APPLIED DIGITAL MEDIA PROTOCOLS

COURSE NUMBER: DIG3XXX	CREDIT HOURS: 3.0
SEMESTER/YEAR: SPRING 2014	CLASS LOCATION: TBD
	CLASS MEETING TIME(S): TBD
INSTRUCTOR: TBD	OFFICE HOURS: TBD
COURSE TA OR COORDINATOR: TBD	COURSE WEBSITE: http://lss.at.ufl.edu

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

REQUIRED TEXTS: Learning Processing: A Beginner's guide to program by Daniel Shiffman, Morgan Cauffman (September 2, 2008), ISBN: 9780123736024.

Java for Artists: The Art, Philosophy, and Science of Object-Oriented Programming by Kasparian Raffi, ISBN: 1932504052

ADDITIONAL RESOURCES:

- o <u>http://cs.joensuu.fi/jeliot/</u> Jeliot (Software for beginners Java programmers)
- <u>http://www.processing.org</u> Processing (An easy-to-use Java programming environment)
- o <u>http://www.eclipse.org</u> Eclipse (An Integrated Development Environment)

COURSE DESCRIPTION: This course will introduce contemporary protocols for mobile application development. Topics covered include procedural and object-oriented programming, mobile software development practices, design and implementation of natural human-computer interaction for mobile and wearable platforms. The students will develop skills in programming their own applications with graphical user interfaces for portable digital media systems.

PREREQUISITE KNOWLEDGE AND SKILLS: Theory of Digital Media Protocols DIG3XXX.

PURPOSE OF COURSE: The main goal of this course is to build upon the theory of digital media systems (covered in the prerequisite course: Introduction of Digital Media Protocols) and introduce the students to the basic principles of scripting and coding in major popular mobile digital platforms, ranging from smart-phones to tablet computers. The students will be able to develop their own applications using multi-media data, graphical user interfaces, and basic human-computer interaction.

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

- 1. Be able to read and understand coded computer logic.
- 2. Be able to write their own programs using object oriented principles
- 3. Be able to develop computer applications with graphical user interface.
- **4.** Be able to code custom human-computer interaction using keyboard, mouse, and touch screens.

INSTRUCTIONAL METHODS: This course incorporates lecture, and discussion, group learning projects and student-created presentations.

COURSE SCHEDULE:

FINAL EXAM: To be announced by the University of Florida Registrars Office at http://www.isis.ufl.edu

Week	Торіс	Platform
1	Survey of scripting and coding protocols	Java-Jeliot
2	Introduction to object oriented protocols	Java-Jeliot
3	Object oriented structures in Java	Java-Jeliot
4	Protocols for coding human-computer interaction	Java-Jeliot
5	Advanced human-computer interaction	Java-Processing
6	Programming generated animations	Java-Processing
7	Handling multimedia (audio and visual) file formats	Java-Processing
8	Graphical user interfaces	Java-Processing
9	Graphical user interfaces (cont.)	Java-Processing
10	Principles of programming logic in electronic games	Java-Processing
11	Principles of game logic (cont.)	Java-Processing
12	Protocols for mobile devices	Java-Eclipse
13	Java libraries for android operating system	Java-Eclipse
14	Coding in android operating system	Java-Eclipse
15	Survey of scripting protocols on other mobile systems	Java-Eclipse

GRADING SCALE:

Letter Grade	% Equivalency	GPA Equivalency
А	94 – 100%	4.0
A-	90 – 93%	3.67
B+	87 – 89%	3.33
В	84 – 86%	3.00
В-	80 - 83%	2.67
C+	77 – 79%	2.33
С	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-		0.00
U, WF		

GRADING POLICIES:

Assignment	%
Weekly Homework projects: Every week starting from week 3 up to week 14	35%
the students will receive homework assignments related to the material covered	
in each week of classes. The students will have 1 week to work on each	
homework assignment. The assignments will be submitted through SAKAI.	
In-Class projects: During class the students will have to work on small-scale	30%
assignments (no more than 5-10 minute long). The goal of the in-class projects is	
to facilitate learning and give the students the opportunity to practice on the	
class material and receive immediate feedback by the instructor. One or more of	
the students will be asked to briefly present his/her solution to this project,	
followed by a discussion in class. One example in-class assignment is: Write a	
Java program that implements a given task or solves a described problem.	
Pop-Quizzes: There will be at least 5 unannounced pop-quizzes during the	10%
semester. The pop-quizzes will test the students on the material covered during	
the 2 classes prior to the pop-quiz.	
Final Paper/Project – Final Paper OR Final Project is the final result of the	30%
semester long effort in learning. It is expected that in this final test, students	
manifest their knowledge on the matter, and successfully deploy this knowledge	
in the practical format.	

COURSE POLICIES:

ATTENDANCE POLICY:

a. At the sole discretion of the instructor, documented Emergencies or medical situations may be the only acceptable reasons for an excused absence. At the very least, students must contact the Instructor 24 hours before class time if they wish to be considered for an excused absence.

b. Unexcused absences will accrue to the detriment of the portion of the final grade given for class participation.

MAKE-UP POLICY:

a. At the sole discretion of the instructor, Exams may or may not be taken late. Documented Emergencies or medical situations may be the only accepted reasons for an excused absence on the day of an exam.

b. Any assignment turned in past the due date may lose up to 10% of the total point value of the assignment for each class day it is late.

ASSIGNMENT POLICY:

a. At the discretion of the instructor, late work may be penalized according to policy.b. Any assignment turned in past the due date may lose up to 10% of the total point value of the assignment for each class day it is late.

Applied Digital Media Protocols Syllabus

COURSE TECHNOLOGY: The students are required to bring their own laptop during classes for in-class assignments. The laptop can run any operating system that executes Java applications (Microsoft Windows, Apple's OSX, various versions of Linux). UF POLICIES:

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES: Students requesting accommodation for disabilities must first register with the Dean of Students Office (http://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

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 <u>http://www.dso.ufl.edu/students.php</u>. **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 based on ten criteria. These evaluations are conducted online at <u>https://evaluations.ufl.edu</u>. 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 <u>http://evaluations.ufl.edu</u>.

GETTING HELP

For issues with technical difficulties for E-learning in Sakai, please contact the UF Help Desk at: <u>Learning-support@ufl.edu</u>, (352) 392-HELP - select option, 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

<u>Disclaimer</u>: 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.

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