

Cognitive and Physical Requirements
Outdoor Studies Programs
AA:OE, AGS:ORL, COP:FFG

The field of Outdoor Education is both intellectually challenging and physically demanding.

The College has established the essential eligibility criteria listed below to provide both course instructors and potential students with information needed to make an accurate, objective assessment when deciding if the participant's abilities are appropriate to preserve student safety and welfare for a specific course or activities within the course. The essential eligibility criteria are applied to all potential students, regardless of physical limitations or disabilities, and must be able to be demonstrated unassisted, unless otherwise noted.

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Section 1: General Cognitive-Physical Requirements for the Outdoor Studies Programs and Courses include:

- Vision, with or without correction, must allow the determination of minute areas of detail, very small variations in color and adequate depth perception (size, shape and texture), including differentiation of details. Visual ability must be sufficient for observation and assessment necessary from a distance and close by in order to recognize physical status and non-verbal responses including behaviors of fellow students, clients, patients, and the physical environment surrounding them.
- Speech and hearing must permit clear and effective communication with colleagues, clients, faculty and staff without lip reading. Auditory ability must be sufficient to monitor and assess environmental dangers, including unsafe atmospheres with high levels of background noise (paddling a river or hiking in high wind). In responding to emergencies, whether real or scenario-based, speech and auditory ability must be sufficient to monitor and assess health status, including auscultation of heart and lungs, and hear equipment alarms and warning sounds from humans of impending danger or injury.
- Students must be able to read, write, speak and report accurately and effectively in English.
- Students must be able to comprehend and carry out complex written and oral directions given in English.
- Students must possess the physical ability to tolerate unassisted walking and standing for sustained periods of time, be capable of lifting and/or carrying up to 60 pounds from floor to waist level frequently and walking with that load (in a backpack-based field course) for up to 10-days.

- Students must be able to move his/her entire body a distance of no less than three meters within two seconds of a signal to do so, to move from objective environmental dangers like rock-fall.
- Students must possess fine motor movements in order to perform the *essential functions* of the profession. This includes the dexterity to control and manipulate equipment in a life-saving context, including ropes, belay systems, rescue equipment, boat oars, as well as execute first-aid procedures in a rescue context, whether real or scenario-based.
- Students must possess tactile ability sufficient to perform emergency medical exams. Examples include performing palpation during physical exams, administering oral and intramuscular medications, and perform wound care.
- Student should be able to operate around groups of people consuming varied foods from a variety of sources (nuts, fish, etc.) in environments which may be difficult to contain allergens, like backpacking-based courses in the desert.
- Students must be able to function in a structured and an unstructured environment within significant time constraints.
- Students must possess a willingness to assist with and perform a wide variety of routine procedures where another student's life or well-being depends on their performance.
- Students must be able to complete required tasks/functions under stressful conditions, including emergencies.
- Students must demonstrate socially appropriate behavior; maintain cleanliness and personal grooming consistent with close human contact.
- Students must be able to progress toward minimal supervision as they advance through the program.
- Students must be able to interact appropriately with clients and all members of the outdoor education team.
- In case of emergency, students must be able to perform any or all required activities for the rescue and safe treatment of the injured individual under the direction of a trained faculty member, including assisting a team in carrying a litter and assisting in performing first aid.
- Students must be able to perform any other activity required for the safe travel of a group of up to 15 individuals in the wilderness several miles from help.

Furthermore, in regards to judgement and decision-making, students must...

1. Be able to independently identify and recognize environmental hazards. These hazards may include, but are not limited to, falling objects/rocks, loose rock and unstable surfaces, rugged steep and uneven terrain, cliff edges, crevasses, moving water (fast or slow) such as rivers, creeks, surf or tides; and potentially hazardous animals and insects.
2. Recognize and understand the hazards and risks posed by other course members, which include, but are not limited to, fatigue, state of mind, and actions that may influence judgment and decision-making.
3. Recall and understand hazards and risks previously explained by instructors.
4. Be able to effectively alert and warn others of potential or impending dangers such as falling rocks, aggressive animals, or other environmental hazards.
5. Be able to effectively signal or notify course instructors or other course members of personal distress, injury, or need for assistance.

6. Be able to do the preceding warnings and notifications up to a distance of 50 meters and in conditions within limited visibility such as in darkness or inclement weather or with loud background noise, such as high winds or while near roaring rivers.
7. Act reliably around above stated hazards to minimize risk even when not directly supervised.
8. Independently perceive, understand, and follow directions and instructions given by others to be able to successfully execute appropriate and perhaps unfamiliar, techniques to avoid hazards and/or manage risks. These directions may be given before the hazard or risk is encountered or may need to be given during exposure to the hazard/risk and out of necessity and practicality are often given orally.
9. Be able to stay alert and to focus attention for up to several hours at a time while traveling in wilderness terrain, attending classes, or receiving instructions.
10. Be able to respond appropriately to stress or crisis such as when encountering large and/or potentially hazardous animals, severe weather, or a medical emergency.
11. If taking prescription medications, be able to maintain proper dosage by self-medicating without assistance from instructors or others (except possibly in emergency situations).

Section 2: Course Requirements

This section breaks down cognitive-physical limitations further by exploring specific outdoor modalities and course-specific needs.

Wilderness-Based Hiking and Backpacking Courses

Some of these courses include overnight camping and wilderness travel for up to 8 miles per day over variable terrain on and off trail at elevations up to 13,000ft. All include field excursions up to 1 mile from the vehicle on mixed terrain.

- OUT-100: Non-technical Mountaineering
- OUT-102: Backcountry Navigation
- OUT-104: Trekking
- OUT-105: Land and Water Navigation
- OUT-112: Mountain Orientation
- OUT-113: Desert Orientation
- OUT-114: Canyon Orientation

Each participant must...

1. At a minimum, be able to travel over and negotiate through varied wilderness terrain with a backpack weighing up to or exceeding 50 pounds or 30% of body-weight. Some hiking courses are designed with pack weights less than 60 pounds and some have only day-packs.
2. Be able to navigate travel conditions may include, but are not limited to, rough, rugged, uneven steep and sloping terrain; human made and animal made trails; rocky terrain that may range from smooth bedrock to extensive areas of large rock boulders; needing to cross rivers and creeks without the aid of bridges up to three feet or more in depth; ascending, descending or traversing slopes covered in snow, rocks or vegetation; bushwhacking off trail through thick standing and/or downed vegetation. Any and all travel can occur during periods of inclement weather or nighttime hours.
3. Be able to travel durations ranging from less than one hour to more than 12 hours in one day, and occur on successive days.
4. Have average strength and endurance and basic balance and agility to travel through such terrain with a backpack.
5. Be able to carry gear, food, and personal items or personal medications needed for the duration of the course, or the period between resupplies.
6. Be able to function in a range of temperatures, weather conditions from 5 to 95 degrees F and at altitudes up to 14,500 feet.

Mountaineering, Climbing, and Technical Courses

These courses all involve technical rope skills while rock/ice climbing or moving through class 4 and higher terrain at elevations up to 14,500ft.

Courses include:

- OUT-129: Ice Climbing I
- OUT-130: Ice Climbing II
- OUT-132: Rock Climbing II
- OUT-133: Technical Canyoneering
- OUT-155: Ski Mountaineering
- OUT-164: Alpine Rescue: Snow, Ice, Crevasse
- OUT-165: Climbing-Self Rescue
- OUT-166: High Angle Rescue
- OUT-221: Top Rope Climbing
- OUT-222: Sport Climbing
- OUT-211: Mountaineering Leadership
- OUT-212: Rock Climbing Leadership

Each participant must...

1. Effectively communicate independently in oral dialogue over a distance of 60 meters when participating in a multi-pitch climbing environment.
2. Possess the potential to communicate hand signals, spoken signals or understand a rope-tug system.
3. Provide a reliable belay to another climber during roped climbing. To do so a student must be able to reliably manipulate a climbing rope through a belay device such as an ATC, Grigri, or other such device and understand the necessary climbing signals with or without a backup.
4. Independently tie the overhand and figure eight series of knots.
5. Perform self-arrest with an ice axe of traveling on snow or glaciers.
6. Reliably and independently perform simple technical tasks such as tying into a rope, clipping into an anchor and getting into a harness without the direct supervision of an instructor.
7. Be able to carry gear, food, and personal items or personal medications needed for the duration of the course, or the period between resupplies.
8. Be able to function in a range of temperatures, weather conditions from 5 to 95 degrees F and at altitudes up to 14,500 feet.

Winter Courses

These courses take place in mountain winter environments where temperatures can potential get as low as -20 degree Fahrenheit. All courses travel on snow via skis, splitboard, or snowshoes in avalanche terrain and OUT 115 includes overnight winter camping.

Courses include:

- OUT-115: Snow Orientation
- OUT-168: Avalanche Awareness Level I
- OUT-169: Avalanche Awareness Level II
- OUT-214: Backcountry Winter Travel Leadership

Each participant must...

1. Move on skis, snowshoes, or a snowboard over flat to steep unpacked snow-covered terrain.
2. Be able to move a load of gear weighing 60 lbs. (or 40% of body-weight) by means of sled, backpack or some combination thereof.
3. Be able to travel from camp to camp, which may take all day (8+ hours).
4. Be able to shovel in order to perform camp chores and to participate in rescues where people, gear or shelters have been buried in the snow.
5. Be able to perceive and differentiate signals from an avalanche transceiver (audio and visual signals) and efficiently move over avalanche debris.
6. Be able to carry gear, food, and personal items or personal medications needed for the duration of the course, or the period between resupplies.
7. Be able to function in a range of temperatures including extreme cold (-20), weather conditions, and altitudes up to 14,500 feet.

Water-Based Courses

These course take place on large bodies of water that can include Class 2 & 3+ whitewater. Water temperatures can be as low as 40 degrees Fahrenheit and some courses include progressive, overnight camping.

Courses include:

- OUT-116: River Orientation
- OUT-127: River Kayaking
- OUT-137: Kayaking
- OUT-138: Whitewater Rafting
- OUT-140: Swift-Water Rescue
- OUT-218: River Orientation II
- OUT-210: Kayak Touring Leadership
- OUT-215: Whitewater Paddling Leadership

Each participant must...

1. Be able to lift and carry boats and supplies in order to assist with boat packing, launch and landing.
2. Be able to row and/or paddle a boat with proficiency.
3. Be able to follow audible and/or visual commands of a trained instructor while rowing or paddling a raft.

4. Be able to exit a capsized boat, fend for self while in the water away from the boat, attain and maintain the correct body position, swim 100 yards in current, and/or perform self-rescue as taught by the instructor.
5. Be able to carry gear, food, and personal items or personal medications needed for the duration of the course, or the period between resupplies.
6. Be able to function in a range of temperatures, weather conditions, and altitudes from 5 to 95 degrees F, altitudes up to 12,500 feet, and water temperatures as low as 33 degrees F.

Bike Courses

Bike courses are taught on two-wheeled bikes and generally include trail riding on variable terrain in mountain and desert environments.

Courses include:

- OUT-124: Bicycle Touring
- OUT-126: Mountain Biking
- OUT 226: Mountain Bike Leadership

Each participant must...

1. Be able to ride a bike for a total of 8 hours over a distance of 10 miles throughout a day over sequential days on mountainous single-track, while carrying a daypack of food, water, and emergency equipment.
2. Be able to ride a bike on rugged mountain terrain and varied surfaces, including steep climbs, rocky descents, and loose sand.
3. Have the judgement to get off the bike when terrain exceeds the student's ability to safely handle a bike.
4. Be able to lift and carry a 30-40 pound bike for 100 yards on steep/rough terrain.
5. Be able to carry gear, food, and personal items or personal medications needed for the duration of the course, or the period between resupplies.
6. Be able to function in a range of temperatures, weather conditions from 5 to 95 degrees F and at altitudes up to 12,500 feet.

Other courses with specific cognitive-physical requirements:

HWE-129/OUT 244, Wilderness First Responder

1. Lifting and moving patients with a team of rescuers up to 200 lbs. in weight.
2. Dragging and/or rolling a patient alone, who is up to 200 lbs. in weight.

OUT-119, Fly Fishing & OUT-122, Professional Fly Fish Guide I & OUT-123, Professional Fly Fish Guide II

1. Student is able to walk and balance on rough terrain both in and out of a river.

OUT-216, Challenge Course Facilitation

1. Student must be able to participate in low and high ropes-course initiatives.

OUT-220, Trail Design & Construction

1. Student is able to walk and balance, unassisted, over mixed and rough terrain to work site
2. Employ the use of various hand tools for trail construction safely

OUT-287, Internship: Outdoor Leadership

1. Students must be able to complete the physical requirements of their chosen internship or work experience.