

# Game Design and Interactive Media (GDIM)

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## Courses

### **GDIM 25. Game Design Fundamentals. 4 Units.**

Explore the fundamentals of game design through the design and play of simple analog game systems. Students explore the principles and usage of game design elements through hands-on projects emphasizing iteration and playtesting in a creative game design community.

Same as ICS 61.

Restriction: Computer Game Science Majors have first consideration for enrollment. Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second right of consideration

## (II)

### **GDIM 27. Intermediate Game Design. 4 Units.**

More advanced study of game design principles and systems design through the study of complex problems and play experiences. Topics include economies, game balancing, level design, prototyping, stat design, playtesting, and design documentation.

Prerequisite: GDIM 25

Restriction: Computer Game Science Majors have first consideration for enrollment. Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second consideration for enrollment.

### **GDIM 31. Introduction to Programming for Games. 4 Units.**

Learn the fundamentals of programming for games through hands-on exercises in programming languages like C#, Processing, Visual Studio, .NET, and the Unity engine. Students build several small game prototypes.

Restriction: Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second right of consideration.

## (Va)

### **GDIM 32. Intermediate Programming for Games. 4 Units.**

Students advance their skills with game programming, building on existing skills developed in Introduction to Programming for Games. Hands-on projects emphasize general procedural and problem-solving skills, as well as furthering knowledge of C# and the Unity3D/Unreal game engines.

Prerequisite: GDIM 31

Restriction: Computer Game Science Majors have first consideration for enrollment. Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors will have second consideration.

## (Va)

### **GDIM 33. Coding In Game Engines. 4 Units.**

Introduces students to visual scripting tools in game engines in the context of game design, level, design, and experience design. Students gain fluency in one or more visual scripting languages.

Prerequisite: GDIM 31. GDIM 31 with a grade of C or better

Restriction: Computer Game Science Majors have first consideration for enrollment. Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second consideration for enrollment.

### **GDIM 41. Games and Society. 4 Units.**

The study and critical analysis of computer games as art objects, cultural artifacts, gateways to virtual worlds, educational aids, and tools for persuasion and social change. Emphasis on understanding games in their historical and cultural context.

Same as ICS 60.

Restriction: Computer Game Science Majors have first consideration for enrollment. Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second right of consideration.

## (III)

**GDIM 49. Special Topics in Games and Society. 4 Units.**

Studies in selected areas of games and their relationship to society. Topics addressed vary each quarter.

Repeatability: Unlimited as topics vary.

Restriction: Computer Game Science Majors have first consideration for enrollment. Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second right of consideration.

**GDIM 51. Visual Design Fundamentals. 4 Units.**

The principles, tools, and techniques of visual design for playable media. How do shape, line, color, composition, typography, and time work together to communicate information, emotion, and meaning in interfaces, game worlds, and stories.

Restriction: Computer Game Science Majors have first consideration for enrollment. Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second right of consideration.

**GDIM 53. Roleplaying and Improvisational Play. 4 Units.**

How do practices of performance, role-playing, and improvisation overlap with contemporary practices of game design? Connecting these forms of play to their contemporary uses within role-playing games, virtual worlds, and playable media more broadly.

Restriction: Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second right of consideration.

**GDIM 55. Storytelling for Interactive Media. 4 Units.**

The history, theory, and practice of interactive storytelling for games and other interactive media. Starting with the emergence of electronic literature and hypertext narratives, students encounter and experience a compressed history of this emergent form through play, analysis, and design.

Restriction: Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second right of consideration.

**GDIM 61. Introduction to Game Development. 4 Units.**

Introduction to the design and development of games. Includes core concepts in software development, team management, leadership, and project management.

Restriction: Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second right of consideration.

**GDIM 127. Professional Studio/Practicum. 4 Units.**

Professional skills are essential in today's competitive job market. Covers interview techniques, resume building, professional networking, personal brand development, online portfolios, and presentation.

Restriction: Seniors only. Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second right of consideration.

**GDIM 129. Special Topics: Project in Advanced Game Design. 4 Units.**

Studies in selected areas of advanced game design. Topics addressed vary each quarter. Students work alone or in teams to design and implement a unique game or interactive experience.

Prerequisite: GDIM 25. GDIM 25 with a grade of C or better

Repeatability: Unlimited as topics vary.

Restriction: Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second consideration for enrollment.

**GDIM 131. Data Analytics for Games and Interactive Media. 4 Units.**

Survey of analysis methods for understanding player data, including playtesting, telemetry data collection and analysis, metrics visualization, and its application in development and business.

Restriction: Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second right of consideration.

**GDIM 139. Special Topics in Game Programming. 4 Units.**

Studies in selected areas of game programming. Topics addressed vary each quarter.

Prerequisite: GDIM 33 or ICS 161

Repeatability: Unlimited as topics vary.

Restriction: Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second consideration for enrollment.

**GDIM 149. Special Topics in Interactive Media Design. 4 Units.**

Studies in selected areas of games and interactive media and design. Topics addressed vary each quarter.

Repeatability: Unlimited as topics vary.

Restriction: Upper-division students only. Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors have second consideration for enrollment.

**GDIM 161. Multiplayer Game Project. 4 Units.**

Design and develop a multiplayer game using Unity or similar engine, with a focus on learning to work in a development team, writing design documents, working with platform features and limitations, developing engaging mechanics, playtesting, and post-mortems.

Prerequisite: (GDIM 27 or ICS 166) and (GDIM 33 or ICS 161) and (GDIM 61 or ICS 62). GDIM 27 with a grade of C or better. ICS 166 with a grade of C or better. GDIM 33 with a grade of C or better. ICS 161 with a grade of C or better. GDIM 61 with a grade of C or better. ICS 62 with a grade of C or better

Same as ICS 168.

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**GDIM 163. Solo Game Project. 4 Units.**

Students work on their own to design, develop, and playtest a small game from scratch, taking into consideration psychology, narrative, platform features and limitations, marketing, computer science capabilities, human-computer interface principles, industry trends, aesthetic judgment, and other factors.

Prerequisite: GDIM 27 and GDIM 33 and GDIM 51 and GDIM 61. GDIM 27 with a grade of C or better. GDIM 33 with a grade of C or better

Restriction: Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors given second consideration.

**GDIM 165. Games Entrepreneurship. 4 Units.**

As the audiences for games continue to diversify so have the channels for game publishing and monetization. Explore connections between the business and creative side of games in context like esports, education, indie game development, mobile apps, and AAA studios.

Restriction: Upper-division students only. Computer Game Science Majors have first consideration for enrollment. Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors given second consideration.

**GDIM 167A. Capstone Game Project I. 4 Units.**

Students work in teams to design and implement a unique game or interactive experience. Emphasis on sound, art, and level design, building a community, production values, full utilization of hardware and software platform, and current industry trends.

Prerequisite: GDIM 27 or GDIM 61 or ICS 62 or ICS 166. GDIM 27 with a grade of C or better. GDIM 61 with a grade of C or better. ICS 62 with a grade of C or better. ICS 166 with a grade of C or better

Grading Option: In Progress (Letter Grade with P/NP).

Same as ICS 169A.

Restriction: Seniors only. Computer Game Science Majors have first consideration for enrollment. Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors given second right of consideration.

**GDIM 167B. Capstone Game Project II. 4 Units.**

Students continue work in teams to design and implement a unique game or interactive experience. Emphasis on sound, art, and level design, building a community, production values, full utilization of hardware and software platform, and current industry trends.

Prerequisite: GDIM 167A or ICS 169A. GDIM 167A with a grade of C or better. ICS 169A with a grade of C or better. In Progress grade for GDIM 167A or ICS 169A also accepted.

Same as ICS 169B.

Restriction: Seniors only. Computer Game Science Majors have first consideration for enrollment. Game Design and Interactive Media students have first consideration for enrollment. School of ICS majors given second right of consideration.