Crane and Hoist Safety

1. Direct supervision of an experienced and licensed operator is required for any trainee learning to use lifting equipment.
2. Riding a load or hook is prohibited.
3. A limit switch is not to be used as an operating control.
4. If the power goes off while an electric crane or hoist is being operated, turn off all switches or operating buttons.
5. Do not use a crane or hoist in an unsafe working condition until it is repaired.
6. Makeshift repair of lifting equipment is prohibited.
7. If a crane, hoist, or mobile lifting device has been red-tagged as dangerous, UW employees will not operate it.
8. Before hoisting work begins, consideration must be given to the fact that stress is greatly increased if the leg of a hoisting chain, cable, or rope is rigged at an angle of less than 90 degrees with the horizontal. Avoid angles of less than 45 degrees.
9. Side pull is prohibited; the load must be directly in line with the mast or boom.
10. Keep cranes, power shovels, telescoping lifting devices, and similar equipment at least 6 feet away from high voltage lines. Use approved insulated buckets to lift personnel.
11. Lift only one separately rigged load at a time.
12. Keep lifting equipment from dangling or dragging under the load.
13. The crane or hoist operator is responsible for the load. Only one employee will give signals to the operator. The operator needs a clear view of work and equipment at all times.
14. Attach the load to the crane or hoist by slings or other approved devices.
15. Remove from service all deformed or defective hooks, rings, or other lifting equipment.
16. Do not use wire or manila rope which is frayed to the extent that it is weakened, or wire rope cables that are cut, frayed, kinked, or rusted.
17. Nylon or wire rope slings must not be shortened by using knots.
18. Use only manufacturer-recommended means to secure chain links of a hoist; don't use a nut and bolt, nails, pins, etc.
19. Prevent sudden shock to slings used to lift equipment (e.g., twisting, snapping, or jerking into place).
20. Do not carry compressed gas cylinders on a sling.
21. Do not wrap the working line of the hoist around the load.
22. Inspect a load for loose parts or objects before lifting.
23. Secure the safety latch on the hook of a hoist when lifting or moving a load.
24. Secure and properly balance the load before lifting a few inches off the floor or support.
25. Test the brake each time a load is lifted, by raising the load a few inches and applying the brake.
26. Make sure equipment lifting a load is not kinked or caught against obstructions while moving the load upward.
27. Before lifting, the area around the crane and the area directly under the travel path of the load is to be cordonned off sufficiently to prevent traffic and protect bystanders.
28. All College of Engineering hoists will be inspected on a yearly basis. Contact the CoE Director for Safety for information.