

Cover Sheet: Request 14201

DIG3XXX Principles of Interaction & Usability

Info

Process	Course New Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Phillip Klepacki pklepacki@arts.ufl.edu
Created	9/6/2019 11:42:09 AM
Updated	10/8/2019 4:24:10 PM
Description of request	Creation of a new course that introduces students to the principles of interaction and usability for digital interfaces and systems. The course focuses on identifying end-users' needs and providing solutions tailored to those needs through interaction design, cognitive and emotional aspects of digital interfaces, visual aesthetics, data gathering, prototyping, and evaluation.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CFA - Digital Worlds 015851001	James Oliverio		9/6/2019
No document changes					
College	Approved	CFA - College of Fine Arts	Jennifer Setlow		9/20/2019
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			9/20/2019
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

Course|New for request 14201

Info

Request: DIG3XXX Principles of Interaction & Usability

Description of request: Creation of a new course that introduces students to the principles of interaction and usability for digital interfaces and systems. The course focuses on identifying end-users' needs and providing solutions tailored to those needs through interaction design, cognitive and emotional aspects of digital interfaces, visual aesthetics, data gathering, prototyping, and evaluation.

Submitter: Phillip Klepacki pklepacki@arts.ufl.edu

Created: 9/6/2019 11:36:34 AM

Form version: 1

Responses

Recommended Prefix DIG

Course Level 3

Course Number XXX

Category of Instruction Intermediate

Lab Code None

Course Title Principles of Interaction & Usability

Transcript Title Prin of Inter/Usabl

Degree Type Baccalaureate

Delivery Method(s) On-Campus, Online

Co-Listing No

Effective Term Earliest Available

Effective Year Earliest Available

Rotating Topic? No

Repeatable Credit? No

Amount of Credit 3

S/U Only? No

Contact Type Regularly Scheduled

Weekly Contact Hours 3

Course Description This course introduces students to the principles of interaction and usability for digital interfaces and systems. The course focuses on identifying end-users' needs and providing solutions tailored to those needs through interaction design, cognitive and emotional aspects of digital interfaces, visual aesthetics, data gathering, prototyping, and evaluation.

Prerequisites MAJOR: DAR_BADA

Co-requisites N/A

Rationale and Placement in Curriculum As digital systems become more pervasive in global culture, the demand for effective and intuitive user interfaces continues to expand exponentially. Through data gathering, analysis, iterative prototyping, and evaluation, this course provides Digital Arts & Sciences students both theoretical insight and practical methods to identify end-users' needs and provide appropriate usable solutions to those needs.

Course Objectives Identify problems in existing digital interfaces and systems

Articulate the cognitive, emotional, and social aspects of digital interaction and understand their implications for user satisfaction

Collect and analyze data to identify system requirements

Transform conceptual design ideas into physical design prototypes tailored to the needs of the end-user

Demonstrate an understanding of industry practices related to interaction and usability of digital systems

Gain experience working effectively in a collaborative group setting

Course Textbook(s) and/or Other Assigned Reading Required Textbook: Interaction Design: Beyond Human-Computer Interaction

(5th Edition), By Sharpe, Rogers, and Preece, Wiley & Sons

Available in both digital form (e.g. Kindle) and paper copy

ISBN-13: 978-1119547259

ISBN-10: 1119547253

Optional Reading: The Design of Everyday Things (2013), By Don Norman

Don't Make Me Think, Revisited (2014), By Steve Krug

Weekly Schedule of Topics Week 1

- Course Introduction and Overview. Reading (during Week 1): Chapter 1. What is Interaction Design?

Week 2

- Principles of Interaction Design
- Good Design and Poor Design
- Reading: Chapter 2. The Process of Interaction Design

Week 3

- Process and Basic Activities of Interaction Design
- Understanding the User Centered Approach
- Reading: Chapter 3. Conceptualizing Interaction

Week 4

- Conceptual Models
- Types of Interactions
- Reading: Chapter 4. Cognitive Aspects

Week 5

- Cognitive Frameworks
- Reading: Chapter 5. Social Interaction
- Chapter 6. Emotional Interaction

Week 6

- Social Interaction: Collaboration and Communication
- Understanding Emotional Aspects
- Reading: Chapter 7. Interfaces

Week 7

- Interface Types
- Graphical and Natural User Interface
- Reading: Chapter 11. Discovering Requirements

Week 8

- Identifying Needs and Establishing Requirements
- Personas and Scenarios
- Reading: Chapter 8. Data Gathering

Week 9

- Data Gathering to Identify Requirements
- Reading: Chapter 9. Data Analysis, Interpretation, and Presentation

Week 10

- Data Analysis, Interpretation, and Presentation
- Quantitative and Qualitative Data
- Reading: Chapter 12. Design, Prototyping, and Constraint

Week 11

- Design and Prototyping
- Sketching and Storyboard
- Reading: Chapter 13. Interaction Design in Practice

Week 12

- From Conceptual Design to Physical Design
- Prototyping Tools
- Reading: Chapter 14. Introducing Evaluation Chapter 15. Evaluation Studies

Week 13

- Evaluation
- Usability Testing
- Reading: Chapter 16. Evaluation

Week 14

- Inspections, Analytics, and Modeling
- Final Project Work Session

Week 15
- Final Project Review

Grading Scheme Class Participation and Attendance: Students are expected to actively participate in class exercises, discussions, both in class as well as in course online forums and outside class group meetings.

Quizzes: Every 2 weeks students will have a quiz hosted through Canvas. The 7 quizzes cover the topics discussed in the previous 2-week periods. Quiz material include lectures, assignments, readings, and other external resources.

Midterm Project: The project will demonstrate the student's mastery of concepts, processes, and discussion from weeks 1-6.

Final Project Proposal: Each working group shall submit a detailed plan for their final project

Final Project Presentation: In-class presentation of final group project. Each group should submit the final report and presentation slides at week 14

(see syllabus for further details)

Instructor(s) To be determined

Attendance & Make-up Yes

Accommodations Yes

UF Grading Policies for assigning Grade Points Yes

Course Evaluation Policy Yes

DIG3XX Principles of Interaction and Usability

Instructor

TBD

Phone

(352) 294-2000

Email

Canvas Mail

Office Location

TBD

Office Hours

TBD

Course Number

DIG3XX

Semester/Year

TBD

Course Credits

3 credits

Course Location

TBD

Course Meeting Times

TBD

Course Description

This course introduces students to the principles of interaction and usability for digital interfaces and systems. The course focuses on identifying end-users' needs and providing solutions tailored to those needs through interaction design, cognitive and emotional aspects of digital interfaces, visual aesthetics, data gathering, prototyping, and evaluation.

Pre-Requisite Knowledge and Skills

BA in Digital Arts and Sciences major (DAR_BADA)

Purpose of Course

This course aims to increase awareness of and fluency in effective contemporary digital design through analysis and relevant case studies. Students will learn basic skills for user-centered design and study various evaluation methods.

Objectives: By the end of this course, students will be able to:

- Identify problems in existing digital interfaces and systems
- Articulate the cognitive, emotional, and social aspects of digital interaction and understand their implications for user satisfaction
- Collect and analyze data to identify system requirements
- Transform conceptual design ideas into physical design prototypes tailored to the needs of the end-user
- Demonstrate an understanding of industry practices related to interaction and usability of digital systems
- Gain experience working effectively in a collaborative group setting

Course Materials:

- **Required Textbook:** Interaction Design: Beyond Human-Computer Interaction (5th Edition), By Sharpe, Rogers, and Preece, *Wiley & Sons*
Available in both digital form (e.g. Kindle) and paper copy
ISBN-13: 978-1119547259
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- **Optional Reading:** The Design of Everyday Things (2013), By Don Norman
Don't Make Me Think, Revisited (2014), By Steve Krug

Course Schedule

This schedule is only a guide and is subject to change. Unless otherwise indicated, readings are to be completed by the first class session of the week in which they are listed on the syllabus.

Week	Subject	Assignment/Quizzes	Assignments Due
Week 1	<ul style="list-style-type: none"> Course Introduction and Overview. Reading (during Week 1): Chapter 1. What is Interaction Design? 	"Practice Quiz" on the Syllabus	
Week 2	<ul style="list-style-type: none"> Principles of Interaction Design Good Design and Poor Design Reading: Chapter 2. The Process of Interaction Design		
Week 3	<ul style="list-style-type: none"> Process and Basic Activities of Interaction Design Understanding the User Centered Approach Reading: Chapter 3. Conceptualizing Interaction	Quiz 1 (wk 1-2) <i>Discussion of Mid-Term Project Assignment</i>	
Week 4	<ul style="list-style-type: none"> Conceptual Models Types of Interactions Reading: Chapter 4. Cognitive Aspects		
Week 5	<ul style="list-style-type: none"> Cognitive Frameworks Reading: Chapter 5. Social Interaction Chapter 6. Emotional Interaction	Quiz 2 (wk 3-4)	
Week 6	<ul style="list-style-type: none"> Social Interaction: Collaboration and Communication Understanding Emotional Aspects Reading: Chapter 7. Interfaces	<i>Discussion of Final Project Assignment</i>	
Week 7	<ul style="list-style-type: none"> Interface Types Graphical and Natural User Interface Reading: Chapter 11. Discovering Requirements	Quiz 3 (wk 5-6)	Mid-Term Project Due
Week 8	<ul style="list-style-type: none"> Identifying Needs and Establishing Requirements Personas and Scenarios Reading: Chapter 8. Data Gathering		Final Project Proposal Due
Week 9	<ul style="list-style-type: none"> Data Gathering to Identify Requirements Reading: Chapter 9. Data Analysis, Interpretation, and Presentation	Quiz 4 (wk7-8)	
Week 10	<ul style="list-style-type: none"> Data Analysis, Interpretation, and Presentation Quantitative and Qualitative Data Reading: Chapter 12. Design, Prototyping, and Constraint		
Week 11	<ul style="list-style-type: none"> Design and Prototyping Sketching and Storyboard Reading: Chapter 13. Interaction Design in Practice	Quiz 5 (wk 9-10)	
Week 12	<ul style="list-style-type: none"> From Conceptual Design to Physical Design Prototyping Tools Reading: Chapter 14. Introducing Evaluation Chapter 15. Evaluation Studies		
Week 13	<ul style="list-style-type: none"> Evaluation Usability Testing Reading: Chapter 16. Evaluation	Quiz 6 (wk 11-12)	
Week 14	<ul style="list-style-type: none"> Inspections, Analytics, and Modeling Final Project Work Session 		Final Project Due
Week 15	Final Project Review	Quiz 7 (wk 13-14)	

Evaluation of Grades

Assignment	Total Points	% of Grade
Class Participation and Attendance: Students are expected to actively participate in class exercises, discussions, both in class as well as in course online forums and outside class group meetings.	100	10%
Quizzes: Every 2 weeks students will have a quiz hosted through Canvas. The 7 quizzes cover the topics discussed in the previous 2-week periods. Quiz material include lectures, assignments, readings, and other external resources.	350	35%
Midterm Project: The project will demonstrate the student's mastery of concepts, processes, and discussion from weeks 1-6.	200	20%
Final Project Proposal: Each working group shall submit a detailed plan for their final project	50	5%
Final Project Presentation: In-class presentation of final group project. Each group should submit the final report and presentation slides at week 14	300	30%

Projects

Midterm Project: Good Design and Poor Design (Individual)

Students will be expected to write a substantive paper citing examples of good design and poor design in the real world and analyze their usability. The paper should be thorough and closely related to the topics and techniques covered in the class. More information about the term paper will be posted in Canvas.

Final Project: From User Analysis to Design (Group)

Students will work in teams for the final project. The purpose of this Final Project is twofold: 1) to demonstrate fluency in the process of interaction and usability in digital design and 2) to effectively communicate design concepts to the audience and collaborate in a team. In this project, students will select the target population and digital application as a group. Applying course materials, students will collect data, identify users' needs by analyzing data, ideate design concepts, develop prototypes, and run usability testing. The final project will be graded by the thoroughness of data analysis, quality of design work, presentation, and originality. Students will be graded as groups as well as individually. Students will be expected to complete a confidential peer assessment and evaluate how effectively each team member contributed to the team. More information about the final term project will be posted in Canvas.

With this assignment, students must submit an evaluative group report that describes what they contributed to the project plus A.) what their teammates contributed as well as B.) the general quality of their teammate's contributions to the group. The reports will not be viewed by other students in the group. 75% of a student's grade will be determined based on their individual contributions to the project (which must be clearly described in an evaluative report submitted with the assignment), and the remaining portion of the student's grade is determined by the feedback given by their teammates. Students who do a poor job on their individual contributions still have a chance to earn points on the assignment if their team report is favorable. Conversely, students who submit all of their individual work but do not participate will lose points if it is noted in the other reports submitted by their teammates.

Material and Grading Scale

Materials and Supply Fees

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 course fee for this class is \$0.00.

The total course fee for each course is listed on the UF Schedule of Courses. (<https://registrar.ufl.edu/soc/>).

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 – 59%	0.00

More information on grades and grading policies is here:

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

Course Polices

Attendance Policy, Class Expectations, and Make-Up Policy

We value participation more than mere attendance. The 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. Interaction with your peers and the instructor will empower you to greater achievement.

Attendance and participation are required for this course. Attendance will be taken every class period at the time the class is scheduled to start. If a student arrives after class begins, it is their responsibility to meet with the instructor after class to notify them that they were late and would like to receive a late attendance grade.

In our course, attendance for On-Campus and RT On-Line students is mandatory. Students are allowed **three unexcused absences**. If you miss more than **three classes** during the semester, each additional absence will lower your overall grade by **100 points**. If you miss more than **six classes**, you will fail the course. Exempt from this policy are only those absences involving university-sponsored events, such as athletics and band, and religious holidays, family emergencies, and health issues for which **you must provide appropriate documentation in advance of the absence**.

Additionally, tardiness will not be tolerated. If you are tardy for three class periods, you will receive an

unexcused absence.

YOT On-Line students will be expected to stay in sync with the rest of the class, and to achieve their participation portion by recording their responses to course material in advance of each lecture at least once a week.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

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.

The University of Florida and Digital Worlds requires that students have access to and on-going use of a laptop/mobile computer for DIG courses in order to be able to function in the current learning environment. Digital Worlds requires each student's laptop computer to meet certain minimum specs for heavy graphics use, the requirements documented below must be met.

DW Computer Requirements: <http://digitalworlds.ufl.edu/programs/ba-in-digital-arts-sciences/new-student-buyers-guide/>

Course Communications

Students can communicate directly with the instructor regarding the course material through the course management system (CANVAS) using "Canvas Mail".

Course Technology Support

The [Technology Support Center](http://digitalworlds.ufl.edu/support) provides computer support for Digital Worlds students who access Zoom, lecture recordings, student equipment, facilities and other technology-based resources.
<http://digitalworlds.ufl.edu/support>

For computer assistance related to Zoom, lecture recordings, student equipment, and facilities request please [Submit a Help Ticket](#) or email support@digitalworlds.ufl.edu.

For support related to account services, technical consulting, mobile device services, software services, administrative support, application support center, and learning support services, please contact the [UF Computing Help Desk](#) available 24 hours a day, 7 days a week at 352-392-4357 or helpdesk@ufl.edu.

UF Policies

University Honesty Policy

UF students are bound by The Honor Pledge which 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-conduct-honor-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, <https://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/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf>

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:

<http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html>

Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu/evals>. 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

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.

Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc>, and 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 at 392-1111 (or 9-1-1 for emergencies), or <http://www.police.ufl.edu/>.

E-learning Technical Support

352-392-4357 (select option 2) or e-mail to Learning- learning-support@ufl.edu

Career Connections Center

Reitz Union, 392-1601. Career assistance and counseling. <https://career.ufl.edu>

Library Support

Various ways to receive assistance with respect to using the libraries or finding resources.

<http://cms.uflib.ufl.edu/ask>

Teaching Center

Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu/>

Writing Studio

2215 Turlington Hall, 846-1138. Help brainstorming, formatting, and writing papers.

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

Student Complaints Campus

<http://regulations.ufl.edu/wp-content/uploads/2012/09/1.0063.pdf>

Online 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.