Accessibility and Assistive Technology in Human-Robot Interaction

A class module for HRI classes, developed with support from a TeachAccess Curriculum Development Grant

This lesson includes several components: lecture slides, three options for one-hour activities, a 5-10 hour homework assignment and some standalone homework questions. Feel free to mix and match to suit your class size, lecture style, and teaching preferences.

In addition, I recommend assigning students Chapter 16 of "Research Methods in Human Computer Interaction" by Lazar, Feng, and Hochheiser. This book is available on ScienceDirect and Elsevier; if you have institutional access you can find it here: https://www.sciencedirect.com/book/9780128053904/research-methods-in-human-computer-interaction

The full citation is as follows:
J. Lazar, J. H. Feng, and H. Hochheiser, "Chapter 16 - Working with research participants with disabilities," in Research Methods in Human Computer Interaction (Second Edition), Second Edition., J. Lazar, J. H. Feng, and H. Hochheiser, Eds. Boston: Morgan Kaufmann, 2017, pp. 493–522.

The homework is written to use the Python Turtle module; if your students have access to robots, you can easily modify it to use the robot instead. Please note the last page of the assignment contains several standalone questions; they would make the current homework assignment too long but may be useful to you for other assignments or as alternative options for the given assignment.