



## CIS125GA – Game Design I Syllabus / Dr. Wayne Machuca

### **Contact Information:**

Office:	AC 2783
Hours:	Office hours are posted on the door, available on the Internet, and attached at the end of this document.
Phone:	503.491.7631 Voice mail is always available.
Email:	<b><u><a href="mailto:wayne.machuca@mhcc.edu">wayne.machuca@mhcc.edu</a></u></b> Email is checked several times a day and is often the most effective method to get in contact with me.
Web Page:	<b><u><a href="http://www.obiWEBkenobi.com">http://www.obiWEBkenobi.com</a></u></b>

### **Class Meeting Time:**

This class meets: \_\_\_\_\_

Final Exam is on: \_\_\_\_\_

### **Required Text Books:**

Learning to Program with Alice (2ed)

**Wanda P. Dann**, *Ithaca College*  
**Stephen Cooper**, *St. Joseph's University*  
**Randy Pausch**, *Carnegie Mellon University*

ISBN-13: 978-0-13-208519-9

Publisher: Prentice Hall  
Copyright: 2008

## ***Catalog Course Description:***

This course introduces students to video game concepts and design. Students build fundamental game scenarios using packaged software such as ALICE to create animated scenes and basic goal seeking games with 3D characters similar to SIMS-style games. Students are exposed to basic techniques (Events) for character (Object) control.

## ***Recommended Co-requisite and Proficiency:***

None

## ***Course Goals and Expected Educational Outcomes***

1. Describe the concept of Object Oriented Programming within the concept of simple game design
2. Perform object method manipulation to create “realistic” animation
3. Evaluate from several Events to determine the most appropriate Event to apply to an Object in a given situation
4. Create events in a 3-dimensional space
5. Design logical structures using algorithms
6. Incorporate Boolean Logic in an animation
7. Incorporate Conditional Logic in an animation
8. Incorporate Recursive Algorithms (such as: Looping Structures) in an animation
9. Create a basic goal-seeking game
10. Demonstrate how external actions can influence the actions of an object

## ***Course Contents***

- Alice and the Information Systems industry
- Program Design and Implementation
- Programming: Built in functions
- Classes, Objects, and Methods
- Events and Event Handling
- Functions
- Conditional Events (If/Else)
- Looping and Recursion

## ***Anticipated Schedule***

Following is an anticipated schedule for this course. Schedules, assignments, and exam dates may change at any time at the discretion of the instructor.

Week	Material to be covered	Assignments Due
1	Introduction / Alice and IS / Chapter 1	
2	Chapter 2	Exercises: 1.1, 1.2, 1.3, 1.5 (demo)
3	Chapter 3	Exercises: Spider Robot (demo), Storyboard, 2-2.3, 2-2.4, 2-2.6
4	Chapter 4 / Portfolio Presentations I	Exercises: 3-1.3, 3-2.5 (Spider Robot complete – demo), Portfolio I
5	Chapter 5 (part 1)	Exercises: Clever Skater complete (demo), 4-1.1, 4-1.3, 4-1.4
6	Chapter 5 (part 2)	Exercises: Fire Rescue complete, 5-1.1, 5-1.3,
7	Chapter 6	Philosopher Game from chapter (demo), 5-2.15, Project 2. Horse jumps over fence.
8	Chapter 7	Philosopher Game complete (demo), horse jump over multiple fences.
9	Portfolio II Presentation	Goldfish Chase, Game project review
10	Chapter 8 (part 1)	
11	Chapter 8 (part 2), Randomization	Towers of Hanoi, Steeple chase
Finals	Final game presentation, Steeple chase presentation.	

Note: No classes are scheduled for the week of November 23-27, 2009.

## ***Evaluation***

The student will be expected to demonstrate a basic understanding of the course objectives by obtaining a passing grade on exams, assignments and homework. Special exercises and small projects may be given on a regular basis to assist student understanding of key concepts. Pop quizzes, if given, are for extra credit and will be used at the instructor's discretion.

Homework credit is available at 20 points per chapter regardless of the number of chapters covered.

The course grade will be based upon the accumulation of total points earned

Grading distribution will consist of:

Portfolio I - 100 points Final Portfolio - 100 points	Homework - 120 (20 points/chapter) Semester Project - 40 points
Totals: Portfolios (200) + Homework (120) + Project (40) = 360	

The grading scale:

Course Syllabus

Wayne Machuca  
Mt. Hood Community College

A = 90 - 100%  
B = 80 - 89%  
C = 70 - 79%  
D = 60 - 69%  
F = 0 - 59%

**Note:** The instructor reserves the right to modify the assignments, schedule, or grade point scale at any time. Instructor will notify the class of any changes through announcements or email.

### ***Special Information***

- Homework will be assigned every week. It may consist of questions from the text, or other projects that may be assigned as the class progresses.
- Homework is due on the due date by the beginning of the class session. No exceptions. Do not expect extra time allowance for printing, completion, etc.
- **Note: Late homework will not be accepted.**
- Homework must be complete by the due date and is due by the end of class. Do not expect extra time at the end of the class period for homework completion or printing. Homework can be turned-in in class, in person, or in my office mail box in advance.

### ***Attendance Requirements & Drop Policy***

Attendance will be taken during each class.

If you miss a class or are late to class, **you are responsible** for making up the material yourself. The instructor does not use pre-written lecture notes.

**Drop policy:** This instructor does not perform “administrative drops.”

It is the responsibility of any student desiring to drop the course to turn in the necessary drop forms. The instructor will not drop students who are no longer attending class, but reserve the right to drop students who have missed the equivalent of two weeks of class (2-4 class meetings). The instructor *will not* drop a student after the last day to drop. You are responsible for your own records.

**Absences:** If a student knows that they might have to miss a class, they should notify the instructor in advance and make arrangements to find out the nature of future lecture material and assignments. It is the student's responsibility to study material covered in

missed classes as obtained from a fellow student and complete all assignments. The instructor should be consulted immediately if particular problems ensue.

## ***Lab Time***

The computer lab is located in room AC1451 and is available for your use. Check on hours and notices of holiday closures on the MHCC computer lab web site.

## ***Email Rules***

Because I receive several emails every day, many of which contain viruses or phishing attempts, I request that any student communications with me via email follow these rules:

- 1. Identify yourself in the email by full name and the class in which you are enrolled.**
2. In the subject line of the message key your class id, name, and topic as such:  
CIS000 John Smith – *message*
3. **Do not send attachments** unless you have made a special arrangement with me.  
Emails with attachments will be deleted without opening.

You can usually expect a reply within 24 hours except over weekends, holidays, or vacations.

## ***Methods of Instruction and Class Conduct***

Classes will consist of interactive lectures, hardware and software demonstrations, in-class microcomputer exercises, pop quizzes and examinations. Students should expect to work hard, concentrate seriously, and participate regularly during class.

In this course, it will be assumed that the student has no significant background in the subject matter. As a result, a strong foundation based on fundamental concepts must be developed during the first few weeks of the course before significant application, project work, and management considerations can be effectively treated.

The amount of material and number of subject areas to be covered in a course of this nature is significant. As a result, the amount of class time allocated for this course will be fully utilized and the student should endeavor to participate fully.

The instructor will be available to answer student questions, help with individual problems, and cover troublesome material throughout each class. Students having problems should not hesitate to consult the instructor as soon as possible. Many times a few moments of consultation will help a student get quickly moving forward in the course (and can often prevent several hours of struggle!). Delaying consultation often leads to insurmountable student problems.

**No Internet activity, computer games, email checks, chatting, or work for other classes is permitted during the lecture portion of the class.**

**You are responsible for your own wellbeing.**

**All cell phones and personal electronic devices must be turned off prior to class.**

## *Emergency Events*

**Weather Closure:** You are always responsible for your own well-being. In the event of school closure due to natural events (e.g. storms, snow, etc.), due dates for all assignments will be reassigned on a case by case basis. Depending on the severity or length of the closure, students will still be responsible for course work, readings, homework, and assignments. Students should be prepared to accomplish work off-campus.

**Pandemic Events:** You are always responsible for your own well-being. If you are sick, stay home. If the school has to close due to a pandemic, all course activities will continue through the portal, email, or alternative social network at the instructor's discretion.

**Other Emergencies:** You are always responsible for your own well-being. In the event of a declared campus emergency, you should follow the established school policies and procedures.

**Student's Responsibility:** It is the student's responsibility to make sure that all contact information on the portal is correct and that your email service places my message in your "In Box". The student is responsible for making all due dates for all exams and assignments regardless of the circumstances.

**Instructor's Responsibility:** The instructor will make every reasonable effort to communicate schedule changes. In the event of a school closure, the instructor will make arrangements for collecting assignments. In the event of closures on an exam day, the instructor will make reasonable alternative arrangements for examination including (but not limited to) use of the testing center.

## *Academic Honesty*

**Academic Honesty** - Cheating, plagiarism, and other acts of academic dishonesty are regarded as serious offenses. Instructors have the responsibility to submit, in a written report to the Associate Vice President of Student Life, any such incident that cannot be resolved between the instructor and student. Depending on the nature of the offense, serious penalties may be imposed, ranging from loss of points to expulsion from the class or college. Student rights and responsibilities can be located in the MHCC Student Handbook.

## ***Classroom Behavior***

**Classroom Behavior** - Instructors have the responsibility to set and maintain standards of classroom behavior appropriate to the discipline and method of teaching. Students may not engage in any activity which the instructor deems disruptive or counterproductive to the goals of the class. Beepers, pagers, and cellular phones can be a nuisance and are not to be brought to the classroom. Instructors have the right to remove offending students from class. Repetition of the offense may result in expulsion from the course.

## ***Safety and Security Considerations***

There are Public Safety officers on duty 24 hours every day. They patrol the entire campus in marked vehicles. In the event of an emergency dial "33" from any campus phone. There are 20 emergency and information telephones placed throughout the campus. They are located at the front flagpoles, at the main gym entrance and at various points on both the upper and lower levels of the main academic center.

The community service/campus information office (at the southwest corner of the library wing, near the flagpoles) is open Monday through Friday until 7 p.m. for students waiting for rides or buses. The office is not open on Saturdays.

Doors leading to the Jazz Café are open Monday through Friday from 6 a.m. until 10:30 p.m. This well-lit area is equipped with tables and vending machines. It is a great place for study groups. Restrooms adjacent to the café are open during Jazz Café hours.

Public Safety officers are available to escort you through our "Safe Walk" program. Officers are available at any time through the campus switchboard. Dial "7310" from any campus phone to reach an officer.

Closed-circuit cameras monitor broad areas of the campus at all times.

## ***Americans with Disabilities Act***

Americans with Disability Act – If you have a documented disability that may require assistance, you will need to contact the Disability Services Office for coordination of your academic accommodations. The Disability Services Office is located on the Gresham campus in AC 2182. Please call the following numbers for more information- (503) 491-6923 or (503) 491-7670 TDD.

## \_\_\_\_\_ ***Equal Opportunity***

**Equal Opportunity** – It is the policy of MHCC to provide equal educational opportunity and employment opportunities and to provide service benefits to all students and employees without regard to race, color, religion, national origin, sex, age, disability or any other status or characteristic protected by applicable state or federal law.

## \_\_\_\_\_ ***Affirmative Action***

**Affirmative Action** - Inquiries regarding application of these and other regulations should be directed to either the College's Affirmative Action Office (503)491-7200 or TDD, 491-7202, the Office of Civil Rights, Department of Education, Seattle, Washington; or to the office of Federal Contract Compliance Programs, Department of Labor, Seattle, Washington.

## \_\_\_\_\_ ***Offensive Subject Matter***

**Offensive Subject Matter** – Students should be aware this course may contain subject material that may be sensitive or tend to offend. The subjects are not brought into the course for the purpose of offending; rather, the subjects may be discussed for the learning and academic qualities.

## \_\_\_\_\_ ***Learning Assistance Center***

The Learning Assistance Center (LAC) provides free tutoring to students in a variety of academic subjects, as well as individual learning skills consultation and academic success seminars. The LAC Computer Lab is available for individual academic use and has a variety of skill-building software available. For a current schedule of services, visit the center, located directly above the Library, or call (503) 491-7108.