Water Skills and Water Travel
OED 324 01

Also
Wilderness Navigation
Miscellaneous Skills

Instructor: J. Grant White
Office: Wh 209 and the field
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Classroom: Wh 209

Please note: Students in need of academic or medical accommodation should visit the Disabilities Services page of the Northland College web site: http://www.northland.edu/student-life-support-disability.htm,

Contact:
Through mid-September
Kathleen Skoraczewski
Campus Counselor
Division of Student Life
Room 202B - Ponzio Campus Center; Ext 1369
kskoraczewski@northland.edu

After mid-September
Patti Fenner-Leino, @ ext. 1230, Rm. 229 of the Ponzio Center.


Website: O.E. site: http://academics.northland.edu/outdoor-ed/
(Password Protected. Check your email)

“The canoe is the royalty of watercraft, and even the most fat and fatuous of them is infinitely exalted in my mind above the power pig. A canoe is something from which humanity fairly oozes. It’s a wing that’s flown on the pleasurable fuels of perspiration, perception and intelligence. To paddle even a poor one is to partake of broadened perceptual universe; to become immersed in paddling a good one is to partake of some kind of godhood.”
Note
All of the courses and course activities described herein are part of the Outdoor Education Fall Block. Due to the complex nature of the block, the vagaries of weather, and the schedules of the outside agencies with whom we will interact, the structure of this program will be fluid. In other words, the scheduled activities are sure to change on short notice. Please consult the Fall Block Calendar regularly.

Introduction
This course is designed to introduce students to the knowledge and skills needed to safely enjoy canoeing for recreation, relaxation, lifetime physical fitness, or work.

As an activity, canoeing is often viewed as being about as common as dirt: totally uncomplicated, and absolutely without risk. That the exact opposite is true, means that the general public has no grasp of the variety of existing skills or the magnitude of skill level possible. Neither do they appreciate the potential risks, or possess the means of avoiding them. If this course goes as planned, none of these statements will apply to students when it is completed.

Unique to North America, the lightweight open canoe was absolutely essential to both the Native North Americans and the early Europeans for subsistence, work, exploration, commerce, and general transportation. In the early days, the waterways were often the paths of least resistance through the wilderness, particularly when heavy loads were being transported. This remained true even when traveling upstream. Local waterways such as the Boise Brule, St. Croix, Bad, White, and Namekagon rivers were used in this way long before they were used for recreation.

While other types of boats can out-perform the canoe in specific categories of performance, no other boat is, at the same time, as fast, as maneuverable, or as seaworthy as the canoe while hauling such a great a load for its size and still be lifted and carried over land to the next body of water.

Modern canoeing includes the disciplines of tripping, flat water cruising, white water paddling, freestyle paddling, poling, lining, tracking, portaging, sailing, and various categories of competition in nearly all of these areas.

Course Goals
• Students will demonstrate increased understanding of the potential for skill development and diversity within this activity
• Students will demonstrate improved behaviors, regarding the care of equipment
• Students will demonstrate improvements in both flat water and moving water paddling techniques and their abilities to self-critique, in order to continue to learn on their own
• Students will demonstrate the abilities to recognize and avoid the potential hazards associated with canoeing
• Students will demonstrate the ability to perform simple self, partner, and boat rescues

Outcomes
Upon completing the course, students will have developed a functional understanding of the interactions among paddler, boat, paddle, and water, and an ability to apply same to produce efficient, effective canoeing strokes.

Included will be the concepts of:
• Paddle power face
• Law of action-reaction
• Law of inertia
• Effective force transfer
• Effective paddling biomechanics
• Functional ability to use basic rescue techniques
• Functional understanding of water hydraulogy and river/lake safety
• Functional understanding of canoe design and construction
• Functional ability to paddle either bow or stern on either the right or left side, in both quiet and moving water

“If the wind blows when docking, if the lake becomes rough, if the river drops through rapids, the ordinary canoeist grows uneasy, is easily dislodged from his seat, and is often in danger. The skilled canoeist merely becomes more interested and he can put himself in a position of safety whenever he wishes.”

Deforest Eveland

Mankato State University graduate student, Dept. of Experiential Education (and “skilled canoeist”), spring 1977

Schedule (Subject to change!)

<table>
<thead>
<tr>
<th>Thursday, September 6—pm</th>
<th>Basic Flatwater Instruction: Camp Manitowish—Grant</th>
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<tbody>
<tr>
<td>Friday, Sept. 7—pm</td>
<td>Canoe Orienteering: Camp Manitowish—Grant</td>
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<tr>
<td>Tuesday, Sept. 11</td>
<td>Canoe Poling: Fish Creek—Elizabeth/Grant</td>
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<td>Wednesday, Sept. 12</td>
<td>Voyageur Canoe—a.m.</td>
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<td>Thursday, Sept. 13—10:00 am</td>
<td>Turning Strokes: Birch Grove/Twin Lakes—Grant</td>
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<tr>
<td>Friday, Sept. 14—9:00 am</td>
<td>White River: Pike River Rd. to Sutherland Canoe Landing—Grant</td>
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<tr>
<td>Thursday, Sept. 20</td>
<td>White Water: Boise Brule—Elizabeth</td>
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<tr>
<td>Friday, Sept. 21</td>
<td>White Water: Boise Brule—Elizabeth</td>
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<tr>
<td>Tuesday, Sept. 25</td>
<td>Canoe Poling—Boise Brule or Voyageur Canoe—Elizabeth</td>
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<tr>
<td>Wednesday, Sept. 26</td>
<td>Voyageur Canoe?</td>
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<tr>
<td>Thursday, Sept. 27</td>
<td>Swiftwater Rescue—Elizabeth</td>
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</tbody>
</table>
Equipment Requirements
In order to safely participate in this class, you will need to come prepared for cold, wet conditions. Bring extra layers of warm clothing with properties that will keep you warm when wet (this includes wool, synthetic fleece and pile, polypropylene, Thermax, Thinsulate, Capilene, et.al.—the list does not include cotton and acrylic), good rain gear (bring it every time!), a warm hat, waterproof boots (i.e.- “barn boots”) or shoes that can take repeated wetting without damage, a day pack with a garbage bag (two—doubled—are better) or dry bag in which to keep your clothing dry, and a water bottle along with high energy snacks.

Grades
Field-based courses require all students to attend regularly, participate actively and enthusiastically, and to take initiative for mastering the required skills.

• Students who attend all sessions, enthusiastically try all activities while maintaining an open attitude of learning, work determinedly to master the skills, and generously assist others in their learning can expect to earn an “A.”

• Students who do only the minimum expected and who do not engage actively and enthusiastically in the process of learning and of assisting others in their learning can expect to earn a “C” or lower.

Canoeing Internet Resources

Organizations/Information
American Canoe Association
http://www.americancanoe.org/

Minnesota Canoe Association
http://www.canoe-kayak.org/

Outdoor Play
http://www.outdoorplay.com/

Salty Dog
http://www.seakayaker.com/

Preservation
American Rivers
http://www.amrivers.org/

Trip Planning
TopoZone (online topo maps for the U.S.)
http://www.topozone.com/

Ontario Ministry of Natural Resources
http://www.mnr.gov.on.ca/

Ontario Canoe Routes
http://www.myccr.com/

Superior National Forest
http://www.fs.fed.us/r9/forests/superior/

Michigan Department of Natural Resources
http://www.michigan.gov/dnr

Minnesota Department of Natural Resources
http://www.dnr.state.mn.us/

Wisconsin Department of Natural Resources
http://www.dnr.state.wi.us/

Che-Mmu, The Journal of Canadian Wilderness Canoeing
http://www.canoe.ca/che-mun/home.html

**Equipment**
Cooke Custom Sewing (EXCELLENT CUSTOM canoe spray covers, canoe packs, tarps, mukluks, etc.)
http://www.cookecustomsewing.com/

Bell Canoe Works (In my opinion, the best designed and built personal canoes on the market--- David Yost designs)
http://www.bellcanoe.com/

Frost River
http://www.frostriver.com/

Midwest Mountaineering (OUTSTANDING outdoor gear retailer)
http://www.midwestmtn.com/

Piragis Northwoods Company
http://www.piragis.com/

Rutabaga On-line
http://www.rutabaga.com/

**Canoe Poling**
Bushwhacker Wilderness Adventure
http://www.bushwhacker.ca/poling.html

Canoe Poling And Paddling Workshop: Jack Mountain
http://www.jackmtn.com/poling.html

Making an Inexpensive Pole
http://www.brockeng.com/AmusingRaven/pole.htm

When It's Time to Punt
http://www.paddling.net/sameboat/archives/sameboat149.html

ACA
http://www.americancanoe.org/recreation/types_poling.lasso

**Canoe links Pages**
Outdoorplaces.Com Canoe Resource Page
http://www.outdoorplaces.com/Features/Paddle/pickcanoe/newcanoe8.htm

Outdoor On-Line—Canoeing
http://www.outdoor.co.jp/canoe/canoe_windex.htm

**Canoe Building Information**
The Wooden Canoe Heritage Association
http://www.wcha.org/

Native Tech: Native American Technology and Art: Birchbark Canoes
http://www.nativetech.org/brchbark/canoe.htm

North House Folk School—Boat Building Classes
http://www.northhousefolkschool.com/classes/BoatBuilding.htm

Resources for Wood Canoe Enthusiasts
http://www.paddlin.com/fivelakes/resource.htm

Wood Canvas Canoe Building Course
http://www.magma.ca/~paufacan/course_canoe_building.htm

Wood Canvas Canoe Reconstruction Course
http://www.magma.ca/~paufacan/course_reconst.htm

Wooden Canoe Directory of Builders and Suppliers

**Wilderness Navigation**

**Room:** Wh 209 and Field  
**Instructor:** J. Grant White  
**Office:** Wh 312, Ext. 1350  
**E-mail:** gwhite@northland.edu

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Contact
Patti Fenner-Leino, Disabilities Coordinator
Ponzio Campus Center #229
Telephone: (715) 682-1230
Fax: (715) 682-1692
Student Services Toll Free Line: (866) 781-0001
Email: pfen-lei@northland.edu

Introduction
The term “Orienteering” refers to a competitive event in which a map and compass is used to problem solve a route from marker to marker, through a wild area, in the shortest time possible. Orienteering is an excellent lifetime fitness activity and, in Europe, a very serious competitive sport. For the purposes of this class, Orienteering is an excellent means of developing and perfecting wilderness navigation skills.

Students in this class will have opportunities to learn to read a map, use a compass, use map and compass together, problem solve with a map and compass, and use specialized orienteering navigational techniques.

Students must attend all meetings and participate fully. Students are expected to read the assigned readings and take notes during lecture. There will be a written final exam.

Course Outcomes
Upon completion of the course, students should be able to demonstrate the following:

• Functional ability to interpret landforms and extrapolate stories from the map
• Functional ability to perform basic compass operations
• Functional ability to problem solve using a map and compass
• Functional ability to navigate efficiently off-trail
• They should be functionally “lost-proofed”

Preparation for Field Activities
For every field session, students need to prepare themselves by dressing appropriately for current and possible weather conditions and be prepared for emergencies including an unplanned night in the woods. All students must come to labs with a daypack. The following gear, or its near equivalent, is strongly recommended; a water bottle plus water purification tablets such as “Potable Aqua”, good rain gear, spare insulating layers including a warm hat (select hydrophobic fibers as described in the next paragraph), the obvious compass, matches (or a reliable lighter or both), a candle or other fire starter, a knife, a whistle, high energy snacks, a small flashlight with spare batteries, a rescue blanket and or one or two large “leaf” (garbage) bags, and a modest first aid kit including any prescription and over-the-counter medications you’ll require to get you through the class period and
an unexpected overnight stay. Consider insect repellent, sunscreen, lip balm, moleskin, etc.

You will need sturdy shoes or boots that will help to protect you from bruises, ankle injuries, etc. Your insulating layers should continue to insulate when wet. Wool, Capilene, polypropylene, Thermax, and synthetic pile and fleece are examples. A hat is essential for preventing heat loss from the highly vulnerable head/neck region.

**Course Schedule (Subject to change!)**

Text: Read parts 1, 2, and 3

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday, Oct. 5</td>
<td>Wh 209</td>
<td>10:00 am start</td>
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<tr>
<td>Friday, Oct. 12</td>
<td>Wh 209</td>
<td>9:00 am start</td>
</tr>
<tr>
<td>Wednesday, Nov. 7</td>
<td>Wh 209/field</td>
<td>10:00 am start</td>
</tr>
<tr>
<td>Friday, Nov. 9</td>
<td>Field Trail “O”</td>
<td>9:00 am start</td>
</tr>
<tr>
<td>Wednesday, Nov. 14</td>
<td>Field Short “O”</td>
<td>10:00 am start</td>
</tr>
<tr>
<td>Friday, Nov. 16</td>
<td>Field Long “O”</td>
<td>9:00 start</td>
</tr>
</tbody>
</table>

**Grades**

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**Orienteering Internet Resources:**

- Badger Orienteering Club
  [http://userpages.chorus.net/kevin/main.html](http://userpages.chorus.net/kevin/main.html)
- Minnesota Orienteering Club
- U.S. Orienteering Federation
- World of “O”
  [http://worldofo.com/](http://worldofo.com/)
- A & E Orienteering
- Suunto Compasses
- Silva Compasses
  [http://www.silva.se/](http://www.silva.se/)
- Orienteering Vendors
  [http://orienteeringusa.org/orienteers/o-vendors](http://orienteeringusa.org/orienteers/o-vendors)
- Trails.com
Miscellaneous Skills

Course Schedule (Subject to change!)

Tuesday, Oct. 2, 1:00-5:00 pm   Edged Tools and Knots
Tuesday, Oct. 9 1:00-5:00 pm   Trail Nutrition: Wh 209
Wednesday, Oct. 10 10:00-5:00 pm   Motor Learning/Knots
Thursday, Oct. 11 1:00-5:00 pm   Outdoor Cooking Wh 209/Field
Tuesday, Oct. 30, 1:00-5:00 pm   Knots

Tuesday, Nov. 6—10:00-Noon   Motor Learning/Knots
Thursday, Nov. 8—10:00-Noon   Motor Learning/Knots
Thursday, Nov. 15—10:00-Noon   Motor Learning/Knots
Thursday, Nov. 29—10:00-5:00 pm   Motor Learning/Knots

Thursday, Dec. 6—Noon-5:00 pm   Motor Learning/Knots