### IBS Integrated Biomedical Sciences

**#IBS 601 BIOMOLECULES AND METABOLISM.** (3)  
An introductory graduate-level biochemistry course designed to provide a basic knowledge of molecular and biochemical principles necessary for advanced graduate study. Protein structure and function, enzyme catalysis, the generation and storage of metabolic energy, amino acid, nucleotide, and lipid metabolism and biological membranes and transport will be covered. Prereq: CHE 105, 107, 230 and 232; BIO 150 and 152; or equivalents. (Same as BCH 607.)

**#IBS 602 BIOMOLECULES AND MOLECULAR BIOLOGY.** (3)  
An introductory graduate-level biochemistry course focused on the cellular mechanisms that underlie the regulated expression of genes, including transcription and translation, as well as basic mechanisms of DNA replication/repair and recombination. Genetic engineering and other experimental approaches critical to molecular biology research will be reviewed. Prereq: CHE 105, 107, 230 and 232; BIO 150 and 152; or equivalents. (Same as BCH 608.)

**#IBS 603 CELL BIOLOGY.** (3)  
An introduction to cell biology and signaling focused on cell types and architecture, membrane structure, cytoskeletons, mitochondria, cellular mechanisms of development, cell division, cell cycle, apoptosis and prokaryotic cell biology and modulation by bacterial pathogens. Prereq: CHE 105, 107, 230 and 232; BIO 150, 152; or equivalents.

**#IBS 604 CELL SIGNALING.** (3)  
An introductory course on cell biology and signaling focused on inter- and intracellular communication, from the generation of signaling molecules to cellular responses, including transcriptional regulation. Examination of cellular and molecular techniques important to understanding key advances in cell signaling will be included. Prereq: CHE 105, 107, 230 and 232; BIO 150 and 152; or equivalents.

**#IBS 605 EXPERIMENTAL GENETICS.** (2)  
An introductory genetics course designed to expose first-year graduate students to contemporary methods and concepts of genetic analysis. Where possible, model systems will be presented as paradigms to illustrate important concepts. Prereq: CHE 105, 107, 230 and 232; BIO 150 and 152; or equivalents. (Same as MI 604.)

**#IBS 606 INTEGRATED BIOMEDICAL SCIENCES.** (4)  
Consideration of the function of the mammalian organism from a perspective ranging from the cellular/sub-cellular to the organ system and whole organ designed to allow students in the IBS curriculum to develop a truly integrative appreciation of biologic function. Prereq: IBS 601, 603 and 605.

**#IBS 607 SEMINAR IN INTEGRATED BIOMEDICAL SCIENCES.** (0)  
Weekly seminar devoted to the presentation and discussion of classic and new research. May be repeated to a maximum of four times; two semesters are required as part of the IBS curriculum. Prereq: Admission to IBS curriculum.

**#IBS 609 RESEARCH IN INTEGRATED BIOMEDICAL SCIENCES.** (1)  
Individualized laboratory and research experience under the supervision of a faculty member. May be repeated to a maximum of two credit hours. Two semesters required as part of IBS curriculum. Prereq: Admission to IBS curriculum and consent of instructor.

### INF Informatics

**#INF 401G INFORMATICS FUNDAMENTALS.** (3)  
An introduction to the fundamentals of informatics for students in a broad array of disciplines. Fundamentals of computer science, including programming, operating systems, database management, and networking will be covered. Not accepted as credit towards a degree in computer science. Prereq: Junior standing.

**INF 520 BIOINFORMATICS.** (3)  
An introduction to computer analysis of macromolecular structure information. This course describes how to access, process, and interpret structural information regarding biological macromolecules as a guide to experiments in biology. Prereq: BIO 315 or BIO 304 or BCH 401 or BCH 501 or BCH 502 or BIO 510 or consent of instructor. (Same as BIO 520.)

### ISC Integrated Strategic Communication

**#ISC 161 INTRODUCTION TO INTEGRATED STRATEGIC COMMUNICATION.** (3)  
An introductory course in all phases of integrated strategic communication and its role in contemporary business and society. Includes an historical and socio cultural overview of advertising, public relations, sales promotion and direct response marketing as well as an exploration of their interrelationships. Covers strategic planning for integrated communication, message approaches and their foundations in theories of persuasion and information processing, and characteristics of message delivery systems. Provides a discussion of ethics and regulation, and the economic and social impact of the industries.

**ISC 261 STRATEGIC PLANNING AND WRITING.** (3)  
Introduces students to the systematic planning processes and techniques of creative and persuasive message preparation for integrated strategic communication. Extensive practice in writing and visual communication for print and electronic vehicles in the disciplines of advertising, public relations, sales promotion and direct marketing. Lecture, two hours; laboratory, two hours per week. Prereq: ISC 161 or consent of instructor; keyboarding 30 wpm.

**ISC 311 ETHICS AND THE STRATEGIC COMMUNICATOR.** (1)  
An introduction to the ethical dilemmas inherent in the strategic persuasion that permeates a democratic, free-market society. Emphasis will be placed on the consequences such persuasion can have on targeted groups as well as society as a whole and on the nature and exercise of responsibility as it links clients to persuader to intended target. Prereq: Major standing or consent of instructor.

**ISC 321 RESEARCH METHODS FOR THE INTEGRATED STRATEGIC COMMUNICATION PROFESSIONAL.** (3)  
Introduces students to applied research as a decision making tool for the integrated communications professional. Students acquire basic skills in: identification of information needs, stating of research objectives, selection of appropriate research technique(s), sample selection, questionnaire design, analysis procedures, report writing, and budget management. Topics include a survey research and to buy and evaluate studies from custom and/or syndicated research suppliers. Legal and ethical issues are also examined. Prereq: Major standing; one course in statistics.

**ISC 331 ADVERTISING CREATIVE STRATEGY AND EXECUTION.** (3)  
An introduction to the ethical dilemmas inherent in the strategic persuasion that permeates a democratic, free-market society. Emphasis will be placed on the consequences such persuasion can have on targeted groups as well as society as a whole and on the nature and exercise of responsibility as it links clients to persuader to intended target. Prereq: Major standing or consent of instructor.

**ISC 341 STRATEGIC PUBLIC RELATIONS.** (3)  
A course introducing students to the basic concepts of public relations, including its theory and practices, professional history, function in organizations, and role in society. This course meets the needs of those planning or currently involved in professional and managerial careers which require an understanding of public relations. Prereq: For ISC majors, concurrent or previous enrollment in ISC 311 and ISC 321, or consent of instructor.

**ISC 351 INTEGRATED STRATEGIC COMMUNICATION MANAGEMENT: THE CASE APPROACH**. (3)  
Planning and implementation of integrated communication strategy in practical applications. Students analyze business objectives and communications alternatives in the context of case studies drawn from existing industry situations, then develop and present solutions involving advertising message and media strategy, consumer and trade sales promotions, public relations, and direct marketing tools. Other topics include budgeting, research effectiveness measurement, and managing the client-firm relationship. Prereq: Concurrent or previous enrollment in ISC 311 and ISC 321 or consent of instructor.
ISC 361 DIRECT RESPONSE TARGETING: MEDIA AND DATABASE MANAGEMENT. (3)
This course will introduce students to direct marketing practices with emphasis on data base marketing, strategic business planning, importance of the offer, selection and selling merchandise, business-to-business direct marketing, fund raising, mailing lists, print and electronic media, co-ops, telemarketing, production lead generation, direct marketing math, idea development, research and integrating direct marketing into the overall marketing mix. The course will be practical rather than theoretical in nature. Prereq: Variable, given when topic is identified.

ISC 371 SPECIALIZED PUBLIC RELATIONS WRITING. (3)
Audience and purposes of writing are assessed as students develop a formal strategy to guide and to evaluate their writing. Strategic writing tasks include writing of position papers, speech writing, and writing for brochures, media releases, letters and newsletters. Societal impact and ethical considerations are examined across all writing tasks. Lecture, two hours; laboratory, two hours per week. Prereq: ISC 341 or consent of instructor.

ISC 431 ADVERTISING CREATIVE STRATEGY AND EXECUTION II. (3)
Students refine their ability to meet strategic goals through creative message executions. Media options and their impact on message structure and preparation are explored more fully. Application is made of pertinent theoretical principles such as source credibility, selective exposure/perception, and learning theory. Presentation skills stressed. Portfolio preparation and review. Lecture, two hours; laboratory, two hours. Prereq: ISC 331 or consent of instructor.

ISC 441 CASE STUDIES IN PUBLIC RELATIONS. (3)
This course is designed to reinforce and expand the knowledge learned in the introductory public relations course, ISC 341. The course will provide students with an opportunity to apply public relations principles and approaches to institutional experiences. Emphasis will be placed on actual case studies, and students are expected to demonstrate a high level of proficiency in written and oral communication skills. Prereq: ISC 341 or consent of instructor.

ISC 451 INTEGRATED STRATEGIC MEDIA MANAGEMENT. (3)
An overview of the strategic use of media in integrated promotional campaigns is provided. Students acquire basic skills in quantitative and qualitative evaluation of media; choice of target audiences; use of secondary research on products and audiences; development of media objectives, strategies and tactics; and the oral and written presentation of media plans. The basic structure of media organizations is discussed. Lecture, two hours; laboratory, two hours per week. Prereq: ISC 351 or consent of instructor.

ISC 461 DIRECT RESPONSE MESSAGE STRATEGIES. (3)
Examines the purpose, range, social and economic impact, and techniques of direct response messages. Students review type and role of suppliers as well as legal considerations. Based on a strategic plan, students frame messages for print, broadcast, and computer-based media that guide and facilitate response from prime prospects. Experiments to evaluate message effectiveness. Prereq: ISC 361 or consent of instructor.

#ISC 497 SPECIAL TOPICS IN ISC (Subtitle required). (3)
This course will focus on selected topics of industry practice associated with the integrated fields of strategic communication. Title assigned each time the course is offered. May be repeated with different subtitles to a maximum of six credits. Prereq: Variable, given when topic is identified.

ISC 489 TOPICAL STUDIES IN MASS MEDIA PROFESSIONS (Subtitle required). (1)
Each course module offers advanced, pinpoint study of a topic central to the mass media professions. Depending on the topic, the course format may include lectures, seminars, and/or studio work. May be repeated to a maximum of three credits when identified by different subtitles. Prereq: Variable, given when topic is identified.

ISC 491 INTEGRATED STRATEGIC COMMUNICATIONS CAMPAIGNS. (2)
An advanced course which enables senior students to unify strategic and tactical abilities developed in their research, creative, account management/media, public relations and/or direct response courses. The format for this synthesis requires students to establish strategy, develop, execute, and present a multimedia integrated campaign. Student teams compete for client approval on national, regional, or local accounts. Lecture, one hour; laboratory, two hours per week. Prereq: Completion of Major Path or consent of instructor.

ISC 541 CRITICAL TOPICS IN INTEGRATED STRATEGIC COMMUNICATION (Subtitle required). (3)
Students will use psychological or sociological perspectives to analyze one or more important aspects of the interaction between integrated strategic communication and society. Topics that may be considered include behavioral, political, economic, and/or international issues. The course may be repeated to a maximum of six credits when identified by different subtitles. Prereq: Senior or graduate standing; ISC 161 or consent of instructor.

ISC 543 REGULATION OF STRATEGIC COMMUNICATION. (3)
Course examines regulation of strategic, persuasive communication by federal, state, and local agencies as well as self-regulation. Privacy, copyright, and deception are among featured issues. Prereq: Major standing or consent of instructor.

ISP International Studies Program

ISP 499 STUDY ABROAD IN SPONSORED PROGRAM. (12-16)
A course designed for undergraduate students who go abroad to take courses in a foreign institution as part of a University of Kentucky program. A plan of study must be developed with the advice and approval of the UK faculty advisor for the particular study abroad program. The variable credits for ISP 499 are based on the number of credit hours the student plans to complete at the foreign institution. The actual credit hours recorded represent those credits completed by the student and sent to the Office of International Affairs by the foreign institution. University equivalent credit will be determined prior to the beginning of the student’s study abroad. Prereq: Approval by student’s academic department, the faculty advisor for the study abroad program, and the Office of International Affairs.

ISP 599 STUDY ABROAD. (1)
A course designed for undergraduate and graduate students who go abroad for study following a plan developed as part of their academic program and who are not otherwise registered at the University during the period overseas. Registration in the course would constitute full-time status. The course may be taken on a pass-fail basis for undergraduate students and audited by graduate students. Evaluation by the academic advisor will be an element of the plan. May be repeated to a maximum of three credits. Prereq: Approval by each student’s academic department, the Registrar, and the Office for International Programs.