

Instructor	Dr. K. B. Reed Office: ENC 2503 Email: kylereed@usf.edu Office hours: Mondays from 12:30-1:30pm in office, Thursdays from 2-3pm via MS Teams, and always available to schedule a meeting via email
Description	Course covers the theory and implementation of haptic interfaces and rendering, teleoperation, modeling, control and stability of feedback for robotic systems and virtual environments, and the related human haptic sensing capabilities.
Prerequisites	EML 3041: Computational Methods EML 4312: Mechanical Controls (co-requisite with permission)
Class Time/Place	Mondays and Wednesdays from 11:00am until 12:15pm In-person classes will be held in ISA 3048 (most common method). Some content will be via prerecorded videos and/or virtual meetings.
Course Format	Lectures will be a mix of live in-person (majority), live online, and prerecorded videos. Live lectures will be conducted in person or via MS Teams (link provided in Canvas). You will be notified at least one day before any classes that are not in-person with a link provided at least one hour prior to the start of class. During online live meetings, questions should be asked by raising your virtual hand or by typing out a message in the Teams chat. Recordings of all live lectures will be made available to the best of the professor's ability. Some class sessions will involve class discussions that may not be available in the recordings.
Communication	Email and Canvas messages should be used for communication outside of a live class (i.e., MS Teams messages will get a slow response outside of a live class). Class announcements will be posted via Canvas and/or during the lectures. Assignments will be posted to Canvas.
Textbook	There is no textbook for this course. Readings consisting of book chapters, conference papers, and journal papers will be distributed on Canvas.
Attendance Policy	You are not required to show up to class, however you are highly advised to do so. You are responsible for all announcements and material covered during the class sessions. It is the instructor's discretion to post announcements to Canvas (i.e., some announcements will not be posted). A student who will be absent from an in-person class (due to isolation, quarantine or other reason) must notify the instructor immediately for guidance on academic continuity and student learning.

Grading	<p>Homeworks (30%): There will be regular homeworks, some of which will involve programming assignments.</p> <p>Project (35%): There will be one team-based project, culminating in a final report and a haptics demonstration. Progress and check points before the final due date will count toward the final grade. The project demonstration is tentatively scheduled for November 30th (partially coinciding with class time) or December 2nd. The exact time and location will be announced at least a month before it is due.</p> <p>Quizzes (15%): There will several quizzes throughout the semester, all of which will be announced ahead of time. The fourth (and last) quiz is scheduled for November 28th.</p> <p>Class Participation (10%): Students must keep up with readings and actively participate in class discussions as participation will be graded.</p> <p>Presentation (10%): The presentation is a detailed lecture on a topic related to haptics, done individually for graduate students and in pairs for undergraduates. The presenter(s) will also be responsible for preparing a short discussion or group activity related to the paper.</p> <p>Policy: 90+ = A; 80-89.9 = B; 70-79.9 = C; 60-69.9 = D; <59.9 = F +/- grades may be assigned and the grades may include a curve.</p>
Make-up Policy	<p>NO make-ups will be given for quizzes, homeworks, projects, or presentations unless you are seriously ill, a death in the family, or other legitimate, documented, family emergency. Notification of absence must be given prior to the scheduled assignment due date.</p>
Discussion of Grades	<p>Any discussion of grades and/or makeups must occur prior to the Friday before Finals week or within three business days of the date the graded assignment is made available, whichever is later. If you are having trouble in the class, please talk to the instructor during the semester as Finals week (or after) is too late to help you do well in the class.</p>
Individual Work and Plagiarism	<p>Homework should be completed individually. You may work with other students, but the solutions should be individual. If you do work with someone, please make a note of it on your assignment. Simply state "I worked with _____ on this assignment." Note, this does not allow you to then turn in identical work, but does inform us that your work is likely to be similar. You should be aware of USF's plagiarism policy: http://www.ugs.usf.edu/catalogs/0102/adadap.htm</p>

Class Rules	The class rules can be summarized as having respect; respect your classmates and respect the instructor and the instructor will respect you. More specifically, silence your phones during class and if you <i>must</i> take a call, do so quietly and walk far enough away from the door so we don't hear you. If you are going to sleep or read a newspaper in class, don't bother coming to class since you would better off sleeping in your bed or reading in a quieter environment. Please refrain from eating during class. For online classes, stay on mute during classes when not talking and be constructive in any online posts to the professor and other students.
Class Recordings	In this class, software will be used to record live class lectures and discussions. As a student in this class, your participation in live class discussions will be recorded. These recordings will be made available only to students enrolled in the class, to assist those who cannot attend the live session or to serve as a resource for those who would like to review content that was presented. Students who prefer to participate via audio only will be allowed to disable their video camera so only audio will be captured. In-person classes will not record your video except for during your presentation.
Accommodations for students with Disabilities	Students with disabilities are responsible for registering with Students Accessibility Services (SAS) (SVC 1133) in order to receive academic accommodations. SAS encourages students to notify instructors of accommodation needs at least five (5) business days prior to needing the accommodation. A letter from SAS must accompany this request. Please visit the Student Accessibility Services website for more information: https://www.usf.edu/student-affairs/student-accessibility
Policy on Religious Observations	All students have a right to expect that the University will reasonably accommodate their religious observances, practices and beliefs (USF Policy 10-045). The University of South Florida, through its faculty, will make every attempt to schedule required classes and examinations in view of customarily observed religious holidays of those religious groups or communities comprising USF's constituency. Students are expected to attend classes and take examinations as determined by the university. No student shall be compelled to attend class or sit for an examination at a day or time prohibited by his or her religious belief. However, students should review the course requirements and meeting days and times to avoid foreseeable conflicts, as excessive absences in a given term may prevent a student from completing the academic requirements of a specific course. Students are expected to notify their instructors at the beginning of each academic term if they intend to be absent for a class or announced examination, in accordance with this Policy. https://usf.app.box.com/v/usfpolicy10-045

USF Academic Integrity of Students Policy	Academic integrity is the foundation of the University of South Florida's commitment to the academic honesty and personal integrity of its university community. Academic integrity is grounded in certain fundamental values, which include honesty, respect, and fairness. Broadly defined, academic honesty is the completion of all academic endeavors and claims of scholarly knowledge as representative of one's own efforts. The process for faculty reporting of academic misconduct, as well as the student's options for appeal, are outlined in detail in USF Regulation 3.027: https://usf.app.box.com/v/usfregulation3027
Alternate forms of teaching in an emergency	In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include, but are not limited to: Canvas, Teams, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor the Canvas for each class for course-specific communication, and the USF, College, and Department websites, emails, and ALERTUSF messages for important general information (USF Policy 6-010). In-person classes may be asked (by USF leadership or the COVID-19 team) to transition to temporary remote instruction at any point in the Fall semester. <ul style="list-style-type: none">• https://www.usf.edu/administrative-services/emergency-management/programs/emergency-notification-system.aspx• https://usf.app.box.com/v/usfpolicy6-010
Plagiarism tracking software	In this course, turnitin.com may be utilized. Turnitin is an automated system which instructors may use to quickly and easily compare each student's assignment with billions of web sites, as well as an enormous database of student papers that grows with each submission. After the assignment is processed, the instructor receives a report from turnitin.com that states if and how another author's work was used in the assignment. For a more detailed look at this process visit http://www.turnitin.com .
Cheating	The USF Policy on Academic Integrity specifies that students may not use websites that enable cheating, such as by uploading or downloading material for this purpose. This includes, but is not limited to, Chegg.com and CourseHero.com – almost any use of these websites (including uploading proprietary materials) constitutes a violation of the academic integrity policy. All worked turned in must be your own work. Code, text, or anything else that is reused must be clearly listed as not being your work and should have a link to access the original files.

Online Proctoring Software	<p>All students must review the syllabus and the requirements, including the online terms and video testing requirements, to determine if they wish to remain in the course. Enrollment in the course is an agreement to abide by and accept all terms. Any student may elect to drop or withdraw from this course before the end of the drop/add period.</p> <p>Online exams and quizzes within this course may require online proctoring. Therefore, students will be required to have a webcam (USB or internal) with a microphone when taking an exam or quiz. Students understand that this remote recording device is purchased and controlled by the student and that recordings from any private residence must be done with the permission of any person residing in the residence.</p> <p>To avoid any concerns in this regard, students should select private spaces for the testing. The University library and other academic sites at the University offer secure private settings for recordings and students with concerns may discuss location of an appropriate space for the recordings with their instructor or advisor.</p> <p>Students must ensure that any recordings do not invade any third-party privacy rights and accept all responsibility and liability for violations of any third-party privacy concerns.</p> <p>Students are strictly responsible for ensuring that they take all exams using a reliable computer and high-speed internet connection. Setup information will be provided prior to taking the proctored exam. To use Honorlock, students are required to download and install the Honorlock Google Chrome extension (https://static.honorlock.com/install/extension). For additional information please visit the USF online proctoring student FAQ (https://www.usf.edu/innovative-education/digital-learning/digital-learning-resources/proctoring-student-faq.aspx) and Honorlock student resources (https://honorlock.com/students/).</p>
USF Core Policies	<p>USF has a set of central policies related to student recording class sessions, academic integrity and grievances, student accessibility services, academic disruption, religious observances, academic continuity, food insecurity, and sexual harassment that apply to all courses at USF. Be sure to review these online at: https://www.usf.edu/provost/faculty/core-syllabus-policy-statements.aspx</p>
Course Enrollment	<p>All students must review the syllabus and the requirements including the online terms and video testing requirements to determine if they wish to remain in the course. Enrollment in the course is an agreement to abide by and accept all terms. Any student may elect to drop or withdraw from this course before the end of the drop/add period.</p>