

## **CGDD 4814: Studio 2**

### **4 Credit Hours**

*Prerequisite: CGDD 4803*

This course continues the studio experience from and further explores the application of game design and development in a structured environment; teams build applications utilizing best practices in software engineering including asset, project, configuration, and requirements management. Students taking this Capstone course will assume a senior position within their teams and provide mentoring to students taking the Studio course. This course involves weekly status, design, and development meetings.

## **CS 2290: Special Topics**

### **3 Credit Hours**

*Prerequisite: Approval of the instructor, major area committee, and department chair.*

The course covers special topics at the intermediate level that are not in the regular course offerings.

## **CS 3305: Data Structures**

### **3 Credit Hours**

*Prerequisite: (MATH 2345 or CSE 2300) and [(CSE 1322 and CSE 1322L each with a "B" or better), or MTRE 2610 with a "B" or better, or CPE 3000 with a "B" or better]*

This course introduces data structures, specification, application, and implementation. The case studies will illustrate how data structures are used in computing applications. The emphasis of the course is on linear and some nonlinear data structures and object oriented principles. Topics include: abstract data types, stacks, queues, lists, binary search trees, priority queues, recursion, algorithm efficiency, trees, heaps, hash tables, and analysis of search and sort algorithms and their performance for implementation and manipulation. The programming language to be used in this course is any standard high-level object-oriented programming language such as C++, Java, and Ada.