

**IET 2051(0.6) Course ID: 007166****Introduction to Robotics**

Introduces robotics in regard to industrial robotic safety standards, historic timeline of industrial robots, industrial classification of robots, common industrial applications of robots, basic system components found in industrial robot applications, robotic motion concepts, common terms and definitions used in computer integrated manufacturing (CIM) as it relates to robots. Lecture/Lab: 0.6 credits (10.5 contact hours).

**Components: Lecture****IET 2052(1.5) Course ID: 007165****Programming/Editing Robots**

Introduces robotic systems and programming. Reviews robotic system application, automated system safety, robotic system composition, robotic motion control, fundamental programming commands, and program editing. Emphasizes the fundamentals of robot control. Aids students in electronics, welding, computer technology, and general sciences. Lecture/Lab: 1.5 credits (30 contact hours).

**Components: Lecture****IET 2053(0.2) Course ID: 007164****Robot and Preventive Maintenance**

Instructs an operator, technician, engineer, programmer, or student to master the preventive maintenance techniques required for a robot and their backup systems. Lecture/Lab: 0.2 credits (4.5 contact hours).

**Components: Lecture****IET 2054(1.1) Course ID: 007163****Error Codes & Troubleshooting**

Instructs operators, technicians, engineers, programmers, or students on the basic recovery procedures needed to interpret robot error codes and perform a safe recovery start up procedure on robotics equipment. Lecture/Lab: 1.1 credits (22.5 contact hours).

**Components: Lecture****IET 2055(0.6) Course ID: 007162****Integration of PLCs & Robots**

Introduces concepts associated with integrating robotic applications in a PLC-controlled, automated system. Includes discussion of the standard safety and interface signals associated with integrated systems, as well as various types of robotic applications along with the interface signals typically associated with each application. Stresses the programming concepts that support optimizing cycle time. Lecture/Lab: 0.6 credits (15 contact hours).

**Components: Lecture****IET 2061(0.5) Course ID: 007160****Fundamentals**

Introduces identification, installation, replacement, and troubleshooting of automation controller circuit boards and modules. Lecture/Lab: 0.5 credits (10.5 contact hours).

**Components: Lecture****IET 2062(0.9) Course ID: 007159****Sensors and Photoeyes**

Introduces installation, maintenance and troubleshooting of common input devices. Lecture/Lab: 0.9 credits (18 contact hours).

**Components: Lecture****IET 2063(0.6) Course ID: 007158****Calibration and Loop Training**

Introduces methods of motor control including on-off, proportional, integral, and derivative including PID loop tuning and quality. Lecture/Lab: 0.6 credits (13.5 credits).

**Components: Lecture****IET 2064(3) Course ID: 007157****Final Control Elements**

Covers automation output devices including AC, DC, and servo motors, variable speed drives, relays, motor starters and sizing of components for various applications. Lecture/Lab: 3.0 credits (63 contact hours).

**Components: Lecture****IEX Industrial Core****IEX 291(1) Course ID: 001575****Instructor Consent Required  
Special Problems I**

This course is designed for the student who has demonstrated specific needs. Pre-requisite: Permission of Instructor. 1 credit (45 contact hours)

**Components: Laboratory****Attributes: Technical****IEX 293(2) Course ID: 001576****Instructor Consent Required  
Special Problems II**

This is a course designed for the student who has demonstrated specific needs. Pre-requisite: Permission of Instructor. 2 credits (90 contact hours)

**Components: Laboratory****Attributes: Technical****IEX 295(3) Course ID: 001577 Instructor Consent  
Required  
Special Problems III**

This is a course designed for the student who has demonstrated specific special needs. Pre-requisite: Permission of Instructor. 3 credits (135 contact hours)

**Components: Laboratory****Attributes: Technical****IEX 297(4) Course ID: 005346****Special Problems IV**

Designed for the student who has demonstrated specific special needs. Laboratory: 4 credits (180 contact hours).

**Components: Laboratory****Attributes: Technical****IFM Informatics****IFM 111(3) Course ID: 007270****Client-side Informatics Software**

Examines client-side informatics software used to define, analyze, design, collect, structure, manage, and share organizational data. Examines data through charting and statistical analysis. Applies informatics concepts using industry-standard software, such as spreadsheet packages, database management systems, data/document sharing software, and collaboration software. Pre-requisite: Computer Literacy or consent of instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IFM 128(3) Course ID: 007271****Principles of Informatics**

Introduces students to the concepts associated with an information-centric world, information systems, and includes the definition of information and how it is communicated. Prepares students to understand how information systems support data-driven decision making strategies, information sharing technologies, data encoding, cooperative skills, knowledge sharing, and organizing of information. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IFM 130(3) Course ID: 007272****Business Data Communications**

Introduces students to data communications terminology and concepts used in business. Introduces students to network design and analysis. Provides a survey of network planning, implementation and administration. Provides an overview of commercial networking hardware and software products and the methodologies used for their evaluation. Introduces students to data and network security.

Introduces students to data storage, database systems and data extraction across various network and client-side devices. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IFM 211(3) Course ID: 007273****Collaboration Software**

Examines collaboration software and how it is commonly used in informatics environments and within organizations.

Prepares students to design, develop, implement and manage team collaboration sites. Pre-requisite: Computer Literacy. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IFM 215(3) Course ID: 007274****Information Systems Analysis**

Introduces students to systems analysis and general design; analysis strategies, tools, and techniques for documenting current systems and developing proposed systems; systems modeling, data modeling, cost/benefit trade-offs, and project management; and development of a comprehensive systems analysis project. Pre-requisite: Digital Literacy or Consent of Instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IFM 225(3) Course ID: 007275****Advanced Informatics**

Examines advanced informatics concepts related to designing, analyzing, organizing, securing, managing, and mining databases. Examines such topics as data corruption, efficiency in design and implementation, data mining, database connectivity, and network and security basics. Pre-requisite: Computer Literacy. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IFM 235(3) Course ID: 007276****Information Systems and Business Intelligence**

Introduces students to the fundamentals of information systems and business intelligence. Prepares both business and information technology students to understand how information systems and business intelligence provides a basis for the decisions needed to be competitive in the global marketplace. Pre-requisite: Digital Literacy or Consent of Instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD Information Management and Design****IMD 100(3) Course ID: 004764****Digital Information & Communication Technologies**

Introduces digital and social media concepts and technologies. Examines hardware, operating systems, applications, telecommunications, digital defense, ethics, and social media. Utilizes Windows operating system plus word processing, spreadsheet, database, and presentation applications. Emphasizes social media practices and concepts. This course fulfills the digital literacy requirement. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Digital Literacy****IMD 114(3) Course ID: 005748****Information Literacy**

This course is an introduction to the use of information resources, both traditional print materials and online materials, for academic and professional research. Topics include development of search strategy, evaluation of resources, use of database search techniques, ethical and legal aspects of information management and documentation of sources. Lecture: 3 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 115(3) Course ID: 004765****Introduction to Graphic Design**

Introduces theory, concepts and techniques required in graphic design. Includes an introduction to layout; color theory and use; design, photo and illustration techniques; and exploration of media in respect to digital design. Integrates concepts regarding the production process including pre-press, printing, other production techniques and distribution. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical**

**IMD 117(3) Course ID: 004767****Keyboarding and Basic Word Processing**

Students use a microcomputer and software to develop proper techniques of touch keyboarding. Basic word processing skills are integrated with a thorough study of form, style, and arrangement of business documents. Speed, accuracy and control are emphasized. Lecture: 3 credits (45 contact hours).

**Components: Lecture****Attributes: Computer Literacy, Technical****IMD 124(3) Course ID: 016264****Introduction to Game Development**

Presents an overview of the game development process including game development history, platforms, goals, genres, players, story and character development, gameplay, levels, interfaces, audio, development processes, development team roles, marketing, and maintenance. Provides opportunities to play and analyze games and to complete portions of game designs. Pre-requisite: CIT105 OR IMD100 OR Consent of Instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Course Equivalents: CIT 124****Attributes: Technical****IMD 126(3) Course ID: 004781****Introduction to Desktop Publishing**

The use of microcomputers for designing and producing various publications is introduced. Hands-on experience is provided in using desktop publishing software and a laser printer to produce high-resolution publications, such as flyers, brochures, business forms, and newsletters. Students are also introduced to basic design techniques, type and graphics layout, and the related terminology. Pre-requisite: IMD 100 or equivalent skills. Lecture: 3 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 127(3) Course ID: 005044****Vector Design with Adobe Illustrator**

In this course, students will be introduced to and develop vector (line-based) graphics using industry-standard application(s). Topics covered will include examining the theory behind vector graphics, investigating the advertising and print industry's use of this type of graphic, creation of graphics from simple to increasingly complex, as well as development of a portfolio of vector art. Pre-requisite: IMD 115 or concurrent or consent of instructor. Lecture: 3 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 128(3) Course ID: 005045****Raster Design with Adobe PhotoShop**

Introduces raster (photo or pixel-based) graphics using industry standard application(s). Covers the theory behind raster graphics, investigating the advertising and print industries' use of this type of graphic, creation and manipulation of raster-based graphics from simple to increasingly complex, the use of Photoshop in web design, video editing and compositing with Photoshop, as well as development of a portfolio of raster art and photo editing and manipulation samples. Pre-requisite: IMD 100 or consent of instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 133(3) Course ID: 005046****Beginning Web Design**

Introduces the creation and publication of a web site and covers extensible hypertext markup language (XHTML) and introductory cascading style sheets (CSS). Covers hand-coding for web design, along with the incorporation of graphics into web sites and publishing. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 180(3) Course ID: 004786****Intermediate Web Design**

Utilizes web design image creation software, used to create professional, aesthetically pleasing, effective, and fully-functional websites. Includes creation of complete websites using industry-standard software; create web graphics such as buttons, borders, and banners; and a comprehensive examination of web design fundamentals. Identifies fundamentals including website layout, navigation, font usage, color schemes, site architecture, with emphasis on creating visually-pleasing websites that effectively communicate the desired content for employers and clients. Pre-requisite: IMD 133. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 210(3) Course ID: 004787****Microsoft Office Applications**

Presents advanced skills utilizing Microsoft Office applications for the creation, manipulation, and integration of information. Examines applications including word processing, spreadsheet, database management, and presentation. Pre-requisite: IMD 100 OR Digital Literacy Course OR Instructor Consent. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 221(3) Course ID: 016265****Computer Graphics**

Introduces basic computer graphics with an emphasis on graphics for game design. Instructs students in practical aspects of graphics such as color, ray tracing, rasterization, shading, mapping, light, and shadow. Pre-requisite: CIT105 OR IMD100 OR Consent of Instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 222(3) Course ID: 016266****3D Modeling for Video Games**

verb.): Instructs students in the use of industry-standard 3D modeling software specific to the video-game industry. Emphasizes both architectural and character modeling. Familiarizes the student with key 3D modeling concepts and methods, workflow, and the creation and preparation of 3D assets for use specifically in a video-game application. Pre-requisite: CIT 221 OR IMD 221 OR Consent of Instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Course Equivalents: CIT 222****Attributes: Technical****IMD 223(3) Course ID: 016267****3D Animation for Video Games**

Exposes students to the specialized process of animating 3D assets for gaming applications. Familiarizes students with animating both organic and inorganic assets, lighting scenes, rendering and producing cut-scenes, and preparing character assets for in-game motion. Allows students to acquire the necessary skills and techniques to integrate audio with their animations using basic sound-engineering software and processes. 3 credits (45 contact hours)

**Components: Lecture****Course Equivalents: CIT 223****Attributes: Technical****IMD 226(3) Course ID: 004791****Advanced Desktop Publishing**

Requires the demonstration of vital pre-press and print production knowledge necessary for successful output of commercial graphic design projects. Emphasizes raster image creation, editing, and preparation for output, offset printing processes, color separations, spot color usage and preparation, vector graphic usage, font usages and

standards, PDF document creation and preparation, and advanced desktop publishing techniques. Pre-requisite: IMD 126 and IMD 127 and IMD 128. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 228(3) Course ID: 006833****Advanced Photoshop**

Introduces advanced techniques for manipulating and editing raster (photo or pixel-based) graphics using industry-standard application(s). Examines new software features, advanced methods for file optimization and color correction, making complex selections and combining multiple images to create works of art, as well as development of a professional portfolio of raster art and photo editing and manipulation samples. Pre-requisite: IMD 115 and IMD 128. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 229(3) Course ID: 006886****Advanced Illustrator**

Introduces advanced techniques for the creation of vector-based (Bezier-geometry-based) artwork, including techniques for high-end illustrative and artistic projects. Emphasizes working with painterly and naturalistic brushes, photo-realistic vector-based image creation, advanced gradient mesh usage, advanced 3D techniques, integration with Adobe Flash, advanced workflow procedures, and other techniques intended for intermediate to advanced Adobe Illustrator users. Pre-requisite: IMD 127. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 230(3) Course ID: 004793****Advanced Web Design**

Explores existing and emerging web technologies through the role of web designers. Covers topics and issues to include modification of prewritten scripts and applets as well as analysis of current client- and server-side technologies including PHP, MySQL and XML. Students will conclude the course via the creation of a comprehensive, database-driven dynamic website utilizing current client- and server-side technologies including PHP, MySQL, and XML. Pre-requisite: IMD 180 or consent of instructor. Lecture: 3 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 232(3) Course ID: 004794****Web Design with Adobe Dreamweaver**

Utilizes an advanced web authoring software application for design and development. Uses a professional WYSIWYG (what-you-see-is-what-you-get) editor to develop and create web pages, automate production, and manage and maintain entire websites. Builds XHTML, CSS, and web development knowledge to customize features and integrate applications. Pre-requisite: IMD 133 or consent of instructor. Lecture: 3 credits (45 contact hours).

**Components: Lecture****Attributes: Technical**

Information Management and Des

**IMD 235(3) Course ID: 004795****Advanced Word Processing**

Students will learn current word processing software from intermediate skills through advanced utilities. Topics include producing customized documents, enhancing the visual display of documents, creating customized desktop publishing documents, organizing text in documents using advanced features, and integrating data utilizing various applications. Emphasis will be on mastering the software for optimal use. Pre-requisite: IMD 210 or CIT 130, or equivalent skills. Lecture: 3 credits (45 contact hours).

**Components: Lecture****Attributes: Technical**

**IMD 240(3) Course ID: 004796****Multimedia Development for the Web**

Introduces students to the design and delivery of interactive and media-rich websites using professional, industry-standard software and web development technologies. Covers creating and integrating animation into web design, along with developing increasing interactivity and adding audio and video into a website. Covers publishing and integration with other web development applications. Pre-requisite: IMD 133 or consent of instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 250(3) Course ID: 005050****Digital Video Editing I**

Covers the essentials of digital video within cinematic arts, including logging, capturing, editing, and basic compositing. Students will capture and edit digital video using industry-standard desktop video software and export to DVD and the Internet for use in entertainment, documentary films, commercials, and newscasts. Students will learn to storyboard, plan, and produce a digital video project from conception to final packaging. Pre-requisite: IMD 100 or consent of instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 255(3) Course ID: 007327****Digital Video Editing II**

Covers advanced techniques within cinematic arts and editing such as multi-cam editing, color correction, advanced compositing, basic audio editing and production, alpha channels, and special effects. Building on Digital Video Editing I, students will also focus on creating storyboards, quicker workflows, and trim editing using an industry-standard software program. Increased levels of pacing, timing, continuity, and visual aesthetics are emphasized. Students will shoot and edit their own video footage in this course. Cameras will be provided. Pre-requisite: IMD 250 or consent of instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 258(3) Course ID: 007328****Visual Effects for Video**

Covers the creation of visual effects in cinematic arts including basic animation with text and 2D objects and 3D object creation and animation using an industry-standard visual effects software program. Students will focus on animating layers and working with masks, distortion, color correction, motion stabilizing, and particle simulation. Projects will be exported and packaged for the web and DVD. Pre-requisite: IMD 250 or consent of instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****IMD 270(3) Course ID: 005214****Professional Practices**

Designed to assist students develop strategies for entering the Information Management & Design profession by editing and refining portfolios and creating correspondence to meet professional standards, designing resumes and other self-promotional materials, developing a job search strategy, practicing interview techniques, and professional presentations. Pre-requisite: sophomore status & preparing for job search. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical**

Information Management and Des

**IMD 271(1 - 3) Course ID: 004797 Instructor****Consent Required****Internship**

Requires a minimum of 40 clock hours per credit hour of on-the-job experience to include a learning plan agreed upon by the student, instructor, and site supervisor. Pre-requisite: Consent of Instructor, 2.0 GPA, IMD 270 and the completion of 9 additional credit hours of IMD course work. Practicum: 1.0 -3.0 credits (40-120 contact hours).

**Components: Practicum****Attributes: Technical****IMD 272(3) Course ID: 016268****Game Design Theory**

Introduces students to the experience-oriented standards and techniques of gaming on a digital platform. Includes hands-on conceptualization and writing of a game created by the student. Emphasizes creativity, player experiences and motivations, styles of play, types of games, character creation, world creation, and story-driven narrative within a video game. Requires students to write a complete and industry-quality Game Design Document as a final project in this course which can serve as the basis for a fully-produced, playable video game in CIT/IMD273. Pre-requisite: CIT124 OR IMD 124 OR Consent of Instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Course Equivalents: CIT 272****Attributes: Technical****IMD 273(3) Course ID: 016269****Game Production**

Provides students with the opportunity to produce a fully playable 3D video game using assets and materials created in previous courses; employs an industry-standard game engine to meld 3D content, audio, narrative, character, and environment into a professional and enjoyable video game experience. Pre-requisite: ((CIT 222 OR IMD 222) AND (CIT 272 OR IMD 272)) OR Consent of Instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Course Equivalents: CIT 273****Attributes: Technical****IMD 274(3) Course ID: 016270****Seminar in Game Development**

Encompasses the three phases of game design and development: conception, creation, and marketing in this project-oriented seminar. Requires participation in class presentations, individual and group projects, development of a game, and a portfolio. Pre-requisite: ((CIT 223 OR IMD 223) AND (CIT 273 OR IMD 273)) OR Consent of Instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Course Equivalents: CIT 274****Attributes: Technical****IMD 275(3) Course ID: 004798****Information Management and Communications**

Introduces management principles and techniques as they apply to various types of businesses. Includes research emphasis on information management, team concepts, personnel management, communications and business plans. Explores concepts within freelance, small business, and corporate entities. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 277(3) Course ID: 006837****Typography**

Explores the use of typography in the context of graphic design and discover the importance of type as a tool for visual problem solving and communication. Explores origins of typography, font usage, the anatomy and different kinds of type, software used for type manipulation, and how basic principles and elements of design (color, hierarchy, form, rhythm, etc.) are applied to typography. Requires the development of portfolio of individual typography-based designs. Pre-requisite: (IMD 115 and IMD 126 and IMD 127 and IMD 128) or consent of instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 280(3) Course ID: 004799****Portfolio Practicum: Graphic Design**

Provides an opportunity to assemble a comprehensive graphic design portfolio using skills learned within the IMD Graphic Design core courses, which will assess students overall graphic design skills. Provides IMD students with a professional design portfolio to aid in the search for employment. Provides the capstone for students choosing the graphics option. Uses presentation, vector, raster, and desktop publishing software to create design-intensive

portfolio pieces. Pre-requisite: (IMD 127 and IMD 128 and IMD 185 and IMD 226) or Consent of Instructor. Lecture: 3 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 290(3) Course ID: 005779****Photography**

Teaches students basic photography principles and skills to compose technically proficient photographs. Emphasis is on basic camera operations, with exploration of film speeds, apertures, and shutter speeds. Explores composition and elements of lighting. Uses slide lectures, a brief overview of contemporary photography to acquaint students with past and current photography. Lecture: 3 Credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 292(3) Course ID: 005215****Portfolio Practicum: Web Design**

In this capstone course, students will assemble a comprehensive web site design portfolio using skills learned in the IMD Web Design core courses. The purpose of the portfolio will be to assess students' overall skills learned in the web design option. It will also be used to provide IMD students with a professional design portfolio to aid in the search for employment. Students will use Adobe Fireworks, Dreamweaver, Flash, Photoshop, and dynamic scripting languages to assemble the comprehensive design portfolio. Pre-requisite: (IMD 133 and IMD 180 and IMD 232) or consent of instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****IMD 294(3) Course ID: 005799****Seminar IMD Technologies**

Includes research, study, and discussion of a current or emerging topic, issue, or trend in information management and design technologies. May be repeated with different topic for a maximum of 6 credit hours. Pre-requisite: IMD 100 or consent of instructor. Lecture: 3 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****IMD 299(1 - 3) Course ID: 004800 Instructor****Consent Required****Selected Topics in Information Management and Design**

This course is designed to expand course offerings as new technology is developed, as well as consider contemporary and/or emerging trends in information management and design. Topics may vary from semester to semester at the discretion of the instructor; course may be repeated with different topics to a maximum of six credit hours. Pre-requisite: Consent of instructor. Lecture: 1-3 credits (15-45 contact hours).

**Components: Lecture****Attributes: Technical****IMG Radiography****IMG 100(7)****Course ID: 004294****Radiography I**

Emphasizes the historical perspective, professional ethics, introductory imaging, x-ray tube, patient management, and the role of the radiographer as a member of the health care team. Applies the principles of human anatomy to the study of fundamental radiographic procedures (exposure factors and patient positioning) used for different age groups. Covers procedures of the chest, abdomen, extremities, shoulder girdle, bony thorax, and pelvic girdle. Pre-requisite: Admission to the Radiography Program and BIO 139 with a minimum grade of C. Co-requisite: IMG 101. Lecture: 6.0 credits (90 contact hours). Lab: 1.0 credit (30 contact hours).

**Components: Laboratory, Lecture****Attributes: Technical**

**KHP 139(1)** Course ID: 003856

### Lifetime Sports

Instruction in a variety of motor skill activities. Courses are designed for students at a beginner level. Up to six hours credit may be earned in service courses; however, the same activity may not be repeated for credit. Lab: 1 credit (15 contact hours).

**Components:** Laboratory

**Attributes:** Technical

**KHP 140(1)** Course ID: 002341

### Advanced Weight Training

Instruction in a variety of motor skills activities. Courses are for students who already possess intermediate skills in the activity. Instructors will assess skill at start of course. Up to six hours credit may be earned in service courses; however, the same activity may not be repeated for credit. Assignment of specific title will occur internally in the department. Laboratory: 3 hours. Pre-requisite: Completion of comparable service course or demonstrated competency.

**Components:** Laboratory

**Attributes:** Other

**KHP 142(1)** Course ID: 002342

### Advanced Aerobics

Instruction in a variety of motor skills activities. Courses are for students who already possess intermediate skills in the activity. Instructors will assess skill at start of course. Up to six hours credit may be earned in service courses; however, the same activity may not be repeated for credit. Assignment of specific title will occur internally in the department. Laboratory: 3 hours. Pre-requisite: Completion of comparable service course or demonstrated competency.

**Components:** Laboratory

**Attributes:** Other

**KHP 143(1)** Course ID: 002343

### Intramurals

Instruction in a variety of motor skills activities. Courses are for students who already possess intermediate skills in the activity. Instructors will assess skill at start of course. Up to six hours credit may be earned in service courses; however, the same activity may not be repeated for credit. Assignment of specific title will occur internally in the department. Laboratory: 3 hours. Pre-requisite: Completion of comparable service course or demonstrated competency.

**Components:** Laboratory

**Attributes:** Other

**KHP 145(3)** Course ID: 003870

### Concepts of Health and Fitness

Current concepts of health and fitness covering such topics as the benefits of physical fitness, principles of fitness training, prevention of cardiovascular disease, and basic concepts of nutrition and weight management. Emphasis will be on the promotion of health lifestyles. Lecture: 3 credits (45 contact hours).

**Components:** Lecture

**Attributes:** Other

**KHP 146(1)** Course ID: 016371

### Intermediate Yoga

Provides students with intermediate instruction and activities associated with yoga. Laboratory: 1 credit (30 contact hours).

**Components:** Laboratory

**Attributes:** Other

**KHP 149(1)** Course ID: 016372

### Advanced Yoga

Provides students with advanced instruction and activities associated with yoga. Laboratory: 1 credit (30 contact hours). Pre-requisite or Co-requisite: KHP 146.

**Components:** Laboratory

**Attributes:** Other

**KHP 150(3)** Course ID: 006816

### Personal Health Behavior

Prepares students to make informed choices about health issues and behaviors and to take responsibility for their health and well-being. Lecture: 3.0 credits (45 contact hours).

**Components:** Lecture

**Attributes:** Technical

**KHP 160(3)** Course ID: 006817

### Personal Nutrition and Fitness

Introduces the importance of daily diet and nutrition. Addresses the role of the personal trainer in helping clients to recognize and decrease risks for chronic diseases. Lecture: 3.0 credits (45 contact hours).

**Components:** Lecture

**Attributes:** Technical

**KHP 190(2)** Course ID: 000029

### First Aid and Emergency Care

A study of first aid subject matter and orientation in the various first aid teaching methods. Lectures and demonstrations on first aid measures with skill training. American Red Cross Certificate made available. Lecture: 1 hour; Laboratory: 2 hours.

**Components:** Laboratory, Lecture

**Attributes:** Other

**KHP 225(3)** Course ID: 006818

### Exercise Techniques and Physical Training

Focuses on the core components of personal training. Provides information and resources necessary to pass personal fitness trainer certification. Pre-requisite: BIO 135 or MSG 100. Co-requisite: KHP 235. Lecture: 3.0 credits (45 contact hours).

**Components:** Lecture

**Attributes:** Other

**KHP 230(3)** Course ID: 000379

### Human Health and Wellness

The study of health promotion, wellness, and disease prevention concepts as applied to individual, familial, and community health. Lecture: 3.0 credits (45 contact hours).

**Components:** Lecture

**Attributes:** Other

**KHP 235(2)** Course ID: 006820

### Personal Trainer Practicum

Students will apply personal training principles and techniques and demonstrate skills with clients in various settings under instructor and preceptor supervision. Pre-requisite: BIO 135 or MSG 100. Co-requisite: KHP 225. Practicum: 2.0 credits (60 contact hours).

**Components:** Practicum

**Attributes:** Other

**KHP 240(3)** Course ID: 002226

### Nutrition and Physical Fitness

Focuses on the inter-relationship between nutrition and physical fitness. Provides the student with the information necessary to formulate an individualized plan for achievement and maintenance of adequate nutrition and physical fitness while addressing weight control. Lecture: 3 credits (45 contact hours).

**Components:** Laboratory, Lecture

**Attributes:** Other

## **KMA Kentucky Medication Aide**

**KMA 100(5)** Course ID: 001629

### Kentucky Medication Aide

Prepares a Kentucky Medicaid Nurse Aide to administer specific medications in a long term care facility as delegated and supervised by a licensed nurse. Pre-requisite: [(MNA 100 or NAA 100 or NAA 125) and six months of work experience as a Kentucky Medicaid Nurse Aide] or Consent. Lecture/Lab: 5 credits (105 contact hours).

**Components:** Lecture

**Attributes:** Technical

## **LAS Latin America**

**LAS 201(3)** Course ID: 015525

### Introduction to Latin America

An interdisciplinary approach to the people, culture, and development of the Latin American republics. Attention will be concentrated on significant aspects of the indigenous peoples, geography, economic processes, gender roles, social structures and politics of Latin America, with special attention paid to value structures and value conflicts. Musical, literary and artistic expression in Latin America will also be introduced. Lecture: 3.0 credits (45 contact hours).

**Components:** Lecture

**Attributes:** AH - Arts and Humanities, University Course (University of Kentucky)

## **LEAD Leadership Studies**

**LEAD 200(3)** Course ID: 006761

### Introduction to Leadership Studies

The purpose of the course is to provide students a better understanding of leadership from multiple angles and perspectives. Students will explore the different ways leadership has been defined and studied. Students enrolled in this course will read leadership theory, discuss leadership concepts, and discuss cases portraying leaders who exemplify or challenge these theories. Additionally, students will explore the relevance of leadership theory and concepts to the work that will perform as future leaders in their careers and communities. Lecture: 3.0 credits (45 contact hours).

**Components:** Lecture

**Attributes:** University Course (Western Kentucky University)

## **LIN Linguistics**

**LIN 175(3)** Course ID: 015987

### Information Literacy

A foundational course that introduces students to the cross-disciplinary skills needed to assess information needs, and access and evaluate information sources. Lecture: 3.0 credits (45 contact hours).

**Components:** Lecture

**Attributes:** University Course (Northern Kentucky University)

## **LIT Library Information Technology**

**LIT 115(3)** Course ID: 004801

### Introduction to Reference Services

Introduces library reference sources and services. Includes reference interview techniques, print and digital information sources, bibliographic and full text databases, and digital access and retrieval skills. Lecture: 3.0 credits (45 contact hours).

**Components:** Lecture

**Attributes:** Technical

**LIT 120(3)** Course ID: 007416

### Readers' Advisory Services

Examines library readers' advisory services. Includes readers' advisory resources, library programming, book discussion groups, collection development, formats for books, ebooks and audio books, online applications, and marketing. Pre-requisite: LIT 115 or permission of instructor. Lecture: 3.0 credits (45 contact hours).

**Components:** Lecture

**Attributes:** Technical

**LIT 124(3)** Course ID: 004802

### Library Administration

Introduces basic principles of library organization and management. Includes the planning process, policies, ethical and legal issues, budgeting, and human resources. Lecture: 3.0 credits (45 contact hours).

**Components:** Lecture

**Attributes:** Technical

**LIT 132(3)** Course ID: 004803

### Library Technical Services

Provides an overview of library technical services, including acquisitions, processing, cataloging and classification. Lecture: 3.0 credits (45 contact hours).

**Components:** Lecture

**Attributes:** Technical

**LIT 200(3) Course ID: 005218****Seminar in Kentucky Literature**

This is an online or computer-assisted seminar course in Kentucky literature recognizing, examining, and studying distinct regional differences and similarities with concentration on major contemporary and traditional Kentucky writers and their texts. Topics will vary, from a group of authors, and historical period or aesthetic movement, to a genre, a theme, or an aspect of literary theory. Lecture: 3 credits (45 contact hours).

**Components: Lecture****Course Equivalents: HUM 245****Attributes: Technical****LIT 230(3) Course ID: 004804****Web Publishing for Libraries**

This is a course in web publishing for library web sites, including HTML code, web page authoring software, web page and web site design, and trends in library web sites. This is a distance education course with a service learning component. Pre-requisite: LIT 115 or consent of instructor. Lecture: 3 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****LIT 240(3) Course ID: 004805****Literature of Appalachian Kentucky**

This is an online or computer-assisted introductory survey course in the Appalachian literature of Kentucky concentrating on the major contemporary and traditional writers who are distinctly identified with that region. Approaches may include a group of authors, an historical period or aesthetic movement, a genre, a theme, or an aspect of literary theory. Lecture: 3 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****LIT 242(3) Course ID: 004806****Literature of Western Kentucky**

This is an online or computer-assisted introductory survey course in the literature of Western Kentucky which concentrating on the major contemporary and traditional writers who are distinctly identified with that region. Approaches may include a group of authors, an historical period, or aesthetic movement, a genre, a theme or an aspect of literary theory. Lecture: 3 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****LIT 243(3) Course ID: 004807****Library Services for Children**

Introduces library services for children grades K - 6 and their caregivers. Includes surveys of child development, library programming, children's literature, collection development, and legal issues. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****LIT 245(3) Course ID: 005083****Library Services for Young Adults**

Introduces library services for young adults from 6th to 12th grades. Includes programming, collection development, young adult literature, the use of the Internet, and ethical and legal issues. Emphasizes the development and promotion of young adult library services. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****LIT 247(3) Course ID: 004808****Library Services for Adults**

Introduces library services for adults. Includes adult literature, collection development, programming, circulation services, reference services, and customer relations. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****LIT 248(3) Course ID: 004809****Library Services for Preschool Children**

Introduces library services for preschool children, age infant to 5 years. Includes library programming

development and production, preschool children's literature, services for parents and for child care services, collection development, and legal issues. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****LIT 280(3) Course ID: 004810****Genealogy Services in Libraries**

Introduces genealogy services in libraries. Surveys genealogy data sources, research methods, collection development, patron referrals, legal and ethical issues, library programming, and marketing. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****LIT 285(3) Course ID: 005051****History of Libraries**

This course is a survey of the development of libraries from ancient times to the present, with emphasis on academic and public libraries in the United States. Attention is given to the interaction of libraries with economic, social and political trends in the larger society. Pre-requisite: LIT 115 or consent of instructor. Lecture: 3 credit (45 contact hours).

**Components: Lecture****LIT 299(1 - 3) Course ID: 004811****Selected Topics in Library Information Technology**

Expands library course offerings as new technologies develop and/or as new issues evolve. Lecture: 1.0 - 3.0 credits (15-45 contact hours).

**Components: Lecture****Attributes: Technical**

## LOM Logistics and Operations Management

**LOM 100(3) Course ID: 006827****Introduction to Logistics Management**

Presents an overview of general logistics concepts and organizational issues; inventory management and customer service in logistics; and transportation and third party logistics. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****LOM 101(3) Course ID: 006828****Transportation Management**

Presents an overview of the role of transportation and pricing issues; transportation modes and terminals; and transportation risk management and global management issues. Pre-requisite: LOM 100. Lecture: 3.0 credits (45 contact hours)

**Components: Lecture****Attributes: Technical****LOM 102(3) Course ID: 006829****Supply Chain Management**

Presents an overview of supply chain management and financial analysis; inventory management skills and techniques; and supply chain design and sustainability solutions. Pre-requisite: LOM 100. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****LOM 180(3) Course ID: 004629****Project Management**

Introduces practical approach to managing essential resources, people, and deadlines, and real-world challenges required to bring any project in on time, on target, and on budget. Covers skills and concepts of essential project management processes, defining requirements, schedules, risk management assessment, change control, and project management software applications. Provides students with a practical approach to developing projects with opportunities to apply skills and elements by completing activities based upon real-time projects and case studies. Pre-requisite: Digital literacy or consent of instructor. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****LOM 202(3) Course ID: 006830****Applied Supply Chain Management**

Provides an understanding of the importance of individual components (supplies, manufacturers, distributors, and customers) in the operation of a supply chain. Pre-requisite: LOM 102. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****LOM 210(3) Course ID: 016149****Lean for Logistics**

Introduces students to the principles and practices of lean operations in relation to the field of logistics. Incorporates a lean simulation activity and examples from lean practitioners in the management of supply chain operations. Discusses core lean principles with an emphasis on work cells and Just In Time (JIT) practices. Pre-requisite or Co-requisite: LOM100 Introduction to Logistics Management. Lecture: 3.0 credits (45 contact hours).

**Components: Lecture****Attributes: Technical****LOM 1001(1) Course ID: 015571****Logistics Overview**

Presents an overview of general logistics concepts and organizational issues. Lecture 1.0 credit (15 contact hours).

**Components: Lecture****LOM 1002(1) Course ID: 015572****Logistics Activities**

Presents an overview of inventory management and customer service in logistics. Pre-requisite: LOM 1001. Lecture: 1.0 credit (15 contact hours).

**Components: Lecture****LOM 1003(1) Course ID: 015573****Transportation Activities**

Presents an overview of transportation and third party logistics. Pre-requisite: LOM 1002. Lecture: 1.0 credit (15 contact hours).

**Components: Lecture****LOM 1011(1) Course ID: 015579****Transportation Overview**

Presents an overview of the role of transportation and pricing issues. Pre-requisite: LOM 100. Lecture: 1.0 credit (15 contact hours).

**Components: Lecture****LOM 1012(1) Course ID: 015574****Transportation Modes**

Presents transportation modes and terminals. Pre-requisite: LOM 1011. Lecture: 1.0 credit (15 contact hours).

**Components: Lecture****LOM 1013(1) Course ID: 015575****Global Transport**

Presents an overview of transportation risk management and global management issues. Pre-requisite: LOM 1012. Lecture: 1.0 credit (15 contact hours).

**Components: Lecture****LOM 1021(1) Course ID: 015576****Supply Chain Overview**

Presents an overview of supply chain management and financial analysis. Pre-requisite: LOM 100. Lecture: 1.0 credit (15 contact hours).

**Components: Lecture****LOM 1022(1) Course ID: 015577****Supply Chain Skills**

Presents inventory management skills and techniques. Pre-requisite: LOM 1021. Lecture: 1.0 credit (15 contact hours).

**Components: Lecture****LOM 1023(1) Course ID: 015578****Supply Chain Sustainability**

Presents supply chain design and sustainability solutions. Pre-requisite: LOM 1022. Lecture: 1.0 credit (15 contact hours).

**Components: Lecture**