Here are the guidelines for setting WIOL courses this year 2008.
Elementary Course 1 (public beginner)
Courses 1 and 2 can share first control.
Winning time about 15-20 min. (this will mean about 1.1-1.6km length with 610 controls). Control Description sheet will have both symbols and text and will be printed on the map. Technical level: Beginner.
a. Make the first two or three points particularly easy.
b. Keep every leg along well-marked trails or a similar linear feature such as a road, stonewall, field edge, stream or the like. Place controls at points where the linear feature changes.
c. Generally the legs should be kept fairly short.
d. Large or very distinct features are preferable as they encourage map to terrain identification. Pick precise spots, and place the control well visibly.
e. Check the other courses to ensure that there are no nearby controls from them to confuse the White course runners. It is better than they cannot see controls from other courses that might pull them off course or cause them to mispunch.

Middle School Course 2 (public advanced beginner)
Courses 1 and 2 can share first control.
Winning time about $20-25 \mathrm{~min}$. (this will mean about $1.6-2.8 \mathrm{~km}$ length with $7-$ 12 controls). Control Description sheet will have only symbols and will be printed on the map. Technical level: Adv. Beginner.
a. This course takes the runner from the trail into the woods. It will follow linear features, but leaves and returns to them while visiting control points. The linear features used this course handrails can have small gaps or be less obvious than needed for the Elementary course.
b. This should still be an easy course. Confine the technical difficulty to a rather narrow range, offering a wide variety of features to navigate by and the need to begin to use the compass to find the control point. Attack points for this course should be a feature suitable for the beginner. Chose control sites that encourage course orienteers to return to linear features for route choices
c. More than one route choice from control to control is suggested. We want to start testing navigational skills, and begin to introduce the need for contour reading, just being able to distinguish uphill and downhill is enough. Emphasize the need for following the map, but throw in a little compass work such as shortcuts through open woods, but only if the distance is relatively short, and provided that a catching feature exists.
d. Vary the lengths of the legs, but tend toward keeping them short. Legs should be longer than elementary, but short enough that they don't lose concentration.
e. Use rather obvious features, such as top of a small hill, North side of pond, ditch junction. Avoid using reentrants or other contour features for control points. All control features must have nearby attack points on handrails and catching features.
f. Control flags should not be visible from the linear feature used for the main handrail
g. There should be an obvious catching feature shortly after the control when approached from the attack point. Controls may be located on the catching feature.

High School JV Course 3 (Girls) (public intermediate) and 4 (Boys Only) Cannot share first control with each other. Courses 3 and 5 can share first control. Courses 3 and 4 can share other controls with each other. Winning time about 20-25 min. (this will mean about $2.5-3.3 \mathrm{~km}$ length, with 8 14 controls). Control Description sheet will have only symbols and will be printed on the map. Technical Level: Intermediate
a. The controls and best routes should invite the intermediate orienteer away from the strong linear features that the beginners must rely on. However, the penalty for navigational errors should not be extreme. Every course control must have at least one obvious an attack point and one obvious catching feature. If unsure, err on the side of too easy.
b. Provide more route choice. Set a course that forces the orienteer to make several decisions per leg. Make sure that the competitor must continue to pay attention and think in order to execute his choice properly. The controls and
best routes should invite the intermediate orienteer away from the strong linear features that beginners must rely on. Following linear features can and should be part of the route choice, but offer a faster off-handrail route whenever possible. Simplified contour reading should be encouraged.
c. A mix of short and longer legs is desirable. It is important that the whole course contains as much variety as feasible. This variety should also cover control features, direction, route choice and navigational problems.
d. The control feature should be fairly prominent, larger point and contour features. Use the main reentrant, not the small side reentrant. The hill top, not the small cliff face on its side. Emphasize getting there, not fine navigation.
e. The best routes should be those that require navigation via picking off features along the way and navigation along large contour and land features.
f. Avoid using difficult to find point features as controls. While some legs can be almost upper level in navigation, always use large obvious control features at the end of the almost-advanced leg.

High School Varsity Course 5 (Girls) (public advanced intermediate) \& 6 (Boys Only)
Courses 3 and 5 can share first control.
Winning time about $25-30 \mathrm{~min}$. (this will mean about $3.3-4.4 \mathrm{~km}$ length with 8 14 controls). Control Description sheet will have only symbols and will be printed on the map. Technical Level: Advanced Intermediate

Length should be the same, as close as possible, for both courses.
a. Use smaller features -- boulders, cliffs, small reentrants, spurs and knolls, small marshes, depressions, etc. Make the orienteer navigate to the control feature. If he is coming from the South, for example, place the control on the North side of the knoll or boulder.
b. Try to place controls not too close to attack points or collecting features. Don't make the direct route the easier route.
c. Don't design a course with legs or leg segments that requires little or no thinking, merely physical effort. Use short legs and positional controls to move
the orienteer into more technical terrain or move the control site further away from larger and linear features.
d. Try to avoid having the routes parallel to obvious linear features such as roads, trails, streams, fences or power lines.
e. Make sure any attack points the orienteer will most likely use are if possible a good distance away and solid. Require constant concentration. Locating the control can require a short attack from an attack point, but should not require a long bit of navigation away from a good handrail, or the picking out of a small feature in a highly technical area.
f. Longer legs that avoid obvious handrails and test navigational skill should be considered. Try to include at least one of these in this course.
g. Maximize route choices and use of navigation skills. The navigationally most difficult route should be faster than the "easy way around." Offering multiple route choices that are hard to decide between is ideal.

## Adult Course 7

Winning time will vary depending on the length of the course, which can be between $4.5-6 \mathrm{~km}$ length with $8-17$ controls). Control Description sheet will have only symbols and will be printed on the map. Technical Level: Advanced Course length can be short or long depending on map.

Controls and legs should be as difficult _as the terrain allows_. Controls need to be on mapped features, easily visible, and it should always be possible to quickly and accurately navigate directly to the control, without searching.

Focus on interesting and tricky legs above interesting and tricky controls.
Legs should generally not follow trails. If possible, leg should allow for interesting route choice. The fastest way may not be the most obvious way. Consider having at least one long leg, as long as that leg does not allow an easy road/path run.

Catching features should be behind controls, not in front of them. The best attack point for finding the control may be behind the control or not along the fastest route, allowing an interesting choice of safe vs. fast. Consider having a choice between over a hill or around it. Legs should have opportunity for
parallel error -- make the runner pick the right reentrant from two or three similar ones, or the right hill, or even the right trail.

To get a good length course, consider having the course cross itself. If the map is small, course setter may wish to consider using a map exchange.

General Information
The technical levels described should be considered maximum technical difficulties for any leg on that particular course. It's fine and even desirable to have some or even many easier legs. This tests the competitors' ability to change speed, and allows the less skilled participants to get around the course in a reasonable amount of time. There should be at least a few legs at the maximum technical difficulty for that course, so that the technically skilled participants come out on top.

There can be sharing of controls on courses $3,4,5,6, \& 7$. A single control is NOT to be shared by more than three courses because of environmental impact. Each course should have a different first control, except courses $1 \& 2$ and $3 \&$ 5 which may share the first control if necessary.

Courses may cross themselves or loop back close to themselves, since electronic punching prevents punching controls out of order. However, excessive crossing can be confusing to read; minimize any possibility of misreading the map or going to the wrong control point by accident.

Legs should avoid crossing wetlands, streams and other sensitive areas. Work with land managers to identify dangerous, sensitive, or congested areas to be worked around in the course design process.

Strongly consider having the last control common to all courses, with the run from the last control to the finish being easily visible to spectators. Avoid a steep downhill run to the finish. The finish control will be at the beginning of the finish chute to the download area.

