

**Speed track:** testing for smooth running, based on a standardized test which ensures elimination of robot particularities (such as asymmetry of motors, rubber tires defects, etc).

Students get three runs, best result taken.

Tweaking between runs allowed, encouraged.

Each run timed for three laps, from a running start -- time starts as the robot crosses a line, finishes at the same line three laps later.

If the robot goes off or takes a wrong turn, the student must replace it on the track behind the place where it went astray, so it must cross that point again. We apply a 5 second penalty for each touch. Four touches ends the run.

Final score for the run based on % completion minus penalties.

**Technical track:** The current track has three areas of about equal length, with progressive challenges.

Again three runs, best score to count.

Tweaking between runs encouraged.

Timing of the runs is a secondary issue, only for placement in case of a tie among full completion runs. We apply the same standardization values.

If a robot goes astray it must be replaced on the track so it has to pass over the same point again. 3 % - point penalty per touch.

After a max of three tries at any one point the robot should be placed just ahead of that point to see how far it can get on the remainder.

Place the robot a bit (students' discretion) behind an obstacle so it can "get oriented" before hitting it again.

Maximum of 10 touches per run -- On the 11th departure, that point sets the completion place.

**April 13, Friday, proposed schedule:**

Morning lab

**Speed track (course #1)**

9:10 am - first run for all six teams --order will be decided in the day of competition.

9:30 am - second run;

9:50 am - third run.

10:10 am: end of speed track phase.

**Technical track (course #2)**

10:15 am: first run.

10:50 am - second run;

11:25 am: third run on technical.

Afternoon lab

**Speed track (course #1)**

2:10 am - first run for all six teams --order will be decided in the day of competition.

2:30 am - second run;

2:50 am - third run.

3:10 am: end of speed track phase.

**Technical track (course #2)**

3:15 am: first run.

3:50 am - second run;

4:25 am: third run on technical.

APSC1299 final competition (April 2008) Evaluation Form

Team name:

Members:

Robot's number:

Course #1 (Speed track)

	Time for 3-lap completion	Number of interruptions	Distance completed (%)	Note/Checksum (0XXXXX)
1 <sup>st</sup> run				
2 <sup>nd</sup> run				
3 <sup>rd</sup> run				

Total score for the course #1:

Course #2 (Technical track)

	Distance completed	Checksum (0XXXXX)	Time ( s )	Number of interruptions	Note
1 <sup>st</sup> run					
2 <sup>nd</sup> run					
3 <sup>rd</sup> run					