

PROTOCOLS FOR MULTIMEDIA INTERFACES

COURSE NUMBER: DIG6751C	SEMESTER/YEAR: FALL 2015
INSTRUCTOR: ANGELOS BARMPOUTIS	CREDIT HOURS: 3.0
CLASS MEETING: M 4th & W 4th-5th periods	CLASS LOCATION: CSE building, room E413
OFFICE HOURS: M 3rd & W 3rd periods	OFFICE LOCATION: CSE building, room E428
COURSE TA OR COORDINATOR: TBD	COURSE WEBSITE: http://lss.at.ufl.edu

COURSE COMMUNICATIONS: Students can communicate directly with the instructor through Canvas regarding the course material. Students are also encouraged to post general questions to the discussion board through the course management system.

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/joystick 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:

Final exam date: December 9 (Wednesday), 10:40am-12:35am, in our classroom.

Week	Topic	Tools
1	Introduction on computer interfaces, Variables & Conditions	Jeliot
2	Loops & Arrays	Jeliot

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

REQUIRED TEXTBOOKS:

1. LEARNING PROCESSING: A BEGINNER'S GUIDE TO PROGRAM by DANIEL SHIFFMAN, ISBN: 9780123736024

Additionally, there are several useful on-line tutorials and resources

RECOMMENDED MATERIALS:

2. JAVA FOR ARTISTS: THE ART, PHILOSOPHY, AND SCIENCE OF OBJECT-ORIENTED PROGRAMMING by KASPARIAN RAFFI, ISBN: 1932504052
3. 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

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%
In-class Projects – Small programming challenges that you have to complete in class.	5	5%
Pop-Quizzes – Occasional un-announced quizzes.	5	5%
Final Exam – Cumulative final written examination.	30	30%

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:

ATTENDANCE /PARTICIPATION 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 will class participation 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.

UF POLICIES:

ACADEMIC INTEGRITY:

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of*

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honesty and integrity. “ You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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."* It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php>

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.

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES:

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.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT:

Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>.

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:

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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/>.

GETTING HELP

For issues with technical difficulties for E-learning in Canvas, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at <http://www.distance.ufl.edu/getting-help> for:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

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.