# **Human-Computer Interaction**

#### CSC-347 Fall 2020

### Instructor

Andrea Tartaro, Ph.D. Associate Professor of Computer Science

- Office: Riley 200-H (Available on Slack and Zoom Fall 2020)
- Email: andrea.tartaro@furman.edu
- Office hours: Mondays 1:30-2:30pm; Wednesdays 5-6pm; or by appointment.
  - o Check in on Slack first!
  - o https://furman.zoom.us/j/92554545377?pwd=ZzhjQS9EVC92THFLMDRPeldaTjdiZz09
  - o Meeting ID: 925 5454 5377
  - o Passcode: 403587
  - o To make an appointment, send email with at least 3 potential times.

### **Course Information**

- **Description:** Introduction to the field of human-computer interaction (HCI) focusing on a user-centered design process including the theory and application of what makes a user interface usable. Students will apply design principles and use empirical studies to identify a design problem, analyze requirements, and iteratively design, implement and evaluate a solution. We will also explore HCI research topics such as social technologies, universal usability, and participatory design.
- Class format: Interactive lectures, discussion, in-class exercises, group project, presentations, and individual assignments.
- **Meeting time:** Tuesdays & Thursday 9:45-11am; Wednesdays 3-5
- Meeting place: Slack course workspace and Zoom. Meeting information:
  - o https://furman.zoom.us/j/91982160824?pwd=cWtrcFhaTVluNUhzWDczTzk0UzY2UT09
  - o Meeting ID: 919 8216 0824
  - o Passcode: 600622
- **Final Exam:** Monday, December 7, 8:30-11am (Final Presentations and Project Portfolio due)

# **Course Goals and Objectives**

- 1. Learn and apply a human-centered, iterative design process for developing interactive technology systems, including analyzing requirements, developing a breadth of design ideas, applying design principles, prototyping, and evaluating designs.
- 2. Develop skills used by HCI practitioners including collaboration, written communication, and oral presentation.

3. Explore open questions in HCI research.

# Reading

To give you a feel for some of the different perspectives in HCI, readings for the course come from two course texts, available at the bookstore, as well as research articles and other articles on the web. All readings not in the texts will be linked on Moodle. Readings are assigned weekly and should be completed PRIOR to Tuesday's class.

#### **Course texts**

Alan Cooper, Robert Reimann, David Cronin, and Christopher Noessel. 2014. *About Face: The Essentials of Interaction Design*, 4<sup>th</sup> Edition. Indianapolis, IN: John Wiley & Sons, Inc.

Jennifer Preece, Yvonne Rogers, and Helen Sharp. 2015. *Interaction Design: beyond human-computer interaction*, 4<sup>th</sup> Edition. Chichester, West Sussex, UK: John Wiley & Sons Ltd.

# **Assignments**

### **Term-long Group Project**

The majority of the assignments are building blocks of the term-long project developing a system design. The theme for this year's projects is **no-contact HCI**. The project is broken up into five parts:

- 1. Problem Identification
- 2. Requirements Analysis
- 3. Ideation and Paper Prototype
- 4. High-fidelity Prototype, Heuristic Evaluation, and Usability Study Plan
- 5. Functional Prototype, Evaluation, and Proposed Re-design

The focus of the project is the *design process*, rather than building a robust application, and emphasizes working as a design team with users at each stage of design (with no face-to-face contact – see Course Policies, below). The assignments are designed to not only introduce you to different design techniques, but also develop skills you would use as an HCI practitioner/researcher or any other professional role: collaboration (including division of labor), writing, and presenting. After the first project assignment, you will form project groups that you will work with for the remainder of the semester. Deliverables for each assignment will include (at least) a **proposal for division of labor and schedule**, **group written report**, **group class presentation**, **group project journal**, and an **individual reflection**. There may be **additional deliverables** in the assignment.

• **Division of Labor and Schedule**: For each group assignment, you must propose a plan for division of labor - who will do what on the assignment. You will also come up with a project schedule with weekly checkpoints. You can come up with the plan as a group, and I will let you know if I see any problems. Division of labor and schedule should be submitted via Slack (create a group DM including me and your group members – paste the information directly into Slack) before 11:59pm on the Friday following the day the assignment goes out. Division of labor and schedule is worth 5% of your grade.

- Written Report: Each assignment will detail what should be included in the written report. Your group should submit one report to which all members have contributed. Your audience for the reports will be an imaginary client. Each report should provide your client with an argument towards your proposed design based on your current progress. You should describe your methods, provide evidence that supports your argument, and draw a conclusion.
- Class Presentation: Your presentations for all project assignments (except the first individual assignment, which will be 2 minutes) should be 10 minutes (not including questions/comments from peers) and presented as a group. Every group member must present during every presentation. Your audience for your presentation is your classmates who are fellow designers. Similar to the written report, you should present an argument towards a proposed design, describe your methods, provide evidence that supports your argument, and draw a conclusion. You should also seek feedback: class presentations should be interactive with the class. This is your chance to get feedback and input from your classmates, and offer thoughtful feedback to your classmates when they are presenting.
- **Project Journal**: You will maintain a project journal over the course of the term. This journal should include an entry for each meeting that includes 2 or more members of your group (including meetings that occur during lab time). You could think of the entries as "meeting minutes." For each assignment, submit only the journal entries since the previous assignment. Include all entries with your final project portfolio submission (what you will hand in at the end of the term). Entries should be brief; they do not have to be written in complete sentences.

Please use the following format and number your responses:

- 1. Date and time of meeting.
- 2. Group members in attendance. Reasons for any absence of group members. Note that someone might not be involved in a given meeting depending on how you divide up work. Thus, "not relevant because..." is a one possible reason.
- 3. Reason for meeting (1-3 bullet points; examples: "Choose a topic for our project"; "Assign project roles").
- 4. Outcome of meeting (2-5 bullet points; examples: "Decided to do project that..."; "Assigned following group roles: Andrea will maintain the meeting journal...").
- **Individual Reflections**: Your individual reflection should be approximately one page and detail, from your perspective (number your responses):
  - 1. What each member, including yourself, contributed to the assignment.
  - 2. What each member, including yourself, did well.
  - 3. What each member, including yourself, could have done better and how.
  - 4. What you did well as a group.
  - 5. What you could have done better as a group and how.
  - 6. How you would divide up an imaginary \$500 bonus to your group and why.

The individual reflections will be taken very seriously. Please note:

 Working with anyone else on your reflection will be treated as academic dishonesty (a.k.a. cheating - see below). Do not discuss what you wrote in your reflection before, during, or even after writing it with anyone except me.

 You must submit all individual reflections to pass the class. The late policy applies to the individual reflection and affects your assignment grade (for the individual who is late; see below).

Assignment descriptions, detailing additional requirements and deliverables, will be provided for each assignment on Moodle. Read each *carefully*: they may include additional due dates for email approval of your plans for the assignment. I will also discuss each assignment during lab. Your final submission at the end of the term will be a **project portfolio** that includes your previous graded assignments.

• **Project Portfolio**: At the end of the term you will submit a portfolio that includes all your work over the course of the class. The details will be described in the final project assignment, but note that this will include your graded work with my comments. Take care not to misplace your graded assignments! I repeat, **do not lose your assignments**!

#### **Submitting Project Assignments**

Your presentation will be given in lab the day each assignment is due. The group member whose last name comes first alphabetically should also submit an electronic copy of your assignment on Moodle 15 minutes prior to lab (2:45pm) on the due date. You will each submit your individual reflections under a separate submission on Moodle (also due by 2:45pm). Please note acceptable file formats in assignment descriptions.

#### **Grading Project Assignments**

The ability to work in a group is needed for almost any project you work on in life - be it professional or "for fun." People often assume that it is obvious how to work in a group, but group work techniques can be learned and developed. One of my goals is for you to leave this course understanding how to successfully work with a team on an HCI project.

The following grading scheme is designed to help you work successfully as a group, and for me to assess your team dynamics and help you if there are problems.

Your assignment grade on each group assignment will be comprised of 50% of your group grade and 50% of an individual grade. It is my expectation that these grades will be the same. However, your individual grade can be different (lower or higher) if there is compelling evidence that it should be. Groups where one or more individuals' grades are different will be required to meet with me prior to the next class meeting after receiving your grades. If all team members are not available for 15 minutes at some point during my office hours, please email me with at least 3 possible times you would be available for 15 minutes.

Your grade for a group project assignment is essentially calculated as followed. I calculate your **group grade**: 15% is the presentation, 5% is the division of labor and schedule, 5% is your individual reflection (will be different across group members); the remaining 75% depends on the assignment (there will be a rubric). Your **individual grade** starts out as your group grade. This grade can then be adjusted based on compelling evidence that your grade should be higher or lower. Again, my expectation is that it will be the same. Your **assignment grade** is then calculated as 50% group grade and 50% individual grade. **Late assignment adjustments** (see below) are made to this **assignment grade**.

#### **Completing Project Assignments**

Though there will be some in-class time dedicated to working on project assignments (mostly in lab), all assignments for this course will require substantial effort out of class to complete the assignment.

#### **Additional Assignments**

- 1. Research Training: Complete the CITI's Human Subjects Research Educational Program for Social and Behavioral Research Investigators and Responsible Conduct of Research courses. This must be completed prior to working on any other class assignment. You cannot participate in in the class, and therefore cannot pass the class, without completing this training. If you have completed this training previously, you do not have to repeat the training; but you must submit your course completion certificates. NOTE: There is no additional handout for this assignment, but additional information is available in the Moodle Assignment.
- 2. Article Presentation: You will give one presentation and lead a discussion on a research article. The presentation should be 10-15 minutes (not including discussion) and prepared by Tuesday's class for the assigned week (although it may be given on Thursday, depending on the schedule for that week). Your presentation should include: the research question; the author's argument; an overview of the evidence the author uses to make this argument; reflection on the strengths and weaknesses of the paper; reflection on how the article relates to other things we've read and discussed in class and current topics being discussed in class; and three discussion questions. I STRONGLY recommend you meet with me during office hours, or schedule an appointment, to go over your presentation and discussion questions prior to class. NOTE: There is no additional handout for this assignment, but an example will be created in class and an outline will be available in the Moodle Assignment.
- 3. **Design Posts**: You will create an "InstaTwitBook" **Design Post each week by Friday**, 11:59pm, starting with week 3 and ending on the last day of class. These due dates are indicated on Moodle. You have two free passes, i.e., you must complete ten (of twelve possible) Design Posts. Each Design Post presents and comments on the design of a real world artifact. A Design Post is a single post to the appropriate Moodle Forum that consists of one (or more) picture(s) (or screen shot(s); please see me if you do not have a device that can take pictures) and a traditional Twitter-length description (140 characters) indicating how the design relates to something we discussed in class. You can choose artifacts for your Design Posts that demonstrate good design based on a principle we discussed in class, bad design because it breaks a design "rule," or both good and bad aspects of design. Items can be anything, such as placement of buttons on an elevator, the interior of a car, or a piece of software. However, you must identify the good/bad design and take the picture or screen shot yourself! For example, do not find existing examples of good or bad design on the Internet. Keep in mind the goal of the assignment: to help you notice good and bad designs in the world and generate discussion on design.

In addition, each week you must **respond to at least 3 of your peers' posts** from the previous week. Some ideas for how to contribute a meaningful response to peer posts include **supporting** the post's design position by providing additional arguments; **expanding** on post by describing additional related examples; or **challenging** the post by providing a counter-example or counterargument.

Posts and responses will be graded for meaningful participation, but mostly this will be a space for you to discuss amongst yourselves the concepts we are discussing in class as they relate to designs in the real (or virtual) world. NOTE: There is no additional handout for this assignment.

- 4. **Heuristic Slides:** You will be assigned a specific heuristic from Jakob Nielsen's 10 Usability Heuristics for User Interface Design (https://www.nngroup.com/articles/ten-usability-heuristics/). You should find a design that violates the design heuristic. Create **two PowerPoint slides:** the first should contain a picture and a 140-character description that illustrates the violation **without revealing the heuristic**; the second slide should identify the heuristic. We will use these slides to play an "ID that Heuristic" game in class. Please submit a PowerPoint presentation consisting of 2 slides. These will be combined into 1 big presentation, so please do not use a background template. You may choose whether you or not you want to identify yourself on your slides. Additional resources about heuristics will be provided on Moodle. NOTE: There is no additional handout for this assignment, but additional information is available in the Moodle Assignment.
- 5. **Input/Output Presentation**: You will find and present a conference article about an interesting input and/or output technique (i.e., how users provide input to a system or receive output from a system). Create a **one-slide** presentation (about 2 minutes) about an article of your choosing. Email me a link to the article the one week in advance full text must be available from the link; test your link. Email or see me if you want help finding or choosing an article. NOTE: There is no additional handout for this assignment, but additional information is available in the Moodle Assignment.
- 6. Attendance and Participation: Finally, class attendance and participation is a critical component of the course! Complete readings assigned for a given class PRIOR to the class for which they are listed, contribute to class discussions, ask and answer questions during lecture, and participate in design exercises. Be prepared to answer short questions about previously covered material and readings (either oral or written). Listen, answer questions, and give feedback during peer presentations. Attendance is not sufficient for a perfect participation grade actively engage in class! Excessive absences, regardless of reason, will negatively affect your participation grade. Please see the Attendance Policy below for a definition of attendance and additional information.

### **Summary of Assignments**

Assignment	Goal	Individual or Group	Grade Weight	Due
Research Training	Learn about conducting responsible research and ethically working with human subjects.	Individual	P/F <sup>1</sup>	F 8/21
PA1: Problem Identification	Identify a context where technology could potentially be used to support reflection that interests you.	Individual	5%	W 9/2
PA2: Requirements	Understand the people, technology,	Group	15%	W 9/23

<sup>&</sup>lt;sup>1</sup> Completing the research training is required to participate in the course, and therefore pass the course. Training must be completed prior to completing any other assignments.

Analysis	and physical, as well as social, context that play a role in the problem area for which you are designing.			
PA3: Ideation and Paper Prototype	Generate a huge body of design ideas for your problem area in a systematic way. Try out and test different design scenarios.	Group	15%	W 10/14
PA4: High-fidelity Prototype, Heuristic Evaluation, and Usability Study Protocol	Develop an initial prototype of your system, conduct a heuristic evaluation, write the protocol for a usability study, and pilot test your plan.	Group	15%	W 11/11
Final Project: Functional Prototype, Evaluation, and Proposed Re-design	Carry out a usability study of a functional prototype of your system, and propose changes to the system based on the results.	Group	15%	M 12/7, 8:30am (Final Exam)
Individual Reflections	Reflect on how your group worked together to complete each assignment.	Individual	P/F <sup>2</sup>	With group project assignments
Research Article Presentation	Discuss recent research in the field of HCI related to the topics we are covering.	Individual	10%	Tuesdays (assigned randomly)
Design Posts	Open your eyes to good and bad design by applying class content to real world design examples, and generate discussion on design.	Individual	10%	Fridays 11:59pm
Heuristic Slides	Contribute to the "ID that Heuristic" game by finding a design that violates a design heuristic.	Individual	3%	F 8/28
Input/Output Article Presentation	Find and present an interesting input and/or output technique.	Individual	2%	Email article link: T 9/29 Present & submit: T 10/6
Class Participation	Contribute thoughtfully to class discussions, in-class exercises, and presentations. Complete readings in advance. Offer thoughtful responses to peers during presentations. Answer questions about readings and previously covered materials.	Individual	10%	Every Class

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<sup>&</sup>lt;sup>2</sup> All individual reflections must be submitted to pass the course.

#### **Grade Scale**

Grade cut-offs *may* be adjusted slightly (downward only).

Grade	Cut-off	
	(not higher than)	
A+	Exceptional work	
A	92.5	
A-	90	
B+	87.5	
В	82.5	
B-	80	
C+	77.5	
C	72.5	
C-	70	
	65	
D	+/- assigned at	
	instructor's discretion	
F	(< 65)	

## **Course Policies**

#### No Face-to-Face Contact

The course project must be completed with absolutely no face-to-face contact between team members or with research participants.

### **Email Policy**

It is a course requirement to check your email at least once per day. Important announcements regarding assignments and class meetings will be sent via email.

### **Slack Policy**

Slack is a group work platform popular in tech companies. The course will have a Slack Workspace and you will receive an invitation to join during the first week of classes. Please install the App on your computer (at least – also available for mobile devices). It is a course requirement to be on Slack during all class and lab meetings and check Slack daily for course announcements. You will also check in on Slack during office hours. You can send me questions on Slack anytime, and I will answer at my earliest availability.

### **Attendance Policy**

Class participation is a critical component of the course and attendance is mandatory.

For an online course, a clear definition of attendance is warranted. This course will meet synchronously on Zoom and Slack during all schedule class and lab hours. As described, we will also have a course Slack Workspace. There may also be asynchronous materials posted to Moodle. Attendance means being present on Zoom with your camera on and Slack, as well as completing asynchronous course materials.

Students who miss any class or lab without documenting the reason for the absence via email will receive a zero for the participation portion of the course grade. This communication should come before class whenever possible. Absences considered unexcused will negatively affect your participation grade.

You may be asked to make up for missed material due to excused absences (e.g., athletics, religious holiday, documented emergency, documented illness). Due dates for assignments are not adjusted for absences; the late policy applies. If a necessary absence (e.g., athletics, religious holiday) conflicts with a presentation, you must reschedule the presentation well in advance. Missed assignments due to emergencies may be reschedule if you have documentation from a Dean. Following Furman policy, absences in excess of 15% of class sessions for new students, and 25% of class sessions for returning students, will result in an F in the course.

#### **Research Training**

As described above, in order to participate in this class, you must complete CITI's Human Subjects Research Educational Program for Social and Behavioral Research Investigators and Responsible Conduct of Research courses. These courses must be completed prior to working on any other assignment for the course. Since you cannot participate in the course without completing this training, failure to complete the training prior to completing other assignments will result in an F in the course. If you have completed this training previously, you do not have to repeat the training; but you must submit your course completion certificates.

#### **Individual Reflections**

As described above, you must complete an Individual Reflection for each group project assignment (four total) in order to pass the class. Failure to complete all four Individual Reflections will result in an F in the course.

### **Late Assignments**

- **Research Training** must be completed prior to completing any other class assignment (see Course Policies below).
- Due to class scheduling, **all presentations**, including project presentations, the individual article presentations, and the input/output presentation, must be given on the day they are due. Each project presentation is worth 15% of your grade for that assignment.

- Written reports, and individual reflections turned in late will drop your grade for the assignment 10% per day. If your individual reflection is late, your assignment grade will be lowered 10% (for that individual only).
- Late Design Posts are not accepted if you want to submit after 11:59pm on Friday, you will need to submit for the next week. This means that if you skip the first few submissions, and there are only, for example, nine submissions left, you can submit at most nine posts.
- Late Heuristic Slides will not be accepted because they will be presented in class.
- Final Project Portfolios will not be accepted after the schedule final exam slot for our class.

#### **Academic Accommodations**

I encourage students with disabilities to make an appointment to meet with me as soon as possible to discuss ways I can help facilitate your learning. All discussions will remain confidential.

It is the policy of Furman University to make reasonable accommodations for qualified individuals with disabilities. Students eligible for academic accommodations should contact the Student Office of Accessibility Resources at x2302 or soar@furman.edu at the beginning of the semester. Students must also consult with me on how their accommodations will apply to this course.

### **Academic Integrity**

Plagiarism is misrepresenting someone else's work as your own, which is a form of stealing, and will not be tolerated. Plagiarism is a serious offense, and its penalties are severe, including possible failure of the course and/or dismissal from the University. Please consult the booklet, *Plagiarism and Academic Integrity at Furman University*, if you are unsure of the definition of plagiarism. If you need help understanding how and when to cite sources, please see me.

While you are likely familiar with what constitutes plagiarism in written assignments from your other classes, you may not know how it applies to computer programming. The following is adopted from the Department of Computer Science:

The ready availability of information in digital form necessitates that a clear definition of plagiarism be provided for the context of computer science coursework. Plagiarism is a form of dishonesty when a person expresses words or ideas as his or her own without attributing another person as the true source or contributor of those words or ideas. In computer programming, for instance, *words* are computer code and *ideas* are the algorithms or design of code.

Although you are encouraged to discuss requirements of assignments and to help others with general programming concepts, all work you submit as your own should be your own. You may never use code and algorithms from anyone else to complete a program that you submit for credit unless the original source of the code is clearly documented in the comments. This documentation must include the names of individuals or complete citations of books or articles and must describe the ideas or code you are using. Unless otherwise stated in the requirements, it is assumed that sources outside the course textbook, class notes and handouts, and designated teammates are forbidden even if those sources are correctly cited.

The following activities are considered serious instances of academic dishonesty:

- Using code or designs from others without proper citation
- Giving your code or designs to another student
- Not using reasonable means to prohibit another student from copying your code or designs. For example, password-protect your personal computer and log out of shared computers whenever you are away from the computer.
- Facilitating others in the above activities

There are many opportunities for peer tutoring that do not fall under the category of plagiarism. These opportunities include the following examples:

- Describing the general functionality of a programming statement or concept.
- Analyzing the requirements of an assignment.
- Going over class notes and examples or graded assignments.
- Studying together for tests.
- Receiving help from the professor or lab assistants.

#### Research

Your work in this class may be used for future research purposes and will be kept confidential. Use of your materials is completely voluntary. You have the right to choose not to allow the use of your materials for future research. Please know that if you choose not to have your materials used, your grade will not be affected in any manner. There are no anticipated risks to you, beyond those encountered in everyday life. All records will be stored on password protected computers, on servers requiring authentication (e.g. Box), or in locked filing cabinets. The results of the research may be published but will not include your name or any identifiable references to you. If you choose to allow me to use your materials this semester, you have the right to opt out at any time.

You have the opportunity to ask questions at any time.

If you DO NOT wish for your materials to be used in future research, please complete and return the attached form to Kala Kennemore, Computer Science Department, 3300 Poinsett Hwy, Greenville, SC 29613 or kala.kennemore@furman.edu before November 20, 2020.

If you do not return this form, you give consent for me to use your materials for future research.

# **University Policies**

Please take note of the following University policies:

### **Unauthorized Recording of Classroom Proceedings**

(quoted from the Furman Student Conduct Code https://catalog.furman.edu/content.php?catoid=13&navoid=595#class\_recordings)

Students are not permitted to record classroom lectures or discussions without either the express written approval of the faculty member teaching the course or an accommodation through the Student Office of Accessibility Resources (SOAR). Qualified students with disabilities that impact their ability to take or read notes may receive an accommodation through the SOAR office that permits them to record lectures for their personal academic use. If the SOAR office determines that recording lectures and classroom discussions is an appropriate accommodation for a student, the recording may be used only for personal academic purposes.

Neither authorized student-initiated recording nor any faculty-initiated recording may be made available to anyone outside of the students enrolled in the class in any fashion, including but not limited to posting online, email, or through other media without the express written consent of the faculty member responsible for the course. Unauthorized dissemination of any recorded classroom proceedings, including but not limited to distribution for compensation, is strictly prohibited.

Professors or students who believe that a student or classmate is recording classroom proceedings or using recordings made by the professor either without the professor's consent or in violation of the specified terms of the agreed-upon academic accommodation plan will submit an incident report through the Associate Academic Dean's office for review and final determination of whether to bring student conduct charges.

### **Nondiscrimination Policy and Sexual Misconduct**

(adapted from Furman University Academic Affairs)

Furman University and its faculty are committed to supporting our students and seeking an environment that is free of bias, discrimination, and harassment. Furman does not unlawfully discriminate on the basis of race, color, national origin, sex, sexual orientation, gender identity, pregnancy, disability, age, religion, veteran status, or any other characteristic or status protected by applicable local, state, or federal law in admission, treatment, or access to, or employment in, its programs and activities. If you have encountered any form of discrimination or harassment, including sexual misconduct (e.g. sexual assault, sexual harassment or gender-based harassment, sexual exploitation or intimidation, stalking, intimate partner violence), we encourage you to report this to the institution. If you wish to report such an incident of misconduct, you may contact Furman's Title IX Coordinator, Melissa Nichols (Trone Center, Suite 215; Melissa.nichols@furman.edu; 864.294.2221). If you would like to speak with someone who can advise you but maintain complete confidentiality, you can talk with a counselor, a professional in the Student Health Center, or someone in the Office of Spiritual Life. If you speak with a faculty member, understand that as a "Responsible Employee" of the University, the faculty member MUST report to the University's Title IX Coordinator what you share to help ensure that your safety and welfare are being addressed, consistent with the requirements of the law. Additional information about Furman's Sexual Misconduct Policy, how to report sexual misconduct, and your rights can be found at the Furman Title IX Webpage at www.furman.edu/titleix. You do not have to go through the experience alone.

# **Schedule**

Available on Moodle.

SUBJECT TO CHANGE. CHECK MOODLE OFTEN!

[Note: Course policies are subject to reasonable modification at any time based on changes to campus operations.]

#### CSC-347 Fall 2020 Dr. Andrea Tartaro

Consent to use student materials:

Your work in this class may be used for future research purposes and will be kept confidential. Use of your materials is completely voluntary. You have the right to choose not to allow the use of your materials for future research. Please know that if you choose not to have your materials used, your grade will not be affected in any manner. There are no anticipated risks to you, beyond those encountered in everyday life. All records will be stored on password protected computers, on servers requiring authentication (e.g. Box), or in locked filing cabinets. The results of the research may be published but will not include your name or any identifiable references to you. If you choose to allow me to use your materials this semester, you have the right to opt out at any time.

You have the opportunity to ask questions at any time.

If you DO NOT wish for your materials to be used in future research, please complete and return the attached form to Kala Kennemore, Computer Science Department, 3300 Poinsett Hwy, Greenville, SC 29613 or kala.kennemore@furman.edu before November 20, 2020.

If you do not return this form, you give consent for me to use your materials for future research.

DECLINING OF PERMISSION:	
<del></del>	terials to be used for future research purposes and use data already collected about me for your research.
Printed Name of Participant:	
Signature of Participant:	Date: