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: 2-3 credit per semester, maximum of 2 semesters, 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 200 Interactive Media (pending)

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

IM-1.6

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 of 3-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

Process Standards

Common Core Literacy Standards for Technical Subjects

Reading Standards for Literacy in Technical Subjects 11-12

The standards below begin at grade 11 and define what students should understand and be able to do by the end of grade 12. The CCR anchor standards and high school standards in literacy work in tandem to define college and career readiness expectations – the former providing broad standards, the latter providing additional specificity.

Key Ideas and Details

11-12.RT.1 Cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.

11-12.RT.2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

11-12.RT.3 Follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text.

Craft and Structure

11-12.RT.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific context relevant to *grades 11-12 texts and topics*.

11-12.RT.5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.

11-12.RT.6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain

unresolved.

Integration of Knowledge and Idea

11-12.RT.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

11-12.RT.8 Evaluate the hypotheses, data, analysis, and conclusions in a technical subject, verifying the data when possible and corroborating or challenging conclusions with other sources of information.

11-12.RT.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

Range of Reading and Level of Text Complexity

11-12.RT.10 By the end of grade 12, read and comprehend technical texts in the grades 11-CCR text complexity band independently and proficiently.

Writing Standards for Literacy in Technical Subjects 11-12

The standards below begin at grade 11 and define what students should understand and be able to do by the end of grade 12. The CCR anchor standards and high school standards in literacy work in tandem to define college and career readiness expectations – the former providing broad standards, the latter providing additional specificity.

Text Types and Purposes

11-12.WT.1 Write arguments focused on *discipline-specific content*.

11-12.WT.2 Write informative/explanatory texts, including technical processes.

11-12.WT.3 Students will not write narratives in technical subjects. *Note: Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In technical, students must be able to write precise enough descriptions of the step-by-step procedures they use in their technical work that others can replicate them and (possibly) reach the same results.*

Production and Distribution of Writing

11-12.WT.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

11-12.WT.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

11-12.WT.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

Research to Build and Present Knowledge

11-12.WT.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

11-12.WT.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in

answering the research question; integrate information into the text selectivity to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation

11-12.WT.9 Draw evidence from informational texts to support analysis, reflection, and research.

Range of Writing

11-12.WT.10 Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.