

EXPERIENTIAL SYSTEMS

ACCESSIBILITY SERVICES





Accessibility Services

ESI has a team of experts in universal design, accessibility and inclusion who strive to provide options for engagement in both low and high courses. By using in-house design services, ESI can build new or retrofit existing courses with accessibility in mind while following the principles of Universal Design. Specialized equipment may be added to provide ease of use for both vertical and horizontal access points. The ESI core values encourage each team member to keep accessibility in mind when speaking to stakeholders in all lines of work. Our team feels compelled to support this initiative not only for the company, but also for the entire industry.



About ESI

Experiential Systems, Inc. (ESI) is a full-service challenge course construction company that has been building ropes courses and climbing towers for over 40 years. ESI designs and installs low challenge courses, high ropes courses, aerial adventure parks, zip lines, climbing walls and climbing towers, commercial playgrounds and shade structures. ESI trains instructors and facilitators and conducts challenge course inspections, maintenance and repairs, operational reviews, and staff certifications for courses built by ESI as well as those built by other companies. Our builders have many years of experience building adventure elements for the outdoor industry. ESI also offers consultation expertise in course design, administration and risk management planning.



Contact Us

877-206-8967
info@experientialsystems.com

Address:
PO Box 188
Lansing, IL 60438

www.experientialsystems.com

Find a way to get to YES!



By Carla Hacker and Melanie Wills

Nearly 25 years ago, as a new challenge course facilitator, Melanie was asked to take a group with “special needs” through some initiatives and low course elements. She remembered being stumped on choosing the activity line-up since there was limited information about the participants and understanding of what they could do. She was also new to working with “this type of group” or so she labeled it at the time. Her co-workers suggested “just do what you normally do.” That statement carried much more meaning than she realized at the time.

Just do what you normally do.

Sure, there is additional work we can do to plan and prepare as much as possible. Many helpful resources are provided in the industry and listed below. However, having a willingness to be welcoming and inclusive of anyone is the perfect place to start.

Focusing on solutions.

Like her colleague and collaborator, Carla also came into this work with little or no experience working or interacting with individuals who have a disability. In 1974 as a college freshman, she volunteered to teach a swimming program for children with orthopedic disabilities in a therapeutic pool. Upon arrival on the first day there were 10 children sitting in wheelchairs waiting for her to take them swimming! Prior to that she had absolutely no experience with anyone who had a physical or intellectual disability. However, she did know how to teach kids to swim. She later coordinated a team of friends to volunteer and help the program sustain for another four years. During that time, Carla was not sure how much the children learned, but her own learning was exponential.

Often, we are called on to do this work with little experience, no specialized equipment, and very little support. Approaching each hurdle or challenge with a focus on possible solutions and a willingness to try is essential to all of our work and especially to that often-unfamiliar territory of working with participants who have a disability.

It's all about mindset.



Find a way to get to YES!

Saying yes connects with worthiness. When we say it, we say you are worthy of our effort, you are worthy of being included, you are worthy of opportunity, and you are a worthy human. Finding a way to get to yes is of paramount importance.

Where to begin?

Suppose you have a facility that is completely inaccessible, staff with little or no experience, no specialized equipment and are faced with a request to provide services to an individual or group who has a disability. Begin by assessing what you can provide. Research available resources in your community. Brainstorm in collaboration with the participants who are making the request to find solutions that will work for both of you. The end result may not be exactly what everyone envisioned but could be a great compromise and a first step to providing universal access to your program.

Begin with the reason we are all here: A Participant-centered approach

Most if not all decisions related to the organization facility, staff, and experience offered should center back to the participant based on the following:

Pre-participation assessment:

- Physical, intellectual, sensory, or behavioral needs
- Assistive devices (wheelchair, crutches, canes, service dogs, other)
- Personal care or other support needed (aide/buddy need)
- Personal Goals
- History of climbing or other physical activities
- Participant choice on how to climb, specific routes, and session goals

Surrounding this participant-centered approach are three key areas for organizational assessment:

Staffing:

- Mindset/approach
- Understanding and experience working with a variety of populations
- Type of training on specific course or equipment
- Facility:
- Trail and course access - how will participants navigate getting to the course and around the facility including restrooms/changing areas, water stations, and weather protection?



Program or Experience:

- Equipment - is appropriate equipment available to provide the widest range of participant choice which may include specialty harnesses, seats, mechanical advantage systems, and more?
- Course - is the design of the course considerate of a variety of needs including ramps, lifts, rails, rounded edges, textures, colors, and more?
- Program curriculum - is the curriculum designed to be engaging to a variety of people with staged levels of difficulty incorporating participant choice?

How can we help?

We can provide guidance for an internal organizational assessment using the above resources and can then proceed with the following services:

- Consulting expertise backed by an industry-proven track record.
- Review of current course from a universally accessible lens with recommendations for adjustments, replacements, or refurbishments.
- New course design - collaborative approach to designing a course for your organization within your budget.
- Design renderings in 3-D and full-color to provide donor sources.
- Determination and sourcing of specialty equipment needed for populations served.
- Specialty training by experts in the field that best match your course type and staff needs.

What does it cost?

The cost factor for these projects depends on many different considerations. A full assessment of your organization needs should be identified with the assistance of your vendor.

Feeling overwhelmed? Not sure where to start? Just give us a call to discuss.

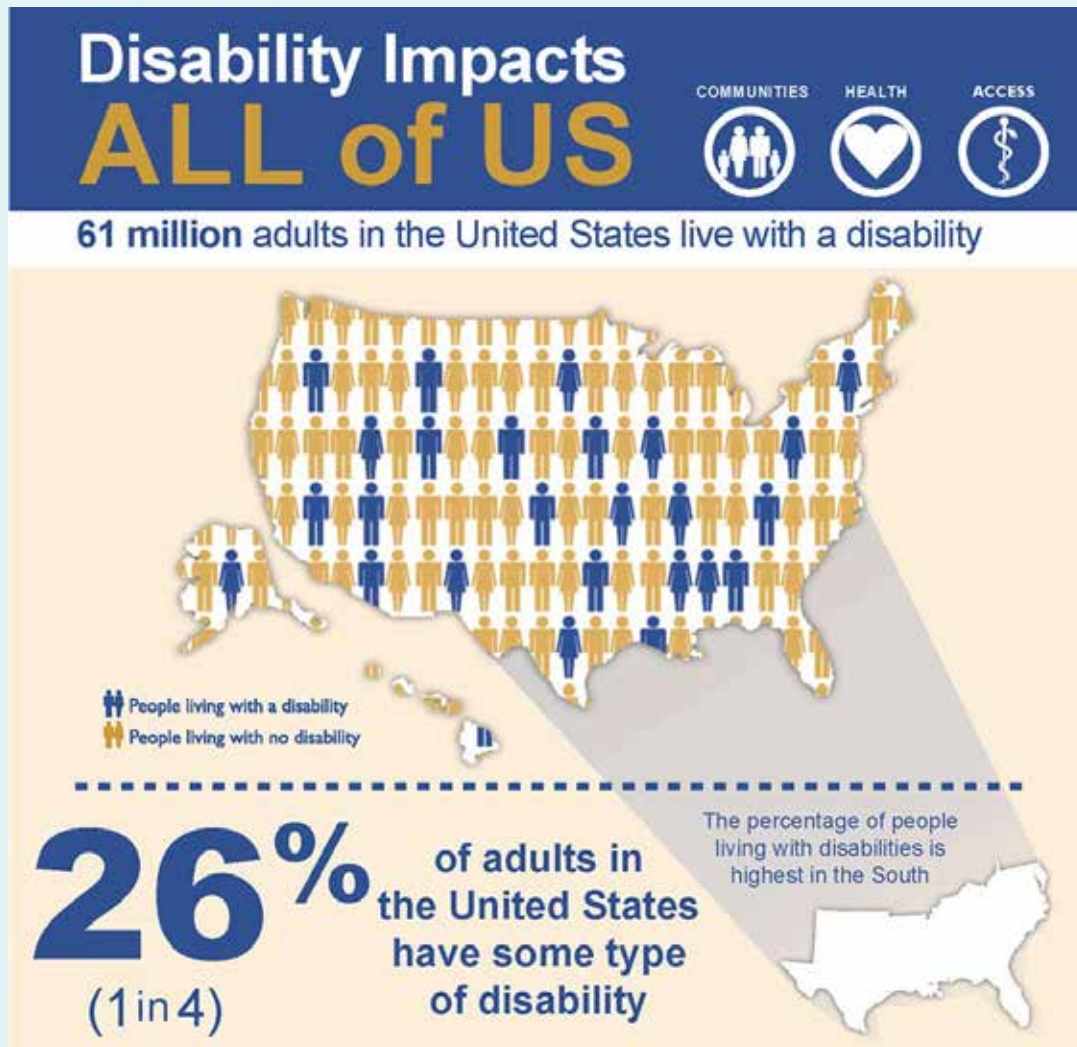
Many people dream of having an opportunity to be involved in experiences on challenge courses, aerial adventure parks, and zip lines. This ‘how to guide’ provides the action steps needed to make these dreams a reality. Let’s work together to help more and more camps, universities, and communities be more welcoming to all.

Find a way to get to YES!

Some components of this article were published in Parks & Recreation Magazine August 2021



The Truth About Disability



Benefits of Aerial Adventures for the Disability Community

A multitude of adapted sports have been growing in interest and engagement for years including archery, basketball, fishing, paddling sports, skiing, horseback riding and more. The climbing industry has historically fallen behind mainstream adapted sports offerings in terms of outreach, resources, and support. However, the benefits of climbing and opportunity for aerial adventures is beginning to grow and catch up to the adaptive sports world. More and more research illustrates the evidenced-based need for aerial adventures which correlates to positive benefits for the disability community.

What is Universal Design?



Glossary of Terms

Inclusive

Benefits everyone in the community, not just someone with a disability.

Adaptive

Specific measures are put in place to create an opportunity for someone with a disability.

Accessible

People with disabilities are specifically considered in design.

Universal

The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design**

Definitions courtesy of Disabilities, Opportunities, Internetworking, and Technology (DO-IT) www.washington.edu

**From the Center for Universal Design at North Carolina State University

Why Have a Universal Offering?



Public Health Benefits of Universal Design

Increased Physical Activity

Encourages participation from individuals with disabilities, leading to improved health outcomes.

Mental Well-being

Reduces social isolation and promotes a sense of belonging.

Community Health

Creates a more inclusive and equitable environment for all.

Prevention of Secondary Conditions

Helps to prevent issues related to inactivity and lack of access.

Reasons to Build a Universal Ropes Course

Empowerment

Provides opportunities for challenge, growth, and achievement.

Therapeutic Value

Offers physical and emotional benefits, such as improved motor skills and confidence.

Social Integration

Fosters interaction and connection among diverse groups.

Advocacy

Raises awareness about disability and promotes inclusion.

Ways to Become More Accessible

Vertical Access

Pivoting davit arms can be built into the design and may be added to existing designs. This option provides a secondary anchor point extended beyond the pole that can pivot bringing a climber over to a platform. The davit arm anchor allow a climber to be lifted vertically (either by their own power or with a team) with the use of a mechanical advantage system.

Ramp access provides a more universal approach to accessibility to a course as everyone enters the course the same way. Depending on the height of the course, the ramp may be linear or wrapped around a structure such as a tower in switchback fashion while still adhering to the rise/run ratio needed for ADA accessibility.

Mechanical Advantage (MA) systems are very helpful to assist climbers in a variety of ways both in vertical ascent and horizontal access when transferring to elements, on/off a course including zip lines. Most used are 4:1 or 5:1 system for larger ascents. A more compact 6:1 or 8:1 system is great for short heights and heavier weights. The ISC R-ALF 5:1 rescue pulley system is our preferred product for longer vertical ascents as it includes a locking hub and can easily be raised or lowered from the ground without resetting the system.

Horizontal Access

Fixed davit arms can be added throughout a ropes course on poles at each platform transfer point. This feature allows a more efficient transfer point for someone needing to use a small mechanical advantage system (see Specialty equipment) to move from one element cable to another.

Specialty equipment such as a Petzl JAG mechanical advantage system, an ISC Clip n Zip Trolley with an anti-roll-back cam, and a Singing Rock work positioning seat all support a climber while moving horizontally.

For added lower body and back support we suggest the Misty Mountain ARC Harness with spreader bar, Easy Seat Harness, Fusion Roar ziplining seat style harness with head and back support and Deimos zip line harness.

Element Design

Track systems that include ramps, incomplete bridges, traversing bridges, teeter totters and more can be utilized for wheelchair users or for those with limited lower body mobility.

Hand-lines and supports including vines, buoys, panels, beams and horizontal lines can increase interaction with the element and provide more choice for participation.

Zip lines can be made more accessible by including an adjacent davit arm for entry and ground or low to the ground landings. Building decks and ramp systems also increase access. Hydraulic zip lines raise and lower the zip line cable making the access truly universal.



Staff Training

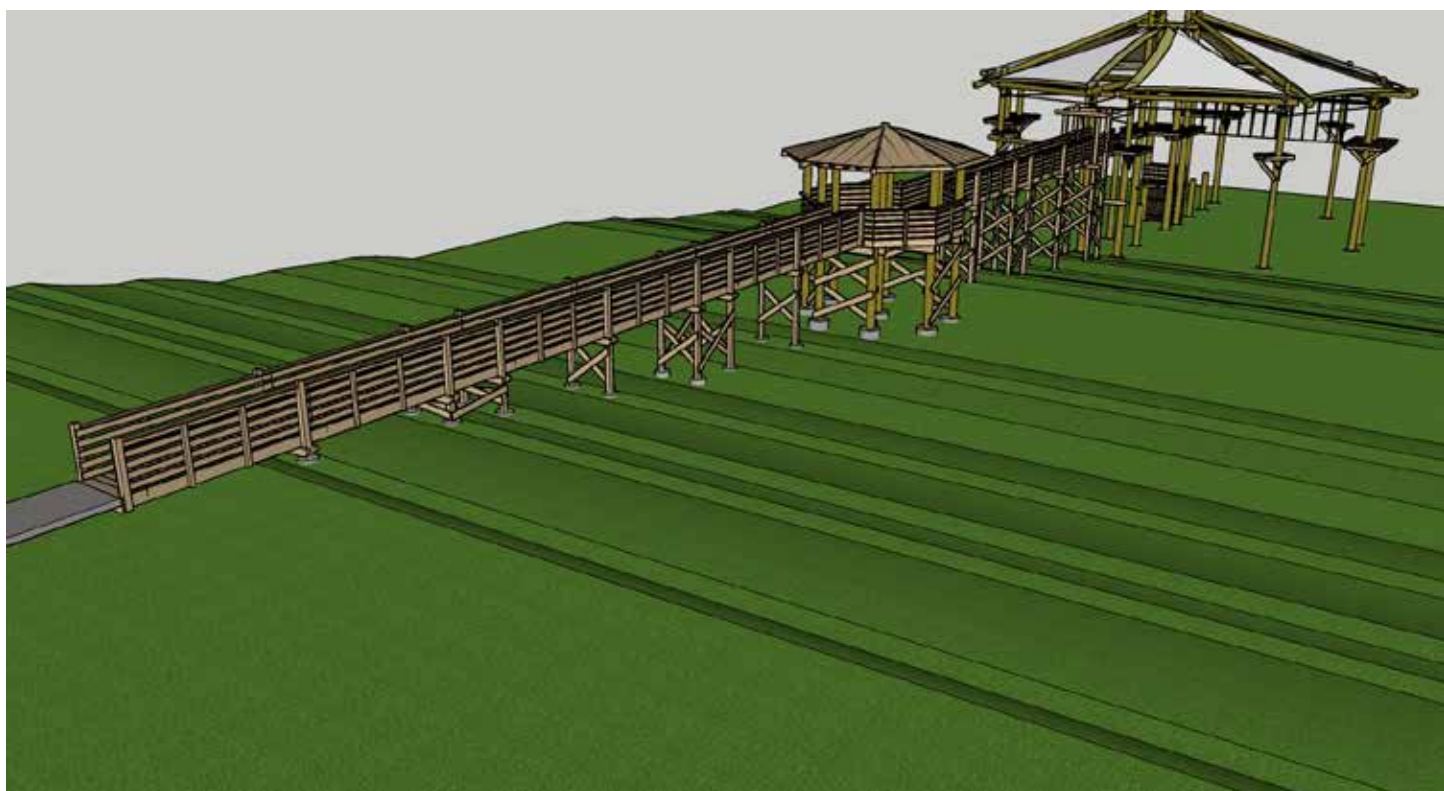
Whether a course is older or brand-new, speciality training in accessibility can assist teams in serving a greater number of people from a variety of populations and backgrounds. The training curriculum covers the following topics and can be tailored to best fit the course and participant needs:

- Common disability categories and definitions
- The Principles of universal design
- Universal mindset - growth v. fixed mindsets
- Invitational education - how to become intentionally inviting
- Speciality gear
- Mechanical advantage systems
- Rigging
- Side Climbing
- Facilitation specifics for all types of courses
- Resources for further education

ESI can provide staff training for an existing staff team or an open enrollment training that may include participants from other facilities.

Our teams provide short workshops, presentations and even pre-conference training throughout the year at a variety of sites. Contact ESI for current offerings and locations.

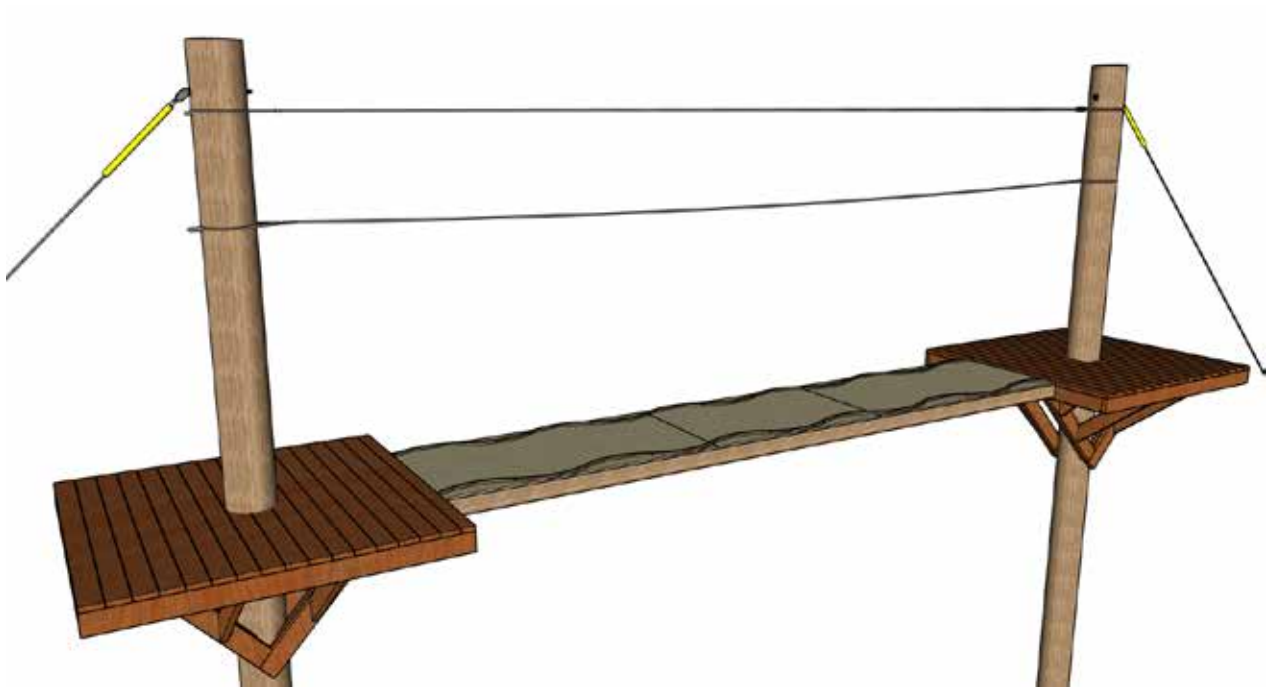
Universal High Ropes Course Ramps



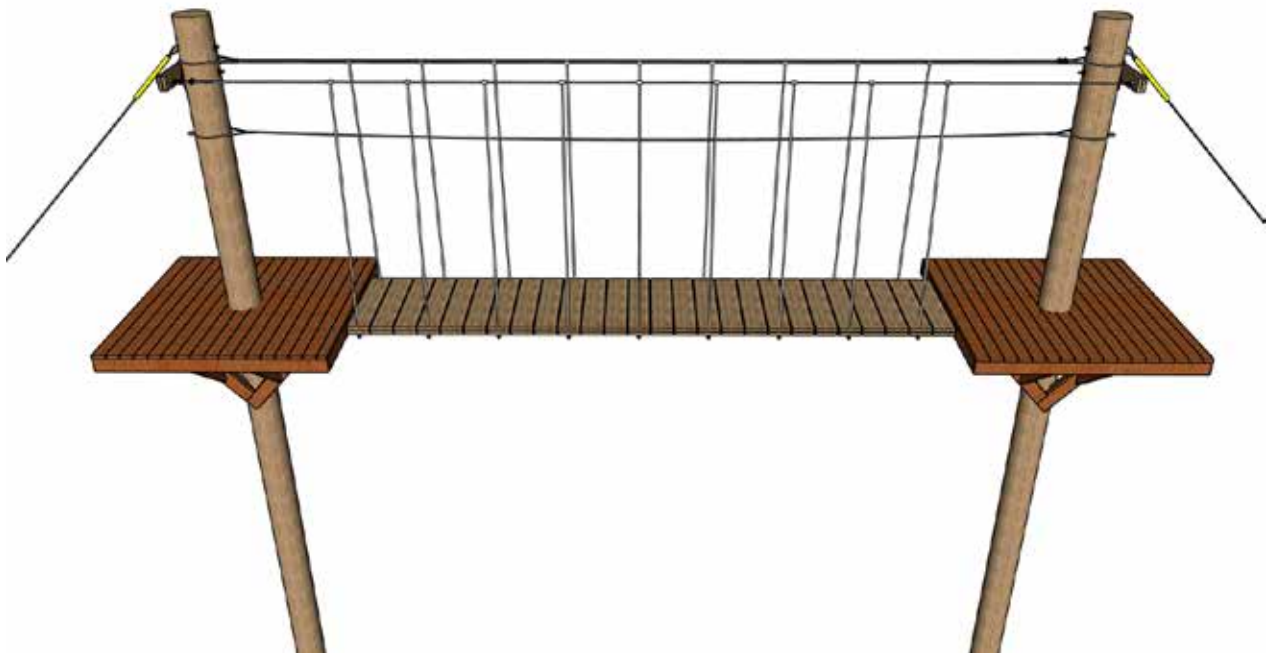
Universal High Ropes Courses



Universal High Ropes Course Activities



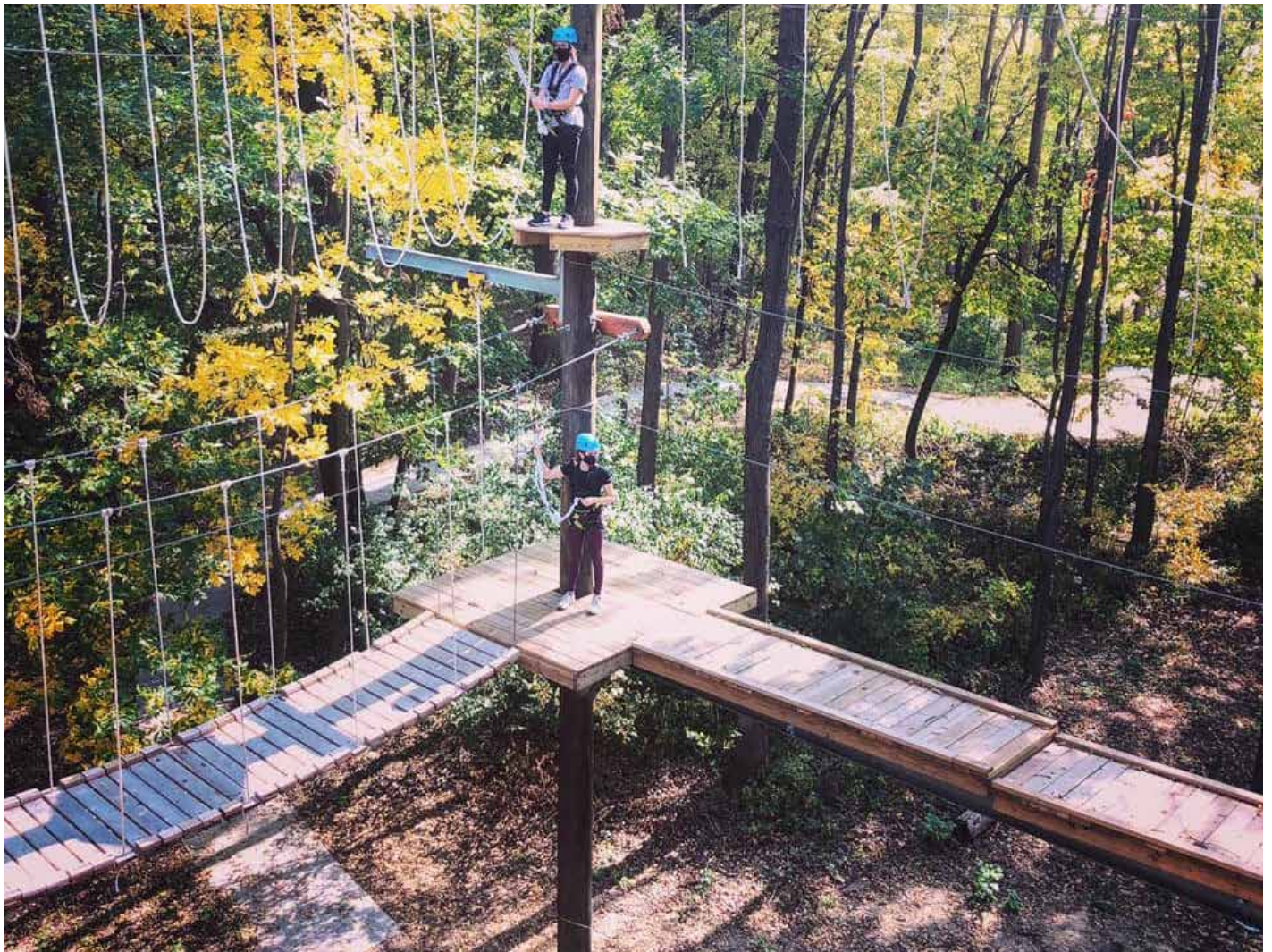
Universal Obstacle Bridge



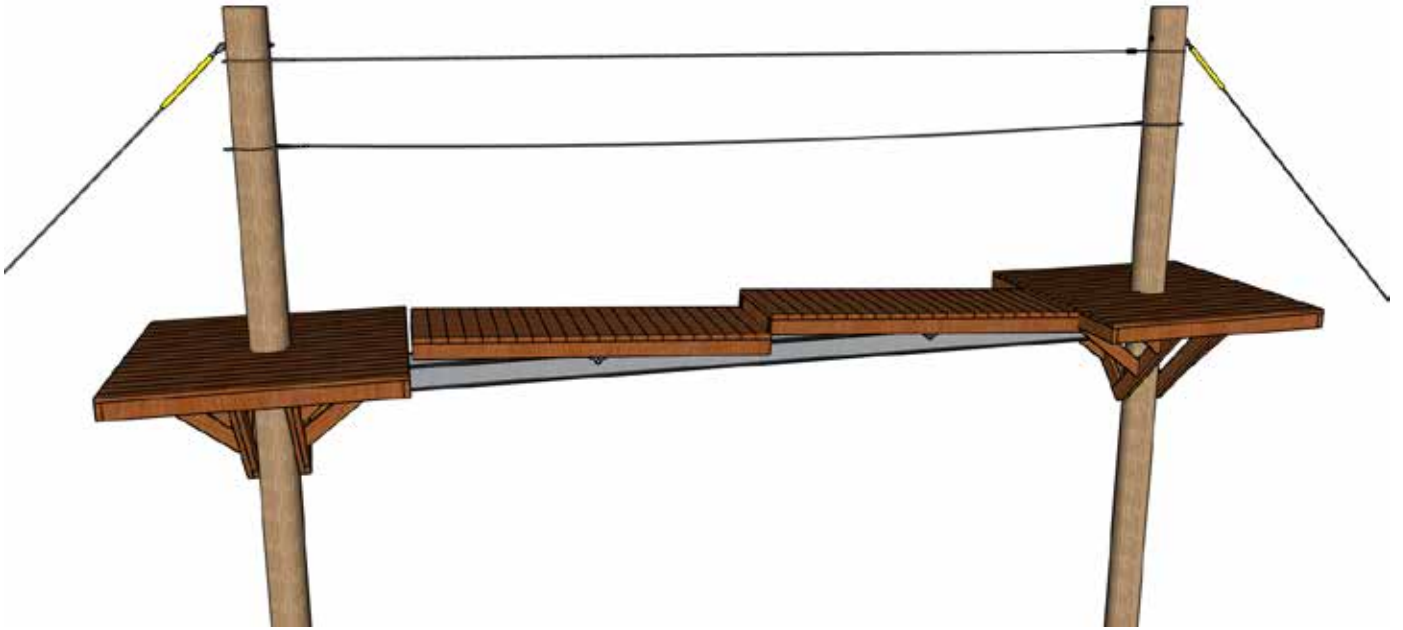
Universal Suspension Bridge

Universal High Ropes Course Activities

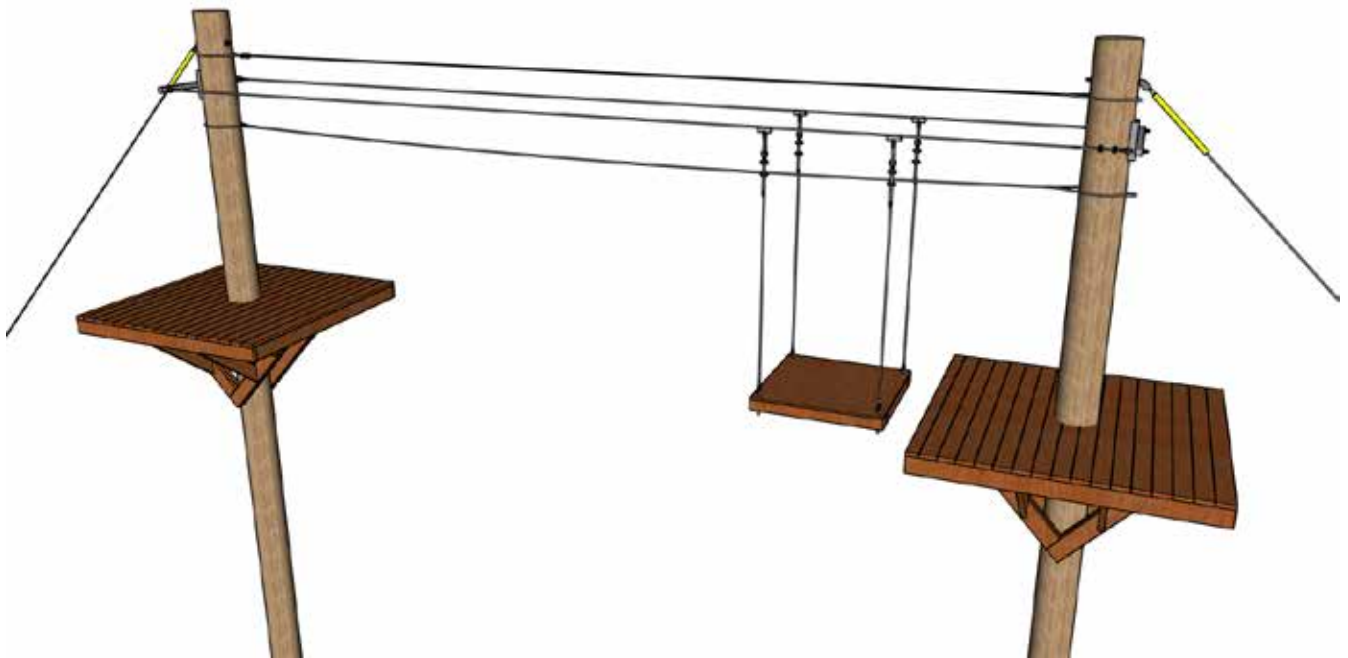




Universal High Ropes Course Activities



Universal Teetering Bridge



Universal Moving Bridge

Universal High Ropes Courses



Universal Course



Universal Course

Universal High Ropes Courses



Universal Hybrid Course



Universal Hybrid Course

Universal High Ropes Courses

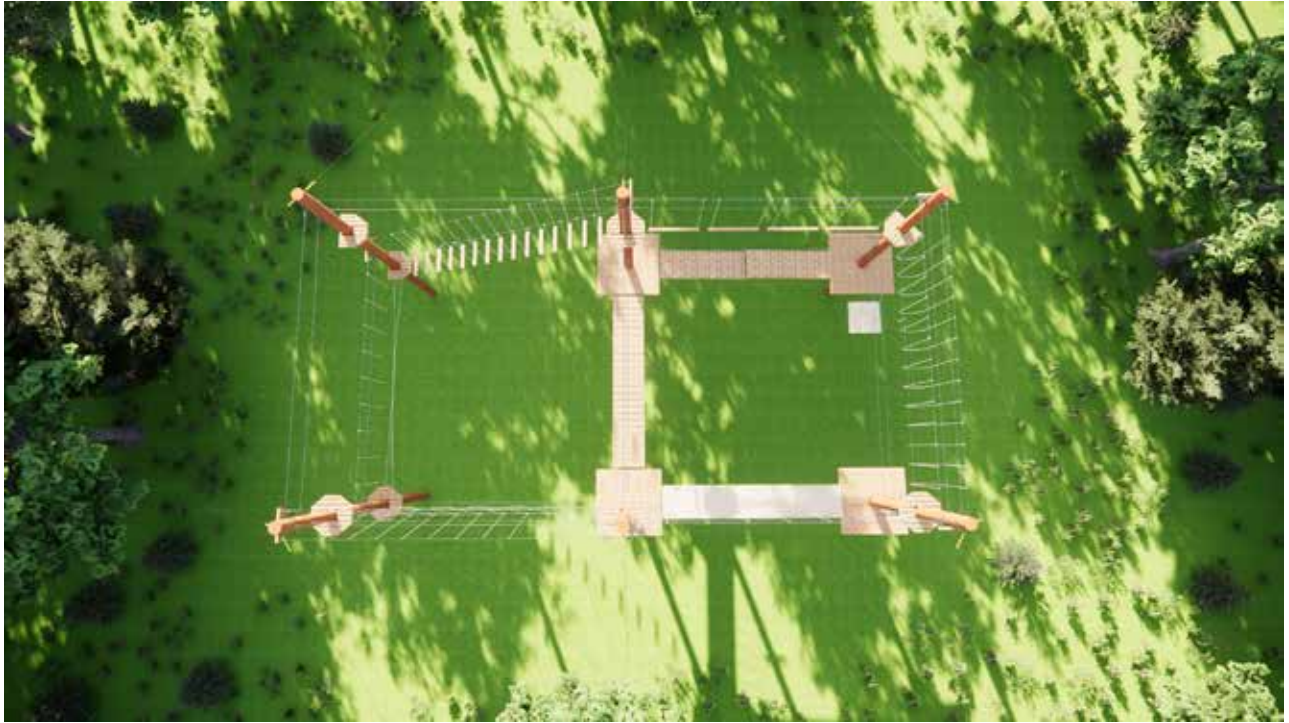


Universal Hybrid Course



Universal Hybrid Course

Universal High Ropes Courses



Universal Hybrid Course Aerial View



Transfer Arm

Universal High Ropes Course Equipment



Edelrid Haul System, Harken Winch



Misty Mountain Easy Seat Harness, ISC Clip n Zip Trolley

Universal High Ropes Course Equipment



Pivoting Davit Arm



Wellman Pull Up Bar, CMI Pulley



Universal Program Design Training

The Universal Program Design Training provided by Experiential Systems, Inc. will help prepare your staff to offer programming that is inclusive to participants of all abilities.

Has your program staff ever been faced with the situation of having to “figure out what to do” when a participant who uses a wheelchair arrives at your ropes course?

Would you like to more seamlessly include someone with a loss of hearing or vision into your challenge course programming?

Have you ever had to turn away a client because you were unprepared to manage a cognitive or emotional difference in your program?

This training will be custom designed to meet the needs of your organization and to provide the information and skills necessary to offer a welcoming and inclusive program. A Universal Program is one that goes beyond making adaptations for accessibility, to one that is an inclusive experience by its very nature.

Some of the learning opportunities in this training include (but are not limited to):

An informational overview of physical, sensory, cognitive and emotional differences.

Designing a program that creates opportunities for all to participate who choose to participate. This can include everything from developing curriculum and training materials to suggestions for simple tweaks to equipment and training.

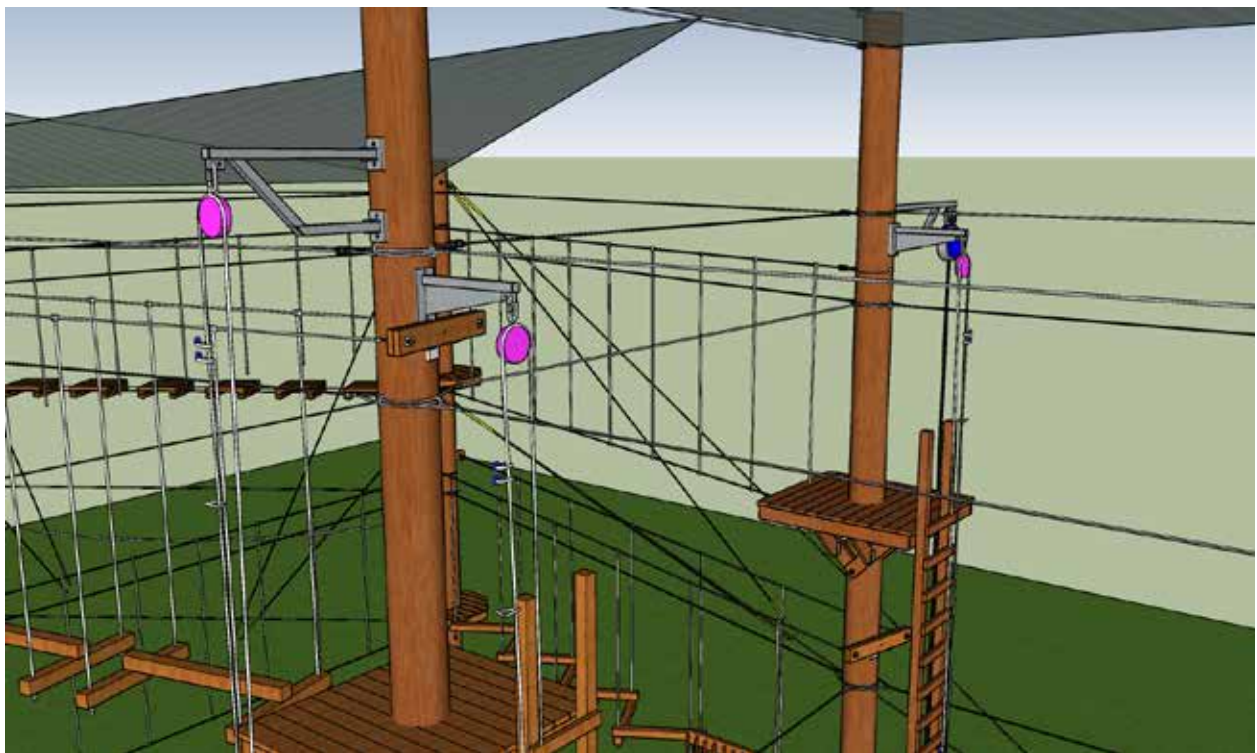
Introduction to and practice with a variety of systems that can improve the accessibility of your facility (including: Misty Mountain Arc and Easy Seat harnesses, ISC R-ALF pulley system, and Petzl Jag).

Technical skills covered include: Outfitting, belaying, lowering, and transferring.





Universal Climbing Tower



Davit Arm, 5 to 1 Pulley System



Universal Climbing Wall



Davit Arm, ISC 5:1 Mechanical Advantage, Misty Mountain ARC Harness and Spreader Bar

Universal Zip Lines



Universal Zip Lines





Universal Low Ropes Courses

GROUP WALL ACCESSIBLE - LGW02

This group event is similar to the typical group wall, but with some features that allow for a wider range of populations to engage in the activity including those with disabilities. It includes two different heights of walls with interior decks and a variety of access points.



8-16



25'X15'



KING'S FINGER UNIVERSAL - LKF03

This version of the King's Finger includes six additional poles surrounding the center pole to allow for use of a pulley system to move the "ring." This feature allows for a wider range of populations to engage in the activity including those with disabilities.



6-16



40'X40'



NITRO CROSSING ACCESSIBLE - LNC02

This version of Nitro Crossing is allows for a wider range of populations to engage in the activity including people with disabilities. The design includes a track for ease of use with wheelchairs, walkers, crutches or if someone has limited mobility. It follows the typical flow of a nitro crossing and allows for a participant to travel from one side to the other.



4-16



30'X40'





Universal Low Ropes Courses

NITRO TROLLEY ACCESSIBLE - LNT01

Similar to a traditional Nitro Crossing, participants must pass from one side to the other. The Nitro Crossing rope is replaced with a swing seat, that traverses a horizontal cable using a trolley. Here the team members can sit in the seat to travel to the other side.



2-16



15'x30'



SPIDER'S WEB ACCESSIBLE - LSW02

This element is similar to the typical spider's web with some additional design features that allow for a wider range of populations to engage in the activity including those with disabilities. Features include lower holes set at ground level taking out the need to step up and over a rope. The various holes are set wider and are adjustable to work with the needs of the group.



4-16



20'X20'



SUNDIAL - LSD01

The Sundial is an arrangement of short posts with beams fixed between. The team has to move around the sundial while balancing along the beams.



6-16



25'X25'





Universal Low Ropes Courses

TP SHUFFLE ACCESSIBLE - LTP02

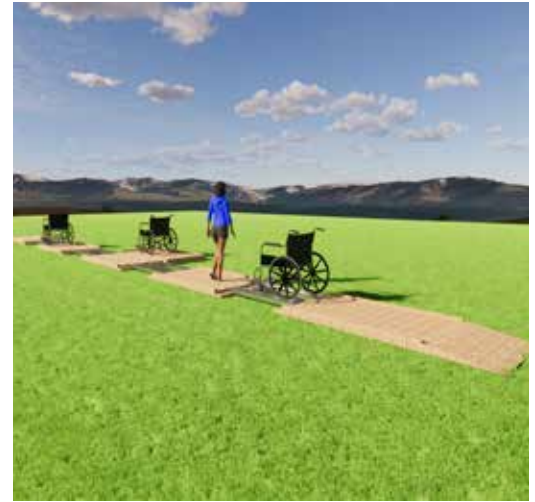
The Accessible TP Shuffle allows for a wider range of populations to engage in the activity including people with disabilities. The low segmented platforms at staggered intervals allow for easier movement when someone is using a wheelchair, walkers, crutches or for someone with more limited physical mobility. It follows the typical TP shuffle flow to challenge the group to arrange themselves in a specific order or pattern.



4-16



15'x30'



TOWERS OF HANOI - LTH01

The Towers of Hanoi are three posts setup in a line and four tires of different sizes stacked on one end pole arranged with the largest on the bottom to the smallest on top. The objective is to move the tires to the opposite end pole according to certain parameters set up for the activity.



2-16



10'x20'



WHALE WATCH ACCESSIBLE - LWW03

This accessible design includes a ramp on either end, a single-sided railing with two different levels of hand-holds, and a short bumper around the perimeter of the deck. These additional features allow a wider range of populations to engage in the activity. This Accessible Whale Watch event challenges all able participants to enter the platform, and then work to get it balanced without either end touching the ground.



2-16



16'X18'



Universal Low Ropes Courses

WILD WOOLY ACCESSIBLE - LWW06

This Accessible Wild Wooly design follows the diamond shape with some additions to engage a wider range of populations. This element integrates two different styles with adjustable cable on one end and wooden planks on the other end offering choice to participants on how they want to complete the activity. It also allows for trying one side and then moving to the other side to increase the challenge as needed.



6-16



50'X20'



Universal Accessibility Kit - UAK-1



ISC R-ALF 5:1 Mechanical Advantage Haul / Rescue Kit

Easy Seat Accessibility Harness

Wellman Pull Up Bar - Universal Accessibility Ascender

Edelrid KAA Haul System - 150cm

13mm Zippy Clip N Zip Trolley Flat Ends

Carabiner Large Steel : 3 Stage Locking