Indiana Department of Education Academic Standards Course Framework

INTERACTIVE MEDIA

Interactive Media prepares students for careers in business and industry working with interactive media products and services; which includes the entertainment industries. This course emphasizes the development of digitally generated or computer-enhanced products using multimedia technologies. Students will develop an understanding of professional business practices including the importance of ethics, communication skills, and knowledge of the "virtual workplace". This course will allow students to have experiences in various software programs involved in creating multimedia presentations, digital movies, digital animation, and introductory scripting Students explore the role of contemporary marketing and design.

- DOE Code: 5232
- Recommended Grade Level: Grade 11-12
- Recommended Prerequisites: IT Essentials or Introduction to Communications
- Credits: 1-3 credit per semester, maximum of 6 credits
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- This course is aligned with postsecondary courses for Dual Credit:
 - Ivy Tech
 - VISC 115 Introduction to Computer Graphics OR
 - VISC 150 Video & Sound
 - VISC 200 Interactive Media

Dual Credit

This course provides the opportunity for dual credit for students who meet postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of this course.

Application of Content and Multiple Hour Offerings

Intensive laboratory applications are a component of this course and may be either school based or work based or a combination of the two. Work-based learning experiences should be in a closely related industry setting. Instructors shall have a standards-based training plan for students participating in work-based learning experiences. When a course is offered for multiple hours per semester, the amount of laboratory application or work-based learning needs to be increased proportionally.

Career and Technical Student Organizations (CTSOs)

Career and Technical Student Organizations are considered a powerful instructional tool when integrated into Career and Technical Education programs. They enhance the knowledge and skills students learn in a course by allowing a student to participate in a unique program of career and leadership development. Students should be encouraged to participate in Business Professional of America, DECA, or Future Business Leaders of America the CTSO for this area.

Content Standards

Domain – Computer Literacy

Core Standard 1 Students perform common computer functions on standard platforms as they apply to digital

media to create multimedia presentations

Standards

- IM-1.1 Discuss the components of a basic digital media computer system and peripherals.
- IM-1.2 Demonstrate proficiency in the use of digital imaging techniques and equipment
- IM-1.3 Create appropriate documents using word processing software
- IM-1.4 Create professional presentations using presentation graphics software
- IM-1.5 Access and integrate information using electronic sources

Domain – Media Business Practices

Core Standard 2 Students interpret business law and ethics as they apply to multimedia.

- IM-2.1 Practice the Fair Use Guidelines and Copyright Laws as they apply to multimedia
- IM-2.2 Compare/contrast legal and ethical issues in interactive media communications
- IM-2.3 Apply practices that respect intellectual laws
- IM-2.4 Select information technology practices
- IM-2.5 Deliver a client presentation

Domain -Careers in Interactive Media

Core Standard 3 Students perform common computer functions on standard platforms as they apply to digital media to create multimedia presentations

- IM-3.1 Evaluate career opportunities in different areas of Interactive Media
- IM-3.2 Explain the importance of the different roles for working as members of a Digital Media project team
- IM-3.3 Explore careers and training opportunities, trends, and requirements for different roles in interactive media
- IM-3.4 Develop personal performance quality, positive work ethic, and professional respect.

Domain – Visual Arts and Graphic Design Fundamentals

Core Standard 4 Students demonstrate visual design fundamentals which are utilized throughout the design process to communicate ideas.

Standards

- IM-4.1 Demonstrate knowledge of and an appreciation for the visual arts
- IM-4.2 Analyze basic technical art skills (traditional and electronic)
- IM-4.3 Apply and adapt the design principles and elements of design
- IM-4.4 Demonstrate design skills using visual design guidelines

Domain - Interactive Multimedia

Core Standard 5 Students create design solutions that demonstrate skill and understanding of different media processes to communicate ideas and information.

Standards

- IM-5.1 Develop scripts, storyboards, and flowcharts used in Interactive Media
- IM-5.2 Analyze the types and uses of interactive media applications
- IM-5.3 Develop project concept proposals
- IM-5.4 Develop navigational structures
- IM-5.5 Demonstrate knowledge of the history of film and video production
- IM-5.6 Incorporate film and video production concepts and products in interactive media production

IM-5.7 Combine media elements to produce an interactive multimedia product

Domain – Video/Audio Production

Core Standard 6 Students perform basic skills and understanding of different audio and video processes to be use for multimedia purposes.

- IM-6.1 Create a plan for video production
- IM-6.2 Perform basic camera-related tasks for digital video production
- IM-6.3 Practice basic preproduction activities for a digital video production
- IM-6.4 Design backgrounds/scenery for a video production
- IM-6.5 Perform basic video production editing processes
- IM-6.6 Demonstrate knowledge of audio recording and production
- IM-6.7 Demonstrate effective composition and compression concepts in the production of a simulation or game product
- IM-6.8 Utilize the basic principles of 2-D animation
- IM-6.9 Utilize the basic principles of 3-D animation

Domain – Photography/Digital Imaging

Core Standard 7 Students model photographic skills for the use in interactive media projects.

Standards

- IM-7.1 Develop competency in the use of photographic equipment
- IM-7.2 Demonstrate knowledge of photographic terminology
- IM-7.3 Prepare images for use in interactive media
- IM-7.4 Apply photographic basic composition techniques

Domain - Programming/Animation/Gaming

Core Standard 8 Student incorporate basic programming, animation and gaming skills to be used in an interactive media projects.

Standards

- IM-8.1 Identify animation file formats and their appropriate use
- IM-8.2 Create and manipulate animations 2D animations
- IM-8.3 Compare 2D and 3D animation
- IM-8.4 Demonstrate knowledge of the basic principles of3-D modeling
- IM-8.5 Utilize the basic principles of 3-D animation
- IM-8.6 Demonstrate knowledge of programming language concepts
- IM-8.7 Analyze technical documentation associated with software development
- IM-8.8 Demonstrate knowledge of computational and string operations
- IM-8.9 Debug programs

Domain - Project Management

Core Standard 9 Students reinforce their knowledge and skills in media design and production for project planning and project development.

Standards

- IM-9.1 Evaluate product planning methodology
- IM-9.2 Apply technical writing requirements

- IM-9.3 Develop and perform usability and testing integration
- IM-9.4 Recommend and implement performance improvement
- IM-9.5 Gather data and identify client requirements and scope of work
- IM-9.6 Conduct technical research

Domain – Website Development, Design and Management

Core Standard 10 Students illustrate basic web standards and coding to create web pages.

Standards

- IM-10.1 Review basic principles of how the Internet is constructed, how it functions, and how it is used.
- IM-10.2 Identify and describe internet development and functions
- IM-10.3 Differentiate between IP addresses and domain name
- IM-10.4 Define important Internet communications protocols and their roles in delivering basic Internet services
- IM-10.5 Apply the process of planning, designing and maintaining web pages.
- IM-10.6 Demonstrate base knowledge of content and applications management
- IM-10.7 Demonstrate knowledge of website design fundamentals
- IM-10.8 Apply essential attributes of Cascading Style Sheets (CSS)
- IM-10.9 Create content for a website
- IM-10.10 Develop web site architecture, prototypes, and user interface specifications