

PROTOCOLS FOR MULTIMEDIA INTERFACES

COURSE NUMBER: DIG6751C	CREDIT HOURS: 3
SEMESTER/YEAR: FALL 2016	CLASS LOCATION: CSE E413
	CLASS MEETING TIME(S): T 4 TH PERIOD/TH 4 TH -5 TH PERIODS
INSTRUCTOR: Angelos Barmpoutis	OFFICE LOCATION/HOURS: CSE E428 / T & TH 3 RD PERIOD
	CONTACT EMAIL: ANGELOS@DIGITALWORLDS.UFL.EDU
CONTACT PHONE: (352) 294-2000	COURSE WEBSITE: DIGITALWORLDS.UFL.EDU/PROGRAMS/MA-IN-DAS/

COURSE DESCRIPTION

The goal of this class is to learn about the protocols that control the interface of devices such as computers, mobile phones, multimedia players etc. through the means of programming and scripting. This class offers an introduction to programming for non-programmers ideal for those who are interested in developing computer applications or mobile apps, such as educators, digital humanists, digital artists, scientists, and game developers, and there is no requirement for prior knowledge on this field. A wide range of human-computer interaction components will be covered, from standard keyboard/mouse/joystic functions up to state of the art touch screens and other natural user interfaces (Microsoft KINECT and others). The students will be exposed to the basic principles of interactive event handling and they will acquire skills in coding touch screen interaction using Java-based platforms, web-based interaction using Java script, as well as standard interaction methods for computer applications.

PREREQUISITE KNOWLEDGE AND SKILLS

There are no prerequisites courses, skills, or knowledge for this course.

PURPOSE OF COURSE

To learn general programming concepts, to acquire scripting skills, to understand multimedia representations in digital devices, to script interaction in virtual environments.

COURSE GOALS AND/OR OBJECTIVES: By the end of this course, students will be able to:

1. learn general programming concepts,
2. to acquire scripting skills,
3. understand multimedia representations in digital devices,
4. script interaction in multimedia environments.

COURSE SCHEDULE:

THERE IS A FINAL EXAM ON THE LAST DAY OF CLASSES, TUESDAY, DECEMBER 6, 10:40AM.

Week	Topic	Assignments/Quizzes
1	Introduction on computer interfaces, Variables & Conditions	Quiz
2	Loops & Arrays	Quiz
3	Functions	Programming assignment

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4	Programming Animations using Images	Programming assignment
5	Object-oriented Programming	
6	Custom Graphical User Interfaces – Pointing device interaction	Programming assignment
7	Interactive applications with graphical user interfaces	
8	Programming 3D Animations	Programming assignment
9	Programming 3D Animations – Part 2	
10	Developing Interactive 3D Games – Part 1	
11	Developing Interactive 3D Games – Part 2	
12	Professional Integrated Development Environments	Programming assignment
13	Developing applications in IDE	
14	Programming Kinect interactions	
15	Review and Exam	

REQUIRED TEXTBOOKS AND SOFTWARE:

1. [LEARNING PROCESSING: A BEGINNER’S GUIDE TO PROGRAM](#) by DANIEL SHIFFMAN, ISBN: 9780123736024

Additionally, there will be several useful on-line tutorials and resources.

RECOMMENDED MATERIALS:

1. [PROGRAMMING](#) by KASPARIAN RAFFI, ISBN: 1932504052
2. [BEGINNING SMARTPHONE WEB DEVELOPMENT: BUILDING JAVASCRIPT, CSS, HTML AND AJAX-BASED APPLICATIONS FOR IPHONE, ANDROID, PALM PRE, BLACKBERRY, WINDOWS MO](#) by GAIL FREDERICK, RAJESH LAL, ISBN: 143022620X

MATERIALS AND SUPPLIES FEES:

Material and supply fees are assessed for certain courses to offset the cost of materials or supply items consumed in the course of instruction. A list of [approved courses and fees](#) is published in the Schedule of Courses each semester. (UF-3.0374 Regulations of the University of Florida)

Material and supply and equipment use fee information is available from the academic departments or from the schedule of courses (Florida Statutes 1009.24). The total M&S for this class is **\$50.00**

EVALUATION OF GRADES

Assignment	Total Points	Percentage of Grade
Weekly Homework Projects – Programming assignments that you have to complete every 1-2 weeks.	60	60%

Final Exam – Cumulative final written examination.	30	30%
Participation – Students are expected to actively participate in class discussions and quizzes	10	10%

GRADING SCALE:

Letter Grade	% Equivalency	GPA Equivalency
A	94 – 100%	4.0
A-	90 – 93%	3.67
B+	87 – 89%	3.33
B	84 – 86%	3.00
B-	80 – 83%	2.67
C+	77 – 79%	2.33
C	74 – 76%	2.00
C-	70 – 73%	1.67
D+	67 – 69%	1.33
D	64 – 66%	1.00
D-	60 – 63%	.67
E, I, NG, S- U, WF		0.00

More information on grades and grading policies is here:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

COURSE POLICIES:

PARTICIPATION / ATTENDANCE POLICY

We value participation more than mere attendance. Each Instructor is responsible for communicating the specific details of what percentage of your grade (if any) will be assigned to participation, and how class participation will be measured and graded.

MAKE-UP POLICY

Presentations may not be presented late. Documented emergencies or medical situations may be the only accepted reasons for an excused absence on the day of a presentation.

COURSE TECHNOLOGY

The students will be required to have access to, and use a personal computer with the access to the Internet. Word editing software will be required for written assignments.

COURSE COMMUNICATIONS

Students can communicate directly with the Instructor regarding the course material.

UF POLICIES:

UNIVERSITY HONESTY POLICY

UF students are bound by The Honor Pledge that states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

The Honor Code (<https://www.dso.ufl.edu/sccr/process/student-conducthonor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

CLASS DEMEANOR

Students are expected to arrive to class on time and behave in a manner that is respectful to the instructor and to fellow students. Please avoid the use of cell phones and restrict eating to outside of the classroom. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

STUDENTS REQUIRING ACCOMMODATIONS

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

NETIQUETTE COMMUNICATION COURTESY

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats, more information can be found at:

<http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf>

ONLINE COURSE EVALUATIONS

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

CAMPUS RESOURCES

HEALTH AND WELLNESS

U Matter, We Care

If you or a friend is in distress, please contact umatter@ufl.edu or 352 392- 1575 so that a team member can reach out to the student.

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Counseling and Wellness Center

<http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department, 392-1111 (or 9-1-1 for emergencies). <http://www.police.ufl.edu/>

ACADEMIC RESOURCES

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling.

<http://www.crc.ufl.edu/>

Library Support, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

<http://teachingcenter.ufl.edu/>

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.

<http://writing.ufl.edu/writing-studio/>

Student Complaints Campus:

https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf

On-Line Students Complaints:

<http://www.distance.ufl.edu/student-complaint-process>

Disclaimer: This syllabus represents the instructor's current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.