for you to take at IUB. If you think there is any likelihood that you can "test out" of college courses in biology, calculus, chemistry, music theory, or political science, and possibly receive credit for doing so, you should inquire about taking one or more departmental exams at IUB.

Identify and put a check (\checkmark) by the exam or exams you want to take.

1) Biology: BIOL-L 111 and/or 112 ¹	4) Music Theory (MUS-T 109)
2) Calculus (see information on p. 17) ¹	5) Political Science (POLS-Y 103)
3) Chemistry (CHEM-C 101-121 or 117)	

¹These tests are usually administered during your first advising/registration session.

A Note about the Calculus Advanced Placement Exam and the Sample Problems

This exam is given once each day during the Freshman Advising and Registration Program, and on the first day of fall orientation. The times for the exam appear on the orientation schedule. To prepare, review material from your most recent mathematics courses and also review the sample problems on p. 81.

Bring a #2 pencil to use when taking the exam. Calculators are prohibited.

Credit for MATH-M 211 with a grade of S is automatically awarded to students who earn a score of at least 20 out of 24 on the Calculus Advanced Placement Exam.

Students earning a score of 17, 18, or 19 out of 24 are eligible to take MATH-M 213 and are awarded credit for MATH-M 211 if they earn an A or B in MATH-M 213.

Calculus Courses at IUB (M 212, S 212, M 213)

If you have completed one year of high school calculus, then you should try to get either 1) advanced placement into second-semester college calculus (M 212 or S 212) with credit for first-semester college calculus (M 211), or 2) placement into the accelerated first-year college calculus course (M 213) with the option of earning additional credit hours for M 211.

College calculus is more advanced and faster paced than high school calculus. If you have successfully completed a strong, one-year high school calculus course, then you will know most (but not all) of the first semester of college calculus (M 211) and will know part of the second semester of college calculus (M 212). To enable you to move ahead in mathematics without needless duplication of work, the Department of Mathematics provides two options: The first option, advanced placement into second-semester college calculus (M 212 or S 212) with credit for the first-semester course (M 211), is for those students who know almost everything in M 211. Your eligibility for this option is determined by your performance on either the CEEB Advanced Placement (AP) Program exam or the IUB Calculus Advanced Placement Exam. If your score on one of these exams demonstrates that you know almost all of M 211, then you will receive credit for M 211 and may proceed to second-semester college calculus (M 212 or S 212). If you qualify for this option, the Department of Mathematics recommends that you take S 212 rather than M 212 because S 212 is specifically designed for students who excel in mathematics.

The second option, placement into the one-semester, accelerated college calculus course M 213 (which merges M 211 and M 212 into one course) with the possibility for tuition-free credit for M 211, is for students who know most of M 211 but need to review some of it. Your eligibility for this option is determined by your score on the IUB Calculus Advanced Placement Exam. If you have done well in a strong high school calculus course, then you probably know most of M 211 but still may have a few gaps. If the gaps are small, rather than largely repeating the material by taking M 211, you may be able to take the accelerated calculus course M 213.

Area of study	First course(s) if you are exploring a major, or intend to major in this area	First course(s) if you are interested, but do not intend to major in this area			
COLLEGE OF ARTS AND SCIENCES					
African American and African Diaspora Studies	A 150, A 141, A 201, A 203, A 156	A 150, A 141, A 201, A 203, A 156			
African Studies	No major (area certificate available).	L 231, L 232			
American Studies	No major (minor available) A200	A 201, A 202			
Anthropology	B 200, E 200, L 200, P 200	A 105, E 105, E 205, E 260, A 150, P 210, P 240			
Apparel Merchandising	H 100, H 209	H 100, H 209			
Astronomy and Astrophysics	A 221 (See advisor.)	A 100, A 102, A 103, A 105, A 115			
Audiology and Hearing Science (See also Speech and Language Pathology)	SPHS S 110, S 111	SPHS S 110			
Biology	L 111	L 100, L 104			
Central Eurasian Studies	No major (area certificate available).	U 284			
Chemistry/Biochemistry	C 117 (C 103 recommended if enrollment criteria for C 117 not met.)	C 100, C 101/C 121, C 117 (C 103 recommended if enrollment criteria for C 117 not met)			
Classical Studies: Classical Civilization Greek Latin	C 101, C 102, C 205, C 206 G 100 (See advisor.) Placement-level course	C 101, C 102, C 205, C 206 G 100 (See advisor.) Placement-level course			
Cognitive Science	Q 240, Q 250, Q 270, Q 320	Q 240			
Communication and Culture	C 190 and C 205	C 201, C 202, C 203, C 204, C 228, C 229, C 290, C292			
Comparative Literature	C 145-C 146, C 151, C 205, C 251, C 255, C 261	C 145-C 146, C 200, C 205, C 216, C 217, C 255, C 310, C 340			
Computer Science	C 211, H 211	A 110, A 111, A 201			
Criminal Justice	P 100, P 200	P 100, P 200			
East Asian Languages and Cultures	Placement-level language course	Placement language course or 100-200 level E courses			
East Asian Studies	Placement-level language course or 200-level E course	Placement language course or 100-200 level E course			
Economics	E 201	E 201			
English	L 202 (usually not taken in first semester freshman year); or any English elective at the 200 level	L 203, L 204, L 205, L 206, L 207, L 141-L 142, W 103			
Fine Arts: History of Art	A 101, A 102	H 100, A 108, any 200-level course			
Fine Arts: Studio Art	F 100, F 101, F 102, A 101, A 102, A 160	F 100, F 101, F 102, N 110, N 198			
Folklore and Ethnomusicology	F 101, F 111, F 121, F 131, F 205 (Limit: 2 courses at 100 level)	F 101, F 111, F 121, F 131, F 205, F 230, F 252, F 253			
French	Placement-level language course.	Placement-level language course; Culture: F 125, F 126			
Gender Studies	G 101, G 102, or G 105	G 101, G 102			

Note: The first course for a major may not need to be taken during the first year. Some departments recommend a prior general survey course that may not count in the required credit hours for the major. You should always see your academic advisor for degree requirements and/or course selection assistance before registering for any course.

Area of study	First course(s) if you are exploring a major, or intend to major in this area	First course(s) if you are interested, but do not intend to major in this area
COLLEGE OF ARTS AND SCIE	ENCES, Continued	
Geography	G 107 or G 109, G 110 or G 120	G 107, G 109, G 110, G 120, G 208
Geological Sciences	G 103, G 104, G 111	G 103, G 104, G 105, G 114, G 121, G 131, G 141, G 161, G 171
Germanic Studies: Dutch	Minor only; placement-level course.	Placement-level course; Culture: N 350, N 450
Germanic Studies: German	Placement-level course.	Placement-level course; Culture: G 364, G 390
Germanic Studies: Norwegian	No major. K 100	K 100
Germanic Studies: Yiddish	Minor only. Y 100	Y 100; Culture: Y 300, Y 350
History	H 101, H 102, H 103, H 104, H 105, H 106, G 101, D 101, W 100 (See advisor about additional options.)	H 101, H 102, H 103, H 104, H 105, H 106, G 101, D 101, W 100 (See advisor about additional options.)
History and Philosophy of Science	Certificate only; X 102	X 100, X 102, X 110, X 123, X 126, X 200, X 220, X 223, X 226
India Studies	I 211	I 211
Interior Design	H 168 (See AMID advisor.)	
Italian	Placement-level language course	Placement-level language course; Culture: M 222, M 235, M 333, M 334, M 345, M 391
International Studies	INTL-I 100 (see advisor about others)	INTL-I 100
Jewish Studies	Modern or Biblical Hebrew or Yiddish: JSTU-H 100 or B 100 or GER-Y 100; History: HIST-H 251, HIST-H 252. JSTU-J 203. See Jewish studies advisor.	REL-R 152, R 210; HIST-H 251, H 252, JSTU-J 203
Linguistics	L 103, L 205, L 210, L 303	L 103, L 111, L 112, L 113, L 114, L 205, L 210, L303
Mathematics M 211 (M 212, S 212, or M 213 with advanced placement)		M 014, X 018, M 025, M 026, M 027, M 118, S 118, A 118, M 119, M 211 (depending upon Mathematical Skills Assessment Test and advising conference)
Microbiology	BIOL-L 112	BIOL-L 100, L 104 (Check topics.)
Near Eastern Languages and Cultures: Arabic Persian	See advisor about culture courses. A 100 or higher level, N 181 P 100 or higher level	200 and 300 level Culture courses (See advisor.) A 100 or higher level P 100 or higher level
Philosophy	P 100, P 135, P 140, P 270, or any Topics course taught by philosophy faculty.	P 100, P 105, P 135, P 140, P 150, P 240, or any Topics course taught by philosophy faculty.
Physics	P 221, P 222 (consider honors sections)	P 101, P 105, P 108/P 109 (concurrent with P 105), P 110, P 120, P 125, P 150, P 151, P 201
Political Science	1 or 2 from: Y 103, Y 105, Y 107, Y 109, Y 200	Y 100, Y 102, Y 103, Y 105, Y 107, Y 109, Y 200
Portuguese	Placement-level course.	Placement-level course.

Note: The first course for a major may not need to be taken during the first year. Some departments recommend a prior general survey course that may not count in the required credit hours for the major. You should always see your academic advisor for degree requirements and/or course selection assistance before registering for any course.

First course(s) if you are exploring Area of study a major, or intend to major in this area		First course(s) if you are interested, but do not intend to major in this area					
COLLEGE OF ARTS AND SCI	COLLEGE OF ARTS AND SCIENCES, Continued						
Psychology	P 151/P 153	P 101 (If, after taking P 101, you decide to major in psychology, you may take either P 152/P 154 or P 102.)					
Religious Studies	R 102, R 153, R 160, R 170, R 222, R 245, R 250, R 264, R 280 (Only one 100-level course may be counted toward the major.)	R 102, R 153, R 160, R 170, R 210, R 222, R 245, R 250					
Slavic Languages and Literatures	Placement-level course	Placement-level course					
Croatian	Placement-level language course; S 363-S 364, R 353	Placement-level language course; Culture/literature: S 363-S 364, R 353					
Czech	Placement-level language course; C 363-C 364, C 365, R 353	Placement-level language course; Culture/literature: S 363-S 364, R 353					
Polish	Placement-level language course; P 363-P 364, R 353	Placement-level language course; Culture/literature: P 363-P 364, R 353					
Romanian	Placement-level language course; R 353	Placement-level language course; Culture/literature: R 353					
Russian	Placement-level language course; R 223, R 263, R 264	Placement-level language course; Culture: R 223; Literature: R 123, R 263, R 264; Cinema: R 352					
Serbian	Placement-level language course; S 363-S 364, R 353	Placement-level language course; Culture/literature: S 363-S 364, R 353					
Sociology	S 100 or S 110, and 1 from S 101, S 105 S 210, S 215, S 217, S 230, S 201, S 220	S 100, S 101, S 105, S 110, S 210, S 215, S 217, S 230, S 201, S 220					
Spanish	Placement-level course	Placement-level course					
Speech Language Pathology (see also Audiology)	S 110, S 111	S 110					
Telecommunications	T 101, T 205, T 206, T 207 (all required)	T 101, T 160, T 191, T 192, T 193					
Theatre and Drama	T 100, T 121, T 225, T 230	T 115, T 120, T 210					
BUSINESS	A 100, K 201, either BUS X 100 or G 100 (both optional electives), W 211 (required only for entrepreneurship majors)	G 100 or X 100, L 100, W 211, A 200, K 201, S260					
EDUCATION	F 205 (second-semester freshmen)	F 200, F 205					
HEALTH, PHYSICAL EDUCA	ΓΙΟΝ, AND RECREATION						
Applied Health Science Dietetics	N 231 (Spring term advised), CHEM-C 117	N 220 (Spring term advised)					
Safety Management (A.S.)	S 101 (Fall only), S 151 (Spring only)	S 101 (Fall), S 151 (Spring)					
Human Dev./Family Studies	F 150, F 255, F 258	F 150, F 258					
Nutrition Science	N 231 (Spring term advised), CHEM-C 117	N 220 (Spring term advised)					
Safety Management	S 101 (Fall only), S151 (Spring only)	S 101 (Fall), S 151 (Spring)					
Public Health Education	H 205, H 263 (See advisor about others.)						

Note: The first course for a major may not need to be taken during the first year. Some departments recommend a prior general survey course that may not count in the required credit hours for the major. You should always see your academic advisor for degree requirements and/or course selection assistance before registering for any course.

Area of study	First course(s) if you are exploring a major, or intend to major in this area	First course(s) if you are interested, but do not intend to major in this area					
HEALTH, PHYSICAL EDUCATION, AND RECREATION, Continued							
Health Education—Secondary Teacher Preparation	F 255, H 160, H 174, H 205, H 180, H 263	F 255, H 160, H 180, H 263					
Kinesiology Athletic Training	P 212, P 280, H 160	P 212, P 280					
Exercise Science	E 119, P 212, P 280	E 119, P 212					
Fitness Specialist	P 212, P 216, P 280, T 142	P 212, P 216, T 142					
Physical Education Teacher Preparation (PETE)	P 140/P 141, P 205, P 216, P 219, P 224, P 280	P 140/P 141, P 280					
Sport Communication	P 211, P 212; P 280 or H 160	P 211, P 212					
Sport Marketing and Management	P 211, P 212	P 211					
Recreation All majors	R 160, R 231	R 160					
INFORMATICS	I 101	I 101					
JOURNALISM	J 110	C 201, J 110					
LABOR STUDIES	L 100, L 101, L 110, L 290	L 100, L 101, L 110, L 290					
MUSIC	T 109 or exemption; T 151; P 110, P 120 or P 130; E 131 (if B.M.E.); private performance study (Z 110)	Z 101, Z 103, Z 111, Z 201, Z 320, Z 393, T 109, X 001, J 100, J 210, private performance study (Z 110)					
PUBLIC AND ENVIRONMENTA	AL AFFAIRS						
Public Affairs	E 162, E 272 (required for environmental management majors) V 160, V 161	E 100, E 162, V 100, V 160, V 161					
Public Health	V 160, H 316, H 320	V 160, H 316, H 320					
Environmental Science (B.S.E.S.)	Appropriate science course, GEOG-G 107, G 108; GEOL-G 105, G 171; SPEA-E 262, E 272	GEOG-G 107, G 108; GEOL-G 105, G 171; SPEA-E 262, E 272					
SOCIAL WORK	S 100, S 141 (R: English composition)	S 100, S 141 (R: English composition)					



Note: The first course for a major may not need to be taken during the first year. Some departments recommend a prior general survey course that may not count in the required credit hours for the major. You should always see your academic advisor for degree requirements and/or course selection assistance before registering for any course.

COMPLETING THE ACADEMIC PLANNING WORKSHEET (APW)—DIRECTIONS

Read information about planning your academic program in Part I and about any school(s) and major(s) of interest to you in Part II, along with selections in your *Planner Course Descriptions* booklet, before completing the Academic Program Worksheet (APW) on the following pages. You should then be ready to make decisions about courses for the first semester.

How Do I Complete the Academic Planning Worksheet (APW)?

- Carefully tear the Academic Planning Worksheet out of the *Planner*.
- Complete each section of the APW as directed on the form. You may need to review the descriptions of skills requirements and general education course work common to most majors in Part I and refer to the "Freshman Year Course Work" for most schools and majors described in Part II.
- Write "completed" on the lines for any requirements you think you have fulfilled through college courses you took while in high school or by testing out of them. You should not list a course on those lines unless you want or need to take an additional course in the area.
- List more courses than you will actually take during the first semester. Doing this will provide you with more flexibility as you discuss your academic plans with your advisor.

What If I Am a Transfer Student with 26 or More Completed Credit Hours?

- Indicate on the APW which requirement(s) you think you may have already completed, based on your transferred course work.
- Focus on your choice of a major now. Check the first box on the APW under "Major/Concentration"; then list your first major choice and an alternate major choice.
- Refer to your major or school in Part II for information about admission requirements. Include required courses among those you list on the plan.

Departmental/School Prefixes

To determine which department or school offers the major department courses you are considering, refer to the list of departmental/course prefixes below. Knowing these will also help you locate courses in the *Planner Course Descriptions* booklet.

African American and		Foster International Center	FLLC	Mathematics	MATH
African Diaspora Studies	AAAD	French	FRIT	Medical Sciences	MSCI
African Studies	AFRI	Gender Studies	GNDR	Music	MUS
American Studies	AMST	Geography	GEOG	Near Eastern Languages and	
Anthropology	ANTH	Geological Sciences	GEOL	Cultures	NELC
Apparel Merchandising and		Germanic Studies	GER	Optician/Technician	TOPT
Interior Design	AMID	Global Village Living-Learning		Philosophy	PHIL
Astronomy and Astrophysics	AST	Center	GLLC	1 7	PHYS
Biology	BIOL	Health, Physical Education,		Physics	
Business (all majors)	BUS	and Recreation (all majors)	HPER	Political Science	POLS
Career Development	COLL	History	HIST	Portuguese	HISP
Central Eurasian Studies	CEUS	History and Philosophy of		Psychology	PSY
Chemistry	CHEM	Science	HPSC	Public and Environmental	
Classical Studies	CLAS	India Studies	INST	Affairs	SPEA
Cognitive Science	COGS	Individualized Major Program	IMP	Religious Studies	REL
College of Arts and Sciences	COLL	Informatics	INFO	ROTC	
Topics Collins Living Learning Center	CLLC	International Studies		Aerospace Studies	AERO
Communication and Culture	CMCL		INTL	Military Science	MIL
Comparative Literature	CMLT	Italian	FRIT	Slavic Languages/Literatures	SLAV
Computer Science	CSCI	Jewish Studies	JSTU	Social Work	SWK
Criminal Justice	CJUS	Journalism	JOUR	Sociology	SOC
East Asian Languages and	2,22	Labor Studies	LSTU	Spanish	HISP
Cultures	EALC	Latino Studies	LATS	Speech and Hearing Sciences	SPHS
Economics	ECON	Leadership, Ethics, and Social		Student Academic Center	EDUC
Education	EDUC	Action	LESA	Telecommunications	TEL
English	ENG	Liberal Arts and Management		Theatre and Drama	THTR
Fine Arts	FINA	Program	LAMP	Traditions and Cultures at	11111
Folklore and Ethnomusicology	FOLK	Linguistics	LING		COLL
		-		Indiana University	COLL

ACADEMIC PLANNING WORKSHEET (APW)

You must complete this form before meeting with an advisor. ID Number ____ Name _ (Please print: Last Middle Initial) Preferred first name or nickname ___ I. DO YOU HAVE ANY COLLEGE CREDIT? Make a check (✓) in the appropriate space(s) below if you have received (or will receive) college credit in any of the following ways: While in high school _____ From another IU campus _____ From another college or university Are you currently enrolled in any college courses? _____ Yes _____ No How many total college credit hours will you have completed by the time IUB classes begin? ______ Have you taken any exams for college placement or credit, e.g., Advanced Placement, SAT II Subject Tests, or International Baccalaureate exams? ____ Yes ____ No If yes, which exam(s)? ___ Have you registered for a Freshman Interest Group (FIG) or an Intensive Freshman Seminar? Yes _____ No If yes, list FIG courses or seminar class:____ II. MAJOR/CONCENTRATION (See pp. 9-11) Make a check (✓) in the box next to the statement below that applies to you; then list your major interest(s) on the lines provided: You have chosen a major. List this major on line 1. It is wise to consider a second area of interest in case you change your mind. List an alternate major on line 2. You are exploratory (considering several majors). List two or three majors that interest you. Course Department Number **Course Title** III. ENGLISH COMPOSITION (See pp. 12-13) Are you exempt from this requirement? ex: ENG W 131 Elementary Composition Yes ____No 1. If you are not exempt, list your first three course choices from the options that will fulfill the 2. basic English composition requirement. Be sure to select options that are acceptable for any

3.

major(s) you are considering.

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IV. MATHEMATICS (See pp. 13-14) List the introductory mathematics course(s) required for the major(s) you are considering and/or any other mathematics course(s) you are interested in taking.	Department	Course Number	Course Title		
	1.				
	2.				
V. SCHOOL, MAJOR, AND GENERAL EDUCATION COURSES (see p. 15)					
List 12 to 18 courses that interest you and that you have not listed elsewhere on this form. As you do this, refer to the "Freshman Year Course Work" section(s) for the school(s)/major(s) you are considering. If you plan to have a major in the College of Arts and Sciences, you should include at least three College of Arts and Sciences course selections that will fulfill the Topics Requirement (COLL-E 103 or COLL-S 103, COLL-E 104 or COLL-S 104, COLL-E 105 or COLL-S 105, or departmental courses that fulfill this requirement).					

Department	Course Number	Course Title	Department	Course Number	Course Title
1.			10.		
2.			11.		
3.			12.		
4.			13.		
5.			14.		
6.			15.		
7.			16.		
8.			17.		
9.			18.		
VI. ELECTIVES (See p. 16) List additional courses that you are interested in taking as electives.		1.			
		2.			
		3.			

List questions for your advis	or here.		

PART II—SCHOOLS AND MAJORS

COLLEGE OF ARTS AND SCIENCES (COLL)

www.indiana.edu/~college/

The education offered by the College of Arts and Sciences is based on a tradition established when Indiana University was founded in 1820. Today the College continues its central role in the mission of IU, providing the general education for all undergraduate students. The College provides the means for undergraduates to acquire a liberal arts education: an education that broadens students' awareness in the major areas of human knowledge, significantly deepens that awareness in one or two fields, and prepares the foundation for a lifetime of continual learning.

ADMISSION REQUIREMENTS

The College of Arts and Sciences requires that students seeking any major in the College complete the following:

- 26 credit hours (that count toward graduation) with a 2.0 CGPA
- English composition (with a grade of C- or higher)

The Bachelor of Fine Arts (B.F.A.) and the Individualized Major Program have additional program admission requirements—ask your advisor about these.

FRESHMAN YEAR COURSE WORK

During the freshman year, students pursuing a major in the College of Arts and Sciences *usually* complete the following:

☐ English composition course(s)
☐ Mathematics course(s)
☐ Foreign language course(s)
☐ One College of Arts and Sciences
Topics/Freshman Seminar course
☐ Additional general education distribution
course(s) and/or culture studies course(s)
☐ One or two major courses
☐ One or two elective courses

■ English Composition

See pp. 12–13 for options.

■ *Mathematics*

Choose from MATH-M 014, MATH-A 025, MATH-M 025, MATH-M 027, MATH-X 018),*

MATH-M 118/MATH-S 118 (MATH-D 116-MATH-D 117 if eligible), MATH-A 118, MATH-M 119, MATH-M 211.

Students earning math test scores at or above 650 on the SAT exam or at or above 29 on the ACT exam are exempt from the fundamental skills math requirement. Some majors in the College, however, specifically require a mathematics course or courses. See your advisor.

Any of the above courses except MATH-M 014 and MATH-X 018 can be used to fulfill the fundamental skills math requirement (grade of C- or higher required). Your advisor will help you finalize your choice based on your major, your background, high school test scores and grades, and your IUB Mathematical Skills Assessment Test score.

*Note: Some students may need to take MATH-M 014, MATH-M 025, MATH-A 025, and/or MATH-M 026, MATH-M 027, or MATH-X 018 as preparation for a higher-level course. No credit is awarded for any of these courses toward graduation. However, MATH-M 025, MATH-A 025, or MATH-M 027 may be used to fulfill the fundamental skills math requirement.

■ Foreign Language

The IU College of Arts and Sciences teaches more foreign languages than almost any other college or university in the United States, including many of the languages of Central Eurasia and five African languages. Acquiring some proficiency in a foreign language broadens a student's outlook on the world and adds enormous value to a student's college degree. Overseas study is encouraged for students in every major. A student who studies one of the less-commonly taught languages can look forward to a wide range of options after graduation; students who study languages such as Russian, Japanese, or Arabic are highly sought-after for employment—whether in business, government, or foreign affairs.

Foreign language study through the fourth semester is required for most degrees in the College; requirements for the B.S. degree are usually less. You can choose to continue the language you began in high school or start a new language. A placement test will determine your course level if you choose to continue the language you studied in high school.

■ One Topics Requirement Course

Choose from COLL-E 103 or COLL-S 103, COLL-E 104 or COLL-S 104, COLL-E 105 or COLL-S 105, and departmental Topics courses. See pp. 1–2 and pp. 7–11 in the *Planner Course Descriptions* booklet.

Hutton Honors College students may substitute HON-H 203 or HON-H 211 for COLL-E 103; they may substitute HON-H 204 or HON-H 212 for COLL-E 104; they may substitute HON-H 205 for COLL-E 105.

Intensive Freshman Seminar (IFS) classes prefixed COLL-S 103, 104, or 105 fulfill the College's Topics Requirement. Contact the IFS program office at (812) 855-3839 for information.

■ Additional General Education Distribution Course(s) and Culture Studies Course

Distribution courses: Choose from arts and humanities (A&H), social and historical studies (S&H), and natural and mathematical sciences (N&M). See the *Planner Course Descriptions* booklet for descriptions and distribution designation (A&H, S&H, N&M).

Culture studies courses: Two culture studies courses are required for graduation, many of which carry A&H or S&H distribution credit. Many students wait until after the first year to begin this requirement.

■ One or Two Major Courses

See descriptions of majors on the following pages for recommended courses.

\blacksquare *Elective(s)*

No more than two elective courses should be taken in the freshman year.

COLLEGE MAJORS AND PROGRAMS

At least 25 College credit hours must be taken in the major subject area (some departments require more) for graduation. Students may also have a double major or an interdepartmental major. See the College Bulletin for a complete description of major requirements. Following is a list of College majors, minors, interdepartmental majors, and certificate programs. At the end of each major description, you will find courses recommended for the first year for students considering a major.

African studies (certificate) (AFRI)

African American and African Diaspora studies (AAAD) African American and African Diaspora studies/English African American and African Diaspora studies/History African American and African Diaspora studies/ Religious studies

African American and African Diaspora studies/ Sociology

African Languages (minor only) American studies (minor only)

Animal behavior (certificate and minor only)

Anthropology (ANTH)

Apparel merchandising (AMID)

Astronomy and astrophysics (AST)

Audiology and hearing science (SPHS)

Biochemistry (CHEM)

Biology (BIOL)

Biotechnology (BIOL)¹

Central Eurasian studies (certificate only) (CEUS)

Chemistry (CHEM)

Classical civilization (CLAS)

(Art and archaeology, Culture and literature)

Classical studies (Latin and Greek) (CLAS)

Cognitive science (COGS)

Communication and culture (CMCL)

Comparative arts (minor only) (CMLT)

Comparative literature (CMLT)

Computer science (CSCI)

Criminal justice (CJUS)

Dutch studies (minor only)

East Asian languages and cultures (EALC)

(Chinese, Japanese, and Korean)

East Asian studies (EALC)

Economics (ECON)

Economics/Mathematics

Economics/Political science

English (ENG)

English/African American and African Diaspora studies Environmental science (jointly administered with SPEA) Environmental studies (must complete a second major

European Union (minor only) (WEUR)

Fine Arts (FINA)

History of art

Studio art

Folklore and ethnomusicology (FOLK)

French (FRIT)

Gender studies (GNDR)

Geography (GEOG)

Geological sciences (GEOL)

Germanic studies (German) (GER)

Global Human Diversity (certificate only)

Hebrew (minor only)

History (HIST)

History/African American and African Diaspora studies History and philosophy of science (certificate and minor only) (HPSC)

India studies (INST)

Individualized Major Program (IMP)

Interior design (AMID)

International studies (INTL)

Italian (FRIT)

Jewish studies (JSTU)

Latin American and Caribbean studies (certificate and minor only) (LTAM)

Leadership, ethics, and social action (minor only) (LESA) Liberal arts and management (certificate only) (LAMP)

Linguistics (LING)

Linguistics/Speech and hearing sciences

Mathematics (MATH)

 $^{^{1}}$ Students can declare biotechnology as a major, but should contact the College Recorder's Office (Kirkwood Hall 001) to confirm course implementation and graduation schedule.

Mathematics/Economics

Medieval studies (certificate and minor only) (MEST)

Microbiology (BIOL)

Music (MUS)

Near Eastern languages and cultures (NELC)

(Arabic, Persian)

New Media and Integrative Storytelling (certificate only)

Philosophy (PHIL)

Philosophy/Political science

Philosophy/Religious studies

Physics (PHYS)

Political science (POLS)

Political science/Economics

Political science/Philosophy

Portuguese (HISP)

Psychology (PSY)

Psychology/Speech and hearing sciences

Religious studies (REL)

Religious studies/African American and African

Diaspora studies

Religious studies/Philosophy

Russian and East European studies (minor only)

Slavic languages and literatures (Russian) (SLAV)

Social science and medicine (minor only)

Sociology (SOC)

Sociology/African American and African Diaspora studies

Sociology of work and business (minor only)

Spanish (HISP)

Speech and hearing sciences (SPHS)

Speech and hearing sciences/Linguistics

Speech and hearing sciences/Psychology

Speech and language sciences (SPHS)

Statistics (STAT)

Telecommunications (TEL)

Theatre and drama (THTR)

Urban studies (certificate only)

West European studies (minor only) (WEUR)

Yiddish studies (minor only)

African American and African Diaspora Studies (AAAD)

African American and African Diaspora studies (AAAD) has evolved into a twenty-first century liberal arts field that utilizes numerous disciplines to examine the myriad of experiences of people of African descent in the United States and throughout the world. Areas of study include the arts, literatures and writings, film, folklore, histories, institutions, communities, stratification, movements, and identities.

Liberal arts skills stressed in AAAD include critical thinking and experiential learning skills, creative writing, reflective critical reading, ethical and moral reasoning, service learning, community service, intercultural competence and social justice as a civic duty of value, scholarship of engagement, and interdisciplinary analysis.

AAAD graduates are enjoying careers in medicine, theatre and drama, music composition, information technology, law, engineering, education, journalism, criminal justice, creative writing, fundraising, politics, social work, business, community organizing, and numerous academic fields.

For the major in African American and African Diaspora studies, a student must complete a minimum of 30 credit hours of undergraduate course work selected from concentration areas including 1) arts; 2) literatures and writings; 3) histories, cultures, and social issues; and 4) social and behavioral sciences.

Recommended courses for the first year for students considering a major include: AAAD-A 100, 110, 120, 141, 142, 150, 154, 156, 169, 201, 203, 210, 269, 278.

African Studies (AFRI)

The African Studies Program provides unique opportunities for students at Indiana University to study with a distinguished faculty, to meet with visiting Africanists from all over the world, and to use the outstanding facilities of the libraries, the Archives of Traditional Music, and the IU Art Museum.

The undergraduate Area Certificate in African Studies was established to satisfy the academic needs of undergraduate students interested in African studies. The certificate provides background for careers in government, business, and the academic world.

To obtain an Area Certificate in African Studies, candidates for the B.A. degree in a major field must complete AFRI-L 231 African Civilization, AFRI-L 232 Contemporary Africa, and four additional 3 credit hour courses with African content from specified disciplines. Those interested in the certificate should talk with the associate director in Woodburn Hall 221.

Demonstrated proficiency or completion of two semesters in a language used on the African continent (other than English)—French, German, Portuguese, Spanish, or any African language, e.g., Arabic, Hausa, or Swahili—is also required.

American Studies (AMST)

The American Studies Program offers an undergraduate minor, which provides an opportunity to examine significant aspects of American cultures from an interdisciplinary perspective. The courses offered in this program draw on a variety of materials from United States history, literature, media, and the arts. Students are encouraged to integrate the diverse areas of their educations and to focus on an understanding of the United States in a national and international context.

Anthropology (ANTH)

Anthropology is the interpretive, scientific, and comparative study of humankind. The Department of Anthropology offers courses in history of the discipline, museum studies, general anthropology, and the four subfields: anthropological linguistics, archaeology, bioanthropology, and social/cultural anthropology.

Anthropological linguistics concentrates on human communication through language, the structure of languages, and the history of their development and interrelationship. Archaeology deals with prehistoric origins and development of humankind, as well as past societies and their material remains. Bioanthropology emphasizes primate origins, evolution, and present-day biological/genetic variation and adaptation of human populations. Social/cultural anthropology studies contemporary and historical cultures and societies of every scale around the world, organized by geographical areas and interpretive themes.

Entering freshmen who are contemplating anthropology as a major and who have adequate background preparation are encouraged to enroll in one or more of the 200-level courses: ANTH-B 200 (Bioanthropology), ANTH-E 200 (Social and Cultural Anthropology), ANTH-L 200 (Language and Culture), and ANTH-P 200 (Introduction to Archaeology).

Recommended courses for the first year for students considering a major: Two courses from ANTH-B 200, ANTH-E 200, ANTH-P 200.

Apparel Merchandising and Interior Design (AMID)

The apparel merchandising and interior design (AMID) B.S. degree programs provide three options. The apparel merchandising option prepares the student for a variety of career positions in business, such as retail store manager, buyer, and product developer. The interior design curriculum emphasizes the relationships between the artistic, behavioral, and technological concerns in the creation of a more responsive physical environment. Career opportunities are available in commercial and residential interior design studios and architectural firms. A program of study in costume construction technology is available through the department.

Apparel merchandising majors must complete a total of 32 AMID credits including AMID-H 100, 203, 204 or 207, 209, and others. They must also complete selected courses outside AMID including ECON-E 201 and 202; SOC-S 100; PSY-P 101; CSCI-A 110 or BUS-K 201; and other upper-level business courses. Students should complete AMID-H 100, 203, and 209 as early as possible.

Recommended courses for the first year for students considering an apparel merchandising major:

AMID-H 100 (fall), 209 (spring), SOC-S 100, PSY-P 101, one year of foreign language.

Interior design majors must complete a total of 42 AMID credit hours including H 168, H 271, H 272, H 277, and others; plus selected courses outside AMID including FINA-A 102; and any two of the three FINA-F fundamental studies courses 100, 101, or 102.

Recommended courses for the first year for students considering an interior design major: AMID-H 168; at least one course from FINA-F 100, F 101, F 102, or FINA-A 102; one year of foreign language; total of five distribution courses.

Astronomy and Astrophysics (AST)

The Department of Astronomy and Astrophysics offers courses toward the B.S. degree in astronomy and astrophysics as well as 100-level courses for non-astronomy majors. The degree program prepares students for graduate study and a subsequent career in astronomy and astrophysics. The program also serves the needs of students preparing for careers in related technical fields. Students enrolled in this program use the telescopes at the Kirkwood Observatory (on campus), the Morgan-Monroe State Forest Observatory, Wisconsin-Indiana-Yale NOAO Observatory, and the computing facilities in Swain Hall.

The prospective major must begin the mathematics and physics sequence in the freshman year to complete the program in four years. Prospective majors should meet with the Department of Astronomy undergraduate advisor as soon as possible to plan a four-year course schedule. Prospective majors with strong preparation are encouraged to take AST-A 221 and 222 in the first year.

Recommended courses for the first year for students considering a major: MATH-M 211 and 212; PHYS-P 221 and 222, a College of Arts and Sciences Topics Requirement Course (COLL-E 103, COLL-S 103, COLL-E 104, or COLL-S 104) (not COLL-E 105).

Biology (BIOL)

Biology is the study of living things—plants, animals, and microbes—at a variety of levels and from different perspectives. The B.S. degree emphasizes science more—biology, math, chemistry, and physics—while the B.A. degree includes more general education courses.

Biology majors should expect to take biology, chemistry, and math as soon as possible. Students should review the chemistry department's criteria for enrollment in CHEM-C 117. (See the C 117 course descriptions in the *Planner Course Descriptions* booklet.) B.S. candidates are encouraged to take MATH-M 211; the two-semester sequence of MATH-M 119-120 may be substituted.

Biology course work will begin with BIOL-L 111 and 112. BIOL-L 113 may not be taken in the first semester of residence.

Microbiology majors are not required to take BIOL-L 111. The math requirement for the microbiology B.S. is MATH-M 211 (recommended) or 119 and 120; for the microbiology B.A., 119.

Recommended courses for the first year for students considering a major:

B.A. in biology: BIOL-L 111; CHEM-C 117; one year of foreign language.

B.S. in biology: BIOL-L 111 and 112; CHEM-C 117, one year of foreign language; Topics COLL-E 103 or 104 (not 105).

B.A. in microbiology: BIOL-L 112; CHEM-C 117; one year of foreign language.

B.S. in microbiology: BIOL-L 112; BIOL-L 113 (second term); CHEM-C 117; one year of foreign language; one College Topics Requirement: COLL-E 103, COLL-S 103, COLL-E 104, or COLL-S 104 (not COLL-E 105).

The B.S. in Biotechnology is designed for students who wish to pursue careers in biotechnology or the biomedical sciences. It is also a basis for further graduate training. B.S. in biotechnology: BIOL-L 112; CHEM-C 117; MATH-M 211 or M 119; one year of foreign language; one College Topics requirement: COLL-E 103, COLL-S 103, COLL-E 104, or COLL-S 104 (not COLL-E 105).

Central Eurasian Studies (CEUS)

The Department of Central Eurasian Studies offers an area certificate. This field embraces the languages, history, and civilization of a vast geographical expanse across central Eurasia. Within this territory, Central Eurasian peoples form or belong to the cultural areas of Balto-Scandinavia, Central Europe, Eastern Europe, the Middle East, the Far East, Central Asia, and Inner Asia.

The Undergraduate Certificate in Central Eurasian Studies requires two semesters in one of the department languages and 15 credit hours of history, civilization, and other culture courses in the department, of which 6 credits must be at the 400 level. A minimum GPA of at least 3.0 (B) is required in all certificate courses.

Freshmen are encouraged to take CEUS-U 284 Civilization of Tibet (3 cr.).

Chemistry (CHEM)

Four degree programs are offered, two in chemistry and two in biochemistry, and some students pursue a double degree in chemistry and biology or other fields.

The B.A. degree program in chemistry is intended for students planning to enter fields such as medicine and dentistry. With additional courses, it also prepares students for other professional schools such as law, optometry, pharmacy, and business.

The B.A. degree in biochemistry does not ordinarily prepare a student for either graduate school or employment in an industrial setting because of the limited number of hours in chemistry and biochemistry. Combining this degree with appropriate course work in other fields or with an additional major will prepare a student for medical, dental, optometry, and law school, as well as for careers in technical sales and technical writing and for M.B.A. programs.

The B.S. degree program in chemistry is designed for students preparing for graduate work in chemistry or for jobs in industry, as well as for medical and dental schools. Although the B.S. degree program in chemistry is challenging, it provides serious and talented students with more depth and breadth in chemistry and other sciences, and it provides more career choices.

The B.S. degree program in biochemistry is intended particularly for students who desire excellent undergraduate training in biochemistry and who plan to attend medical or dental school or to pursue graduate work in biochemistry or related fields or to seek employment in the biochemical or pharmaceutical industries.

Students desiring basic courses that fulfill requirements for either degree in chemistry or biochemistry and that provide a foundation for advanced work in other scientific fields should take C 117 (or C 103—then C 117 as advised) and C 341, or the corresponding honors sequence, CHEM-S 117 and S 341.

Recommended courses for the first year for students considering a major:

B.A. in chemistry: CHEM-C 117; MATH-M 119 or M 211.

B.A. in biochemistry: CHEM-C 117; MATH-M 119 or M 211.

B.S. in chemistry: CHEM-C 117 and C 341; MATH-M 211 and M 212; one year foreign language; Topics Requirement COLL-E 103, COLL-S 103, COLL-E 104, COLL-S 104 (not COLL-E 105).

B.S. in biochemistry: CHEM-C 117 and C 341; MATH-M 211 and M 212; one year foreign language; one College Topics Requirement: COLL-E 103, COLL-S 103, COLL-E 104, COLL-S 104 (not COLL-E 105).

Classical Studies (CLAS)

Classical studies includes the study of Latin and Greek as well as the study of Greek and Roman culture. The study of Latin or Greek provides rigorous intellectual discipline while offering the student better

comprehension of English vocabulary and grammar. Students majoring or minoring in the languages pursue a wide variety of careers, including law, medicine, and teaching at the high school or university level. Modern education in classics covers a variety of historical records that encompass artistic monuments and works of literature and philosophy. Students interested in classical studies can major in Greek, Latin, or classical civilization, which includes ancient culture, art and archaeology, literature in translation, and history; minors are also available in Greek, Latin, and classical civilization.

Recommended courses for the first year for students considering a major:

Classical civilization: one course from CLAS-C 101, C 102, C 205, C 206.

Latin: CLAS-L 100 and L 150 (or equivalent proficiency).

Greek: CLAS-G 100 and G 150 (or equivalent proficiency), see advisor; one year foreign language.

Cognitive Science (COGS)

Cognitive science explores the nature of intelligent systems. At its core, the program focuses on theories of mind and action. The field is inherently interdisciplinary, with contributions from computer science, psychology, philosophy, neuroscience, linguistics, biology, anthropology, and other fields. Both natural intelligence in humans and artificial intelligence fall within the scope of inquiry. The field deals with aspects of complex cognition, computational models of thought processing, knowledge representation, dynamics of real-world engagement, and emergent behavior of large-scale interacting systems.

Goals of the Cognitive Science Program include a better understanding of mind and cognitive skills, and the development of intelligent systems designed to augment human capacities in constructive ways. The program is structured to give students fundamental skills applicable in a wide variety of information-related careers: psychology, neuroscience, artificial intelligence, telecommunications, information processing, medical analysis, data representation and information retrieval, education, scientific research, human-computer interaction, multimedia, knowledge management, and information policy. The skills also have wide applicability in technical and expository writing, mathematical analysis, experimental techniques, and computer programming.

The Cognitive Science Program offers both a B.A. and a B.S. degree. Students considering a major in cognitive science should consult with the program advisor during the freshman year. See the Cognitive Science Resources for Undergraduate Students Web Page: www.cogs.indiana.edu/~underg/index.html

First-year courses recommended for students considering a major: PSY-P 101 (or P 151 or P 106), LING-L 103, CSCI-C 211, PHIL-P 105, PHIL-P 150, COGS-Q 240.

Communication and Culture (CMCL)

The Department of Communication and Culture advances the study of communication as a cultural practice and teaches an array of perspectives that enable students to prepare broadly for a variety of careers. Requirements for the major and minor are flexible in order to promote individualized programs of study that draw on departmental foci in rhetoric and public culture, film and media, and performance and ethnography.

Rhetorical studies orient students to the strategic dimension of human communication associated with deliberation, advocacy, and persuasion in a variety of social, political, and professional settings. Studies of media focus primarily on film and television, with additional emphasis on topics such as radio, recorded music, and interactive digital technologies. Performance and ethnographic studies explore an array of communicative practices, from the conversations and disputes of everyday life to artful performances at cultural events, which are the competencies essential for participation in social life. They also bring intercultural and transnational considerations into focus by examining how diversity and differences of various kinds are negotiated across boundaries. Together, these three dimensions examine communicative practices across the corporate, social, political, visual, and ideological dimensions of culture. They provide a strong grounding in the history, theory, production, and critique of communication, whether in the form of interpersonal dialogue, storytelling, political discourse, film, or television.

Recommended courses for the first year for students considering a major: CMCL-C 190, C 205.

Comparative Literature (CMLT)

This major introduces students to the study of literature in different ages and across national, linguistic, and cultural boundaries. Students learn about texts, themes, literary types, and intercultural relations as well as the methods and theories of comparative literary study. Courses explore relationships between literature and the visual arts, film, music, and other performance arts as well as other disciplines such as philosophy, history, and religious studies. All readings are in English. Majors may choose from our course offerings according to their particular interests.

Recommended courses for the first year for students considering a major: CMLT-C 145 and C 146 in conjunction with ENG-W 143 to fulfill the English

composition requirement. Students who have already fulfilled this requirement should take CMLT-C 205 to fulfill the intensive writing requirement, and may take any other comparative literature course at either the 100 or 200 level. Freshmen should also take two courses in foreign language or literature in their first year, both to meet the College language requirement, and because the comparative literature major requires at least one 300-level literature course in a foreign language.

Computer Science (CSCI)¹

Computer science forms the conceptual foundation of the information revolution and spans a broad spectrum of fields, ranging from mathematical foundations to user applications. A high level of computer literacy is an essential component of any well-rounded education and is increasingly an indispensable part of all professional careers. Because computer science and its uses and the economy are so diverse, majoring in the field can also be usefully combined with very different skills—technical, conceptual, and social.

The department offers many options to suit a variety of needs. The nonmajor courses, labeled "A," include introductory courses. Five of these courses combine to form the minor in information technology. A 110, A 111, and A 201 are the starting points for students with no prior computing experience. For those with basic computer literacy (the material covered in A 110 or A 111), A 112 provides a simple introduction to programming, A 113 covers data analysis, A 114 consists of database design, A 216 is an in-depth look at mixed media hardware and software.

For the student interested in exploring computer science, a suite of six courses, labeled "C," form the core of the computer science major programs. Five of these courses form the minor in computer science. A student completing the six core courses has nearly completed the requirements for the B.A. in computer science, an attractive option for the student interested in a double major. The student with interest in computer science in greater depth should choose the B.S. The department offers strong honors variants of the B.A. and the B.S., which include honors versions of all core courses. The department also offers a professional master's degree, with a program of study leading to both the B.S. and the M.S. in Computer Science in five years of study.

The starting point for all major programs is CSCI-C 211 followed by C 212, or their honors versions, H 211 and

H 212. Prospective majors should take MATH-M 211 followed by CSCI-C 241 at the same time as C 211-C 212 (or H 211-H 212).

Visit the department's Web site: www.cs.indiana.edu/

Note: Computer science majors may use C 211 as a part of a business minor.

Recommended courses for the first year for students considering a B.A. or B.S. in Computer Science: CSCI-C 211 and C 212; MATH-M 211 and M 212.

Criminal Justice (CJUS)

The department provides students with a liberal arts education to assist them in understanding problems of crime, law, and social control systems. A major in criminal justice provides an excellent foundation for careers and graduate work in law, social work, journalism, government, research, or community service. Working with our multidisciplinary faculty, students also may prepare for positions in law enforcement, criminal justice management and administration, and corrections.

Recommended courses for the first year for students considering a major: CJUS-P 100 and P 200.

East Asian Languages and Cultures (EALC)

The Department of East Asian Languages and Cultures is a multidisciplinary and multicultural department that aims to provide students with an enhanced understanding of Chinese, Japanese, and Korean languages and cultures. The department offers a wide range of culture courses, open to nonmajors, that deal with virtually every facet of the cultures of East Asia. Language courses in Chinese, Japanese, and Korean are offered from beginning to advanced levels.

Two majors and two minors are offered. The majors differ in the amount of language required and in the specificity and range of culture courses allowed. There is a language minor in Japanese, Chinese, or Korean, and a minor in East Asian studies, which requires no language training. As part of the baccalaureate training, we encourage students to study abroad in China, Japan, or Korea on one of IU's overseas study programs.

Students who have mastered the languages of China, Japan, or Korea and have a corresponding understanding of their cultures are in high demand in both business (especially international communications and finance) and government and diplomacy, not to mention a variety of nonprofit organizations. In addition, there are more opportunities each year for teaching the East Asian languages in high schools.

¹ For IUB matriculants in May 2005 and later, the Computer Science B.S. will be awarded through the School of Informatics (subject to final approval of the IUB chancellor). The Computer Science B.A. will continue to be awarded through the College of Arts and Sciences. All degree requirements for the B.S. and the B.A. will remain the same.

Recommended courses for the first year for students considering a major:

Language and culture: language course determined by placement exam, or C 101 (Chinese), J 101 (Japanese), K 101 (Korean) for absolute beginners.

East Asian studies: Any 200-level "E" course, or language course listed above.

Economics (ECON)

Economics is the study of how individuals and societies manage their scarce resources—people must decide how much they work, what they buy, how much they save, and how they use their leisure time. Most societies use decentralized markets as the primary means of allocating resources, so economics gives students insight into how markets function in coordinating the activities of many and diverse buyers and sellers. Economics also analyzes the trends and forces that affect the economy as a whole, including growth in average income, the portion of the labor force that cannot find work, and the rate at which prices are rising. A major in economics provides excellent preparation for graduate and professional school and for rewarding careers in consulting, finance, and other private and public sector employment.

The department offers course work in several areas of economics, including financial economics, money and banking, public finance, international economics, economic development, industrial organization, game theory, and economic history.

Students interested in economics should begin their study with E 201. Discuss your readiness for this course with your advisor.

Recommended courses for the first year for students considering a major: MATH-M 118; MATH-M 119 (or MATH-M 211).

Interdepartmental Major in Economics and Political Science or in Economics and Mathematics

Students interested in combining political science and economics study, or mathematics and economics study, can select an interdepartmental major including courses in both areas.

English (ENG)

The Department of English offers courses in all periods of English and American literary history, in major authors, in writing, in language, in film, in creative writing (fiction, poetry, and creative nonfiction), and in relationships between literature and such other disciplines as psychology, philosophy, and history. Courses are also offered in the areas of women and literature, Jewish literature, and Native American literature.

The English program is flexible, allowing students to concentrate in areas of their choice. The department offers several ways for students to satisfy the composition requirement. W 170 or L 141-L 142 are two particularly appropriate avenues for students to follow if they are considering English as a major. The department also offers a wide variety of courses open to first-year students who have completed their English composition requirement. To count toward major requirements, English course work must be at the 200 level or above. ENG-L 202 Literary Interpretation, which majors usually take in their sophomore year, can be taken by well-prepared freshmen in their second semester. A variety of other 200-level courses can also be considered, including W 270, a sophomore-level course that focuses on writing argumentative essays.

Recommended courses for the first year for students considering a major: ENG-W 170, one 200-level literature course, or a creative writing course.

Environmental Science

The B.S. in Environmental Science (B.S.E.S.) stresses a strong background in scientific and mathematical skills to prepare students to work toward solutions to the world's complex environmental problems. Students interested in an applied science degree in the environmental area are advised to pursue this degree, which is a joint degree with the School of Public and Environmental Affairs.

A specific B.S.E.S. major concentration area is usually declared during the first year in consultation with Bruce Douglas, the program director. Students receive a joint degree from the College and the School of Public and Environmental Affairs in one of the following areas: atmospheric science, ecosystem science, general environmental science, hydrology and water resources, mathematical modeling, pollution control technology and remediation, surficial processes.

Recommended courses (one or two of those listed below) for the first year for students considering a major in environmental science: BIOL-L111, chemistry (see advisor), MATH-M 211, and COLL-E 103 or S 103.

Additional courses such as GEOL-G 171 or G 105 or GEOG-G 107 may also be added if a schedule permits.

Fine Arts (FINA)

Three undergraduate degrees are offered by the Henry Radford Hope School of Fine Arts: The Bachelor of Arts (B.A.) in art history, the Bachelor of Arts (B.A.) in studio art, and the Bachelor of Fine Arts (B.F.A.) in studio art.

Students may also complete a Bachelor of Arts (B.A.) with a double major in art history and studio or a major in one area and a minor in the other.

The B.A. in art history is designed 1) to introduce students to the significant developments in the history of art, examining the major artistic achievements within the context of the period and culture in which they were produced, and 2) to train students in the discipline and methods of art history.

Both the B.A. and B.F.A. degrees in studio art enable students to develop visual perception; to gain a command of tools, techniques, and materials; to analyze, organize, and interpret elements of concepts; and to create visual expressions that are integrated and complete. The B.F.A. degree, designed to meet the needs of students with demonstrated superior ability and motivation, requires twice as many credit hours of studio courses as the B.A. The requirements for the B.A. and B.F.A. studio degrees are identical for the freshman and sophomore years, however.

Recommended courses for the first year for students considering a major in art history: FINA-A 101 and/or A 102.

Recommended courses for the first year for students considering a major in studio art: Two courses from FINA-F 100, F 101, F 102; A 101 and/or A 102.

Folklore and Ethnomusicology (FOLK)

Folklore and ethnomusicology explore the dynamics of tradition and creativity in society, past and present. Folklore investigates expressive communication in cultures throughout the world to explain how people use traditional knowledge and practices to participate in new, often challenging, situations of contemporary life. Ethnomusicology analyzes the role of music in human life and the cross-cultural study of music.

Folklore and ethnomusicology are combined into one truly interdisciplinary department. Students use the tools of anthropology, literature, history, political science, international studies, and the performing arts. Our students focus on urban, rural, foreign and domestic topics, often utilizing field work.

While many of our graduates are accepted into nationally recognized postgraduate programs, others move on better prepared for careers in the arts, education, historic preservation, cross-cultural business, and multimedia communications.

Recommended course for the first year for students considering a major: One course from F 101, F 111, F 121, F 131.

French (FRIT)

A major in French provides excellent academic preparation for many professions in various fields including education, business, travel, and publishing.

The department offers a broad selection of courses in French literature, language, and civilization. Majors may give special emphasis to any one of these areas, or combine all of them in a more balanced program.

French F 200 Second Year French I is the first course that counts toward the French major. Students with at least third-year proficiency in French by the junior year should consider the possibility of foreign study with the IU Overseas Study programs in Aix-en-Provence or Paris. Interested students should begin to consider this option during the freshman year to arrange their schedule for their junior year abroad or for a future summer in France.

Recommended courses for the first year for students considering a major: FRIT-F 100, or placement-level course.

Gender Studies (GNDR)

The Gender Studies Program offers exciting, interdisciplinary, and rigorous courses that concentrate on the position of women and men across many cultures. Masculinity and femininity, often referred to as gender, have evolved throughout history and are still evolving. Gender is a feature of all known cultures and is subject to continual reinterpretation and wide cross-cultural variation. Gender studies has developed as an innovative area of research and pedagogy, with the mission of advancing cultural understandings of gender structures and representations, and their impact on knowledge and policy.

Gender studies courses explore issues related to gender across academic subjects. The program develops new approaches to knowledge about gender-related issues and incorporates many methods, theories, and ways of thinking about race, class, and gender. Courses examine sexuality, the body, race and class, business and politics, health, developing societies, artistic movements, academic institutions and knowledge, sports and leisure, law, the media, and many other areas.

The major or minor complements and enhances the content of other courses and majors.

Graduates find occupations in human resources management, public relations, advertising, or the media. Others may become lawyers, doctors, journalists, social workers, or psychologists. Still others will work in law enforcement, education, welfare, the arts, public administration, and international aid organizations. Graduates will also be prepared to enter the full range of graduate and professional education. Visit the Web page: www.indiana.edu/~gender

Recommended courses for the first year for students considering a major: G 101, G 102, G 105.

Geography (GEOG)

Courses offered by the Department of Geography form an important component of liberal education and also provide skills and knowledge necessary for careers in both the private and public sector. The undergraduate program reflects the breadth of geography and its linkages to other social and physical sciences. Courses are in atmospheric science, environmental studies, international studies, geoinformatics, and human geography. The B.A. degree program provides a strong liberal arts education focusing on the major subject areas of geography, while maintaining a great deal of flexibility. The flexibility allows students to focus on particular concentration areas and/or to choose a second major. The B.S. degree provides additional science requirements that prepare science-oriented students for graduate school and science-related jobs at the bachelor's degree level. Students pursuing a B.S. degree normally focus on either the atmospheric science or the geoinformatics concentration.

Visit the program's Web page: www.indiana.edu/~geog

Recommended courses for the first year for students considering a major: GEOG-G 107 or G 109; GEOG-G 110 or G 120.

Geological Sciences (GEOL)

The Department of Geological Sciences offers a large number of courses that serve as excellent introductions to earth processes that directly affect humanity with application to such problems as pollution of the environment, groundwater flow, and natural hazard assessment and preparedness (earthquakes, volcanoes, etc.). Indeed, many pressing environmental issues are related to basic processes best explored and understood through the geological sciences. Other courses emphasize the earth as a member of the solar system, the origin of life, and earth materials. Interested students may pursue these themes further on a topical basis or consider a minor or major in geological sciences.

Students interested in a degree in geological sciences may elect either a B.A. or B.S. degree option. Both the B.A. and B.S. programs are described in greater detail in the College of Arts and Sciences Bulletin. The B.S. degree provides a broad and solid science platform for professional employment or advanced study. It also reduces the non-science distribution requirement of the B.A. degree by seven courses. The B.A. degree provides more program flexibility than the B.S. and preserves the broad liberal arts education. Therefore, it allows students to carry out a double major (e.g., with economics) for those wishing to use geology in a wide variety of careers in business, industry, government, and teaching. In addition to a broad general education, the B.A. degree with additional science and

mathematics courses (or the B.S. degree) will provide an adequate background for advanced study and greater possibilities for employment.

Recommended courses for the first year for students considering a major:

B.A. in geological sciences: GEOL-G 103, G 104, G 105, or G 111; 5 cr. from MATH-M 119, M 211, M 212, M 213; PHYS-P 201, P 202 or P 221, P 222; BIOL-L 111, L 112, L 113; CHEM-C 101-C 121, C 103, C 117, C 102-C 122.

B.S. in Geological Sciences: GEOL-G 103, G 104, or G 111; MATH-M 211 and M 212; C 117 (preceded by C 103 if necessary); one year foreign language; one College Topics Requirement: E 103, S 103, E 104, or S 104 (not E 105).

Germanic Studies (GER)

The department offers courses in Dutch, German, Norwegian, and Yiddish language, literature, and culture—including several courses taught in English.

Requirements are flexible, allowing students to emphasize language, linguistics, literature, or culture. German majors often complete a double major, adding study of another field to that in German.

There are opportunities to study abroad including a full-year or spring term program in Freiburg, Germany, and a summer program in Graz, Austria.

Recommended courses for the first year for students considering a major: GER-G 100, G 105, or placement-level course.

History (HIST)

Studying history gives students the opportunity to discover the origins of today's issues, events, and ideas. History provides an understanding of how change takes place and why some things stay the same. History welcomes different approaches to the past, including the study of individuals, populations, cultures, and social movements. Among liberal arts majors, history graduates stand out as experts in recognizing and analyzing patterns of information. History majors become skilled in formulating significant questions, finding and evaluating evidence, and analyzing a problem from multiple perspectives and methods. Training in history gives students important skills such as critical analysis, research, and clear and persuasive writing that are applicable across all disciplines and in many professions. The major allows students to concentrate on their particular interests while giving them a context in which to understand them.

The department offers courses on nearly every area of the world—from the United States and Western Europe to Africa and the Near East and East Asia. Freshmen may begin with introductory courses in American History (H105-H106), European History (H 103-H 104), or with H 101-H 102 The World in the Twentieth Century.

Region and time are only two distinguishing features of the department's course offerings. At both the 100 and 200 levels, students will find courses that approach the past from the perspective of a special group (for example, H205 Ancient Civilizations), a special problem (such as H213 The Black Death), or a special theme (as in A200 Gender and Sexuality in U.S. History).

Students who graduate with a degree in history have a world of opportunity awaiting them. Many go on to graduate programs in law, education, history, business, journalism, and public relations. Others decide to go directly into either private or public sector careers. History majors receive a broad-based, yet practical, liberal arts education.

Recommended courses for the first year for students considering a major: 3-6 cr. in 100- and/or 200-level history courses. For additional information about major requirements visit, the Department of History Undergraduate Web page at: www.indiana.edu/~histweb/pages/undergraduate/index.htm.

History and Philosophy of Science (HPSC)

History of science describes the origins and evolution of scientific ideas within a cultural context. It deals with where new scientific ideas come from; how the development of scientific theories is influenced by metaphysics, religion, technology, and social institutions; and how scientific discoveries have changed humanity's conception of its place in nature. Philosophy of science analyzes the structure of scientific theories and describes scientific methods.

At present there is no major, but students can receive an area certificate (Culture of Science and Medicine) or earn a minor. Those wishing to pursue study specifically in this area can do so through the Individualized Major Program.

The area certificate involves several different tracks: 1) medicine and health; 2) science writing, literature, and literacy; 3) science, technology, and the environment; 4) science, computation, and information; 5) science and pseudoscience. Students interested in the certificate should begin with the core course, X 102.

Recommended courses for students interested in this field: HPSC-X 100, X 102, X 110, X 123, X 126, and X 200. There are other 200-level courses that might be appropriate for freshmen—check with your advisor.

India Studies Program (INST)

Modern India represents a cluster of cultures and civilizations whose 1 billion inhabitants make up nearly 20 percent of the total population of the world. As a modern nation-state, India has the third largest military in the world, stands about twelfth among nations of the world in gross national product, and is about fifteenth in industrial production. It is also the cradle of many of the world's religions (Hindu, Buddhist, Jain, Sikh) as well as many of the great cultural-historical periods in the development of civilization (including the Hindu-Brahmanical, Buddhist, Muslim, Sikh, and modern Indo-British). The Indian community is the fourth wealthiest community in the United States, with several thousand members living in Indiana.

This program offers undergraduates the options of a major, minor, and certificate.

The core introductory course is I 211. Students majoring in India studies will be required to complete 28 credit hours in the area and pursue a second major within the College or a second degree from one of the professional schools. The minor requires a total of 15 credit hours and offers specializations in three areas: literary and performance studies; philosophical and religious studies; or social, political, and historical studies. See advisor for certificate requirements.

Individualized Major Program (IMP)

Formal requirements for admission to the Individualized Major Program (IMP) are the same as those for the College of Arts and Sciences, except that the IMP requires a minimum cumulative GPA of 2.5. Students who do not meet this GPA requirement, but who feel that their past grades do not accurately reflect their potential for success in the IMP, may request permission from the IMP director to go through the application process. Such permission allows the applicant, like other applicants, to formally present his or her case to the Admissions Committee. This does not, of course, guarantee that the student will be accepted into the IMP.

IMP students are extremely diverse; they have well-developed interests, are highly motivated, and are capable of carrying out independent work. The IMP enables such students to pursue a Bachelor of Arts (B.A.) degree in the College of Arts and Sciences through a course of study that, while meeting all College requirements and conforming to general university standards of breadth and rigor, is tailored to individual interests and goals. IMP students, working closely with their faculty sponsors, pursue interests that cut across usual departmental and disciplinary boundaries. Their programs normally combine regular courses from several departments with independent

and self-directed work. It is recommended that seniors in the IMP take I 470 Individualized Major Program Senior Capstone Seminar (2 cr.).

Examples of majors that have been carried out under the auspices of the Individualized Major Program include musical theater, medical illustration, arts management, film/video production, fashion design, paleobiology, environmental studies, screenwriting, Latin American culture, photography, multimedia studies, public relations, animal psychology, and many others.

IMP students are eligible to take a second major in another department if the course credit is separate and distinct from the IMP concentration. Students in the IMP may graduate with honors if their GPA meets honors standards and if their project work is deemed of honors quality by the IMP review committee.

The Individualized Major Program is administered by a faculty committee that is responsible for granting admission to the program, for reviewing student programs under way, for evaluating a thesis or project, and for the final oral review.

Students wishing detailed information concerning the IMP should consult with the assistant director at Ballantine Hall 129, (812) 855-9588.

International Studies (INTL)

This major is an excellent choice for students who are interested in meeting the unprecedented global challenges of the twenty-first century, challenges that require all of us to have greater knowledge of the languages and cultures of the world. Students wishing to acquire additional expertise and fluency in a particular discipline or area study would be able to couple the international studies major with a second major, or with minors and certificates. With careful planning, students choosing degrees from a professional school such as Journalism, Business, Music, Education, School of Public and Environmental Affairs, and School of Health, Physical Education, and Recreation can add international studies as a second degree program.

Major requirements are broadly constructed to allow flexibility as well as depth. Courses for the major are organized in five parts—core courses, electives in thematic concentrations (see below for the concentrations offering freshman courses), electives in one regional concentration, a language requirement (two semesters in addition to the College's foreign language requirement but not necessarily in the same language), and a senior capstone seminar. Overseas study or an internship with an international dimension is also required. The freshman year is a good time for students to begin taking a language that is spoken in the country where they might later choose to study overseas.

Recommended courses for the freshman year for students considering the major: INTL-I 100: Introduction to International Studies and courses depending upon your interests from the following thematic concentrations: Culture and the Arts (INTL-I 201 and CMCL-C 202; FINA-A 150, A 290; FOLK-F 111; GNDR-G 225), Global Environment (INTL-I 202 and ANTH-E 101; GEOG-G 107, G 208; GEOL-G 131; REL-R 236), Global Markets and Governance (INTL-I 203 and ECON-E 201, E 202 are recommended as prerequisites for upper-division courses), Human Rights and Social Movements (INTL-I 204), International Communications (INTL-I 205 and CMCL-C 202; LING-L 112, L 113), Nations, States and Boundaries (INTL-I 206 and GEOG-G 210), Rituals and Beliefs (INTL-I 207 and LING-L 114; REL-R 152, R 153, R 245, R 257). Also 100- and 200-level courses from the various area studies and departments are recommended as preparation for the upper-level courses that are required for the major. See advisor.

For more information on a major or a minor in International Studies, see www.indiana.edu/~intlweb.

Italian (FRIT)

A wide variety of language, literature, and culture courses in Italian are open to University Division students. Freshmen may begin their language study with M 100-M 150; those students with previous work in Italian may place into courses above this level. Students may also elect Italian courses on such topics as the Italian cinema, Italian literature in translation, and various aspects of Italian culture to fulfill culture studies requirements.

A major in Italian or a double major in Italian and another area provides excellent academic preparation for work in the humanities, in the social sciences, and in music and the fine arts. Students with an interest in the Italian major should contact the undergraduate advisor in the Department of French and Italian as soon as possible in their academic studies. Study abroad through the IU overseas study programs in Bologna or at the summer campus in Florence is recommended not only for Italian majors but also for those in other fields. Interested students should begin to consider this option during the first year of study to arrange their schedule for their junior year abroad or for a future summer in Italy.

M 200 Second-Year Italian I is the first course that counts toward this major.

Recommended courses for the first year for students considering a major: FRIT-M 100 and M 150 or 3-6 credits at the 200 level (M 200 and M 250).

Jewish Studies (JSTU)

The Jewish Studies Program draws on course work from 11 different academic departments. This diversity brings a variety of approaches to the study of Jewish civilization and allows students to structure course work individually according to specific areas of interest. Students can pursue either a major or an area certificate and/or a Hebrew minor in Jewish studies. Students interested in Jewish studies should see the departmental advisor during the freshman year. Call (812) 855-0453.

Note: The area certificate is particularly appropriate for students in the School of Business who can fulfill the Arts and Social Services or Global Studies and Languages Field Specialization by completing the area certificate. Music students may complete the area certificate along with a Bachelor of Music or complete a B.S. in music with Jewish studies as an outside field. Students in the School of Journalism can complete their second concentration by completing the requirements for the Jewish studies major or area certificate.

Students can pursue both the Jewish studies major and the Hebrew minor, or the Jewish studies area certificate and Hebrew minor. Students interested in a career as a Jewish educator should pursue the major in Jewish studies rather than a degree in education. Only students who primarily want to teach in a public school should become education majors. Jewish studies majors are encouraged to pursue a second major.

The major requires at least two semesters of modern Hebrew, biblical Hebrew, or Yiddish*; REL-R 245 Introduction to Judaism or HIST-H 251 Introduction to Jewish History: From the Bible to the Crusades; HIST-H 252 Introduction to Jewish History: From the Crusades to the Present; four courses in one of the following three areas: a) language and literature, b) history and society, c) religion and thought; and two additional courses outside a student's area of specialization (listed above).

The area certificate, more significant than a minor, requires eight courses from three major areas of Jewish studies. There is no minor in Jewish studies.

Recommended courses for the first year for students considering a major: JSTU-H 100 (fall) and H 150 (spring); or JSTU-B 100 (fall) and B 150 (spring); or GER-Y 100 (fall) and Y 150 (spring); HIST-H 251 (fall); HIST-H 252 (spring); JSTU-J 203 (fall); REL-R 152 (fall); REL-R 210 (fall); COAS-S 103 (IFS) Popular Representations of the Holocaust.

For more information, see the Web: www.indiana.edu/~jsp/Freshman.htm.

*Beginning modern Hebrew, biblical Hebrew, and Yiddish are offered in fall 2005, and students wanting to begin one of these languages should enroll in the fall.

Leadership, Ethics, and Social Action Program (LESA)

Do you want to make a difference in the world? Find out what service-learning can do for your education and future. With an interdisciplinary minor in leadership, ethics, and social action through the College of Arts and Sciences, you can explore the concept of leadership through the lens of community service and can acquire practical political skills that will be of enormous value to you. You can deepen your academic curriculum in any field as you develop your career and citizenship skills. The program will guide your personal and professional development as you apply the ideas you study to community needs.

There are five components to this program: the introductory course, the ethics requirement, the social organizations requirement, the social action seminar, and the capstone seminar and project. The introductory course, LESA-L 105, Beyond the Sample Gates, is a service-learning course that satisfies the Topics requirement for the College and distributes as a Social and Historical (S&H) general education course. This course offers a chance to contribute to the community and to reflect upon your own motivations and the structures of society.

Choose from courses in various departments and from different perspectives for the ethics requirement (PHIL-P 140 Introduction to Ethics; POLS-Y 105, Introduction to Political Theory; REL-R 170 Religion, Ethics, and Public Life); and the social organizations requirement (ANTH-E 105 Culture and Society; SOC-S 215 Social Change; SOC-S 217 Social Inequality).

The junior-level social action seminar is offered through different departments each semester and involves a research and writing project that considers community policy. Recent offerings have included courses in political science (Environmental Policy), telecommunications (Public Communication Campaigns), English (Community Service Writing), anthropology (Cultural Documentation on Kids' Social Action) and sociology (Topics in Social Policy).

The capstone seminar and project involve a semester of planning and a semester of carrying out an individual project, designed in consultation with a faculty sponsor and a community partner.

Explore this program by taking the introductory course, LESA-L 105, in your first year. Consult with the advisor early in your degree for more information, lesa@indiana.edu. The program is housed in the Department of Political Science, Woodburn 210, (812) 855-6308. More details are available on the Web site: www.indiana.edu/~college/lesa.shtml.

Liberal Arts and Management Program (LAMP)

For students in IU's Liberal Arts and Management Program, one perspective isn't enough. That's why they choose to combine their passion for the arts and sciences with courses in management. They recognize that no matter what field you plan to enter—from advertising to foreign service to the practice of medicine—an understanding of management is crucial for success.

Each year approximately 100 students are selected to become a part of LAMP. If you join LAMP, you will interact with students and faculty from different disciplines—bringing many more perspectives. You'll find that the program is dynamic, deeply thought-provoking, and realistic preparation for life's work.

LAMP is an interdisciplinary certificate program offered by the College of Arts and Sciences in cooperation with the Kelley School of Business. It allows you to integrate any major in the College of Arts and Sciences with specialized training in management. Most students enter the three-year program as sophomores.

Building on requirements for a bachelor's degree in the College, LAMP students take courses in management, business law, accounting, and computer applications in the Kelley School of Business, as well as economics courses in the College. Through interdisciplinary LAMP seminars, students integrate their course work in management, economics, and liberal arts to solve real-world problems and analyze relationships between business and society.

If you have a strong academic background, wide interests, and leadership potential, we invite you to apply to this honors-level program. Most students apply in the spring of their freshman year. For admission to the program, students must have a cumulative GPA of 3.0, and LAMP students must maintain a cumulative GPA of 3.3. LAMP can be your ticket to a dynamic university experience that provides the crucial skills you'll need to succeed in work and life.

In addition to the usual College of Arts and Sciences freshman-year course requirements (English composition, Mathematics, a freshman seminar, a foreign language), students interested in joining LAMP are encouraged to take ECON-E 201 and E 202, and BUS-A 100. Students interested in LAMP are also recommended to consider the program's own freshman seminar, LAMP-S 104, Understanding a Local Economy.

For further information or to speak with the program's own academic advisor, please contact the Liberal Arts and Management Program, Wylie Hall 245, (812) 856-4966, LAMP@indiana.edu, or consult the program Web site at www.indiana.edu/~lamp.

Linguistics (LING)

Linguistics is the scientific study of language in communication and of human beings' ability to assign meaning to sounds and symbols. Introductory courses in language and linguistics are offered, as well as advanced courses leading to a major. The introductory courses give the student an understanding of both language structure and meaning. Varieties of speaking, such as regional dialects, social dialects, and the languages of politics, law, and advertising, are also examined. Other courses deal with the acquisition of language by children, the nature of language change, and the properties of some of the world's major languages. The department also offers courses in African languages and, periodically, in Haitian Creole.

Of interest to University Division students are L 103 Introduction to the Study of Language, any of the L 100-L 300 series courses, and beginning African languages.

International students should receive information about T 101 English Language Improvement. Placement in T 101 is determined by results of the Indiana English Proficiency Test, administered upon students' arrival in Bloomington. For more information about English for non-native speakers, contact the Program in TESOL and Applied Linguistics, Memorial Hall 313.

Recommended courses for the first year for students considering a major: LING-L 103, L 111, L 112, L 113, L 114, L 205, L 210, L 303.

Mathematics (MATH)

Mathematics is fundamental for science, business, engineering, and computers. The study of mathematics develops problem-solving skills that can be applied to many situations. Math classes include students majoring in other subjects, students with a mathematics minor, and students majoring in mathematics.

The department offers a B.A. and three kinds of B.S. degrees. Within the B.A. program, it is possible for a student to have a double major with an additional liberal arts area. Graduates with a B.A. degree pursue a wide variety of career opportunities, including business, industry, education, and government; they also earn advanced professional degrees such as medicine, business, and law. The B.S. degree provides more extensive training in mathematics and is often earned by students interested in pursuing graduate degrees in mathematics (Program I) or in related areas such as astronomy, chemistry, computer science, economics, geology, physics, or psychology (Program II). The department also offers a B.S. degree in statistics.

The calculus sequence M 211-M 212 is the normal starting point for all majors and minors. With departmental consent, students with superior ability

may choose to take Honors Calculus, S 212, while well-prepared students may take Accelerated Calculus, M 213.

Interdepartmental Major in Mathematics and Economics

Students interested in combining mathematics and economics study can select an interdepartmental major including courses in both areas.

Actuarial Studies within a Mathematics Degree

Actuaries use mathematics and financial theory to determine the financial effect that uncertain events such as birth, death, fire, accident, and illness have on insurance and benefit plans. It is possible to design a program within the B.A. or B.S. degree—including courses in economics, computer science, and business—that will prepare a student for entry into the actuarial profession, but the B.S. in statistics is usually recommended for students interested in actuarial science.

Recommended courses for the first year for students considering a major:

B.A. in mathematics: MATH-M 211.

B.S. in Mathematics: MATH-M 211 and M 212.

Music (MUS)

The B.A. degree in music is intended for the student who wishes to emphasize the academic study of music rather than its performance, in the context of a liberal arts education. Course work includes music history, theory and literature, and performance study. Entering freshmen should take the Basic Musicianship Test (ask your advisor for the date) to help determine placement in the beginning theory courses. See the School of Music section in Part II for information on placement levels to help you estimate which course you should register for before you get test results.

Recommended courses for the first year for students considering a major: MUS-T 109 or exemption; MUS T 151; applied music lessons (MUS-Z 110).

Near Eastern Languages and Cultures (NELC)

The department offers courses in Arabic and Persian literature and civilization. Majors take three years of their major language, and five additional courses chosen with the consent of the undergraduate advisor or two years of a language and seven additional courses. Students may also use the culture background provided

by courses in this department to complement programs in history, folklore, fine arts, political science, religious studies, and other areas.

The department also offers an undergraduate minor. Students can choose to minor in Arabic, Byzantine studies, Islamic studies, Middle Eastern literature, or Near Eastern civilization. Each minor requires 15 credit hours, passed with a grade point average of C+ or higher. For more details, contact the undergraduate advisor at (812) 855-4323.

Recommended courses for the first year for students considering a major: one year of major language.

Philosophy (PHIL)

Philosophy is a reasoned pursuit of fundamental truths, a quest for understanding, and a study of principles of conduct. Philosophy seeks to establish standards of evidence, to provide rational methods for resolving conflicts, and to create techniques for evaluating ideas and arguments. The traditional subfields of philosophy are logic, ethics, metaphysics, epistemology, and the history of philosophy.

P 100 is a general course emphasizing philosophical problems. Many other courses in philosophy are open to first-year students. Several are in the history of philosophy and focus on the writings of important philosophic figures. Others explore logic, scientific and everyday reasoning, ethics, social and political philosophy, or phenomenology and existentialism.

The department encourages majors to take one 100-level course other than P 105 or P 150 during the first year, and at least one 200-level course in philosophy during the second year.

Students should consider courses outside the department that relate to their philosophic interests. Thus, if interested in philosophical psychology, the student might take courses leading to a minor in psychology. Or a student interested in social and political philosophy might take courses in political science, history, or sociology.

Interdepartmental Major with Political Science

These fields enjoy significant overlap in the history of ideas, political and applied philosophy, and public affairs. This major enables students to pursue an integrated course of study covering the intersection between these fields. The major is flexible enough to meet the needs of various students. This program will enhance preparation for law and graduate school. It promotes integration of social sciences and humanities in a way likely to be useful for many other career choices as well. Either department may be contacted for details.

Interdepartmental Major with Religious Studies

Many students are interested in topics at the borderline between these disciplines. This major produces graduates who are culturally informed and skilled at close reading, careful writing, and critical thinking. It is sound preparation for various careers and for graduate or professional education. Either department may be contacted for details.

Recommended first-year courses for prospective majors: One course from PHIL-P 100, P 103, P 135, P 140, P 145, P 240, or P 270.

Physics (PHYS)

The Department of Physics offers a wide variety of courses for freshmen. In particular, there are several exciting courses designed especially for liberal arts or non-science students. These courses include P 101 Physics in the Modern World, P 105 Basic Physics of Sound (with modern electronic applications), P 110 Energy, P 120 Energy and Technology, P 125 Energy in the Next Century, P 150 How Things Work, and P 151 Twenty-first Century Physics.

The physics department offers a B.A. and a B.S. degree in physics and a major in applied physics. Special requirements for the B.S. degree are detailed in the College of Arts and Sciences Bulletin.

The beginning sequence for physics majors is P 221-P 222. Math M 211 and M 212 are co-requisites for P 221 and P 222 respectively. There is a special, highly interactive honors section of P 221-P 222 for freshmen particularly interested in majoring in physics or pursuing research careers in another area of science. Prospective physics majors are strongly encouraged to consult with the Department of Physics undergraduate advisor, Scott Wissink, (812) 855-5192, e-mail: wissink@indiana.edu; and to start the P 221-P 222 sequence in their freshman year.

Recommended courses for the first year for students considering a major:

B.A. in physics: PHYS-P 221 and P 222; MATH-M 211 and M 212.

B.S. in Physics: PHYS-P 221 and P 222; MATH-M 211 and M 212.

Political Science (POLS)

Are you interested in American politics? International affairs? Critical issues such as welfare reform, the environment, wars, and health policy? How we get the kinds of leaders we do, and why? If you are, you should take political science courses. Political science is the study of government and public policy and the political behavior of individuals and groups. Political science

uses both humanistic and scientific perspectives and skills to examine the United States, all countries and regions of the world, and international relations.

Political science majors qualify for careers in the private and public sectors. The most frequent types of careers chosen by majors are in the fields of law, education, business, public service (including elective and appointed office), and communications.

A variety of 100- and 200-level courses with no prerequisites are offered for entry-level students. Students with unusually strong preparation in American government and politics are eligible to take a special credit examination for Y 103 American Politics, which is given each semester.

Recommended courses for the first year for students considering a major: One course from Y 103, Y 105, Y 107, Y 109, Y 200.

Interdepartmental Major in Political Science and Economics or in Political Science and Philosophy

Students interested in combining political science and economics study or political science and philosophy study can select an interdepartmental major.

Political science/economics majors who are qualified to take ECON-E 201/E 202 as freshmen should do so and begin their study of political science with Y 204, Y 205, Y 210, or Y 200 as their schedules allow. Those who need to take E 201/E 202 as sophomores may take POLS-Y 200 as freshmen (see your advisor for a list of approved sections). Y 204 is inappropriate for most freshmen.

Political science/philosophy majors should take both POLS-Y 105 and one PHIL course at the 100/200 level during their freshman year. Only one 100-level PHIL course counts in this major.

Psychology (PSY)

The department offers majors in psychology leading to the B.A. or B.S. degree and provides course work for undergraduates who wish to satisfy distribution requirements. As a science, psychology seeks to understand the basic principles by which living organisms adapt their behavior to the changing physical and social environments in which they live. The breadth of the discipline, with its links to the humanities, mathematics, and other social and natural sciences, encourages the development of broad problem-solving skills through exposure to experimental methodology and statistical analysis, and contributes to the development of communicative skills. Psychological knowledge, techniques, and skills are applied in many careers and provide background for students entering graduate work in psychology and related areas, as well as the professions of medicine, dentistry, law, and business.

An outside concentration or minor is required for all psychology majors.

The B.A. program provides a broad coverage of modern scientific psychology and the strategies and tactics by which knowledge is acquired in this field. Although the B.A. program offers the student considerable flexibility in choosing courses, it requires sufficient background in science and psychology to enable good students to qualify for demanding graduate programs.

The B.S. program in psychology is designed for careeroriented and highly motivated students. The program emphasizes a broad preparation in science and the development of math and computer skills, and it requires more advanced courses and laboratory work in psychology than the B.A. program.

Recommended courses for the first year for students considering either a B.A. or B.S. major: PSY-P 151/P 153 and P 152/P 154. (B.S. majors should not take College of Arts and Sciences Topics E 105 unless the topic is Neural Basis of Human Behavior.)

Religious Studies (REL)

Religion is a major force in human experience. Religious studies provides an opportunity for students to explore the ways people have struggled to make sense of the world and their place in it. Religious studies does not aim to promote or undermine any particular religion or worldview; the academic study of religion seeks to examine religion analytically.

Religious studies explores a wide range of phenomena, including the myths, symbols, values, beliefs, writings, and rituals of individuals and communities in many different times and places. Religious studies brings together perspectives and approaches from anthropology, history, philosophy, art, sociology, and literature to gain a more comprehensive view of religious behavior. Majoring in religious studies provides students with the critical thinking and writing skills and general knowledge of the world necessary to perform a tremendous variety of professional tasks. Undergraduate majors in religious studies have long been valued by law schools, business schools, medical schools, public policy programs, and a wide variety of graduate and professional programs and employers.

Interdepartmental Major in Religious Studies and African American and African Diaspora Studies

Students interested in combining religious studies and African American and African Diaspora studies can select an interdepartmental major including courses from both areas.

Interdepartmental Major in Religious Studies and Philosophy

Students interested in combining religious studies and philosophy select an interdepartmental major including courses in both areas.

Visit the department's Web site: www.indiana.edu/~relstud/

Recommended courses for the first year for students considering a major: One or more 100- or 200-level introductory courses. (*Note*: Only one 100-level course may be counted in the major.)

Slavic Languages and Literatures (Russian) (SLAV)

The department offers courses designed to meet a wide range of special needs and interests. Slavic language courses are designed not only for Slavic majors but also for students specializing in other disciplines, particularly in the social sciences, natural sciences, and other languages and literatures. The department offers literature and culture courses that require no knowledge of Slavic languages and that may be taken by any students interested in the Russian and East European area. Most of them can be taken to satisfy College requirements.

Freshmen who enter the university with some previous knowledge of a Slavic language are required to take a placement test to determine which course is most appropriate for them. Such students should contact the department at (812) 855-2608 before registration.

Students contemplating a possible Slavic major, a double major, or a minor should make an appointment to see the departmental undergraduate advisor.

All students are encouraged to consider the Summer Workshop in Slavic and East European Languages (SWSEEL), which will enable them to advance in Russian or another Slavic or East European language by two semesters during the eight-week summer session.

Courses of interest to freshmen include the following:

For Russian: R 123 Russian Short Fiction (Fall and Spring), R 223 Introduction to Russian Culture (Fall and Spring), R 263 Russian Literature from Pushkin to Dostoevsky (Fall), R 264 Russian Literature from Tolstoy to Solzhenitsyn (Spring)

For Croatian and Serbian: S 223 Introduction to Balkan and South Slavic Cultures, S 363-S 364 Literature and Culture of the Southern Slavs I-II (Fall, Spring), R 353 Central European Cinema (Fall)

For Czech: C 363 History of Czech Literature and Culture (Fall), C 364 Modern Czech Literature and Culture (Spring), R 353 Central European Cinema (Fall)

For Polish: P 363-P 364 Survey of Polish Literature and Culture I-II (Fall, Spring), P 365 Topics in Polish Literature and Culture, R 353 Central European Cinema (Fall)

Sociology (SOC)

Sociology is the study of the social structures and social forces that influence human behavior. Sociologists look beyond individual and unique events to the patterns in people's attitudes and activities and how these patterns vary across time, cultures, and social groups.

The department offers courses in such areas as social problems, social psychology, deviance, race and ethnic relations, population, family, and social change. A major in sociology provides an excellent foundation for many professional careers in law, business, journalism, government, community service, corrections, and social work, or for graduate work in sociology. Many sociology students have double majors.

Recommended courses for the first year for students considering a major: SOC-S 100 or S 110 and one course from S 101, S 105, S 201, S 210, S 215, S 217, S 220, S 230.

Spanish and Portuguese (HISP)

The department offers a four-year program in course work leading to the major and minor in Spanish and Portuguese, with advanced specialization in culture, literature, and linguistics. Students may also study two semesters of language work in Catalan. The department actively participates in IU Overseas Study programs (academic years in Buenos Aires, Argentina; Madrid, Spain; Santiago, Chile; and Salvador and São Paulo, Brazil; semester programs in Alicante, Madrid, Seville and Salamanca, Spain; Buenos Aires, Argentina; Santiago, Chile; Lima, Peru; Salvador and São Paulo, Brazil; Monteverde, Costa Rica; and Santiago, Dominican Republic; and summer programs in Cuernavaca and Guanajuato, Mexico; and Salamanca, Spain) and encourages all students to live and study in a Spanish- or Portuguese-speaking country. With careful planning from the beginning, foreign study is compatible with any course of study.

Students who plan to major in either language are strongly encouraged to consider a second major. A minor or second major is required.

S 250 Second-Year Spanish II and P 200 Second-Year Portuguese I are the first courses that count in these majors.

Recommended courses for the first year for students considering a major:

Spanish: Level at which student places.

Portuguese: See your advisor regarding placement.

Speech and Hearing Sciences (SPHS)

Speech and hearing sciences encompass the study of our ability to use speech, language, and hearing and the disorders that affect this ability. Practitioners in the field—audiologists; speech-language pathologists; and speech, language, and hearing scientists—evaluate, treat, and conduct research in human communication and its disorders in settings such as schools, hospitals, businesses, private practice, universities, research laboratories, and government agencies.

The B.A. degrees provide an overview of the processes of speech, language, and hearing. The B.S. degrees focus more on the processes underlying speech, language, and hearing, while providing the option for more in-depth study in the sciences. Both degrees offer concentrations in either speech language pathology or audiology and afford the opportunity to go on to graduate studies within these fields. They also provide a strong science background that would be useful for entering directly into business, education, and the health professions.

Recommended courses for the first year for students considering a major: SPHS-S 110; S 111; PSY-P 101 or P 151; one of the two required mathematics courses from M 118, S 118, M 119, M 120, any 200-level or higher MATH "M" course; one Topics Requirement course; one additional A&H distribution course; first year of foreign language.

Telecommunications (TEL)

Telecommunications majors study a broad range of electronic media including radio, television, cable, satellite services, telephone, multimedia, and the Internet. There are three major course concentrations: 1) the electronic media's influences on audiences and users; 2) the design and production of video, audio, and multimedia messages, programs, and products; and 3) the business, legal, and managerial aspects of telecommunications. WFIU (FM) and WTIU (TV), university broadcast stations, instructional teleconferencing media, and state-of-the-art departmental production facilities are located in the Radio-TV Center and provide opportunities for student involvement.

Note: If you are interested in broadcast journalism, please read about the School of Journalism, p. 59. If interested in Sport Communication, see HPER, p. 51.

Recommended courses for the first year for students considering a major: TEL-T 101 and one of T 205, T 206, or T 207. T 101 is not required before taking T 205, T 206, or T 207. Students also should consider taking SLIS-L 150 Resources in Telecommunications.

Those with design and production interests should take TEL-T 206 during the first year.

Theatre and Drama (THTR)

The department offers a number of courses open to freshmen. For those choosing theatre and drama as their major concentration, four courses are offered each semester: T 100 Introduction to Theatre, T 121 Acting I, T 225 Stagecraft I, and T 230 Stage Costuming I. Although all four courses are required for a major concentration, students should not enroll in both T 225 and T 230 in the same semester.

Students may elect one or more courses from T 100 Introduction to Theatre, T 121 Acting I (for majors) or T 120 Acting I (for nonmajors), T 225 Stagecraft I, T 230 Stage Costume I, and T 210 Appreciation of Theatre (T 210 cannot be counted for credit in major concentration). These courses are offered each semester.

Recommended courses for the first year for students considering a major: THTR-T 100 and one course from T 121, T 225, T 230.

West European Studies (WEUR)

West European Studies is an interdisciplinary program in the College of Arts and Sciences that combines courses in the social sciences, humanities, and languages to give students a broad understanding of the countries of Western Europe and the European Union. The program is structured by combining core courses and seminars with elective courses from other departments and schools that address topics concerning Western Europe. Students take one core course in political science, and a total of four elective courses selected from the social sciences and humanities, along with a language, to complete the minor. A WEUR minor is easily paired with majors in English, foreign languages, fine arts, history, political science, international studies, education, journalism, business, music and others.



Kirkwood Hall, home of the offices of the College of Arts and Sciences

KELLEY SCHOOL OF BUSINESS (BUS)

www.kelley.iu.edu/ugrad

The Kelley School of Business Undergraduate Program is nationally recognized as a leader in educating and preparing students for careers in the business world. Consistently ranked among the top business programs year after year, the school has a long history of providing students with a challenging undergraduate curriculum. A world-class faculty of more than 185 manage the school's eight academic departments. Numerous opportunities are available to Kelley students to grow both personally and professionally. Please refer to our Web site for more information.

ADMISSION REQUIREMENTS

Admission to the Kelley School is selective and requires students to do the following:

- complete English composition (with a grade of C or higher)
- complete at least three out of the following four courses: MATH-M 118, MATH-M 119, BUS-K 201 (with a grade of C or higher), and optional courses BUS-X 100 or BUS-G 100. The three highest grades of these courses will be used to compute the admission GPA, which is one of the factors used when considering a student's admission.
- complete 26 credit hours of college course work that counts toward graduation.
- be in academic good standing and meet the standard of the Kelley School of Business for academic good standing.
- submit an application. Application deadlines are April 1 for fall semester and November 1 for spring semester. (Grades for prerequisite course work must appear on the student's university transcript by July 10 to be used for fall admission.)

The Kelley School Admissions Committee reviews each application, looking for evidence of strong and consistent B-level academic performance. The committee evaluates the following academic factors for each applicant: 1) IU grade trends and patterns, 2) cumulative GPA, 3) application semester GPA, and 4) admission course GPA. Factors such as extracurricular activities, community service, work experience, and optional letters of recommendations are also considered, but are less important than academic performance factors.

FRESHMAN YEAR COURSE WORK

During the freshman year, students pursuing a major in the Kelley School of Business usually complete the following:

☐ English composition course(s)
☐ Two mathematics courses
☐ Business computer course
☐ Speech communication or Business Presentations
☐ General education courses
☐ Business course(s)
☐ Optional electives

■ English Composition

ENG-W 131 (or alternative; see pp. 12–13) with a grade of C or higher

■ *Two Mathematics Courses*

MATH-M 118 and M 119 (M 211 may be substituted for M 119) with a grade of C or higher

Your advisor will help you finalize your choice based on your background, high school test scores and grades, and IUB Mathematical Skills Assessment Test score.

Note: Some students may need to take MATH-M 014, M 025, and/or M 026 as preparation for a higher-level course. No credit is awarded for any of these courses toward graduation.

■ Business Computer Course

BUS-K 201 (no alternate) with a grade of C or higher

■ Speech Communication Course

BUS-X 104 or CMCL-C 121 (or alternate) with a grade of C or higher

For students with acceptable backgrounds in high school speech, CMCL-C 223 may be taken instead of C 121. BUS-X 104 may also be taken in place of C 121.

■ General Education Courses

Choose one of two methods:

 Distribution option, which includes courses from Arts and Humanities (A&H) Social and Historical Studies (S&H; excluding economics), and Natural and Mathematical Sciences (N&M)

or

2. Field Specialization option courses (see p. 45)

Students must also complete the International Dimension requirement as a graduation requirement (6 credit hours of foreign language at second-year level is one of the options for this; for other options see an advisor).

See p. 45 for further explanation of general education requirements.

■ Business Courses

BUS-A 100 with a grade of C or higher

BUS-X 100 or BUS-G 100 is a good option for students who are exploring their interest in business (although

they are not required, either course may be used as one of the course options for admission to the school).

Note: Some students take additional courses that are required for all business majors, such as ECON-E 201, BUS-A 201 (students must take A 100 first), BUS-A 202 (students must take A 100 first), or BUS-X 201 (students must take K 201 first). If you are interested in doing this, consult with an advisor about whether this is a good idea for you.

■ Elective Course(s)

The concentration area in the business major that a student wishes to pursue will determine the number of elective credit hours allowed. See your advisor.

GENERAL EDUCATION REQUIREMENTS

Students must choose ONE of two alternatives (the field specialization or the distribution option) to complete a required 27 credit hour component of the general education requirement for graduation. The 27 hour core must be completed for graduation, in addition to the major.

Distribution Option

Students who choose the distribution option complete a total of 27 credit hours of general education course work that includes the following:

- a. Arts and Humanities (A&H)
- b. Social and Historical Studies (S&H; excluding economics)
- c. Natural and Mathematical Sciences (N&M)

See an advisor for additional information about this requirement.

The Kelley School of Business follows the general education distribution designations of the College of Arts and Sciences. Refer to your *Planner Course Descriptions* booklet for distribution information.

Note: For the distribution options, the Kelley School of Business will count only one of the following courses per distribution area: *COLL Topics courses*: E 103 (A&H), E 104 (S&H), E 105 (N&M); *Freshman Seminars*: S 103 (A&H), S 104 (S&H), and S 105 (N&M). One additional Honors course is allowed for each area. Students may count both Honors H 211 and H 212.

Field Specialization Option

Field Specializations offer business students the opportunity to enhance their career aspirations by taking specific courses in certain areas of interest.

Students may complete one of the following Field Specializations by taking 27 credits from the departments or schools within the chosen area. See your advisor for additional information about this requirement.

Communications—Communication and Culture, English, Journalism, Speech and Hearing Sciences, Telecommunications, Physics—P105, P106 only.

Environmental—Biology, Chemistry, Geological Sciences, Public and Environmental Affairs, Physics—P 110, P 120, P 201, P 202, P 309, P 310 only.

Global Studies and Languages—African Studies, American Sign Language, Central Eurasian Studies, Classical Studies—language only, East Asian Studies, French and Italian, Germanic Studies, India Studies, Jewish Studies, Latin American and Caribbean Studies, Near Eastern Languages and Cultures, Russian and East European Studies, Slavic Languages and Literature, Spanish and Portuguese, West European Studies.

Arts and Social Service—Fine Arts, Jewish Studies, Music, Philosophy, Public and Environmental Affairs, Religious Studies, Social Work, Theatre, African American and African Diaspora Studies performance courses (AAAD-A 100, A 104, A 110, A 120).

Science and Technology—Astronomy, Biology, Chemistry, Cognitive Science, Computer Science (see business advisor for appropriate courses), Geological Sciences, History and Philosophy of Science, Mathematics (excluding M118, M119, M211, and others used to fulfill other business requirements), Medical Sciences, Physics.

Business Majors

Accounting

Business Economics and Public Policy—Public Policy Analysis Track

Business Economics and Public Policy—Economic Consulting Track

Business Information Systems (second major only)

Business Process Management

Computer Information Systems

Entrepreneurship

Finance

Finance—Real Estate

International Business (second major only)

Legal Studies

Management

Marketing

Production/Operations Management

Note: Regardless of major, business students usually complete the courses listed below during the first two years. Each course must be completed with a grade of C or higher.

BUS-A 100, A 201, A 202, K 201, L 201, X 201, X 204, X 220, G 202

CMCL-C 121 or equivalent ENG-W 131 or equivalent

ECON-E 201, E 202, E 370

MATH-M 118, M 119 (or M 211)

See your advisor regarding necessary prerequisites for some courses.

SCHOOL OF CONTINUING STUDIES (SCS)

www.continue.indiana.edu

The School of Continuing Studies was created in 1975, reflecting the commitment of Indiana University and the state government to meeting the educational needs of adult citizens. It offers the Associate of Arts and Bachelor of General Studies degrees. Degree requirements can be completed in a variety of ways, enabling students to design a flexible program of study tailored to their backgrounds and needs. Credits toward the degrees can be earned in regular session courses completed at an IU campus, evening courses and television and/or Internet courses, independent study by correspondence, credit by examination, and military service credit.

THE ASSOCIATE OF ARTS AND BACHELOR OF GENERAL STUDIES DEGREES

The Associate of Arts (A.A.) and Bachelor of General Studies (B.G.S.) degrees are composed of two parts: 1) course work that must be done in broad categories called "required areas of learning," and 2) course work called "elective credit" that may be done in any school, division, or program of the university. To fulfill the requirements, students may choose from a wide variety of subject fields. In each plan of study, a student must demonstrate competency in each of the following areas: written communication, oral communication, quantitative reasoning, and computer literacy. There is a maximum number of credit hours allowed from a single department/school. Students should discuss with their academic advisors the appropriate ways to establish competency, e.g., specific courses, credit by examination, self-acquired competencies, and the College-Level Examination Program (CLEP).

ADMISSION REQUIREMENTS

Although there are no specific courses required for admission, students must complete a School of Continuing Studies admission application. Additional information and application forms are available from the Bloomington Division, School of Continuing Studies, 790 E. Kirkwood Avenue, Bloomington, IN 47405-7101, (812) 855-4991.

FRESHMAN YEAR COURSE WORK

During the freshman year,	students	usually	complete
the following courses:		•	•

English composition course(s)
Mathematics course or other quantitative
reasoning option

☐ Computer course	
☐ General education course	es
☐ Electives	

■ English Composition

See pp. 12–13 for options.

■ Quantitative Reasoning

Students must demonstrate competency in quantitative reasoning through course work or exemption.

Choose from MATH-A 025, M 025, M 026, M 027, M 118 (D 116-D 117 if eligible), M 119, M 211, and MATH-A 118.

Check with your advisor for non-math courses that fulfill the quantitative reasoning requirement.

Students having earned a math SAT score of 650 or higher or a math ACT score of 29 or higher are exempt from the fundamental math skills requirement.

Your advisor will help you finalize your choice based on your background, high school test scores and grades, and IUB Mathematical Skills Assessment Test score.

 $\it Note:$ Some students may need to take MATH-M 014 as preparation for a higher-level course. M 014, M 025, M 026, and M 027 do not count for graduation credit.

■ Computer Course

Choose from any computer science course or any other approved computer course. The most common choices are CSCI-A 110, BUS-K 201, EDUC-W 200, HPER-P 200 or R 237, or SPEA-V 261.

■ Oral Communication Course

Students must demonstrate competency or take CMCL-C 121, C 122, THTR-T 115, or T 120. See your advisor for other options.

■ General Education Courses

Choose from:

Arts and humanities: any foreign language course or courses designated A&H by the College of Arts and Sciences. See the *Planner Course Descriptions* booklet for A&H courses.

Social and behavioral sciences: courses designated S&H by the College of Arts and Sciences. See the *Planner Course Descriptions* booklet for S&H courses.

Science and Mathematics: courses designated N&M by the College of Arts and Sciences. See the *Planner Course Descriptions* booklet for N&M courses.

■ *Elective Course(s)*

Choose elective courses that interest you.

SCHOOL OF DENTISTRY 47

SCHOOL OF DENTISTRY

www.iusd.iupui.edu/

Indiana University School of Dentistry (IUSD) is fully accredited by the American Dental Association. The school is located on the Indianapolis (IUPUI) campus and is an integral part of the Indiana University Medical Center. Students seeking admission to the dental school for training as a dentist may be admitted at the end of 90 hours of college credit. For additional information on the preprofessional requirements for admission, see the "Preprofessional Studies" section of this Planner, p. 75. Students pursuing careers in dental hygiene or dental assisting may enter programs at various Indiana University campuses (see below). IU Bloomington students may complete prerequisite course work in preparation for admission to these programs. The dental hygienist and dental assistant are members of the dental team providing educational, preventative, and therapeutic oral health services. Employment opportunities are available in private dental practice, hospitals, public health, educational institutions, and research.

Programs in dental hygiene and dental assisting are available on the following IU campuses: IUPUI/IUSD (Indianapolis), Fort Wayne, Northwest (Gary), and South Bend. These campuses offer programs leading to an Associate of Science degree. IUSD also offers a program leading to a Bachelor of Science degree in Public Health Dental Hygiene. A dental laboratory technology program is available on the Fort Wayne campus. In addition to preparing for admission to the programs on the IU campuses listed above, IUB students may also apply to the dental hygiene program offered by the University of Southern Indiana. Ask your advisor for additional information.

ADMISSION TO IU DENTAL HYGIENE PROGRAMS

Students need to complete a minimum of one year of preprofessional course work including elementary composition, Chemistry C 101-C 121, Communication and Culture C 121, two humanities courses, Psychology P 101, Sociology S 100, Anatomy A 215, Physiology P 215, and microbiology (Biology M 200 and M 215 or Biology M 250 and M 225.

Because of the number of science requirements, students often need two years at IUB to complete the admission requirements. There is some variation among campuses for determination of admission courses and other criteria for admission. Other factors in admission may include dental work experience, college GPA, high school GPA, high school SAT/ACT scores, admission interview, letters of recommendation, personal statement, and the number of college credit hours completed.

Students need to complete an application between July 1 and February 1 before the fall semester when admission is desired. Science prerequisites must be completed by the end of the spring semester.

FRESHMAN YEAR COURSE WORK

During the freshman year students usually complete the following:

- \square English composition course
- ☐ Public speaking course
- ☐ Science courses
- ☐ General education courses
- ☐ Elective courses

■ English Composition

ENG-W 131 or alternate; see pp. 12–13.

■ Public Speaking

CMCL-C 121

■ Science Courses

CHEM-C 101-C 121; ANAT-A 215 (also BIOL-M 200 and M 215 as well as PHSL-P 215 if you are applying to get into the clinical program after one year).

■ General Education Courses

PSY-P 101 and SOC-S 100

6 credit hours from arts and humanities (see your advisor)

■ *Elective Courses*

See your advisor.

IU Northwest requires that student complete 3 credit hours in computer skills, CSCI-A 110.

SCHOOL OF EDUCATION (EDUC)

www.education.indiana.edu/

Indiana University has been educating teachers since 1851. The School of Education is one of America's most respected institutions for the preparation of teachers, administrators, and specialists in education. On the Bloomington campus, the school is housed in the Wendell W. Wright Education Building, a facility designed to meet the demands of the Information Age and support teaching and research with the latest instructional technology.

The School of Education offers a variety of programs that culminate in several bachelor of science degrees and certification areas:

Early Childhood Education (pre-Kindergarten and K-3)

Teaching All Learners: Elementary Education and Special Education (grades K–6) Elementary Education (grades K–6)

Secondary Education (Senior High, Junior High, Middle School, grades 6–12; Anchor and Community of Teachers [COT] see subject list on p. 50)

Special Education/Secondary through COT (grades 6–12)

All-Grade Education (grades K-12) in Visual Arts

Note: Undergraduate teacher certification is also available for selected areas through joint programs between the School of Education and other IU degree-granting units:

Health and safety education (HPER) Chinese (College of Arts and Sciences) Japanese (College of Arts and Sciences) Music (School of Music) Physical education (HPER)



School of Education, Wright Education Building, Rose Avenue and Seventh Street

ADMISSION REQUIREMENTS

Students must complete required courses, obtain passing scores on the Pre-professional Skills Test (PPST), maintain a 2.5 cumulative GPA, and apply to be admitted to the Teacher Education Program. See advisor for details.

FRESHMAN YEAR COURSE WORK

Early Childhood Education

During the freshman year students interested in Kindergarten-Primary and Early Childhood Education usually complete the following:

- ☐ English composition course(s)
- ☐ Oral expression course
- ☐ Science and technology course(s)
- ☐ Additional general education courses
- \square Electives

■ English Composition

ENG-W 131 or W 170 See advisor for additional options.

■ Oral Expression

CMCL-C 121, CMCL-C 122, CMCL-C 223, or EDUC-G 203

■ Science and Technology Course(s)

EDUC-W 200 (3 credits) and EDUC-Q 200 See advisor for elective options.

■ Additional General Education Courses

Choose from the following requirements:

Literature (one course): AAAD-A 141, A 142; CMLT-C 145, C 146; ENG-L 141, L 142, L 202, L 203, L 204, L 205. See your advisor for other options.

Fine Arts: MUS-E 241. See advisor for additional options.

Social Studies (6 credits): HIST-H 101, H 102, H 105, H 106. See advisor for social studies elective options.

Mathematics: MATH-T 101, T 102. See advisor for additional options.

■ *Elective Course(s)*

The number of electives is very limited. Electives are not recommended for the freshman year. See your advisor.

SCHOOL OF EDUCATION 49

FRESHMAN YEAR COURSE WORK

Elementary (K–6) and Teaching All Learners: Elementary and Special Education (K–6)

During the freshman year students interested in elementary education or special education elementary usually complete the following:

En	glish	composition	course((\mathbf{s})
\sim	1	•		

- \square Oral expression course
- ☐ Mathematics course
- ☐ Computer course
- ☐ Additional general education courses
- ☐ Electives

■ English Composition

ENG-W 131 or W 170 See advisor for additional options.

■ Oral Expression

CMCL-C 121 or CMCL-C 122 or EDUC-G 203 See advisor for additional options.

■ *Mathematics Course*

MATH-T 101 and T 102

■ *Computer Course*

EDUC-W 200 (3 credits) for Teaching All Learners EDUC-W 201 (1 credit) for Elementary

■ Additional General Education Courses

Choose from the following:

World literature (one course): AAAD-A 141, A 142; CMLT-C 145, C 146; ENG-L 141, L 142, L 202, L 203, L 204, or L 205

Fine Arts: MUS-E 241; FINA-N 110

United States History (one course): HIST-H 105 or H 106 (See your advisor for other options.)

World Civilization (one course): HIST-H 101, H 102, H 103, H 104, GEOG-G 110, G 120

Social studies elective from any of the following (one course): African American and African Diaspora Studies (history only), Anthropology, Criminal Justice, Economics, Gender Studies, Geography (nonphysical), History, Political Science, Psychology, Religious Studies, Sociology, SPEA

Science: EDUC-Q 200; GEOL-G 103 or G 104 or G 105

Area of Concentration: Elementary students choose an area of concentration. Your advisor will explain this requirement to you and help you choose courses if you are interested in beginning your concentration during the freshman year.

■ *Elective Courses*

The number of electives is very limited.

FRESHMAN YEAR COURSE WORK

Secondary and All-Grade Education

During the freshman year students interested in secondary or all-grade education (including Special Education through COT) usually complete the following:

English	composition	course(s)

- ☐ Oral expression course
- ☐ Computer course
- ☐ Additional general education courses
- ☐ Major course(s)
- ☐ Electives

■ English Composition

See pp. 12–13 for information about options. ENG-W 131 or W 170 is preferred.

■ Oral Expression

CMCL-C 121 or CMCL-C 122 or EDUC-G 203

■ Computer Course

EDUC-W 201 (1 credit) for Secondary Anchor majors EDUC-W 200 (3 credits) for All Grade

(*Note:* The Community of Teachers Program does not require a computer class.)

■ Additional General Education Courses

Choose a few courses from the following:

Remaining arts and humanities: Any course identified as Arts and Humanities (A&H) by the College of Arts and Sciences (6 credit hours required for degree).

Natural and Mathematical Sciences: Any course identified as Natural and Mathematical Sciences by the College of Arts and Sciences (9 credit hours required for degree).

Social and Historical Studies: Any course identified as Social and Historical Studies by the College of Arts and Sciences (9 credit hours required for degree).

Multicultural Studies: Any course listed as "Culture Studies" by the College of Arts and Sciences (3 credit hours required for degree). Careful selection may allow course work to be double counted in some majors.

■ *Major Course(s)*

One or two courses from the major area. See your advisor.

■ *Elective Course(s)*

The number of elective credits varies with each major. See your advisor.

MAJORS AVAILABLE FOR SECONDARY/ ALL-GRADE EDUCATION

Secondary (Anchor and Community of Teachers Program)

English/Language Arts

Journalism

Languages:

Chinese

French

German

Japanese

Latin

Russian

Spanish

Mathematics

Science:

Chemistry

Earth-space science

Life science—biology

Physical science

Physics

Social Studies—select three subjects:

Economics

Geographical perspectives

Government and citizenship

Historical perspectives

Psychology

Sociology

All-Grade

Visual arts

For music education, see pp. 64 and 66. For physical education teacher education, see p. 54.



SCHOOL OF HEALTH, PHYSICAL EDUCATION, AND RECREATION (HPER)

www.hper.indiana.edu

The school's first graduates in physical and health education received degrees in 1926. The current organizational structure was established in 1946. Throughout its history, the school has enjoyed a significant national reputation. The school is now composed of the Department of Applied Health Science, the Department of Kinesiology, the Department of Recreation and Park Administration, and the Division of Recreational Sports. A close relationship is also maintained with the Department of Athletics, to assure excellent preparation of athletic coaches and trainers.

APPLIED HEALTH SCIENCE MAJORS

Dietetics

Health education—secondary teacher preparation Human development/Family studies Nutrition science Public health education Safety Management

APPLIED HEALTH SCIENCE ADMISSION REQUIREMENTS

All majors require students to complete 26 credits before admission. The minimum overall entrance GPAs for the majors are as follows: GPA of 2.5 for dietetics, nutrition science, human development/family studies, and health education—secondary teacher preparation; GPA of 2.3 for public health education and safety management.

FRESHMAN YEAR COURSE WORK

Applied Health Science

During the freshman year students usually complete the following:

☐ English composition
☐ Mathematics course (not required for some majors
see below)
☐ Verbal communications
☐ Computer course (not required for hazard control)
☐ General education courses
☐ Major course(s)
☐ Elective course(s)

■ English Composition

ENG-W 131

■ Mathematics Course

See major description below. Choose course from list. Not required for the health—secondary teacher preparation major or for the Associate of Science degree and Certificate in Safety Management.

■ Verbal Communications Course

CMCL-C 121 (Majors in dietetics may substitute C 223; majors in nutrition science may substitute C 122 or C 223.)

■ *Computer Course*

Choose a course from computer course(s) listed under the individual majors below.

■ General Education Course

See major descriptions for course recommendations.

■ *Major Course(s)*

See the following major descriptions for course recommendations.

■ *Elective Course(s)*

See your advisor.

Dietetics Major

This four-year program leads to the degree Bachelor of Science in Applied Health Science with an emphasis on the role of nutrition in health promotion and disease prevention and treatment in clinical and community settings. Students learn to apply principles of nutrition, food science, and food management in advancing health promotion. There is a 2.5 cumulative GPA entrance requirement. The curriculum meets American Dietetic Association (ADA) Didactic Program in Dietetics approval.

Recommended courses for the first year for students considering a major: CHEM-C 117, CMCL-C 121, PSY-P 101, SOC-S 100, MATH-M 118 or MATH-A 118 (*or* D 116-D 117 for eligible students) *or* MATH M 119, and one computer course from HPER-P 200, HPER-R 237, CSCI-A 110, BUS-K 201, EDUC-W 200.

Health Education—Secondary Teacher Preparation

This four-year program leads to a provisional teaching certificate and the degree Bachelor of Science in Applied Health Science with an emphasis in secondary health education. There is a 2.5 cumulative GPA entrance requirement.

Recommended courses for the first year for students considering a major: HPER-H 160, HPER-H 205, HPER-H 263, HPER-F 255, HPER-H 174, EDUC-W 201 (1 cr.), EDUC-G 203, CMCL-C 121, any SOC course, a humanities course. (See advisor.)

Human Development/Family Studies Major

This four-year program leads to the degree Bachelor of Science in Applied Health Science with an emphasis in the study of the growth and development of human beings throughout the life span, including how family members interact and the roles they assume. There is a 2.5 cumulative GPA entrance requirement.

Recommended courses for the first year for students considering a major: HPER-F 150, HPER-F 255, HPER-F 258, BIOL-L 104, MATH-M 118 (*or* D 116-D 117 if eligible) *or* M 119, PSY-P 101, PSY-P 102, SOC-S 100, one computer course from HPER-P 200, HPER-R 237, CSCI-A 110, BUS-K 201, EDUC-W 200, a humanities or social and behavioral science course. (See p. 56.)

Nutrition Science Major

This four-year program leads to the degree Bachelor of Science in Applied Health Science with an integration of the basic and applied principles of nutrition and related sciences. The curriculum can serve as a route toward medical or dental school. There is a 2.5 cumulative GPA entrance requirement.

Recommended courses for the first year for students considering a major: CLAS-C 209, CHEM-C 117, CMCL-C 121, MATH-M 119 or M 211, PSY-P 101, CSCI-A 110, a social and behavioral science course. (See p. 56.)

Public Health Education Major

This four-year program leads to the degree Bachelor of Science in Applied Health Science with emphasis in promoting the health of the general public. With this background, students can learn to direct and implement programs in community, occupational, and clinical settings. There is a 2.3 cumulative GPA entrance requirement.

Recommended courses for the first year for students considering a major: HPER-H 205, HPER-H 263, BIOL-L 100, CHEM-C 101, C 103, or C 117, one math course from MATH-M 118 or MATH-A 118 (or D 116-D 117 if eligible) or M 119, and one computer course from: HPER-P 200, HPER-R 237, CSCI-A 110, BUS-K 201, EDUC-W 200. Students may also choose courses from anthropology, economics, human geography, history, political science, psychology, sociology, or health electives.

Safety Management Major

This four-year program leads to the degree Bachelor of Science in Applied Health Science with an emphasis in behavioral safety and hazard control in the workplace. There is a 2.3 cumulative GPA entrance requirement.

Recommended courses for the first year for students considering a major: HPER-S 101, HPER-S 151, one math course from MATH-M 118 (or D 116-D 117 if eligible) or M 119, PSY-P 101, one computer course from HPER-P 200, HPER-R 237, CSCI-A 110, BUS-K 201,

EDUC-W 200 (K 201 recommended for students who want a business minor), a social and behavioral science course. (See p. 56.)

Safety Management Programs

CERTIFICATE IN SAFETY MANAGEMENT This one-year certificate is designed for students interested in safety and hazard control in business and industry. Students may earn this certificate while completing another major at IU or independently.

See your advisor for course recommendations.

ASSOCIATE OF SCIENCE DEGREE IN SAFETY MANAGEMENT

This two-year program to prepare entry-level specialists builds on the one-year certificate program and provides a professional background for students interested in pursuing a baccalaureate degree in safety.

Recommended courses for the first year: HPER-S 101, HPER-S 151, CHEM-C 101-C 121 or C 103 or C 117, PSY-P 101.

KINESIOLOGY MAJORS

Athletic training—teaching and nonteaching Exercise science
Fitness specialist
Physical education teacher education (PETE)
Sport communication—broadcast and print
Sport marketing and management

See your advisor for information about the following kinesiology minors and the Martial Arts Certificate Program: dance, coaching, exercise science, kinesiology, and sport marketing and management. Watch for information soon about a fitness specialist minor or certificate.

KINESIOLOGY ADMISSION REQUIREMENTS

See below for the entrance GPA and course requirements for entrance to majors.

FRESHMAN YEAR COURSE WORK

Kinesiology

☐ English composition course(s)
☐ Verbal communications course
☐ Mathematics course
☐ Computer course
☐ General education courses
☐ Major course(s)
☐ Elective course(s)

■ English Composition

ENG-W 131 or W 170

■ Verbal Communications

CMCL-C 121 (Sport communication majors may substitute C 122. Both C 121 and C 122 are required for sport marketing and management majors.)

■ *Mathematics Course*

See each major description for course recommendations.

■ Computer Course

See each major description for recommendations.

■ General Education

See each major description for course recommendations.

■ Major

See each major description for course recommendations.

■ Elective Courses

See your advisor.

Athletic Training Major

The four- and five-year programs lead to the Bachelor of Science in Kinesiology with a major in athletic training. The five-year program incorporates a teaching degree in physical education combined with the athletic training major. The athletic training curriculum prepares the student to sit for the National Athletic Trainers' Association Board of Certification (NATABOC) examination. Additionally, the program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

The number of admissions to the professional athletic training program is necessarily limited to the number of practicum spaces available. A student desiring entrance into the program is eligible for consideration under the following conditions:

- 1. Formal application by April 1 including a) three letters of recommendation; b) biographical sketch; c) completion of Athletic Training Application (available in HPER 115); and d) completion of the Technical Standards of Admissions to Athletic Training form.
- 2. Interview with the Athletic Training Admissions Committee.
- 3. Completion of H 160 and P 280 with a B or higher.
- 4. Completion of A 215 with a C or higher.
- 5. Minimum university CGPA of 2.50 or higher.

The five-year program requires admission to the Physical Education Teacher Education Program (PETE). See description of that program (p. 54) for PETE admission requirements.

Admission to the undergraduate Athletic Training Program is determined by the following criteria: overall GPA and grade in the three required courses (35 percent), letters of recommendation (20 percent) and interview (45 percent). A selection committee that includes at least one National Athletic Trainers' Association Board of Certification (NATABOC) certified member determines admission to the program. Students satisfying the conditions stated above are not guaranteed positions in the program.

Teaching option—recommended courses for the first year for students considering a major: HPER-H 160, HPER-P 140-P 141, HPER-P 200, HPER-P 219, HPER-P 224, HPER-P 280, ANAT-A 215, PSY-P 101, courses chosen from humanities or social and behavioral sciences.

Nonteaching option—recommended courses for the first year for students considering a major: HPER-H 160, HPER-P 212, HPER-P 219, HPER-P 224, HPER-P 280, CHEM-C 101-C 121, SOC-S100, ANAT-A 215, a computer course (HPER-P 200 or CSCI-A 110 or BUS-K 201), a humanities or social and behavioral sciences course. (See p. 56.)

Exercise Science Major

This four-year program leads to the Bachelor of Science in Kinesiology. Students may enter the major after completing 26 credit hours with a 2.0 or higher cumulative grade point average.

The exercise science major is for students interested in pursuing a graduate degree in some area related to human movement or exercise science. It offers students excellent preparation for graduate work in adapted physical education, biomechanics, ergonomics, exercise physiology, motor control, and sports medicine. In addition, the exercise science curriculum allows for preparation for professional education in chiropractic, dentistry, medicine, physical and occupational therapy, optometry, osteopathy, podiatry, and in physician's assistant programs and other health fields.

Recommended courses for the first year for students considering a major: HPER-E 119, HPER-P 212, HPER-P 280, CHEM-C 101-C 121 or C 117, MATH-M 118 and M 119, ANAT-A 215 or HPER-P 205, ANTH-A 105 or E 105, PSY-P 101, SOC-S 100 or S 101; one computer course from CSCI-A 110, HPER-P 200, BUS-K 201.

Fitness Specialist Major

The fitness specialist major prepares students for entry-level employment with corporate and community fitness programs, health clubs, YMCAs, and similar fitness-related organizations. This major helps students prepare to complete various fitness certifications including the American College of Sports Medicine

(ACSM) Health Fitness Instructor (HFI) Certification

Recommended courses for the first year for students considering a major: HPER-P 205, P 212, P 216, P 280, T 142, CHEM-C 101-C 121 or C 117, MATH-M 118 or M 119, PSY-P 101, SOC-S 100 or SOC-S 101; one computer course from CSCI-A 110, HPER-P 200, BUS-K 201.

Physical Education Teacher Education (PETE) Major

This four-year program leads to a provisional teaching certificate and the Bachelor of Science in Kinesiology. Certification is for grades K–12. Students seeking an undergraduate degree in Physical Education Teacher Education (All-Grade Teaching License) must be admitted to both the Department of Kinesiology Physical Education Teacher Education program and to the School of Education Teacher Education Program. Usually, students apply for admission to the PETE program during the spring of the freshman year and to the School of Education Teacher Education Program before the end of the sophomore year.

Students seeking admission to the Physical Education Teacher Education (PETE) Program in the Department of Kinesiology are eligible for consideration under the following conditions:

- 1. Completion of 26 credit hours of college course work that counts toward graduation.
- 2. Cumulative GPA of 2.5 or higher.
- 3. Completion of the following prerequisite courses with a minimum grade of C (2.0) in each course: a. HPER-P 140 Foundations of Physical Education
 - b. HPER-P 141 Fundamentals of Human Movement
- 4. Formal application to the program, including:
 - a. Submission of a completed application form to the dean's office by March 1 for summer/fall admission and by November 1 for spring admission
 - b. Successful completion of HPER-P 140 and P 141
 - c. Three letters of recommendation
 - d. Personal interview

Recommended courses for students considering a major: HPER-P 140-P 141, HPER-P 200, HPER-P 205, HPER-P 216, HPER-P 219, HPER-P 280, MATH-M 118 (or option). You may also choose humanities and social and behavioral science courses. (See advisor.)

Sport Communication Major

Students may complete a four-year program with either a broadcast or a print emphasis in conjunction with the Department of Telecommunications or the School of Journalism, respectively.

A minimum of 26 credit hours and a cumulative entrance grade point average of 2.5 are required for admission to the Sport Communication—Broadcast and Print emphases. For the print emphasis, application to the School of Journalism should be completed during the freshman year in order to be eligible to register for advanced journalism courses.

Recommended courses for students considering a major: HPER-P 212, HPER-P 280 or H 160, MATH-M 118 (D 116-D 117 if eligible) or M 119, SOC-S 100 or S 101, PSY-P 101, humanities courses, one social and behavioral science course, a computer course (CSCI-A 110 or HPER-P 200), JOUR-J 110 (print emphasis) or TEL-T 101 (broadcast emphasis). See your advisor for other options. Students seeking the print emphasis need to complete one semester of foreign language (or establish proficiency) and complete all journalism admission prerequisite courses.

Sport Marketing and Management Major

This four-year interdisciplinary program focuses on interest in marketing and management as applied to the sport enterprise and leads to the degree Bachelor of Science in Kinesiology. Admission is competitive, and the number of admissions to the sport marketing and management program is limited. Between 40 and 50 students per year will be accepted.

Students seeking admission are eligible for consideration under the following conditions:

- Completion of 40 credit hours of college course work that counts toward graduation. This course work may be completed at Indiana University or at another accredited institution offering comparable course work. Generally, students apply mid-sophomore year.
- Successful completion of the following five prerequisite courses:
 BUS-A 201 or A 202 (P: A 100)
 BUS-L 201 (P: Sophomore standing)
 ECON-E 201 or E 202
 HPER-P 211
 MATH-M 118 (or both D 116-D 117) or M 119

For purposes of admission, the *average* of the grades earned in the prerequisite courses will be used to compute the GPA. For repeated courses, the highest grade will be used in the computation of the prerequisite average GPA.

3. Submission of an application by the required deadline. Undergraduates are admitted to the Sport Marketing and Management Program *twice* each year. The application deadline for admission is December 1 for spring semester and May 1 for fall semester admission. Students will be notified of

admission status no later than February 15 and June 1. Grades for all prerequisite course work must be on the student's university transcript by the end of fall or spring semester. Applications are available at the School of Health, Physical Education, and Recreation, Records Office, Room 115.

4. Participation in the Sport Marketing and Management Orientation Program. After receiving an offer of admission, students are required to attend an orientation program at a time specified in the offer. Failure to attend this orientation program may cause the offer of admission to be withdrawn.

Applications are reviewed on an individual basis. Admission will be based upon the applicant's GPA (both prerequisite course and cumulative GPA), but other factors will be considered, such as trend in grades, experience in sport activities, sport-related work or volunteer experience, and other relevant skills and experiences.

Recommended courses for students considering the major: HPER-P 211, HPER-P 212, HPER-P 392, MATH-M 118 or M 119, PSY-P 101, SOC-S 100 or alternate, BUS-A 100, BUS-A 201 (P: A 100), humanities course, social and behavioral science course. (See p. 56.) ECON-E 201 is taken by some students in the freshman year. See your advisor for other suggested course work.

RECREATION MAJORS

Outdoor recreation and resource management Park and recreation management Recreational sport management Therapeutic recreation Tourism management

See your advisor for information about recreation minors and the Underwater Resource Management Certificate Program.

RECREATION ADMISSION REQUIREMENTS

Applicants to the department are eligible for consideration under the following conditions:

- 1. All applicants must have successfully completed at least 26 credit hours of college work.
- 2. A minimum cumulative GPA of 2.0 for students majoring in Park and Recreation Management, Recreational Sport Management, and Tourism Management. A minimum cumulative GPA of 2.3 for students majoring in Outdoor Recreation and Resource Management and Therapeutic Recreation.

FRESHMAN YEAR COURSE WORK

Recreation Majors

During the freshman year students usually complete the following:

☐ English composition course(s)
☐ Verbal communication course
☐ Mathematics course (if needed as preparation for
statistics)
☐ Additional general education courses
☐ Major course
☐ Electives
- 4.4.6

■ English Composition

ENG-W 131

■ Verbal Communication

CMCL-C 121 or C 122

■ *Mathematics*

Your advisor will help you decide whether you need a mathematics course in order to prepare for the statistics course you will take later.

■ Additional General Education Courses

Social and behavioral sciences: SOC-S 100, PSY-P 101, PSY-P 102 (*P: P 101*), and possibly courses from history or political science.

Humanities: One course (See p. 56).

Life and physical sciences (5 credit hours): Therapeutic recreation majors should complete CHEM-C 101-C 121.

■ Major Course

HPER-R 160

■ *Elective Course(s)*

Electives vary by program. See your advisor.

RECREATION MAJORS

Outdoor Recreation and Resource Management Major

The focus of the outdoor recreation and resource management major is to educate the student about outdoor recreation resources and their users, as well as to provide knowledge and skills required for the profession. Topical areas covered include outdoor recreation, environmental ethics, interpretive techniques, outdoor adventure education, outdoor leadership, nature study, recreational resource management, and organized camping.

Competencies are developed for career positions such as park naturalist, outdoor education coordinator, outdoor program developer, camp program planner, and adventure leader.

Park and Recreation Management Major

The park and recreation management option prepares students for management, supervisory, and leadership positions in park and recreation programs operating at the private, commercial, municipal, county, regional, state, and federal levels. Typical job responsibilities include management of fees and other finances, hiring of personnel, long-range planning, promotion, and operation of park and recreation facilities.

Recreational Sport Management Major

The recreational sport management option prepares students to assume direct leadership, supervision, and management positions in participatory sports. The focus is on the management of people and resources in the recreational rather than the athletic context. Graduates with this option assume sport specialist positions in city recreation and park agencies, business and industrial corporations, YMCAs, colleges and universities, sport and fitness centers, the armed forces, youth-serving agencies, and other facilities.

Therapeutic Recreation Major

Therapeutic recreation is an allied health profession concerned with the treatment of disabling conditions as well as the promotion of health and the facilitation of an optimal quality of life. It uses recreation and leisure experiences as means of intervention with persons of all ages who experience emotional, mental, or physical problems. Completion of the program enables graduates to be eligible to sit for the certification examination of the National Council for Therapeutic Recreation Certification.

Tourism Management Major

The tourism management option prepares students to enter one of the world's most diverse and largest industries. Tourism is the business of attracting and catering to the needs and expectations of visitors. Although the tourism industry includes transportation, travel brokers, and food and housing, students in this program focus on the marketing and management of tourist attractions and destinations. These include government tourism divisions, resort areas, convention centers, theme parks, visitor centers, and conference hotels.

HUMANITIES, SOCIAL AND BEHAVIORAL SCIENCES, AND LIFE AND PHYSICAL SCIENCES

All HPER majors whose general education requirements allow course work from humanities, social and behavioral science, or life and physical sciences may select courses from the following schools, departments, or programs:

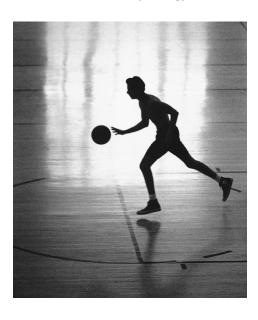
Humanities: African American and African Diaspora Studies, American Sign Language, Central Eurasian Studies, Classical Studies, College of Arts and Sciences Topics E 103 courses (credit allowed for only one topic), Communication and Culture, Comparative Literature, East Asian Languages and Cultures, English, Fine Arts, Folklore, French and Italian, Germanic Studies, HPER—R 160 only, India Studies, Jewish Studies, Journalism, Linguistics, Music (no applied courses), Near Eastern Languages and Cultures, Philosophy, Religious Studies, Slavic Languages and Literatures, Spanish and Portuguese, Telecommunications, Theatre and Drama

Social and Behavioral Sciences: Anthropology, College of Arts and Sciences Topics E 104 courses (credit allowed for only one topic), Criminal Justice, Economics, Geography (human and regional), History, Political Science, Psychology, Sociology

Life and Physical Sciences: Anatomy and Physiology, Astronomy, Biology, Chemistry, College of Arts and Sciences Topics E 105 courses (credit allowed for only one topic), Computer Science, Geography (physical), Geological Sciences, Mathematics, Physics

Also allowed in "Life and Physical Sciences":

COLL-J 113 Introduction to College Mathematics III HPER-H 263 Personal Health HPER-P 391 Biomechanics HPER-P 409 Basic Physiology of Exercise



SCHOOL OF INFORMATICS 57

SCHOOL OF INFORMATICS (INFO)

www.informatics.indiana.edu

The School of Informatics is Indiana University's newest school and among the first in the nation designed to give students a fundamental knowledge of information and its technologies that will prepare them to fill the urgent need for information technology (IT) professionals. The school offers a broad education, providing students with the knowledge of a specific subject area chosen by the student coupled with key concepts in informatics and technology and their applications that students will need to excel as IT professionals.

BACHELOR OF SCIENCE IN INFORMATICS

The student majoring in informatics is required to take 33 credit hours of informatics core courses, 6 credit hours of informatics electives, and 15-21 credit hours in an informatics-related subject area, referred to as a cognate area. Students must complete specific general education requirements, and successfully complete a senior capstone project.

ADMISSION REQUIREMENTS

To be considered for admission, students must declare an intended major in informatics and pass 26 credit hours of course work with a minimum cumulative GPA of 2.0. The 26 credit hours must include ENG W131 Elementary Composition or equivalent (with a minimum grade of C) or exemption from the English composition requirement; MATH M118 Finite Mathematics or equivalent (with a minimum grade of C); and INFO I101 Introduction to Informatics (with a minimum grade of C).

FRESHMAN YEAR COURSE WORK

During the freshman year, students who are pursuing an informatics major usually take the following courses:

\square English composition course(s)
☐ Mathematics course
☐ Speech requirement course
☐ General education courses
☐ Major courses
□ Electives

■ English Composition

ENG-W 131 (or alternative; see pp. 12-13) with a grade of C or higher

■ Mathematics Course

MATH-M 118, MATH-D 116-MATH-D 117, MATH-A 118, or MATH-S 118 with a grade of C or higher. Some students may need to take MATH-M 014 or

MATH-X 018 as preparation for their mathematics course. No credit toward graduation is awarded for MATH-M 014 or MATH-X 018.

■ Speech Communication Course

CMCL-C 121, or approved substitute, with a grade of C– or higher.

■ General Education Courses

Choose arts and humanities, social and historical studies, or natural science courses. See below for further explanation.

■ Major Courses

INFO-I 101

INFO-I 202 (P: I101)

INFO-I 210 (recommended for students with a strong computing background)

Note: Students who do not have a strong computing background should take CSCI-A 110, CSCI-A 112, or CSCI-A 114 first.

■ Cognate Area Course(s)

Students generally wait until after the freshman year to determine the cognate area. If you have chosen an area already, discuss this with your advisor.

■ *Elective Course(s)*

Students should take no more than two elective courses in their freshman year.

General Education Requirements

Communications Courses

Students must take three communications courses: ENG-W 131, ENG-W 231 (or one intensive writing course at the 200 level or above as defined by the College of Arts and Sciences) and a course in public speaking, such as CMCL-C 121.

Quantitative and Analytical Skills Courses

Students must take MATH-M 118 (or S 118, D 116-D 117, or approved substitute), and one statistics/research methods course. M 118 must be successfully completed before statistics. Students may choose from any 300-level statistics course, such as K 300 from MATH, PSY, CJUS, SPEA, or MATH/PSY-K 310 or SOC-S 371, ECON-E 370/S 370, or MATH-M 365.

Arts and Humanities and Social and Historical Studies Courses

Students must take five courses in Arts and Humanities and Social and Historical Studies as defined by the College of Arts and Sciences. Topics courses are eligible but may not be repeated. Students must take two courses in each area. One of the Arts and Humanities courses must be in ethics (PHIL-P 140, REL-R 170, or an approved professional ethics course).

Natural Sciences

Students must take a minimum of 8 credit hours in natural science courses (see p. 15 of the School of Informatics Bulletin for list). One course must have an associated laboratory.

COGNATE AREAS

During the sophomore year, students are encouraged to declare a cognate area. Cognate area courses focus on the technical, psychological, and social aspects of information technology in the student's chosen area of interest. Students should plan to take most cognate area courses in the junior and senior year. For up-to-date information about available cognate areas, please consult the Web (www.informatics.indiana.edu) or phone the School of Informatics at (812) 856-5754.

INFORMATICS ELECTIVES

Informatics electives are typically taken in the junior year. For a detailed list of electives, please consult our Web site: www.informatics.indiana.edu

CAPSTONE EXPERIENCE

In the senior year all informatics majors participate in a two-semester capstone experience, where they complete a senior project providing them with hands-on experience in the design and development of an information system. Examples of course projects include the design and development of a database for a business, the preparation and presentation of an interactive media performance, or the design and implementation of a simulated environment (virtual reality). The capstone requirement may also be fulfilled by performing a project-oriented internship, which must be approved in advance. Only internships that provide experiences similar to the capstone may be accepted.

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

For IUB matriculants in May 2005 and later, the Computer Science B.S. will be awarded through the School of Informatics (subject to final approval of the IUB chancellor). The Computer Science B.A. will continue to be awarded through the College of Arts and Sciences. All degree requirements for the B.S. will remain the same. See pp. 25, 26, and 31.

HEALTH INFORMATION ADMINISTRATION

The health information administration major is not available on the Bloomington campus. Students may begin on the Bloomington campus and complete the degree in the School of Informatics at IUPUI.

Health information administrators are skilled in the collection, interpretation, analysis, and protection of patient data and are involved with the design of health information systems. They interact with other health care professionals to interpret data for patient care, research, statistical reporting, and planning. Graduates of the program serve as directors, managers, consultants, and information security officers in health care settings.

Minimum CGPA required to apply: 2.500.

Recommended courses for the first year: ENG-W 131; choose from PSY-P 101, SOC-S 100, INFO-I 202; INFO-I 101 (13 credit hours of computer science course work required for graduation); CHEM-C 101 (not required but chemistry background is a prerequisite for PHSL-P 215); ANAT-A 215; BUS-A 100; BUS-X 100; MATH M118; humanities elective.



Students register for courses.

SCHOOL OF JOURNALISM (JOUR)

www.journalism.indiana.edu

As you prepare for orientation, visit the Web site (www.journalism.indiana.edu) and select "Academics," then "Undergraduate Advising." On that page see "Advising Notes" for a list of courses that meet requirements.

Indiana University was one of the first state universities to teach journalism, beginning in 1893. A department was established in 1911 and the School of Journalism in 1974. The mission of the baccalaureate program is to help students explore the institutions, procedures, professional skills, and audiences of journalism and mass communication. The school is committed to liberal education in the arts and sciences as well as to professional training in the skills of journalism and mass communication. The school believes that both breadth and depth of learning must characterize the undergraduate experience.

BACHELOR OF ARTS IN JOURNALISM (B.A.J.)

In almost every journalism class, students are taught a combination of knowledge, skills, values, and ethics. The goals of the curriculum are:

- to develop skills in thinking and judgment, in gathering, organizing, and presenting information in words, images, and numbers on paper, on the air, and online;
- to graduate students with both visual and verbal literacy and the flexibility to respond to changing media environments; and
- to promote the professional values of truth, accuracy, and fairness.

Exploration of multiple media skills is a key goal of the three sophomore core courses. In the junior and senior years, students take classes from a wide selection of specialized journalism electives, from areas such as advertising, broadcast news, graphic and online communication, magazines, newspapers, photojournalism, public relations, and journalism education.

Graduates begin with jobs as copywriters, reporters, advertising and public relations account managers, editors, and Web and graphic designers. Some go on to careers as TV news anchors, attorneys, publishers, and upper-level managers in business. Alumni have been associated with media such as CNN, Seventeen, the Chicago Tribune, The Miami Herald, The Washington Post, and National Geographic.

The online newsletter, *Deadline*, contains information on internships and jobs. All journalism students should subscribe at: www.journalism.indiana.edu. Select "Career Resources," then "Deadline."

ADMISSION REQUIREMENTS

To be considered for admission, students must pass 26 credit hours with at least a 2.20 cumulative GPA. The 26 credits must include Journalism J 110 (C or higher), English composition (C or higher), fundamental mathematics (C- or higher; see below), and one semester of a foreign language. The School of Journalism requires that you complete an application for admission. Applications are reviewed May 15, August 20, and December 15.

FRESHMAN YEAR COURSE WORK

During the freshman year, students who are pursuing a journalism major usually complete the following:

☐ English composition course(s)
☐ Mathematics course
☐ Foreign language course(s)
☐ Distribution courses
☐ Culture studies course(s) (often taken later)
☐ Second concentration course (often taken later)
☐ Major course—JOUR-J 110
☐ Electives (optional)

■ English Composition

See pp. 12–13 for options.

■ Mathematics

Choose from MATH-A 025,* M 025,* M 027,* M 118/S 118 (D 116-D 117 if eligible), A 118, M 119, M 211

Students earning math test scores at or above 650 on the SAT exam or at or above 29 on the ACT exam are exempt from the fundamental skills math requirement.

Any of the above courses may be used to fulfill the fundamental skills math requirement. Your advisor will help you finalize your choice based on your major, your background, high school test scores and grades, and your IUB Mathematical Skills Assessment Test score.

Some students may need to take MATH-M 014 (or X 018) as preparation for the fundamental skills math course. No credit toward graduation is awarded for either of these two courses.

*Note: A 025, M 025, and M 027 may be used to fulfill the fundamental skills math requirement, but no credit toward graduation is awarded for any of these courses.

■ Foreign Language Course(s)

If you previously studied the language, the level will be determined by placement exam. Your advisor will help you interpret your score. See the *Planner Course Descriptions* booklet for list of foreign language areas.

Note: Study of a foreign language is required through the fourth term of college-level course for the B.A.J. degree.

■ General Education Distribution Courses

Choose from:

- United States history (HIST-H 105 or H 106; see your advisor for other options)
- American political science (POLS-Y 100 or Y 103; see your advisor for other options)
- Literature or history of art
- Other arts and humanities (A&H)
- Social and historical studies (S&H)
- Natural and mathematical sciences (N&M)
- Culture studies (see your advisor for lists)

See the *Planner Course Descriptions* booklet for distribution designation of arts and humanities (A&H), social and historical studies (S&H), and natural and mathematical sciences (N&M) courses.

Visit our Web site (www.journalism.indiana.edu) and select "Academics," then "Undergraduate Advising" for a list of these courses.

■ Major Course

JOUR J 110

■ Second Concentration

Choose one or two courses if you have chosen an area. Some students wait until after the freshman year to determine the second concentration.

The second concentration is required in addition to the journalism major. Students are required to study in another subject, earning 24 credit hours, or about eight courses, in a College of Arts and Sciences department or another school at IUB.

Telecommunications cannot be used for this second concentration. If you know what subject you want for this requirement, you may begin courses your freshman year. See your advisor for further explanation.

■ *Elective Course(s)*

The School of Journalism allows a limited number of electives in your program and recommends that you limit electives taken during the freshman year. If you plan to take electives, you may want to consider some 1 or 2 credit hour courses to help "round out" your schedule.

DIVISION OF LABOR STUDIES

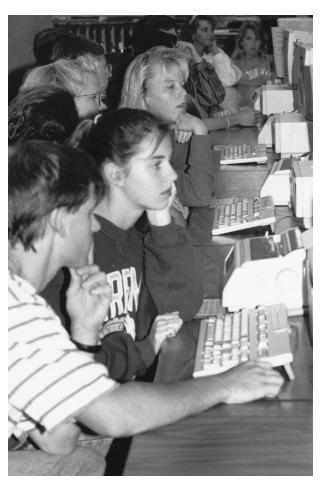
www.labor.iu.edu

Through the Division of Labor Studies, Indiana University offers a Certificate in Labor Studies, a minor in labor studies, an Associate of Science in Labor Studies, and a Bachelor of Science in Labor Studies.

LABOR STUDIES (LSTU)

The labor studies major deals with work, the workplace, and workers and their organizations. It advances a body of knowledge that reflects the concerns of modern labor organizations. As a program, labor studies enables participants to serve more effectively as members and leaders in their organizations. Because union leaders need to be familiar with economics, communications, and other subjects, labor studies can assist them in mastering a broad range of learning.

Recommended courses for the first year for students considering a major: LSTU-L 100, L 101, L 110, L 203. For general education course recommendations, see the labor studies advisor in Poplars 633. We also offer a wide selection of online courses. Please visit our Web site: www.labor.iu.edu.



Students develop computer skills.

SCHOOL OF MEDICINE HEALTH PROFESSIONS PROGRAMS

Degree programs in clinical laboratory science, cytotechnology, medical imaging technology, nuclear medicine technology, paramedic science, radiography, radiation therapy, and respiratory therapy are administered by the School of Medicine under the name "Health Professions Programs." If you have questions about these programs, please call (317) 278-4752 or e-mail askhpp@iupui.edu.

Students interested in health information administration should contact the School of Informatics at IUPUI by phone at (317) 274-1572. Students interested in graduate degrees in occupational therapy and physical therapy must complete a baccalaureate degree before they are eligible for admission to such programs. Further information about those two graduate programs is provided in the preprofessional section of this *University Division Planner* on pages 75–77.

For advising assistance on the IU Bloomington campus, students should contact their freshman advisor or an advisor in the Health Professions and Prelaw Center (HPPLC), Maxwell Hall 010, (812) 855-1873. The center advises students during their prerequisite years in Bloomington and has copies of academic and career information. Students are responsible for reading the School of Medicine section of the IUPUI Bulletin (available at bulletin.iupui.edu) and becoming familiar with its contents pertaining to major(s) of interest.

ADMISSION TO DEGREE PROGRAMS

IU Bloomington students take from one to three years of preparatory course work on the IUB campus to qualify for admission. Students must complete their course work at the IUPUI campus. Related programs are also available at IU Northwest, IU South Bend, IPFW (Fort Wayne), IU Kokomo, and IU Southeast.

For prerequisite courses for these programs at Indiana University in Bloomington, call (812) 855-1873 or send e-mail to udivhpp@indiana.edu. On the Web consult www.indiana.edu/~udivhpp/

Requirements vary widely among the School of Medicine Health Professions Programs. For specific requirements, please refer to the School of Medicine section of the IUPUI Bulletin and the information sheet for each major that is published by University Division's Health Professions and Prelaw Center (HPPLC).

In addition to completion of preprofessional course work, each program has specific cumulative GPA requirements. Students completing preprofessional course requirements are not guaranteed admission to the professional programs because admission to most of the School of Medicine Health Professions Programs is

competitive and limited by the availability of clinical facilities. Prospective students must submit an application for professional programs directly to the School of Medicine. For specific deadline dates, please refer to the School of Medicine section of the IUPUI Bulletin or to specific major requirement sheets that are published by HPPLC.

Associate and baccalaureate degree programs in the School of Medicine may require from one to three years of general education and preparatory courses (prerequisites) followed by one to two years of professional study. All programs require a clinical practice component. Student must earn a C or higher in all stated prerequisite courses.

FRESHMAN YEAR COURSE WORK

During the freshman year students usually complete the following:

☐ English composition course(s)
☐ Verbal communication course
☐ Mathematics course
☐ General education courses
☐ Elective course(s)

■ English Composition

ENG-W 131 or alternate. See pp. 12-13.

■ Verbal Communication

CMCL-C 121 or C 122

■ *Mathematics*

See recommended math course at the end of the major description.

■ General Education Courses

See course lists at the end of each major description. General education includes science courses such as chemistry, anatomy, physiology, biology, and physics.

■ Elective Course(s)

The amount of elective work varies with each major (program) area. Some programs recommend that you take specific courses to complete elective course work.

Following is an alphabetical list of majors along with major descriptions.

A.S. Degrees: Paramedic Science, Radiography

B.S. Degrees: Clinical Laboratory Science, Cytotechnology, Medical Imaging Technology, Nuclear Medicine Technology, Radiation Therapy, Respiratory Therapy

Clinical Laboratory Science

Clinical laboratory scientists sample and analyze blood, fluids, and body tissues to reveal abnormalities. They use sophisticated instruments and must be thoroughly knowledgeable about scientific principles and techniques relating to clinical laboratory medicine.

Minimum CGPA required to apply: 2.500 with a 2.500 GPA in all mathematics and science courses.

Recommended courses for the first year: Choose from PSY-P 101, sociology, or anthropology (see advisor); MATH-M 119 *or* M 211; CHEM-C 117, BIOL-L 112; BIOL-L 113 (second term); ANAT-A 215; useful electives (CSCI-A 110, CLAS-C 209).

Cytotechnology

Cytotechnologists collect, inspect, and evaluate cells to detect cancer and other diseases. One of the primary objectives in this field is to discover cancer early, when the best chances for a complete cure exist.

Minimum GPA required to apply: 2.500 CGPA with a 2.500 GPA in all biology courses.

Recommended courses for the first year: Choose from one humanities course (see advisor); two social and behavioral science courses (see advisor); one course from MATH-M 025, A 025, M 118, M 119 or M 211; CHEM-C 101-C 121 and C 102-C 122 (or C 117 and C 118); BIOL-L 112, L 113; electives (CLAS-C 209, HPER-H 320).

Medical Imaging Technology

Medical imaging technologists carry out advanced imaging procedures. Students must first complete the A.S. in Radiography or be A.R.R.T. certified with a minimum GPA of 2.500 plus additional prerequisites with a minimum GPA of 2.500.

Choose from CLAS-C 209; PSY-P 101 or P 102 (P: P 101); MATH-M 025 or A 025 or M 119; CSCI-A 110, A 201, or BUS-K 201; CHEM-C 101-C 121 *or* C 117; PHYS-P 101 or P 201; ANAT-A 215.

Nuclear Medicine Technology

Nuclear medicine technologists assist physicians when radioactive materials are used to diagnose or treat disease. Nuclear medicine procedures fall into two categories: those performed totally within the patient (in vivo), and those performed on patient specimens in the laboratory (in vitro).

Minimum GPA required to apply: 2.500 CGPA with a 2.500 GPA in all mathematics and science courses.

Recommended courses for the first year: Choose from CLAS-C 209; PSY-P 101; social and behavioral elective

(see your advisor); MATH-M 025 and M 026 or M 025 and M 119 or M 119 and M 120, or M 211; CSCI-A 110 or A 201; CHEM-C 101-C 121, C 102-C 122 (or CHEM C 117, C 118); PHYS-P 101 or P 201; ANAT-A 215.

Radiation Therapy

Radiation therapy technologists treat patients who have benign and malignant tumors by administering the prescribed dose of ionizing radiation to specific sites on the patient's body as directed by a physician.

Minimum GPA required to apply: 2.500 CGPA with a 2.300 GPA in all prerequisite mathematics and science courses and a 2.500 GPA in stated prerequisite courses.

Recommended courses for the first year: Choose courses from the following: Humanities (see advisor); CLAS-C 209; PSY-P 101, P 102 (P: P 101); MATH-M 025 or A 025 and M 026 or M 027 or M 119 or M 211; CSCI-A 110 or A 201 or BUS-K 201; PHYS-P 201 or ANAT-A 215; electives (CHEM-C 101-C 121, HPER-H 220, H 320).

Respiratory Therapy

Respiratory therapists aid in the diagnosis and treatment of a wide range of heart and lung problems. They operate sophisticated equipment that helps patients to breathe, and they instruct patients on various systems and procedures.

Minimum CGPA and mathematics and sciences course GPA required to apply: 2.500.

Recommended courses for the first year: PHIL-P 140 or REL-R 170; PSY-P 101; HPER-F 150 or EDUC-P 314; MATH-M 025 (or A 025) and M 026 or M 025 and M 119 or M 027 or M 211; CSCI-A 110 or A 201 or BUS-K 201; CHEM-C 101-C 121 (or C 117); PHYS-P 201; ANAT-A 215; electives (CLAS-C 209, HPER-H 220, SPEA-H 320).

ADMISSION TO ASSOCIATE DEGREE PROGRAMS

Each candidate for an associate degree must complete course work in basic general education and the professional concentration. Refer to the program of interest in the current IUPUI Bulletin for specific information on admission criteria and an outline of each program's professional curriculum.

Since admission to professional programs in the School of Medicine Health Professions Programs is competitive and limited by the availability of clinical facilities, students completing preprofessional course requirements are not guaranteed admission to professional programs. Applications for professional programs must be submitted to the School of Medicine

Health Professions Programs. For specific deadline dates, students should refer to the current IUPUI Bulletin. Students seeking admission to associate degree programs are reminded that all professional requirements must be completed at the Indianapolis campus.

Paramedic Science

Paramedics manage medical emergencies of acutely ill or injured patients using advanced life support units and ambulance services in pre–hospital care settings. These emergency care professionals provide a variety of advanced life support (ALS) interventions such as emergency medication administration, intravenous therapy, heart monitoring, and artificial respiration for the nonbreathing victim.

Minimum GPA required to apply: 2.300 with a 2.300 in math/science; must be a certified EMT and have 20 hours documented patient care in an ambulance.

Students who are EMT certified should apply to the professional program the fall semester of their freshman year.

Recommended courses for the first year: Choose from PSY-P 101; SOC-S 100; MATH-M 014 or higher level; CSCI-A 110 or A 201 or BUS-K 201; ANAT-A 215, HPER-H 160, PHSL-P 215, electives (CHEM-C 101-C 121 if needed to prepare for required physiology, CLAS-C 209).

Radiography

Radiographers and graduates with a B.S. in Medical Imaging Technology use X rays, sound waves, radio frequencies, and computers to produce photographic images of body structures. These images provide physicians with information vital to the diagnosis and treatment of injuries and illnesses.

Minimum CGPA required to apply: 2.300 CGPA with a 2.300 GPA in all mathematics and science courses and the completion of English composition and college algebra with a minimum grade of C. Students in the Medical Imaging Technology Program must first complete the A.S. in Radiography with a GPA of 2.500.

Students who will complete the math (college algebra) and English (W 131 or equivalent) courses in their freshman year should apply to the professional program in the fall semester of their freshman year.

Recommended courses for the first year: ENG-W 131, CLAS-C 209; one social and behavioral science course; MATH-M 014 or M 025 or M 119 or M 211; ANAT-A 215; electives (PHYS-P 101, MATH-M 025 if student takes M 014 to fulfill math requirement).

SCHOOL OF MUSIC (MUS)

www.music.indiana.edu

The School of Music is one of the leading institutions of its kind. Performance majors have the unique opportunity to combine a high-quality conservatory experience with a college education. Students in all majors have access to an outstanding faculty and a wide choice of majors related to the field of music. The mission of the School of Music is to provide distinguished instruction and outstanding opportunities for performance, research, and teacher training for music majors and non–music majors.

MAJORS

The School of Music offers majors in performance (historical or modern instrument or voice), composition, and jazz studies leading to the Bachelor of Music (B.M.) degree. It also offers a Bachelor of Music Education (B.M.E.) degree. For this degree, you can be a choral, general, or instrumental major. You can then be certified to teach band, orchestra, chorus, or general music in public schools. Bachelor of Science (B.S.) degrees are offered in ballet, opera scenic design, audio recording, and music with an outside field. This last option provides an opportunity to study music plus another field at the major level (27 credit hours). Associate degrees are offered in recording arts, stagecraft technology, costume construction technology, and string instrument technology.

ADMISSION TO THE SCHOOL OF MUSIC

Most music majors pursuing B.S., B.M., and B.M.E. degrees are accepted directly into the School of Music, not the University Division. This admission follows formal application to the school, a successful audition in a performance area, and completion of orientation and first-semester registration. Students should refer to the Music Undergraduate Office for all academic matters.

Exceptions to this type of admission include students pursuing the B.S. in opera scenic technique, and the A.S. in stagecraft technology, costume construction technology, and string instrument technology.

Some students apply for admission and are accepted to the B.S., B.M., B.M.E., or the A.S. (Recording Arts) while in University Division. Refer to the section with information for students *not accepted* into the School of Music on p. 66.

Information for Students Accepted into the School of Music

Students accepted into the School of Music meet with advisors on a special day during the regular advising and registration program in the summer, or during the week preceding the beginning of classes in the fall or spring term.

During the music orientation, students will have a required informational meeting with the Music Undergraduate Studies advisor, followed by individual advising appointments. Students will take required music placement tests in music theory and secondary piano and also have the opportunity to take university placement tests in mathematics, foreign languages, and other subjects in which they seek to earn advanced placement and credit. During the summer advising and registration program these examinations are given on the day before advising and registration.

Students interested in earning advanced credit in music theory may do so in a series of examinations given only Thursday and Friday before the first week of classes of the fall and spring terms. Schedules for these examinations are posted outside the Music Theory Office (Simon 225).

Credits in music theory earned through the Advanced Placement Program or transferred from other universities must be validated by examinations before they can be used to meet degree requirements.

FRESHMAN YEAR COURSE WORK FOR ACCEPTED MUSIC MAJORS

Accepted music majors usually complete courses from the following:

English composition course(s)
Foreign language (required only for B.M. and B.S.
degree programs)
Ensemble
Performance study
Music theory
Secondary piano
General education
Music education course (for B.M.E. students only)
Speech communication (required only for B.M.E.)

■ *English Composition*

ENG-W 170 (3 cr.) recommended; ENG-W 131 (3 cr.) or other option acceptable. Exemption: see pp. 12–13.

SCHOOL OF MUSIC 65

■ Foreign Language

All music majors except B.M.E. and A.S. students are required to complete two terms (or one term of accelerated study) in a foreign language. Voice students must complete two terms each of French, German, and Italian. This requirement may also be met through an exemption/credit exam or AP credit.

■ Speech Communication

Required only for B.M.E. students. Choose CMCL-C 121 or C 122.

■ Ensemble

All music majors must enroll in ensemble each semester. Ensembles meet for one or two periods daily between 2:30 p.m. and 6:00 p.m. Assignments will be posted during the first week of classes. All instrumental ensembles are X 040 (2 cr.); all choral ensembles (for voice, piano, and guitar students) are X 070 (2 cr.); ballet is X 030 (2 cr.); early music is X 060 (2 cr.).

■ Performance Study

All music majors except those in ballet, recording arts, and A.S. degrees should enroll for performance (private applied music lessons). Credit hours of performance study depend on your degree: B.M.—performance—6 cr.; B.M.E., B.S., B.M.—composition—2 cr.; B.M.—voice or B.M.—jazz—3 cr.

■ Music Theory

If you have passed the Basic Musicianship Test (BMT) (70 percent), enroll in T 151. If you did not pass the test, but achieved a score between 50 and 68, register for both T 109 and T 151. If you had a score below 50, take T 109 only.

■ Secondary Piano

All students except those whose primary instrument is piano, guitar, organ, or harpsichord must take class piano until the keyboard proficiency is passed.

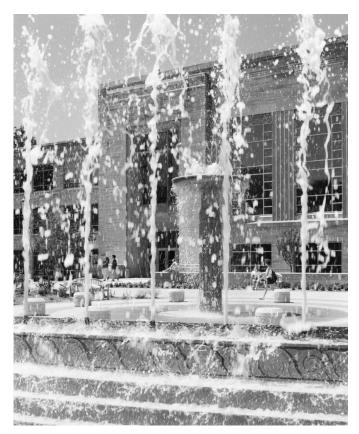
■ General Education

Choose from courses designated N&M, S&H, or A&H in the *Planner Course Descriptions* booklet.

B.S. with an Outside Field: If you would like to explore some possible areas for your outside field, you can do this through your general education courses.

■ *Music Education Course (for B.M.E. students only)*

You may enroll in MUS-E 131 Introduction to Music Education (2 cr.). Consult your advisor regarding appropriate courses.



Music Library, North Jordan Avenue

Possible First-Term Plans for Accepted Music Majors

B.M.—PERFORMANCE—INSTRUMENT OR VOICE

Instrumental ensemble MUS-X 040 (2 cr.) *or* Choral ensemble MUS-X 070 (2 cr.)

Performance lessons, instrumental (6 cr.), or voice (3 cr.) Music theory (3-6 cr.)

Class piano MUS-P 111 (2 cr.)—except guitar, organ, harpsichord, and piano majors

English composition (3 cr.)

Foreign language or additional general education course if space permits

TOTAL 16-19 cr.

COMPOSITION

B.M. composition students take only 2 credit hours of performance lessons and should take MUS-K 400 Composition Lessons and K 133 Notation and Calligraphy.

JAZZ STUDIES

B.M. jazz studies students take only 3 credit hours of performance lessons and should take M 395 Jazz.

B.M.E.—INSTRUMENTAL OR CHORAL/GENERAL

Instrumental ensemble MUS-X 040 (2 cr.) *or* Choral ensemble MUS-X 070 (2 cr.)

Performance lessons (2 cr.)

Music theory (3-6 cr.)

Class piano MUS-P 111 (2 cr.)—except guitar, piano, harpsichord, and organ majors

E 131 Introduction to Music Education (2 cr.)

English composition (3 cr.)

General education course if space permits (3 cr.)

TOTAL 18 cr.

B.S.—OUTSIDE FIELD—VOICE OR INSTRUMENT

Instrumental ensemble MUS-X 040 (2 cr.) *or* Choral ensemble MUS-X 070 (2 cr.)

Performance lessons (2 cr.)

Music theory (3-6 cr.)

Class piano MUS-P 111 (2 cr.)—except for guitar, piano, harpsichord, and organ majors

English composition (3 cr.)

Foreign language or course to explore outside field (3-4 cr.)

TOTAL 16-19 cr.

B.S.—RECORDING ARTS

MUS-X 090, MUS-A 101, A 111, A 150 English Composition (3 cr.) Minor Course

B.S.—BALLET

Ballet ensemble MUS-X 030 (2 cr.) Ballet major MUS-J 400 (6 cr.) Class piano MUS-P 110 (2 cr.) Theatre elective (3 cr.) Foreign language (4 cr.)

TOTAL 17 cr.

Note: Music theory course numbers and credit hours will be determined by performance on the Basic Musicianship Test given before advising.

Information for Students Not Accepted into the School of Music

Most B.M., B.M.E., and B.S. (nontechnical) students who are interested in a music major but have not yet been accepted may begin course work for the major while in the University Division.

ADMISSION TO THE SCHOOL OF MUSIC FROM THE UNIVERSITY DIVISION

Admission is very competitive. Students must apply to the School of Music and arrange for a fall audition for spring semester admission. Auditions scheduled for January are too late for spring admission. For more information concerning admission and the application, contact the Music Admissions Office, Merrill Hall 101, (812) 855-7998.

FRESHMAN YEAR COURSE WORK

Non-Admitted Music Interest

During the freshman year, students who plan to apply for the B.M., B.M.E., or B.S. (not audio recording or opera scenic technique) should choose from the following:

English composition course(s)
Foreign language (required only for B.M. and B.S.
degree programs)
Speech communication (required only for B.M.E.
degree program)
Ensemble
Performance study
Music theory
Secondary piano
General education
Music education course (for B.M.E. students only)

■ English Composition

See pp. 12–13 for options.

SCHOOL OF MUSIC 67

■ Foreign Language

All music majors except B.M.E. and A.S. students are required to complete two terms of foreign language. Voice students must complete two terms each of French, German, and Italian. This requirement may also be met through an exemption/credit exam or AP credit.

■ *Speech Communication*

Required only for B.M.E. students. Choose CMCL-C 121 or C 122.

■ Ensemble

Consult the *Planner Course Descriptions* booklet regarding ensemble choices and auditions.

Choral Ensemble Music X 070 Instrumental Ensemble X 040 Ballet Ensemble X 030 Marching Hundred X 050

■ *Performance Study*

Select MUS-Z 110 music performance course corresponding to your interest from the Private Performance Lessons listed under "Music" in the *Planner Course Descriptions* booklet.

■ Music Theory

Music theory course selections should match students' backgrounds:

- a. If you have an excellent background in music theory, register for T 151 (3 cr.), the first core music theory course.
- b. If you have an average background in music theory, register for both T 151 and T 109 Rudiments of Music (3-3 cr.).
- c. If you have a deficient background in music theory, register for T 109 (3 cr.).
- d. Take the Basic Musicianship Test during the week preceding the start of classes. If your test score does not place you into the music theory course that you have chosen, you will then adjust your schedule to include the music theory course(s) appropriate to your background.

Test scores: 70 or above: You are exempt from T 109; take T 151. 50-68: Take both T 109 and T 151. Below 50: Take only T 109.

Note: MUS-T 151 is offered only in the fall semester.

■ Piano

If you are a non–music major, and your main instrument is something other than piano, organ, or guitar, you should register for MUS-P 110. This is a beginning class. If you wish to investigate more advanced classes, take the secondary piano placement examination during the orientation preceding the fall or spring semester. The schedule is available from the secondary piano coordinator, Music Annex 283.

■ General Education

Choose from courses designated S&H, N&M, or A&H in the *Planner Course Descriptions* booklet.

■ *Music Education (for B.M.E. students only)*

Students interested in music education may take MUS-E 131 Introduction to Music Education (2 cr.) during the first or second semester.

Information for Students Interested in the B.S. or the A.S. in Recording Arts

Admission to the B.S. or A.S. Degree Program

Admission for University Division students into the A.S. or B.S. Degree Program in the Recording Arts is generally quite competitive. Students seeking admission from University Division should follow the School of Music admission procedures, submit applications by December 1, and interview on audition weekends in the spring. Admitted students will begin the program in the following fall semester. For more information, see www.music.indiana.edu/department/audio/admission.shtml.



Summer band concert at the School of Music.

FRESHMAN YEAR COURSE WORK Recording Arts

During the first year, students who are interested in being admitted to the Audio Recording Program (B.S. or A.S.) usually complete the following:

☐ English composition course
☐ Foreign language (required for audio recording
only)
☐ Core music courses
☐ Audio course
☐ General education courses

■ English Composition

See pp. 11–12 for options. Students choosing ENG-W 131 or W 170 may decide to postpone this course until the second semester.

■ Foreign Language

Required only for the B.S. These students need two semesters for graduation (or one semester of accelerated study).

■ Core Music Courses

MUS-Z 101 and Z 111 (MUS-T 151 may be substituted for the two courses.)

See information about T 109 in music theory section above. Some students will need to take T 109 before or with T 151.

■ Audio Course

MUS-A 101

■ General Education Courses

Choose from PHYS-P 105, some other course for an area of interest in an outside concentration (B.S.) or a bachelor's degree in another area (A.S.), or a distribution area course (A&H, S&H, or N&M).

OTHER TECHNICAL MUSIC DEGREES

For information regarding admission and degree requirements for the B.S. in Opera Scenic Technique and A.S. in Stagecraft Technology, Costume Construction Technology, and String Instrument Technology, contact the School of Music.



SCHOOL OF NURSING 69

SCHOOL OF NURSING

www.indiana.edu/~iubnurse

Founded in 1914, the IU School of Nursing is among the largest nursing schools in the country and offers associate through doctoral degrees. It offers various programs at eight campuses—Bloomington, Gary, Indianapolis (including the Columbus center), Kokomo, Richmond, South Bend, and New Albany—that prepare beginning professional nurses who are competent in meeting the health needs of society. The Bachelor of Science (B.S.N.) program is available in Bloomington.

BACCALAUREATE CURRICULUM

The course work of the four-year B.S.N. degree is divided into three categories: general education, the nursing core, and electives. The general education category is further divided into five distinct clusters: critical/analytical/science, communication, social competence, cultural diversity, and humanistic appreciation. To complete the degree, students typically take one year of general education courses followed by three years of nursing core courses mixed with their remaining general education and elective courses.

ADMISSION REQUIREMENTS

Admission is highly competitive, based on grades in 29–31 credit hours of pre-nursing courses. All courses counting toward admission must have a grade of C+ or higher. The credits used toward admission must include English composition, PSY-P 101 or P 102 (or P 151 or P 152) Introductory Psychology, SOC-S 100 (or S 101), Introduction to Sociology, and a minimum of 8 credit hours within the critical/analytical/science cluster, including one course in anatomy. While finite math and a cultural diversity cluster course are not specifically required in the 29–31 admission credit hours, students must take both before applying to the nursing major, and a grade of C+ or higher must be earned in both courses. Applicants must have at least a 2.5 cumulative GPA. A 2.7 GPA in the 29–31 credit hours of pre-nursing admission courses is also required. A grade of C+ or higher must be earned in all specifically required courses by the second completed attempt. Course repeats are limited to a total of three specifically required courses and/or 11 credit hours. Students typically apply for admission to the major during the spring term of the freshman year.

Note: Students are expected to have completed at least two semesters of high school chemistry with a grade of C or higher. Students who have not successfully completed chemistry in high school are required to take a semester of college chemistry (CHEM-C 100 or C 101) before admission.

FRESHMAN YEAR COURSE WORK

During the freshman year, students who are pursuing a nursing major usually complete the following:

☐ English composition course(s)
☐ Anatomy (physiology or microbiology if anatomy
is unavailable)
☐ MATH-M 118, A 118, or D 116–D 117 Finite
Mathematics
☐ At least one critical/analytical/science course
(not from anatomy, physiology, or microbiology)
☐ PSY-P 101 or P 102 Introductory Psychology
(or P 151 or P 152)
☐ SOC-S 100 Introduction to Sociology or SOC-S 103
☐ A cultural diversity course
☐ Additional general education course(s)

■ English Composition

ENG-W 131 or alternate. (See pp. 12-13 for options.)

Note: The two-semester composition option may prevent a student from meeting the 29 credit hour minimum required for admission. Please consult an advisor.

■ Anatomy, Physiology, or Microbiology

ANAT-A 215 is required. However, if students are unable to register for anatomy, they may use PHSL-P 215 or BIOL-M 200-M 215 in its place. Students who take BIOL-M 200-M 215 must ensure that they earn at least 8 credits within the critical/analytical/science cluster—see "Admission Requirements."

■ *Finite Mathematics*

MATH-M 118, A 118, or D 116-D 117

■ At Least One Critical/Analytical/Science Course in Addition to Anatomy

Students who have not completed two semesters of high school chemistry with a grade of C or higher must take college chemistry (CHEM-C 100 or C 101).

Finite math and/or chemistry may be counted toward the critical/analytical/science cluster. Or students may also choose a course from the critical/analytical/science cluster course list.

■ Introduction to Psychology

PSY-P 101, or P 102 (P: P 101), or P 151 or P 152

■ Introduction to Sociology

SOC-S 100 or S 101

■ Additional General Education Distribution Courses

A cultural diversity course is required for application. Students may choose additional courses from critical/analytical/science, communication, social competence, cultural diversity, and/or humanistic appreciation. See your advisor or consult the School of Nursing Web site (www.indiana.edu/~iubnurse) for a list of distribution courses.

NURSING CORE

Only students admitted to the B.S.N. major are eligible to take the 19 courses within the nursing core.

SCHOOL OF OPTOMETRY

www.opt.indiana.edu

The Indiana University School of Optometry has achieved national recognition for its preeminence in optometric education. The school provides space for classrooms, laboratories, clinics, a library, offices, and supporting research and development activities.

Students seeking admission to the School of Optometry in order to pursue a Doctor of Optometry degree (O.D.) may be admitted upon receipt of a baccalaureate degree or at the end of 90 college credit hours. For additional information on the preprofessional requirements for admission, see the "Preprofessional Studies" section, p. 76.

Optician/Technician Program

The IU School of Optometry also offers a two-year program in optometric technology leading to the Associate of Science degree. Students completing the program are qualified to begin careers as optometric technicians or opticians. This study offers an excellent entry point into one of the most interesting areas in the health care field.

This program takes four semesters to complete if the student has not taken any college courses. The general nontechnical courses, such as English composition, may be completed either before or after the technical courses. An additional option allows a student to become a laboratory optician by completing courses in lens surfacing and fabrication (Optician's Laboratory Concentration).

For additional information, visit the Optician/ Technician Program Web page: www.opt.indiana.edu/ programs/opttech/opttech.htm

Or contact the School of Optometry:

800 E. Atwater Avenue Bloomington, IN 47405 E-mail: iubopt@indiana.edu Phone: (812) 855-1917

Fax: (812) 855-4389

Career Information for the Optician and the Optometric Technician

Opticians fill eyewear prescriptions. Their training includes dispensing eyewear, selecting frames, taking facial measurements, and choosing the best lens style for the patient. They take the order written by an eye doctor, produce the lenses with the correct prescription, and shape the lenses to fit the frame.

Optometric technicians must know how to select, adjust, and dispense eyewear. They learn business procedures and may be responsible for managing an office. Generally, they work closely with an eye doctor as part of an eye care team. Tasks include testing and measuring visual acuity, color vision, depth perception, field of vision, and pressures within the eye. Optometric technicians assist in various contact lens procedures, and also teach contact lens patients to insert, remove, and care for their contact lenses.

ADMISSION REQUIREMENTS

In addition to applying for admission to IUB, you need to complete a separate application to the Optician/ Technician Program. There are no prerequisites other than a high school diploma, although most entrants into the program have already taken college courses. You can obtain an application from the Office of Student Administration in the School of Optometry or download and print a copy of the application from the school's Web page under "Admissions."

Curriculum for Students Already Accepted into the Program

First Semester (16 credit hours)

TOPT-V 111 Basic Optics (5 cr.)

TOPT-V 151 Ophthalmic Procedures 1 (4 cr.)

TOPT-V 174 Office Procedures (4 cr.)

TOPT-V 201 Anatomy and Physiology of the Eye (3 cr.)

Second Semester (16 credit hours)

TOPT-V 121 Ophthalmic Lens Finishing (4 cr.)

TOPT-V 131 Ophthalmic Optics (5 cr.)

TOPT-V 153 Ophthalmic Dispensing (4 cr.)

TOPT-V 251 Ophthalmic Procedures 2 (3 cr.)

Courses That Can Be Taken Before Admission That Meet Requirements for the Program

ENG-W 131 Elementary Composition (3 cr.) HPER-H 160 First Aid and Emergency Care (3 cr.)

TOPT-V 153 Ophthalmic Dispensing (4 cr.)

TOPT-V 201 Anatomy and Physiology of the Eye (3 cr.)

SCHOOL OF PUBLIC AND ENVIRONMENTAL AFFAIRS (SPEA)

www.indiana.edu/~speaweb

SPEA is among the three top schools of public affairs in the United States and is number one among public universities. It is widely known for innovative educational programs, research, and public service.

A Bachelor of Science in Public Affairs (B.S.P.A.), a Bachelor of Science in Public Health (B.S.P.H.), or a Bachelor of Science in Environmental Science (B.S.E.S.) equips students with the concepts to understand, and the skills to do something about, complex social and environmental issues. SPEA graduates can "make a world of difference."

SPEA provides its students with a wide range of services, such as academic advising, career planning, internships in public and private organizations (including in Washington, D.C.), and opportunities to study overseas.

ADMISSION REQUIREMENTS (B.S.P.A. OR B.S.P.H.)

Admission to the School of Public and Environmental Affairs is competitive. To be considered for admission to the B.S.P.A. or B.S.P.H. degree programs, students must complete at least 26 credit hours, and no more than 75 credits. Students should have completed an introductory SPEA course (V 160, V 161, E 162, or E 272) with a grade of C or higher. Admissions decisions are based, in part, on students' cumulative GPA, grade trends, class standing, and SPEA GPA. Application deadlines are December 1 for spring admission and May 1 for fall admission.



School of Public and Environmental Affairs, Tenth Street

FRESHMAN YEAR COURSE WORK

Public Affairs or Public Health

During the freshman year, students who are pursuing a major in public affairs or public health usually complete the following:

☐ English composition course(s)
☐ Mathematics course
☐ Computer course (or during sophomore year)
☐ Major course—SPEA-V 160
☐ Speech communication (freshman year or later)
☐ General education courses
□ Electives

■ English Composition Course(s)

C- or higher. See pp. 12-13 for options.

■ *Mathematics Courses*

Choose one course from MATH-M 118, D 116 and D 117, MATH-A 118, MATH-M 119, or M 211.

Your advisor will help you finalize your choice based on your major, background, high school test scores and grades, and IUB Mathematical Skills Assessment Test score.

Note: Some students may need to take MATH-M 014, M 025 and/or M 026, M 027, or X 018 as preparation for a higher-level course. No credit is awarded for any of these courses toward graduation.

■ Computer Course

Choose from SPEA-V 261, BUS-K 201, CSCI-A 110, or CSCI-A 201 (credit given for only one of these courses).

Your advisor will help you decide whether it is better to wait until later to take this course.

■ Statistics

One of the following statistics courses: SPEA/CJUS/MATH/PSY-K 300, ECON-E 370, MATH/PSY-K 310, SOC-S 371

■ Speech Communication Course

Choose from BUS-X 104 or CMCL-C 121, C 122, C 200-level course (tell your advisor if you have a substantial background in debate), and either THTR T 115 or T 120. Discuss with your advisor whether you should take this in your freshman year or later. (For complete listing of courses, see your advisor.)

■ Additional General Education Courses

Choose from the following:

Public Affairs: One course from HIST-H 105, HIST-H 106, and POLS-Y 103. Course(s) from arts and humanities, social and historical studies, and/or

natural sciences. See "Public Affairs Course Work" below for appropriate courses.

Public Health: Arts and humanities, social sciences, natural sciences. See "Health Administration Course Work" on p. 73 for appropriate courses.

■ *Major Course(s)*

Public Affairs: SPEA-V 160, SPEA-V 161, E 162, or E 272 (required for environmental management majors)

Public Health: SPEA-V 160

■ *Elective Course(s)*

Both the public affairs and public health degree programs allow approximately 30 elective credit hours for graduation. The B.S.E.S. program allows few electives. See your advisor.

Public Affairs Major

The B.S. in Public Affairs degree combines many courses in the general categories of finance (How are public roads, schools, and prisons paid for?), management (How can we increase efficiency in public and private sector organizations?), public law (Who makes the rules and regulations, and what is the process?), policy studies (How are public policy decisions made?), and environmental management (What can we as individuals and as a society do to protect and improve the environment?).

Students interested in public affairs focus on one of the following majors: environmental management, legal studies, management, policy analysis, public financial management, or public or nonprofit management.

PUBLIC AFFAIRS COURSE WORK

Arts and Humanities (two approved courses, minimum 6 credits, are needed for graduation). Choose courses from the following departments only and ask your advisor how SPEA counts the courses that interest you.

Note: Any foreign language or literature course is approved for arts and humanities for SPEA.

African American and African Diaspora Studies
American Studies
Central Eurasian Studies
Classical Studies
College of Arts and Sciences Topics E 103
Communication and Culture
Comparative Literature
English
Fine Arts
Folklore and Ethnomusicology
Foreign languages and literatures
History and Philosophy of Science

Musicology and music history

Philosophy Religious Studies Theatre and Drama

Social and Historical Studies (five courses, minimum 15 credits, are needed for graduation).

ECON-E 201 and E 202 One of HIST-H 105, H 106, or POLS-Y 103

Two additional approved courses. Choose courses from the following departments only and ask your advisor how SPEA counts the courses that interest you.

Anthropology College of Arts and Sciences Topics E 104 Criminal Justice Gender Studies Geography (G 110, G 120) History

Journalism
Linguistics
Political Science
Psychology (not P 101 or P 151)
Sociology

Telecommunications

Natural Sciences (two courses, minimum 6 credits, are needed for graduation). Choose from the following only:

Astronomy: AST-A 100, A 105, or A 110 Biology: BIOL-L 100, L 104, L 111, L 112, L 113, L 212, L 350, L 369

Chemistry: CHEM-C 101/C 121, C 102, C 122, C 103, C 117, C 118

Earth sciences: GEOG-G 107, G 109, G 185, G 208, GEOL-G 103, G 104, G 105, G 111, G 112, G 114, G 116, G 121, G171

Physics: PHYS-P 101, P 110 or P 120, P 201, P 202, P 221, P 222

Psychology: P 101 or P 151

College of Arts and Sciences Topics E 105 (approved sections only)

Public Affairs Core (Five courses)

SPEA-V 160 National and International Policy (3 cr.) SPEA-V 161 Urban Problems and Solutions (3 cr.) SPEA-E 162 Environment and People (3 cr.) or E 272 Introduction to Environmental Sciences (3 cr.)* SPEA-V 372 Government Finance and Budgets (3 cr.) SPEA-V 376 Law and Public Policy (3 cr.)

*Environmental management majors are required to take SPEA-E 272, not E 162. Additional credit hours in major—refer to SPEA Bulletin.

Public Health Major

The B.S. in Public Health degree program explores much of the same subject matter as the public affairs program, also enabling the student to focus specifically on concepts and skills of management and policy in the health sector. The Bloomington campus offers the health administration major.

HEALTH ADMINISTRATION COURSE WORK

Arts and Humanities (one approved course, minimum 3 credits, needed for graduation)

Choose one approved arts and humanities course for the B.S. in Public Affairs.

Social Sciences (four courses, minimum 12 credits, needed for graduation)

ECON-E 201, E 202, and POLS-Y 103

Choose one approved course from anthropology, geography, journalism, linguistics, political science, psychology, sociology

Natural Sciences (two courses, 6-10 credits from the following, needed for graduation (chemistry lecture and lab count as one course)

Choose from ANAT-A 215, BIOL-L 100, L 104, L 112, L 212, L 302, CHEM-C 101/C 121, C 102/C 122, C 103, C 117, C 118, MSCI-M 131 (medical sciences), PHSL-P 215

Public Health Core (Six courses)

SPEA-V 160 National and International Policy (3 cr.) SPEA-H 316 Environmental Health (3 cr.) SPEA-H 320 Health Systems Administration (3 cr.) SPEA-V 366 Managing Behavior in Public Organizations (3 cr.) HPER-H 311 Human Diseases and Epidemiology (3 cr.)

HPER-C 403 Techniques in Public Health Education (3 cr.)

Additional credit hours in major—refer to SPEA Bulletin.

FRESHMAN YEAR COURSE WORK FOR THE B.S. IN ENVIRONMENTAL SCIENCE

The B.S. in Environmental Science (B.S.E.S.) stresses a strong background in scientific and mathematical skills to prepare students to work toward solutions to the world's complex environmental problems. Students interested in an applied science degree in the environmental area are advised to pursue this degree, which is a joint degree with the College of Arts and Sciences.

A specific B.S.E.S. major concentration area is usually declared during the first year in consultation with Bruce Douglas, the program director. Students receive a joint degree from the College and SPEA in one of the following areas:

Atmospheric science Ecosystem science General environmental science Hydrology and water resources Mathematical modeling Pollution control technology and remediation Surficial processes

While course requirements vary among concentrations, all students should consider taking the following for the first year. See your advisor for assistance in determining the correct courses:

English composition (if not exempt)	
College of Arts and Sciences Topics I	E 103

☐ Chemistry (see your advisor)

☐ BIOL-L 111

☐ Foreign language (if not exempt)

☐ MATH-M 211 (or appropriate preparatory course)

☐ Introductory course from a physical science (e.g., geography, geological sciences)



Students relax between classes at Ballantine Hall.

SCHOOL OF SOCIAL WORK

socialwork.iu.edu

Indiana University has a long history of providing preparation for social work practice. The first courses in this area were offered in 1911. The organizational status changed many times until 1977, when the School of Social Work was organized to reflect identification with the profession more clearly. Although the school's main location is in Indianapolis, courses or programs are offered on other IU campuses. Graduates move into a broad variety of social service settings, including those concerned with aging, family and child welfare, corrections, mental and physical health, and adjustment in schools. In addition, persons receiving the bachelor's degree who are admitted to the master's program may be given advanced standing in that program. Both the Bachelor of Social Work and the Master of Social Work are accredited by the Council on Social Work Education (CSWE).

The School of Social Work offers a major leading to the Bachelor of Social Work degree (B.S.W.). All four years of the Bachelor of Social Work program are available on the Bloomington campus.

ADMISSION REQUIREMENTS

To be considered for admission, students need to have completed Social Work S 141 with a grade of C or higher and 12 credit hours of course work with a minimum cumulative GPA of 2.5. Meeting the minimum GPA requirement does not guarantee admission into the B.S.W. program. The average GPA of admitted students is substantially higher.

The school requires evidence of characteristics or potential required for competent social work practice as defined in the mission statement of the school. Such evidence may be derived from application materials, letters of reference, pertinent work experience, and performance in S 141.

Students submit an application by April 1 for priority consideration for the following fall admission. Applications are available at the School of Social Work office (1127 Atwater Avenue). To increase the cultural diversity in the student body, the school particularly encourages applications from members of ethnic minorities.

FRESHMAN YEAR COURSE WORK

During the freshman year, students who are pursuing a
major in the School of Social Work usually complete the
following:

English composition course(s)
Mathematics course (taken by some but not all
students)

☐ Computer course
☐ General education courses
☐ Major courses
☐ Electives

■ English Composition

ENG-W 131 is recommended for the first semester. If you strongly prefer to take another option, discuss this possibility with your advisor. You will need to ask for permission from the School of Social Work to have a different option fulfill the requirement. For exemption information, see pp. 12–13.

■ *Mathematics*

The school recommends that you take a statistics course in your junior or senior year, as statistics is required for admission to most M.S.W. programs. You may want or need to take a mathematics course in preparation for statistics. If so, choose from MATH-M 014, M 025, M 118/S 118, M 119, M 211, or MATH-A 118. Most mathematics courses can be used to fulfill a mathematical and physical sciences requirement.

Your advisor will help you finalize your decision based on your high school background, high school test scores and grades, and the Mathematical Skills Assessment test.

■ Computer Course

CSCI-A 110 or A 201

■ General Education

Choose courses from: ANTH-E 105, POLS-Y 103, PSY-P 101, SOC-S 100, HIST-H 106.

Either SOC-S 100 or PSY-P 101 is usually taken first semester. You can also choose from foreign language, arts and humanities (see the *Planner Course Descriptions* booklet for A&H courses), and mathematics and physical sciences (see your advisor). If you plan to take statistics in the future, you are not required to complete another mathematics and physical sciences course.

■ Major Courses

SWK-S 100 and S 141. S 141 is usually taken in the second semester since completion of English composition and either PSY-P 101 or SOC-S 100 is highly recommended before SWK-S 141.

■ *Electives*

You may want to consider some 1 or 2 credit electives to help round out your schedule.

PREPROFESSIONAL STUDIES: HEALTH PROFESSIONS AND PRELAW CENTER

www.indiana.edu/~udivhpp

The mission of the Health Professions and Prelaw Center (HPPLC) is to help Bloomington students become thoughtful, well-prepared applicants for professional school in the areas of health and law and to provide advising from the freshman through the senior year. The advisors at the center can help students become informed and competitive applicants to professional schools. For more information, see the Web site (www.indiana.edu/~udivhpp) or contact HPPLC at (812) 855-1873.

Undergraduate students do not major in dentistry, law, medicine, optometry, or occupational or physical therapy. Training beyond the undergraduate degree, at IU or other institutions, is required. You will need to prepare systematically throughout your undergraduate years.

IU does not offer professional programs in veterinary medicine or pharmacy, but you may prepare for admission to another school's program in either area by completing prerequisite course work at IUB. Ask your freshman advisor for the HPPLC materials that interest you.

If you are interested in pre-health profession study or prelaw study, you are encouraged to participate regularly in group meetings or individual appointments with advisors at the Health Professions and Prelaw Center. To further assist you, the center maintains a reference library of materials describing the scope of the health and legal professions, admission requirements and standards, curricula, and costs of professional schools. Applications for entrance examinations are also available, as are materials to assist in preparation for these exams.

The center maintains a recommendation service and provides evaluation forms acceptable to all professional schools. Through this service letters of recommendation may be compiled and disseminated.

Requirements for IU professional schools offering medicine, dentistry, optometry, and occupational and physical therapy degrees are noted below, as well as requirements for Purdue University's School of Pharmacy and Pharmacal Sciences and School of Veterinary Medicine. See an advisor in HPPLC for information about requirements for admission to other schools. All programs require that courses be passed with letter grades (Pass/Fail not accepted).

Predental Study

For admission to the IU School of Dentistry, a student must have earned a minimum of 90 credit hours.

Students must have completed the following predental requirements:

- 1 semester of English composition (W 131)¹
- 1 semester of introductory psychology (P 101)¹
- 2 semesters of biology or zoology (L 111, L 112, and L 113)¹
- 2 semesters of chemistry (C 117 and C 118) or (C 117 and N 330)
- 2 semesters of general physics (P 201 and P 202)¹
- 1 semester of organic chemistry (C 341 and C 343)¹
- 1 semester of anatomy (A 215)
- 1 semester of physiology (P 215 or P 431)
- 1 semester of biochemistry lecture (BIOL-M 350 or CHEM-C 483 or CHEM-C 484)

All science requirements except biochemistry and physiology must include a laboratory. Courses in three-dimensional art (e.g., ceramics, jewelry, design), genetics, histology, molecular biology, cell biology, and introduction to business administration or personal finance are recommended, but not required, in the predental curriculum. Special credit by testing out of predental requirements will be accepted by the IU School of Dentistry if adequate documentation is provided.

Preferential consideration is given to those with overall and science grade point averages of 3.0 or higher.

Prelaw Study

Law schools seek applicants who have gained, through their undergraduate experiences, precision in written and oral expression, an understanding of history, a familiarity with scientific method, and an appreciation of social, political, and economic problems of society. No single course of prelegal study can supply these elements for all students, and they may be combined in varying proportions. Students are encouraged to meet with a prelaw advisor in HPPLC during the freshman year to discuss their interests.

Most law schools require a B.A., B.S., or equivalent degree from an accredited undergraduate institution, but do not require particular subjects or any special course of study in the undergraduate program. Admissions committees typically consider narrow collegiate specialization undesirable, particularly if the area of undergraduate study provides solely vocational training. There are no preferred majors.

Premedical Study

The modern world is complex, and physicians care for people from a wide range of social, economic, and cultural backgrounds. The faculty of IU's School of

¹ See an advisor for appropriate alternatives.

Medicine, like many medical school faculties, requires applicants for admission to include in their undergraduate study a minimum number of science courses. It also expects successful applicants to complete a significant number of courses in the humanities and social and historical studies to gain a better understanding of contemporary society, human experience, and their future patients' backgrounds, problems, and illnesses.

Nearly all of the applicants admitted to the IU School of Medicine have at least a baccalaureate degree before beginning medical school.

Any major from the traditional arts and sciences curriculum is acceptable, as well as some others. Premedical students must complete lecture and laboratory work at the science major's level in the following areas:¹

- 8-10 credit hours of general chemistry (C 117 and C 118) or (C 117 and N 330)²
- 8-10 credit hours of organic chemistry (C 341, C 342, and C 343)²
- 8-10 credit hours of physics (P 201 and P 202)²
- 8-10 credit hours of biological sciences (L 111, L 112, and L 113) 2

Medical school applicants are expected to speak and write the English language correctly. The IU Admissions Committee encourages highly qualified students to enroll in undergraduate honors courses in any area of study.

Pre-Occupational Therapy Study

Occupational therapy (OT) is skilled intervention that assists individuals to achieve independence in all facets of their lives. OT gives people the necessary "skills for the job of living."

Students entering Indiana University at this time will be eligible to pursue a graduate entry-level master's degree in OT, but they will have to graduate with a baccalaureate (bachelor's) degree before admission to the entry-level master's program. Psychology and biology are among the recommended undergraduate majors for pre-OT students. Students should consult with their academic advisors for appropriate courses and semester sequencing in order to complete prerequisites for admission to the master's degree program. The prerequisites listed are minimums.

Abnormal Psychology (PSY-P 324)	3 cr.
Introduction to Lifespan Development	
(HPER-F 150 or EDUC-P 314)	3 cr.
Human Anatomy with lab (ANAT-A 215)	5 cr.
Human Physiology with lab (PHSL-P 215)	5 cr.
Introductory Statistics (PSY or MATH or	
SPEA-K 300)	3 cr.
Medical Terms from the Greek and Latin	
(CLAS-C 209)	2 cr.

Beginning this fall (2005), eligible students may enter the IU graduate program in occupational therapy. This transition to graduate education is in line with changes mandated by the Accreditation Council for OT Education (ACOTE).

For specific questions regarding the entry-level master's degree in occupational therapy, contact an academic advisor in the Health Professions and Prelaw Center (HPPLC) at (812) 855-1873 or the School of Health and Rehabilitation Sciences enrollment coordinator at (317) 274-7238.

Preoptometry Study

The minimum preparation for admission to the IU School of Optometry is 90 credit hours of college courses. (Last year, approximately 84 percent of admitted students had earned a bachelor's degree.) Courses must include:

4-6 credit hours of calculus (M 211 or M 119-M 120)
10 credit hours of inorganic chemistry (C 117 and C 118)²
10 credit hours of general physics (P 201 and P 202)²
3 credit hours of psychology (including P 101)²
3 credit hours of statistical techniques (K 300 or K 310)²
6 credit hours of animal biology with lab (L 112 and L 113)

6 credit hours of arts and humanities courses²
8 credit hours of foreign language or the equivalent³
3 credit hours of English composition²
5-6 credit hours of organic chemistry (C 341 and C 342 or C 341 and C 343)²

3 credit hours of advanced biology (L 211 or other 200 level or above)²

6 credit hours of social and historical studies² 5 credit hours of microbiology with lab (M 250 and

Intensive writing requirement

M 255)

Changes in pre-optometry requirements are being considered for students entering the Doctor of Optometry program in fall 2006. Please contact the Office of Student Administration at (812) 855-1917 for the most current information.

Students are encouraged in their freshman year to begin meeting with a School of Optometry advisor.

 $^{^{1}}$ Some medical schools require one year of college math or calculus and one year of English. Ask your advisor.

² See an advisor for appropriate alternatives.

³ Students not seeking a bachelor's degree who have completed two or more years of a single foreign language in high school with an average grade of C or higher are exempt from this requirement. Students seeking a degree in the College of Arts and Sciences must complete three or four semesters of foreign language, depending on the degree.

Prepharmacy Study

The following IUB course work is acceptable for application to Purdue University's School of Pharmacy and Pharmacal Sciences.

CHEM-C 117 ²	5 cr.
CHEM-C 118 or CHEM-N 330 ²	3-5 cr.
MATH-M 119-M 120	6 cr.
(MATH-M 211-M 212 may be	
substituted for M 119-M 120.)	(8 cr.)
ENG-W 131 and W 231	6 cr.
(ENG-L 141 and L 142 may be	
substituted for W 131 and W 231.)	(8 cr.)
ANAT-A 215 and PHSL-P 215	10 cr.
BIOL-L 112, L 113, L 211	9 cr.
CHEM-C 341, C 342, C 343	8 cr.
BIOL-M 250-M 255	5 cr.
PHYS-P 201	5 cr.
ECON-E 201	3 cr.

General education electives: Students need to have a minimum of one course from three of five selected areas for graduation (not admission). A list of appropriate courses is available from academic advisors.

Pre-Physical Therapy Study

Physical therapists plan and administer treatment utilizing therapeutic exercise, assistive devices, and physical agents to restore function, relieve pain, and prevent disability following disease, injury, or loss of a part of the body.

Indiana University offers the Doctor of Physical Therapy (D.P.T.) degree on the IUPUI campus. Prior to entering the D.P.T. Program, students must have completed requirements for their baccalaureate degree and the following prerequisite courses. Students should consult with their academic advisors for appropriate courses and semester sequence in order to complete prerequisites. Listed credit hours are minimums.

Humanities/Social Sciences ¹	6 cr.
Introductory Statistics: PSY or SPEA K300	3 cr.
Human Anatomy (one course with lab): ²	
ANAT-A 215	5 cr.
Human Physiology (one course with lab): ²	
PHSL-P 215	5 cr.

Chemistry (two courses with lab): ² CHEM-	
C 117 and C 118	8 cr.
Physics (two courses with lab): ² PHYS-P201	
and P 202	8 cr.
Introductory Psychology: PSY-P 101	3 cr.
Human Lifespan Development: HPER-F 150	3 cr.

Students must demonstrate proficiency in medical terminology prior to entering the professional program. They will also need to be competent writers and demonstrate computer literacy including e-mail, the Internet, database searches, and spreadsheet and word processing capabilities.

Minimum GPA required to apply: 3.2 CGPA with a 3.2 GPA in required anatomy, physiology, chemistry, physics, and statistics courses. For more information see www.dpt.indiana.edu and www.indiana.edu/~udivhpp.

Preveterinary Study

Below are acceptable IU courses that fulfill requirements of 70-73 credit hours for application to Purdue University's School of Veterinary Medicine. Since only a few students are admitted after two years of college study, it may be advisable to complete the required courses over three years. Considerable experience with animals (some in a clinical setting) is also required.

PURDUE REQUIREMENTS	IUB COURSES AND CREDIT HOURS
English composition	W 131 (3 cr.)
Speech	C 121 (3 cr.)
General biology	L 111, L 112, and L 113 (9 cr.)
Microbiology with Lab	BIOL-M 250-255
General chemistry	C 117, C 118 (10 cr.)
Organic chemistry	C 341, C 342, C 343, and C 344
	(10 cr.)
Biological chemistry	C 483 (3 cr.)
	(BIOL-M 350 not acceptable)
Calculus	M 119-M 120 or M 211-M 212
	(6 cr8 cr.)
Physics with lab	P 201-P 202 or P 221-P 222
	(10 cr.)
Genetics with lab	L 311 (P: L 211) and L 319 (6 cr.)
Statistics	K 300 or K 310 (3 cr.)
Humanities	9 credit hours
Animal Nutrition	This course is not offered at
	IUB and will need to be taken
	at another university or online
	from Rutgers University.
Electives	To total 70-73 credit hours
Strongly Recommended Ele	ectives
Macroeconomics	E 202 (P: E 201) (3 cr.)
Business Writing	ENG-W 231 or BUS-X 204
	(3 cr.)

 $^{^{1}\,}$ Two courses such as sociology, anthropology, art, history, or philosophy.

² Level of the anatomy, physiology, chemistry, and physics courses must be appropriate for science majors and must have been completed within seven years of application.

ADVANCED PLACEMENT PROGRAM (AP) TEST INFORMATION

Subject	AP Score	Department or School	Course Credit	Credit Hours Received
Art:		Fine Arts		
History	5		A 101/A 102	(3-3) 6
Studio	3-4		Undistributed ¹	3
	5		Undistributed ¹	5
Biology	4	Biology	E 112	3
6)	5	6)	E 111/E 112	6
Chemistry	4-5	Chemistry	C 117	5
Computer Science:		Computer Science		
A	3-4-5	-	A 201	4
AB	2-3		A 201	4
	4-5		A 201/A 202	(4-4) 8
Economics:		Economics		
Micro	4-5		E 201	3
Macro	4-5		E 202	3
English:		English		
Composition	2			
and Ĺiterature	4-5 ²		L 198 (Literature)	3
Language and				
Composition	4-5 ²			
Environmental Science	4-5	SPEA	E 272	3
Geography:		Geography		
Human Geography	3-5		G 110	3
Government:		Political Science		
American	4-5		Y 103	3
Comparative	4-5		Y 107	3
History:		History		
American	4-5	•	H 105/H 106	(3-3) 6
European	4-5		H 103/H 104	(3-3) 6
World	4-5		W 100	3
French: ³		French/Italian		
Language	3		F 200	3
	4-5		F 200/F 250	6
Literature	3 ⁴		F 200/F 250	6
	4 -5 ⁵		F 200/F 250	6
German: ³	2	Germanic Studies	G 100	4
Language	3		G 200/G 250	(3-3) 6
0 0	46		G 200/G 250	(3-3) 6
	4 ⁶ 5 ⁷		G 200/G 250	(3-3) 6
Latin: ³		Classical Studies		
Vergil	38		L 100/L 150	8
O	4-5		L 200/L 250 & L 309	(3-3-3) 9
Lyric	38		L 100/L 150	8
LVric				

Undistributed indicates that credit is not assigned to a specific course.

Students with AP scores of 4 or 5 are exempted without credit from the first-level English composition course. Students who also earn a score of 660+ on the SAT II Writing Test will receive 2 hours of special credit in W 143.

If you test into the 200 level or above and are a full-time student, 8 hours of credit for 100-level courses are automatically added to your transcript.

Students who continue studying French should take F 300.

Students who continue studying French may skip F 300 and take F 305, F 306, or another 300-level course. Students who continue studying German are exempt from G 300 and should take G 330. No special placement credit is awarded above the G 250 level.

Students who continue studying German are exempt from G 300/G 330 and should take G 400. No special placement credit is awarded above the G 250 level.

¹⁷ credit hours will be given to students who receive a score of 3, but only after they have completed L 305, L 307, or L 308 with a grade of C- or higher.

ADVANCED PLACEMENT PROGRAM (AP) TEST INFORMATION

Subject	AP Score	Department or School	Course Credit	Credit Hours Received
Mathematics:		Mathematics		
Calculus AB	4-5		M 211	4
Calculus BC	4-5		M 211/M 212	(4-4) 8
Statistics	4-5		K 300	3
Music	3	Music	Undistributed ¹	3
	4		Undistributed 1	4
	5		Undistributed ¹	5
Physics:		Physics		
В	4	Ž	P 201	5
	5		P 201/P 202	(5-5) 10
C				
Mechanics	4-5		P 221	5
Electricity and Magnetism	ı 5		P 222	5
Psychology	4-5	Psychology	P 101	3
Spanish: ²		Spanish/Portuguese		
Language	3	1	S 200	3
0 0	4		S 200/S 250	(3-3) 6
	5		S 200/S 250/S 310	(3-3-3) 9
Literature	3		S 200	à ´
	4		S 200/S 250	(3-3) 6
	5		S 200/S 250/S 331	(3-3-3) 9

Undistributed indicates that credit is not assigned to a specific course. If you test into the 200 level or above and are a full-time student, 4 hours of credit for HISP-S 105 will be automatically added to your transcript.



History Professor David Pace meets with new students.

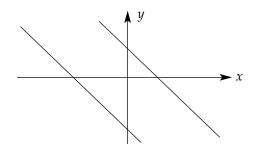
Photography by IU Photographic Services, IU School of Public and Environmental Affairs, Tyagan Miller, Owen Mundy, Annalese Poorman, Evelyn Tracy, and Nancy Webber. Photograph on p. 56 copyright Annalese Poorman. Photo on p. 68 by Tom Stio, courtesy of IU School of Music.

SAMPLE PROBLEMS: MATHEMATICAL SKILLS ASSESSMENT TEST

- 1. $(xy^3)^2 =$ (a) $x^2 y^3$ (b) $x^2 y^6$ (c) $(xy)^6$ (d) $x^2 y^5$ (e) $(xy)^5$
- 2. $\sqrt{3} (\sqrt{3} + 2) =$ (a) $9 + 2\sqrt{3}$ (b) 5 (c) $3 + 2\sqrt{3}$ (d) $\sqrt{3} + 2\sqrt{3}$ (e) 11
- 3. $\frac{x-3}{8} \frac{7}{4} = \frac{5}{8}$ has a solution of (a) 12 (b) -6 (c) 15 (d) 16 (e) 22
- 4. If $x^2 + 2x = 3$, then x could equal (a) -3 (b) -2 (c) -1 (d) 0 (e) 3
- 5. $x^{3}(2x^{-2} + 4x) =$ (a) $2x + 4x^{4}$ (b) $2x^{-6} + 4x^{3}$ (c) $2x^{5} + 4x^{4}$ (d) 2x + 4x (e) $2x^{-5} + 4x^{4}$
- 6. When factored $y^2 7y + 12 =$ (a) y(y-7) + 12 (b) y(y-7) + 5(c) (y+2)(y+6) (d) (y+3)(y+4)(e) (y-3)(y-4)
- 7. $\frac{x}{5y} \div \frac{2x}{3y} =$ (a) $\frac{3}{10}$ (b) $\frac{2x^2}{15y^2}$ (c) $\frac{x}{15y}$ (d) $\frac{10}{3}$ (e) $\frac{x+3y}{2x+5y}$
- 8. $\frac{5}{x} \frac{3}{2y} =$ (a) $\frac{2}{2xy}$ (b) $\frac{2}{x+2y}$ (c) $\frac{10x-3y}{2xy}$ (d) $\frac{5x-6y}{2xy}$ (e) $\frac{10y-3x}{2xy}$
- 9. If $f(x) = \frac{x+3}{5-x}$, then f(a+4) =(a) $\frac{a+7}{1-a}$ (b) $\frac{a+7}{9-a}$ (c) $\frac{38-6a}{5-a}$ (d) $\frac{23-3a}{5-a}$ (e) $\frac{a+7}{5-a}$
- 10. Which are factors of $x^2 3x + 2$?

 (I) x + 1 (II) x 2 (III) x 3(a) I only (b) II only (c) III only (d) I and II only (e) II and III only
- 11. $\frac{8}{4x-16} \cdot \frac{x^2-16}{2x} =$ (a) 1 (b) $\frac{x-4}{x}$ (c) x+4 (d) $\frac{8x^2-16}{4x-32x}$ (e) $\frac{x+4}{x}$

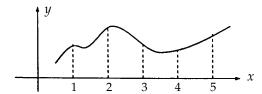
- 12. $32^{(2/5)} + 16^{(1/4)} =$ (a) $48^{(1/10)}$ (b) 4 (c) 6 (d) 8 (e) 84/5
- 13. The two parallel lines represent the graphs of which of the following pair of equations?



- (a) x 2y = 3 and x 2y = 7(b) x + y = 1 and x + y = -2(c) x + y = 3 and 2x + 2y = 6(d) x + y = 3 and x - y = 5
- (e) x y = 7 and x y = 14
- 14. $\left(\frac{u^{2}v^{-3}}{2w}\right)^{-2} =$ (a) $\frac{u^{4}w^{2}}{4v^{6}}$ (b) $\frac{u^{6}}{4v^{6}w^{2}}$ (c) $\frac{4w^{2}v^{6}}{u^{4}}$ (d) $\frac{4u^{4}v^{6}}{w^{2}}$ (e) $\frac{u^{4}v^{6}}{4w^{2}}$
- 15. If a(x + b) = bx c then x = $(a) \frac{ab + c}{a + b} \quad (b) \frac{b + c}{b a} \quad (c) \frac{ab + c}{b a} \quad (d) \frac{b c}{b a}$ $(e) \frac{b + c}{a + b}$
- 16. Let $f(x) = x^2 kx + 1$. If f(2) = 3, then k = (a) -4 (b) -1 (c) 1 (d) 2 (e) 3
- 17. For any x, |x-7| =(a) x-7 (b) |7-x| (c) |x+7| (d) -x-7(e) |-(x+7)|
- 18. If $7^x = 3$ then x =(a) 3/7 (b) 7/3 (c) $\log_3(7)$ (d) $\log_7(3)$ (e) $\log_{10}(3/7)$
- 19. $\log_6 4 + \log_6 9 =$ (a) 2 (b) $\log_6 (13)$ (c) 13/6 (d) 78
 (e) $\log_6 (4/9)$

SAMPLE PROBLEMS: MATHEMATICAL SKILLS ASSESSMENT TEST, CONTINUED

20. Definition: A function is increasing on the interval [a, b] if and only if $f(x_1) < f(x_2)$ whenever $x_1 < x_2$, where x_1 and x_2 are any numbers in [a, b].



The function *f*, pictured in the graph above is increasing on the interval

- (a) [1, 2] (b) [2, 3] (c) [3, 4]
- (d) [4, 5]
- (e) none of these

21. Given a rectangle with sides of length *x* and width y. Suppose the length x is doubled and the width yis halved. The new perimeter is

- (b) (2x)(y/2)(a) 4x + y(c) 2x + (y/2)
- (d) $x^2 + y$ (e) $x^2 + (y/2)$

ANSWERS TO SAMPLE PROBLEMS

- 1. (b) 2. (c) 3. (e) 4. (a) 5. (a) 6. (e)
- 7. (a) 8. (e) 9. (a) 10. (b) 11. (e)
- 12. (c) 13. (b) 14. (c) 15. (c) 16. (c)
- 17. (b) 18. (d) 19. (a) 20. (d) 21. (a)

SAMPLE PROBLEMS: CALCULUS ADVANCED PLACEMENT EXAM

- 1. $\lim_{x \to 1} \frac{7x^2 9x + 2}{-2x^3 + x^2 + x} =$
- $2. \lim_{\theta \to 0} \frac{\theta \tan \theta}{\sin^2 \theta} =$
- 3. $\frac{d}{dx} \left[\sqrt{x^4 + 1} + \ln(x^2 + 1) \right] =$
- 4. Let $f(x) = x/(x^2 + 2)$. Find the intervals on which f(x)is increasing. Find the intervals on which f(x) is decreasing.
- 5. Let $f(x) = x(\ln x \sqrt{x})$. Find the inflection points of f(x).
- 6. The radius of a spherical balloon is changing at a rate of -1.25 inches per second. Find the rate of change in the volume at the moment that the volume is 288π cubic inches.
- 7. The height, *h*, of a rectangle is related to its base, *b*, by $h = b^3 - 4b^2 + 4b$. Find the value of b which will give the largest rectangular area.
- 8. $\int x \sec^2(x^2 + 5) dx =$
- 9. $\int \frac{e^{\sqrt{x}}}{\sqrt{x}} dx =$
- 10. $\int_{-2}^{-2} \frac{1}{2x+1} dx =$

- 11. $\int_{1}^{2} \frac{t}{(2t-1)^3} dt =$
- 12. Find the area of the region enclosed by the curves $y = x^2 + 4$ and x + y = 6.
- 13. Find the volume of the solid obtained by revolving the region enclosed by the curves y = x + 3 and $y = x^2 + 1$ about the x-axis.
- 14. If y is given by $dy/dx = -4xy^2$ and y = 1/4 when x = 0, find y when $x = \sqrt{2}$.

ANSWERS TO SAMPLE PROBLEMS

- 1. -5/3 2. 1 3. $\frac{2x^3}{\sqrt{x^4+1}} + \frac{2x}{x^2+1}$
- 4. f(x) is increasing for $-\sqrt{2} < x < \sqrt{2}$; f(x) is decreasing for $x < -\sqrt{2}$ and for $x > \sqrt{2}$.
- 5. x = 16/9 6. $-180\pi in^3/sec$ 7. b = 1
- 8. $(1/2) \tan(x^2 + 5) + C$ 9. $2e^{\sqrt{x}} + C$ 10. $\ln(\sqrt{3/5})$
- 11. 5/18 12. 9/2 13. $117\pi/5$ 14. y = 1/8

Web Sites of Interest to IUB Students

Student Support

Academic Advising—University Division www.iub.edu/~udiv

Academic Support Center www.indiana.edu/~acadsupp/ ASChome.shtml

Admissions www.admit.indiana.edu

Bureau of Evaluation Studies and Testing www.indiana.edu/~best

Bursar www.indiana.edu/~blbursar

Career Development Center (CDC) www.indiana.edu/~career

Center for English Language Training iep.indiana.edu

Counseling and Psychological Services (CAPS)

www.indiana.edu/~caps

Dean of Students www.dsa.indiana.edu/dos.html

Disability Services for Students www.dsa.indiana.edu/dss.html

Exploratory Student Resources— University Division www.iub.edu/~udiv/html/explore.html

Health Professions and Prelaw Information Center www.indiana.edu/~udivhpp

Hoosier Help (H20) www.h2o.iub.edu

Indiana University— Bloomington campus www.iub.edu International Admissions www.admit.indiana.edu/ international/welcome

International Services
www.indiana.edu/~intlserv

Orientation Programs www.indiana.edu/~orient

Overseas Study www.indiana.edu/~overseas

Registrar www.indiana.edu/~registra

Student Financial Assistance www.iub.edu/~sfa

Student Academic Center www.indiana.edu/~sac

Student Advocates www.dsa.indiana.edu/adv.html

Academic Units

College of Arts and Sciences www.indiana.edu/~college

Kelley School of Business www.bus.indiana.edu

Continuing Studies
www.indiana.edu/~scs

Education www.education.indiana.edu

Health, Physical Education, and Recreation www.hper.indiana.edu

Informaticswww.informatics.indiana.edu/
academics

Journalism www.journalism.indiana.edu

Labor Studies www.labor.iu.edu

Medicine Health Professions Programs msa.iusm.iu.edu/hpp

Music www.music.indiana.edu

Nursing www.indiana.edu/~iubnurse

Optometry www.opt.indiana.edu

Public and Environmental Affairs www.indiana.edu/~speaweb

Social Work www.socialwork.iu.edu