

**RARITAN VALLEY COMMUNITY COLLEGE  
ACADEMIC COURSE OUTLINE**

**IDMX297 – INTERFACE DESIGN CAPSTONE**

**I. Basic Course Information**

- A. Course Number and Title: IDMX297 Interface Design Capstone
- B. New or Modified Course: Modified
- C. Date of Proposal: Semester: Spring Year: 2018
- D. Effective Term: Fall 2019**
- E. Sponsoring Department: Visual and Performing Arts (VAPA)
- F. Semester Credit Hours: 3
- G. Weekly Contact Hours: 4 Lecture: 2  
Laboratory: 2  
Out of class student work per week: 5
- H. Prerequisites/Corequisites: **Prerequisite:** A grade of C or higher in IDMX291 User Interface Programming
- I. Laboratory Fees: Yes, at current rate.
- J. Name and Telephone Number or E-Mail Address of Department Chair and Divisional Dean at time of approval: John Sichel – [john.sichel@raritanval.edu](mailto:john.sichel@raritanval.edu) & Vandana Nadkarni – [vandana.nadkarni@raritanval.edu](mailto:vandana.nadkarni@raritanval.edu). Patrice Marks- [Patrice.Marks@raritanval.edu](mailto:Patrice.Marks@raritanval.edu)

**II. Catalog Description**

**Prerequisite: A grade of C or higher in IDMX291 – User Interface Programming.**  
This course is a capstone to the Interface Design & Web Development Program. Students will act as both designers and developers to produce a piece of interactive digital media (app, tool, information display, exhibit, etc.) from conception to deployment. They will be responsible for creating text, image, audio, animation, and video assets, and implementing them into a final product.

**III. Statement of Course Need**

- A. Students entering into the growing number of fields that make use of interactive digital media require practical experience, both exploring practical possibilities that modern multimedia technology enables, and managing the time and assets among team members, to create a final, deployed product. With how multimedia experiences are changing and evolving, this course will also provide them with a valuable opportunity to work with new interactive technologies.
- B. This course requires the use of a Computer Lab to both learn the software necessary to create user interface assets, as well as to assemble practical user interface projects.
- C. Transferability of Course: This course could transfer as a free elective or as a Computer Science elective.

#### **IV. Place of Course in College Curriculum**

- A. This course meets a program requirement for the Interface Design & Web Development A.A.S., and A.S..
- B. Computer Elective on the Computer and Programming Electives List
- C. Free Elective
- D. To see course transferability: a) for New Jersey schools, go to the NJ Transfer website, [www.njtransfer.org](http://www.njtransfer.org); b) for all other colleges and universities, go to the individual websites.

#### **V. Outline of Course Content**

- A. Review of Design Principles covered in IDMX114, IDMX208, and IDMX291.
- B. Concept development
- C. Technical and interactive design
- D. Team and time management
- E. Integrating developed assets with developed code
- F. User testing
- G. Distribution/deployment.
- H. Post-mortem assessment and maintenance.

#### **VI. General Education and Course Learning Outcomes**

##### **A. General Education Learning Outcomes:**

**At the completion of the course, students will be able to:**

1. Apply creativity to problem solving; decision making; and quantitative reasoning (G.E. 1, 3, 4, 7)
2. Build communication skills (effective writing and speaking) through collaborative learning, utilizing team projects and multi-tasking. (G.E. 2, 3, 6)

##### **B. Course Learning Outcomes:**

**At the completion of the course, students will be able to:**

1. Optimize working in a group by identifying team members' strengths and weaknesses and collectively divide up responsibilities and time in such a way that play upon identified strengths.
2. Implement multimedia assets with code to create a working interactive product.
3. Deploy an interactive multimedia product via appropriate channels, such as an online store (for mobile apps) or physical installation (for museum, performance, or interactive art displays), etc.
4. Implement updates and revisions to a product and deploy those revisions.

**C. Assessment Instruments**

1. Computer lab assignments
2. Quizzes
3. Midterm examinations
4. Final examination

**VII. Grade Determinants**

- A. Attendance & participation
- B. Homework assignments
- C. Computer lab assignments
- D. Tests and quizzes
- E. Interactive multimedia product
- F. Final product's zero-day update

The modes, and methods for teaching and learning that may be used in the course:

- A. lecture/discussion
- B. small-group work
- C. computer-assisted instruction
- D. guest speakers
- E. laboratory
- F. student oral presentations
- G. simulation/role playing
- H. student collaboration
- I. independent study

**VIII. Texts and Materials**

- A. Suggested textbooks:
  - "Interactive Displays: Natural Human-Interface Technologies (Wiley Series in Display Technology)" (2014) by Achintya K. Bhowmik
- B. Open Educational Resources (OER)

**The following statement should be included in the outline:**

(Please Note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.)

**IX. Resources**

- A. Computer lab with overhead projection
- B. Modern web browser software (Chrome)
- C. Microsoft Office Suite
- D. Adobe Suite
- E. Unity or other engine determined by the professor

**X. Honors Options**

N/A