

Orienteering SA COURSE SPECIFICATIONS

Contents: *Click on active links to go to particular pages. (first press CTRL with some systems)*

- [Reference data](#) for calculating Course Lengths & Class Groupings
- **Course Planners** are asked to always use the short class names to allow easy import into Sport Software.
- **Summary or Championship Event Formats on page 9**
- **Summary Table of Events**

No	Event Type	Terrain Cross country Street park	Total courses	H	M	E	VE	Timing Sportident Manual	Controls Flag Plate Hanging flag	Start Draw Yes Optional No	Controller Level 3 2 1 Check
1	State Long Champs & Badge (with elites)	C	13	9	2	1	1	Si	F	Y for State Champs	2
2	State Long Champs and Long OY (no elites)	C	12 (11)	9	2	1	1	Si	F	Y for State Champs	2
3A	Standard OY	C	9	5	2	1	1	SI	F	N	1 - C
3B	Standard OY - Middle	C	9	5	2	2	1	SI	F	N	1 - C
4	Standard Cross Country	C	8	4	2	1	1	SI	F	N	1 - C
5	Twilight Series	S	3		2	1		M	P	N	C
6	SA Sprint Champs	C S	5		3			Si	F	Y	2
7.1	SA Middle Distance Champs (with elites)	C	9	5	2	1	1	Si	F	Y	2
7.2	SA Middle Distance Champs (no elites)	C	9	5	2	1	1	Si	F	Y	2
8	SA Night Champs	C	7	4	1	1	1	SI	F	O	1
9	SA State Relays	C						Si	F	NA	2
10	Urban Newcomer	C/S	3		2	1		M	F P	N	C

	Series										
11	Street Park Events	S	3		2	1		M	F P	N	C
12	Wednesday Series	C	1	1				M	H	N	C
13	School Champs	C	12	3	3	5	2	SI	F	Y	2
14	School Relays	C S	6		2	2	2	M	F P	NA	1
15	State MTBO Long Champs	C	4	2	2			SI	F H	O	1

Reference data for calculating Course Lengths & Class Groupings

- Link to Spreadsheet on [Run Rates for Maps](#) by Adrian Uppill
- Link to Spreadsheet [Course Length Determinator](#) by Adrian Uppill as demonstrated at the 2011 Course Planners Workshop

The winning time for classes at Championship events is given in the Orienteering Australia Foot Orienteering Rules. This document also provides suggested winning times for non-championship events.

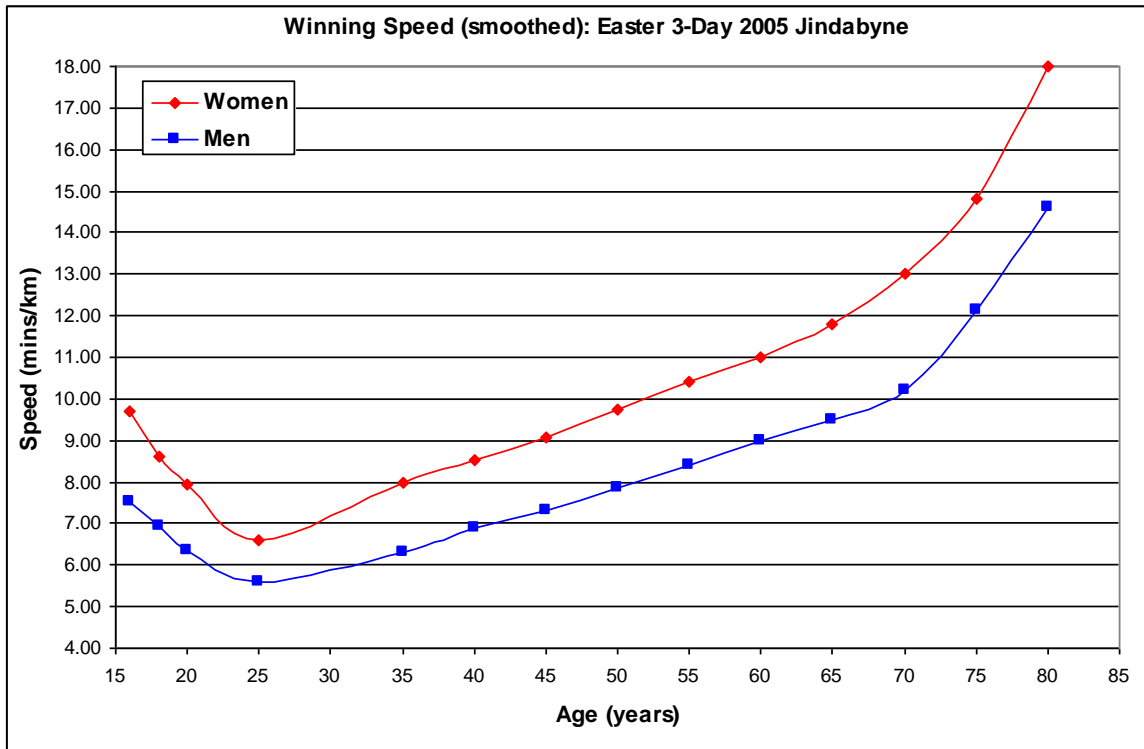
Course length is calculated by dividing the winning time by the running speed.

Running speed needs to be estimated for each event. Running speed will vary depending on factors including the style of orienteering (Long distance, Middle, Sprint, Night etc), navigation standard (Hard, Moderate, Easy or Very Easy), terrain (vegetation density, steepness or climb factor), the quality or depth of orienteers participating and the type of event (Championship, Standard Cross Country, Summer Series, etc).

Running speed can be estimated by having regard to previous events especially those held on the same map. One of the best events from which to gather data is the Easter 3-Day event as this event generally has a good depth of orienteers in most age groups and because a three day accumulative time can be used to calculate the running speed.

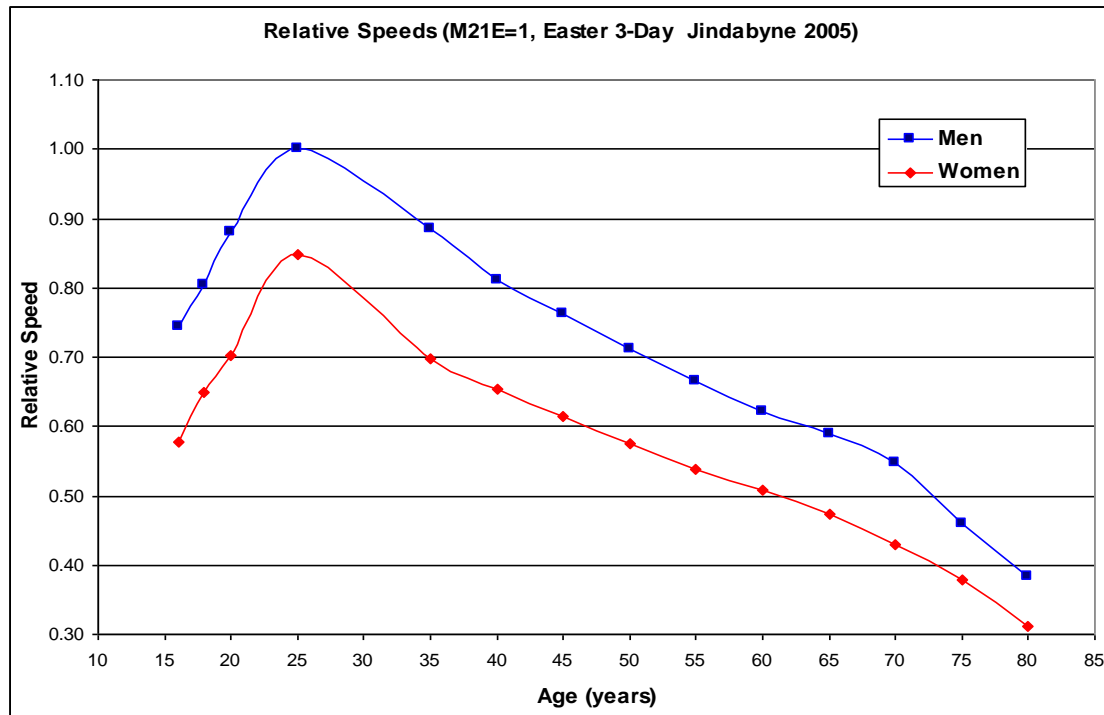
The 2005 Easter 3-Day at Jindabyne therefore provides a useful data base of the run rate for a full range of classes. Graph 1 summarises the run rates for men and women for this event.

Graph 1



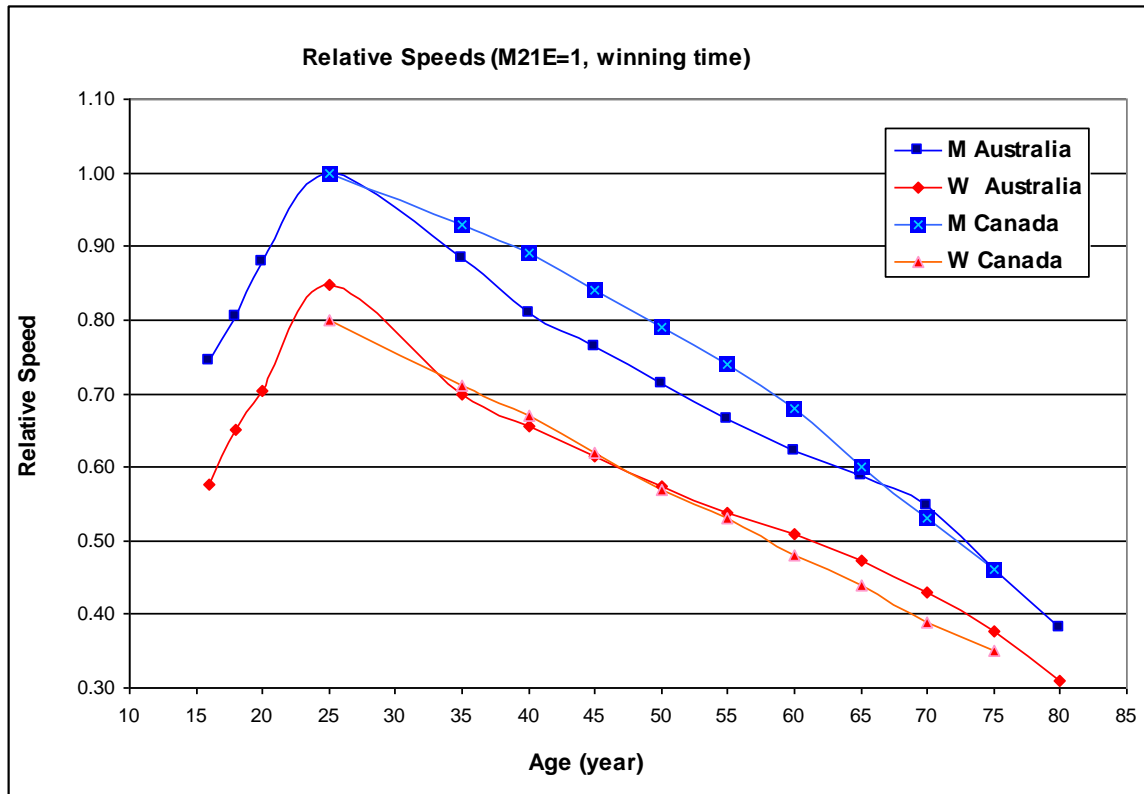
To compare the relative run rates from one event or map to another it is necessary to calculate the Relative Speeds. This is done by dividing all the class run rates by the fastest age class ie M21E. The Relative Speeds for the 2005 Easter event is shown at Graph 2.

Graph 2



As shown by Graph 3, the Relative Speeds for Easter 2005 compare favourably with data from Canada (Zissos, A., Course Planning & Route Choice, 2003), hence adding a certain degree of reliability to the Australian data.

Graph 3



On the assumption that the Relative Speeds determined from Easter 2005 are reliable and representative, they may then be used as an indicator of a national standard. Accordingly Table 1 lists the National Standard Relative Speeds for age groups from 16 to 80 years. The 'AS' Relative Speeds are based on 75% of the corresponding age 'A' class.

Table 1 National Standard Relative Speeds (M21 = 1)

Age (yr)	Men A	Women A	MAS (75%)	WAS (75%)
16	0.743	0.576		
18	0.804	0.650		
20	0.880	0.703	0.660	0.527
21	1.000	0.848	0.750	0.636
35	0.885	0.699	0.664	0.524
40	0.810	0.654	0.608	0.491
45	0.763	0.615	0.572	0.461
50	0.712	0.575	0.534	0.431
55	0.666	0.538	0.500	0.404
60	0.621	0.508		
65	0.588	0.474		
70	0.548	0.430		
75	0.460	0.378		
80	0.383	0.311		

Once a class run rate is determined or estimated, then the Relative Speeds can be used to multiply out the run rates and course lengths for each class

As an indicator of how fast a map area is, Table 2 sets out some M21E run rates for various maps in South Australia and interstate. Link to Spreadsheet on [Run Rates for Maps](#) by Adrian Uppill

Table 2 M21E run rates for various maps (times are decimal minutes)

Date	Event	Map	Competitor	Class	Distance km	Time min	Run Rate min/km	M21E Run Rate min/km
2002	Aust Champs	Manawarra	Eddie Wymer	M21E	16.55	83.48	5.04	5.04
2006	OY	Bri Glen	Simon Uppill	M18E	9.70	55.62	5.73	5.04
2003	SA Champs	Pugilist Hill	Reuben Smith	M21E	15.92	81.93	5.15	5.15
2006	OY	Mt Crawford	Simon Uppill	M20E	9.2	55.3	6.01	5.29
2005	SA Badge	Merridee	Simon Uppill	M18E	10.60	64.02	6.04	5.31
2005	Standard CC	Manawarra	Simon Uppill	M18E	7.70	46.62	6.05	5.32
2005	Easter 3 Day	Jindabyne	Troy de Hass	M21E	29.50	164.92	5.59	5.59
2002	SA Champs	Pewsey Vale	Reuben Smith	M21E	12.78	76.72	6.00	6.00
1999	SA Champs	Narrinyeri Hills	Bruce Arthur	M21E	16.00	96.33	6.02	6.02
2004	SA Champs	Twigham	Bruce Arthur	M21E	16.20	98.96	6.11	6.11
2005	SA Badge 2	Mt Crawford	Simon Uppill	M18E	8.30	58.60	7.06	6.21
2000	Standard CC	Worlds End	Reuben Smith	M21E	10.90	70.67	6.48	6.48
2005	SA Champs	Eyre Pen	Bruce Arthur	M21E	24.20	158.22	6.54	6.54
1999	Standard CC	Worlds End	Reuben Smith	M21E	12.90	86.98	6.74	6.74
2005	Aust Champs	Little Childs Creek	Grant Bluett	M21E	13.10	93.42	7.13	7.13
2005	Standard CC	Belair NP	Simon Uppill	M18E	7.30	65.90	9.03	7.95
1998	OY	Cantara	Bruce Arthur	M21E	12.00	102.00	8.50	8.50
2000	SA Champs	South Para	Reuben Smith	M21E	13.60	120.83	8.88	8.88

Hence by selecting an appropriate M21E run rate for an orienteering event and applying it to the Orienteering Australia winning times and the 'National Standard Relative Speeds', course lengths and class groupings can be calculated as per Table 3. In this example, a Badge event at Pugilist Hill, a run rate of 5.10 mins/km is considered to be appropriate for the M21A class (noting M21E will run M21A).

Table 3 Example: Determining Course Length and Class Groupings

Class Groupings	Class	Aust Long Distance Champs Winning Times mins	National Standard Relative Speed	Fastest Expected Run Rate for Map m/km	Calculated Course Lengths km	Course Distance as Planned (on OCAD) km	Expected National Standard Class Winning Time mins
				5.10			
1	M21A	75	1.00	5.10	14.71	14.4	73
2	M35A	70	0.88	5.80	12.08	11.9	69
2	M20A (A17-20A)	70	0.88	5.80	12.08	11.9	69
3	M40A	65	0.81	6.30	10.32	9.2	58
3	W21A	60	0.85	6.00	10.00	9.2	55

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3	M45A	60	0.76	6.71	8.94	9.2	62
4	W35A	60	0.70	7.29	8.24	8.1	59
4	M50A	55	0.71	7.18	7.66	8.1	58
5	W40A	60	0.65	7.85	7.65	6.9	54
5	W20A (W17-20A)	55	0.70	7.29	7.55	6.9	50
5	M21AS	50	0.75	6.80	7.35	6.9	47
5	W45A	60	0.62	8.23	7.29	6.9	57
5	M16A	50	0.74	6.89	7.25	6.9	48
5	M55A	50	0.67	7.61	6.57	6.9	53
6	W50A	55	0.57	8.95	6.15	5.8	52
6	M60A	50	0.62	8.23	6.08	5.8	48
6	M20A (A17-20A)S	45	0.66	7.73	5.82	5.8	45
6	M35-44AS	45	0.66	7.73	5.82	5.8	45
6	M65A	50	0.59	8.64	5.78	5.8	50
7	M70A	50	0.55	9.27	5.39	5.1	47
7	W55A	50	0.54	9.44	5.29	5.1	48
7	W21AS	40	0.64	7.97	5.02	5.1	41
7	W60A	50	0.51	10.00	5.00	5.1	51
8	W65A	50	0.47	10.85	4.61	4.4	48
8	W16A	40	0.58	8.79	4.55	4.4	39
8	M75A	50	0.46	11.09	4.51	4.4	49
8	M45-54AS	40	0.57	8.95	4.47	4.4	39
8	W70A	50	0.43	11.86	4.22	4.4	52
8	W20A (W17-20A)S	40	0.53	9.62	4.16	4.4	42
8	W35-44AS	40	0.52	9.81	4.08	4.4	43
9	M55+AS	40	0.50	10.20	3.92	3.7	38
9	M80A	50	0.38	13.42	3.73	3.7	50
9	W75A	50	0.38	13.42	3.73	3.7	50
9	W45-54AS	40	0.46	11.09	3.61	3.7	41
9	W55+AS	40	0.40	12.75	3.14	3.7	47
9	W80A	50	0.31	16.42	3.04	3.7	61

In order to satisfy Orienteering Australia course length requirements of 'AS' course lengths to be 45-55% of the 'A' course length, a relative speed of 75% of the 'A' age class was used and applied to the winning times as indicated for the AS class.

If the table is used in a spreadsheet, course lengths can be easily sorted and classes regrouped as appropriate for the need and numbers expected.

- Link to Spreadsheet [Course Length Determinator](#) by Adrian Uppill as demonstrated at the 2011 Course Planners Workshop

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The last column in Table 3 sets out the expected winning time at the national standard, hence orienteers can compare their result as if it were a major championship event.

Championship Course Formats

The following table is from Appendix 8 of the OA Foot Orienteering rules where more details of each format is described.

SUMMARY TABLE	Sprint	Middle Distance	Long Distance	Relay
Controls	Technically easy	Consistently technically difficult	A mixture of technical difficulties	A mixture of technical difficulties
Route Choice	Difficult route choice, requiring high level of concentration	Small and medium scale route choice	Significant route choice including some large scale route choice	Small and medium scale route choice.
Type of Running	Very high speed	High speed but requiring runners to adjust their speed for the complexity of the terrain	Physically demanding, requiring endurance and pace judgement	High speed often in close proximity to other runners who may, or may not, have the same controls to visit
Terrain	Very runnable park, streets or forest	Technically complex terrain	Physically tough terrain allowing good route choice possibilities	Some route choice possibilities and reasonably complex terrain
Map	1:4000 or 1:5000	1:10000 (or sometimes 1:15000)	1:15000 or 1:10000	1:10000 (or sometimes 1:15000)
Start Interval	1 minute	2 minutes	2 minutes	Mass start
Timing	1 second	1 second	1 second	Finish order across line
Winning Time	12-15 minutes	30-35 minutes	See rules 16.9 and 16.10	See rules 16.10 and 16.13
Summary	Sprint orienteering is a fast, visible easy-to-understand format allowing orienteering to be staged within areas of significant population	Middle distance orienteering requires fast, accurate orienteering for a moderately long period of time. Even small mistakes will be decisive.	Long distance orienteering tests all orienteering techniques as well as speed and physical endurance.	Relay orienteering is a competition for teams of three runners running on a virtually head-to-head basis with a first-past-the-post winner. Exciting for spectators and competitors.

1 SA State Championships

SA STATE LONG CHAMPIONSHIPS

With Elite Classes

COURSE INFORMATION

Course	Distance km	Climb m (max %)	Navigation Difficulty	Classes	Expected winning time
1	11.3-16.0	4	Hard	M21E	90
2	7.0-11.2	4	Hard	M20E M21A M35A W21E	70-75
3	5.7-9.6	4	Hard	M40A M45A	60-65
4	4.8-7.6	4	Hard	M20A M50A W20E W21A W35A W40A	55-60
5	4.6-8.2	4	Hard	M16A W45A M21AS	55-60
6	3.7-6.1	4	Hard	M55A M60A M65A W50A M20AS M35AS	50-55
7	3.2-5.0	3	Hard	M70A W21AS W20A W55A W60A	45-50
8	2.5-4.3	3	Hard	M75A W16A W65A W70A W35AS M45AS W20AS	45-50
9	2.0-3.6	3	Hard	M55AS M80A W55AS W75A W80A W45AS W85A M85A	45-50
10	4.2-4.8	3	Moderate	M14A , MOpenB	40
11	2.4-3.0	3	Moderate	W14A, WOpenB, W45B M45B	30
12	2.0-3.0	3	Easy	W12A M12A	25
13	1.5-2.0	3	Very Easy	W10 M10	20

Course Planner:
NOL or Group A event)

Controller: (Level 2 required, L3 if an

Course Notes:**Event Requirements:**

- This format would generally be used when the event is part of a major carnival, hence it retains 5 year age groups. 10 year age classes can be used if numbers do not warrant 5 year groupings
- Full SPORTident required

Policies & Guidelines Section 2.1 Updated Jan 2020

- For basic principles of Long Distance Course Planning see page 7
- *Elite courses are optional and if offered may only be run if more than 4 entrants per class. If no Elite courses use course guidelines as per SA Badge Event*
- Map scale may be 1:15000/1:10,000 (senior and junior elite and some senior age classes) or 1:10000/1:7500 (other juniors and older age classes)
- All courses to be pre-marked and sealed in a plastic map bag or on waterproof paper
- Pre-entry & start times allocated to all competitors
- Enter on day - one Hard, one Moderate and Easy course

SA LONG CHAMPIONSHIPS & LONG OY EVENT (NO ELITES)

COURSE INFORMATION

Course	Distance km	Climb m (max %)	Navigation Difficulty	Classes	Expected winning time
1	9.4-14.7	4	Hard	M21A	75
2	7.7-12.8	4	Hard	M20A M35A W21A	70
3	5.7-8.2	4	Hard	M45A W35A (see comment below for possible course change for Long OY)	55-60
4	4.2-7.6	4	Hard	M16A M55A W20A	50-60
5	3.7-6.1	4	Hard	M21AS W45A M65A	45-55
6	3.2-5.4	3	Hard	W55A W21AS	40-50
7	2.6-4.6	3	Hard	M75A W16A W65A M45AS	40-50
8	1.9-3.9	3	Hard	M55AS W55AS W75A W45AS M85A W85A	40-50
9	4.2-4.8	3	Moderate	M14A MOB	40
10	2.4-3.0	3	Moderate	W14A WOB W45B M45B	30
11	2.0-3.0	3	Easy	W12A M12A	25
12	1.5-2.0	3	Very Easy	W10 M10	20

Course Planner:

Controller: (Level 2 required for State Long Championships. For Long OY – discuss with Technical Officer)

Course Notes:

Event Requirements:

- State Long Championships is a Badge event, Long OY events are not
- Courses for Long OY may be reduced depending on numbers
 - consult with OSA Technical Officer
 - For Long OY events, option is to reduce the number of courses e.g. remove C3. M45A may move to C2 which would need to be shortened, W35A to 4M/W85A are optional dependent on expected entries

Policies & Guidelines Section 2.1 Updated Jan 2020

- Full SPORTident required
- No Elite Classes
- For basic principles of Long Distance Course Planning see page 7
- Map scale may be 1: 15000/1:10,000 (senior and junior elite, and some senior classes) or 1:10000 /1:7,500 (juniors and older age classes)
- All courses to be pre-marked and sealed in a plastic map bag or printed on waterproof paper
- Pre-entry required
- Start draw required for SA Long Championships
- Enter on the day – one of the shorter Hard courses , the shorter Moderate course and Easy course
- For OY points to be earned – see notes under OY event about classes

3 A SA Orienteer of the Year

ORIENTEER OF THE YEAR EVENT STANDARD

COURSE INFORMATION

Course	Distance Km	Climb m (%max)	Navigation Difficulty	OY Classes	Expected Time Range
1	9.0-12.0	4	Hard	M21A, M35A	75-150mins
2	8.0-9.0	4	Hard	M20A M45A , W21A	60-120
3	6.0-7.0	4	Hard	M16A, M21AS, W35A	50-100
4	4.5-5.5	3	Hard	M45AS, M55A, M65A W20A W21AS, W45A	45-90
5	3.0-4.0	3	Hard	M55AS, M75A, M85A W16A, W45AS, W55A, W55AS, W65A, W75A, W85A	40-80
6	4.0-4.5	3	Moderate	MOB	40-80
7	3.5-4.0	3	Moderate	WOB	30-60

NON OY COURSES - indicative classes only

6	4.0-4.5	3	Moderate	M14A, MJuniorB	40-80
7	3.5-4.0	3	Moderate	W14A, WJuniorB	30-60
8	2.2-2.7	3	Easy	M12A, W12A	25-50
9	1.8-2.3	3	Very Easy	M10, W10	20-40

Course Planner:

Controller: (Level 1 required)

Course Notes:

Orienteer of the Year

The above represent the minimum course for your class, you can choose to run a higher course. You may choose to run a lower class if you do not wish to earn OY points.

Please note the rules are special for the MW21AS classes. Clearly these are open classes and everyone qualifies to run the age class. Consequently, to prevent non-AS competitors from winning, you can only gain OY points for these classes if you run the specified MW21AS course (at all events where these are offered).

Similarly, the MW45+AS and MW55AS classes are targeting those people who wish to consistently run shorter courses. To qualify, you will need to run your AS class at all events where these are offered.

See Club Information Manual Section 3.9 for the current Scoring & Rules for Orienteer of the Year Competition.

Event Requirements

- Full SPORTident is optional, otherwise use for timing only
- Map scale may be 1:15000 or 1:10000 (preferred for older classes)
- Pre-printed maps required for all courses
- Pre-entry to be offered, Enter on day available for all courses
- Ensure all pre-entries are allocated the required pre-printed map, include sufficient extra pre-printed maps for enter on the day

3 B SA Orienteer of the Year

ORIENTEER OF THE YEAR EVENT

MIDDLE

COURSE INFORMATION

Course	Distance Km	Climb m (%max)	Navigation Difficulty	OY Classes	Expected Time Range
1	6.0 - 6.4	4	Hard	M21A	
2	5 – 5.5	4	Hard	M20A, M35A M45A, W21A	
3	4 – 4.5	4	Hard	M16A, W20A, W35A M55A	
4	3.4 – 3.9	3	Hard	M65A W45A W55A	
5	2.5 - 3	3	Hard	M75A, M85A W16A, W65A, W75A, W85A	
6	2.8 – 3.6	3	Moderate	MOB	
7	2.2 – 2.8	3	Moderate	WOB	

NON OY COURSES - indicative classes only

6	2.8 – 3.6	3	Moderate	M14A, MJuniorB	
7	2.2 – 2.8	3	Moderate	W14A, WJuniorB	
8	2.0 – 3.0	3	Easy	M12A, W12A	
9	1.5 - 2	3	Very Easy	M10, W10	

Course Planner:

Controller: (Level 1 required)

Course Notes:

Orienteer of the Year

The above represent the minimum course for your class, you can choose to run a higher course. You may choose to run a lower class if you do not wish to earn OY points.

See Club Information Manual Section 3.9 for the current Scoring & Rules for Orienteer of the Year Competition.

Event Requirements

- Full SPORTident
- Map scale 1:10000
- Pre-printed maps required for all courses
- Pre-entry to be offered, Enter on day available for all courses
- Ensure all pre-entries are allocated the required pre-printed map, include sufficient extra pre-printed maps for enter on the day

4 Standard Cross Country

STANDARD CROSS COUNTRY EVENT

COURSE INFORMATION

Course	Distance km	Climb m (%max)	Navigation Difficulty	Classes	Expected Time Range minutes
1	8.4-9.0	4	Hard	Competitive / Recreation	70-140
2	6.6-7.2	4	Hard	Competitive / Recreation	60-120
3	4.8-5.4	3	Hard	Competitive / Recreation	50-100
4	3.0-3.6	3	Hard	Competitive / Recreation	40-80
5	3.8-4.4	3	Moderate	Recreation long	40-80
6	2.8-3.4	3	Moderate	Recreation short	30-60
7	2.5-3.0	3	Easy*	Recreation / Novice	25-50
8	1.5-2.0	3	Very Easy*	Recreation / Novice	20-40

Course Planner:

Controller: (Level 1 recommended,
from with in club)

Course Notes:

Event Requirements

- Full SPORTident
- Pre-marked maps preferred
- Map scale may be 1:15000 or 1:10000, 5m contours.
- Pre-entry preferred, Enter on day to be available
- Ensure all pre-entries are allocated the required pre-printed map, include sufficient extra pre-printed maps for enter on the day
-

SA TWILIGHT SERIES

COURSE INFORMATION

Course	Distance km	Climb m (%max)	Navigation Difficulty	Classes	Estimated Time Range mins
1 Long	5.0-7.0	4	Moderate	Knowledge of map reading skills required. Suitable for joggers, walkers & runners	40 – 80
2 Medium	3.5 – 4.5	4	Moderate	Knowledge of map reading skills required. Suitable for joggers, walkers & runners.	30 - 60
3 Short	2.0-3.0	3	Easy	Family groups, walkers, new orienteers	20 - 40
Scatter	5.5 - 7.5		Moderate	Generally for experienced orienteers & more competitive	45 - 90

Scatter Course categories:

- A 17 out of 20 controls for M17-39
- B 15 out of 20 controls for W17-39, M14-16, M40-49
- C 14 out of 20 controls for W14-16, W40-49, M50-64, M-13
- D 12 out of 20 controls for W50-64, W-13, M65+
- E 9 out of 20 controls for W65+

Course Planner:

Controller: (Twilight Series Co-ordinator)

Course Notes:

Event Requirements

- Pre-printed maps
- Pre-entry encouraged, enter on the day available
- SPORTIdent timing preferred

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- Lockable plate controls
- Street / park venue

Sprint Series – this may follow the standard Twilight Series

- 2 Sprint Format Courses – generally about 2 and 3 km
- One easier courses for newcomers
- SPORTident timing
- Pre-printed maps
- Urban venues with more detailed maps

SA SPRINT CHAMPIONSHIPS

COURSE INFORMATION

Course Number	Distance km	Climb m (%max)	Navigation Difficulty	Classes	Estimated Time Range
1 Sprint 1	3.0-3.4	4	Moderate / Hard	M21A M20A M35A	15 - 30 mins
2 Sprint 2	2.4-2.8	4	Moderate / Hard	M16A M45A W21A W20A W35A	15 - 30
3 Sprint 3	2.0-2.4	4	Moderate / Hard	W16A W45A M14A M55A	15 – 30
4 Sprint 4	1.5 - 2	4	Moderate / Hard	W14A W55A M65A W65A M75A W75A M85A W85A	15 – 30
5 Sprint 5	1.5 - 2	4	Easy	M12A W12A M10 W10	15 - 30

Course Planner:

Controller: (Level 2)

Course Notes:

Event Requirements

- Run as a Badge event, so all junior and 10 year senior age classes required
- Winning time for all courses – 15 minutes
- Full SPORTident required for sprint courses
- For basic principles of Sprint Distance Course Planning see page 7
- Map scale 1:4000 or 1:5000
- Pre printed maps (in plastic bags or on waterproof paper)
- Pre entry for age classes
- Start draw is required
- 1minute start intervals
- Hold the Sprint Champs before other non-championship courses (enter on the day) are offered
- Enter on the day – one of the shorter Hard courses , the shorter Moderate course and Easy course
-

7.1 SA Middle Distance Championships – with Elite classes

SA MIDDLE DISTANCE CHAMPIONSHIPS

(With Elites and 5 Year Age Classes
e.g. if run as a National event)

COURSE INFORMATION

Course	Distance km	Climb m (max %)	Navigation Difficulty	Classes	Expected winning time
1	6.0-6.5	4	Hard	M21E	30-35
2	5.3-5.6	4	Hard	M35A M20E W21E	25-35
3	4.6-5.1	4	Hard	M21A M40A M45A	25-35
4	4.0-4.5	4	Hard	M16 A M20A M50A M55A W20E W35A W40A	25-35
5	3.3-3.9	4	Hard	M60A M65A M70A W21A W45A W50A W55A	25-35
6	2.8-3.2	3	Hard	W16 A W20A W60A W65A M75A	25-35
7	2.0-2.7	3	Hard	M80A W70A W75A W80A M85A W85A	25-35
8	2.8-3.6	3	Moderate	M14A MOB	25
9	2.2-2.8	3	Moderate	W14A WOB W45B M45B	25
10	2.0-3.0	3	Easy	W12A W14B M12A M14B	25
11	1.5-2.0	3	Very Easy	W10 W12B M10 M12B	20

Course Planner:

Controller: (Level 2 required)

Course Notes:

Event Requirements:

- To be run as a Badge event
- Version to be used where numbers higher e.g. as part of a major carnival or a NOL event
- May use the 10 year age classes with elite courses if numbers are not sufficient for 5 year age classes
- Full SPORTident required
- Map Scale 1:10,000 (maybe 1:7,500 for younger juniors and older age classes)
- For basic principles of Middle Distance Course Planning see page 7
- *Elite courses are optional and if offered may only be run if more than 4 entrants per class. If no Elite courses use Course Information 7.2*

Policies & Guidelines Section 2.1 Updated Jan 2020

- Map scale should be 1:10000 (preferred)
- All courses to be pre-printed and sealed in a plastic map bag or on water proof paper
- Pre-entry for age classes
- Start Draw is required
- Enter on day – one Hard, one Moderate and Easy Course

7.2 SA Middle Distance Championships: No Elites

SA MIDDLE DISTANCE CHAMPIONSHIPS

(With no elites and 10 year age classes)

COURSE INFORMATION

Course	Distance km	Climb m (max %)	Navigation Difficulty	Classes	Expected winning time
1	6.0-6.4	4	Hard	M21A	30-35
2	5.3-5.5	4	Hard	M20A M35A W21A	25-35
3	4.7-5.1	4	Hard	M45A ?move to C2	25-35
4	4.0-4.5	4	Hard	W20A W35A M16A M55A	25-35
5	3.3-3.9	4	Hard	W45A E55A M65A	25-35
6	2.8-3.2	3	Hard	W16 A W65A M75A	25-35
7	2.0-2.7	3	Hard	W75A M85A W85A	25-35
8	2.8-3.6	3	Moderate	M14A MOB	25
9	2.2-2.8	3	Moderate	W14A WOB	25
10	2.0-3.0	3	Easy	W12A M12A	25
11	1.5-2.0	3	Very Easy	W10 M10	20

Course Planner:

Controller: (Level 2 required)

Course Notes:

Event Requirements:

- Run as a Badge Event
- Full SPORTident required
- For basic principles of Middle Distance Course Planning see page 7
- No Elite courses. If Elites use course guidelines 7.1
- Map scale 1:10,000 (maybe 1:7,500 for younger juniors and older age classes)
- All courses to be pre-printed and sealed in a plastic map bag or on water proof paper
- Pre-entry for age classes
- Start draw required
- Enter on day - one Hard, one Moderate, Easy course

8 SA Night Championships**SA NIGHT CHAMPIONSHIPS****COURSE INFORMATION**

Course	Distance km	Climb m (max %)	Navigation Difficulty	Classes	Expected winning time
1	5.5-6.5	4	Hard	M20A M21A, M35A,	60-120
2	4.5-5.5	4	Hard	W35A, M45A, W21A	50-100
3	3.5-4.5	4	Hard	M16A, W45A, M55A, W20A M21AS, M65A	50-100
4	2.0-3.0	3	Hard	W16A, W21AS, W55A, W65A, W75A, M75A, W45AS, M45AS, M85A, W85A, C4GRP	45-90
5	2.5-3.0	3	Moderate	M14A, W14A, MOB , WOB, C5GRP	40-80
6	1.5 – 2.0	3	Easy	Groups Only C6GRP	30-60

Course Planner:**Controller:** (Level 1 required)**Course Notes:****Event Requirements:**

- Courses 4 - 6 are open to Pairs or Groups e.g. for pairs of younger children on Course 6, adults with children, or others less competitive.
- M/W10 -12 classes are not offered as children of these ages should not do a night course unaccompanied (these classes are not OY classes OY scores are not impacted)
- SI Timing only
- Map scale preferred 1:10,000
- All courses to be pre-printed
- Pre-entry optional
- Flags on stands with reflective tape

SA STATE RELAYS

COURSE INFORMATION

Course	Distance km	Climb m (max %)	Navigation Difficulty	Group	Classes	Expected winning time
1	5.0-6.0	2-3	Hard	A	M	22-30
				B	W	
				C	Mixed	
2	3.8-4.5	2-3	Hard - Moderate	D	M	20-25
				E	W	
				F	Mixed	
3	2.8-3.2	2-3	Moderate	G	M	20-25
				H	W	
				I	Mixed	
4	2.0	2-3	Easy	J	Mixed	15

Course Planner:

Controller: (Level 2 preferred
Level 2 acceptable)

Course Notes:

Event Requirements:

- Si Timing only
- Teams format 1: 2 person x 2 loops each (Distance is total of 2 loops)
- Clubs may have in any of their club teams one team member who is not a financial club member
- Teams format 2: 3 person x 1 loop each
- Keep total winning time < 90 minutes for Hard courses and <80 mins for Moderate courses; and for both team formats
- Pre-entry
- All courses pre-printed
- Map scale 1:10000 (Forest Terrain) or 1:5000 or 1:4000 (Sprint Terrain) Cross country terrain or urban using maps to Sprint Format

URBAN NEWCOMER SERIES

COURSE INFORMATION

Course	Distance km	Climb m (max %)	Navigation Difficulty	Classes	Expected winning time
1 Long	3.5 - 4	4	Moderate	Knowledge of map reading skills required. Suitable for joggers, walkers & runners	30 - 60 mins
2 Medium	2.5 – 3.5	4	Moderate	Knowledge of map reading skills required. Suitable for joggers, walkers & runners.	25 – 50 mins
3 Short	1.5 - 2	3	Easy/Very Easy	Family groups, walkers, new orienteers	20 – 40 mins

Course Planner:

Controller: Check required

Course Notes:

Event Requirements

1. Suburban/near suburban map areas with some bush/forest areas are preferred
2. Prepare English control descriptions only
3. Have pre-marked maps
4. SPORTident timing preferred
5. Details of courses (minimum required)
 - a. Very Easy – Easy – approx 1.5 to 2 km
 - b. Easy – Moderate – approx 2.5 – 3.5 km. This course should be a mixture of easy and moderate controls
 - c. Moderate – approx 3.5 – 4 MAX km, base on the Easy – Moderate course but leave out easy controls
 - d. For events where greater numbers are expected – additional longer courses can be offered
 - e. Possibly also offer a Scatter Course (needs to be advertised if offered)
6. Include bush areas on the course as much as possible
7. Use control stands if possible (except for events with Street Park maps)

11 **Street – Park Events**

STREET PARK EVENTS

(or other event type)

COURSE INFORMATION

Course	Distance km	Climb m (max %)	Navigation Difficulty	Classes	Expected winning time
1 Long	6.0-7.0	4	Moderate	Knowledge of map reading skills required. Suitable for joggers, walkers & runners	40 – 80
2 Medium	4.0-5.0	4	Moderate	Knowledge of map reading skills required. Suitable for joggers, walkers & runners.	30 - 60
3 Short	2.0-3.0	3	Easy	Family groups, walkers, new orienteers	20 - 40

Course Planner:

Controller: Check required

Course Notes:

Event Requirements

- weekend events can use variations
- Pre marked maps preferred for all events
- Enter on the day
- SPORTident preferred to manual timing
- Flag or Lockable plate controls
- Mostly street / park venue
- Courses above are the minimum – extra courses can be offered if high participation expected

WEDNESDAY SERIES

COURSE INFORMATION

Course	Distance km	Climb m (max %)	Navigation Difficulty	Classes	Expected winning time
1	5.0-6.0	4	Hard	Training	45-60
2 (optional)	3.0-4.0	3	Hard	Training	40-55

Course Planner:

Controller: (Check)

Course Notes:

Event Requirements:

- Manual timing
- Street Park as per Saturday Series
- Cross Country as indicated above
- Hanging flags
- Course 2 is generally a sub-set or 'cut-off' of Course 1.
- If only one course offered , distance less than listed above for Course 1

SCHOOL CHAMPIONSHIPS

COURSE INFORMATION

Course	Distance km	Climb m (max %)	Navigation Difficulty	Classes	Expected winning time
1	5.0-5.3	4	Moderate	MOpenA M16A	30-45
2	4.4-4.6	3-4	Moderate	M15A W16A WOA	30-45
3	3.4-3.6	3	Moderate	M14A MOB W15A	30-35
4	3.0-3.3	3	Moderate	M13A W14A WOB	30-35
5	2.7-3.0	2-3	Moderate	W13A M16B W16B	25-30
6	2.2-2.8	2-3	Easy	M14B W14B M15B W15B	20
7	2.0-2.6	2-3	Easy	M13B W13B	20
8	2.0-2.4	2-3	Easy	M12A W12A	20
9	1.8-2.3	2-3	Easy	M11A W11A M13 Pairs	20
10	1.7-2.0	2-3	Easy	M12B W12B, W13 Pairs	20
11	1.6-1.8	2-3	Very Easy	M11B W11B M11 Pairs	20
12	1.5-1.7	2-3	Very Easy	M10 W10 W11 Pairs	20

Course Planner:

Controller: (Level 2 preferred,
Level 1 acceptable)

Course Notes:

Event Requirements:

- Park venues, or park with some limited bush areas, are preferred, and/or maps to sprint specification
- SI Preferred, will permit longer courses to be achieved in park areas with loops and crossovers
- Shorter winning times are possible in park dominated terrain
- Course 1-3 should use Middle/Sprint style of course planning
- Sheltered assembly area preferred
- Pre-printed map in plastic bag or printed on waterproof paper
- Start draw – must be by class (do not intermingle classes on a course)
 - Pairs must be the last class on any courses
 - See other guidelines below
- Flags on stands

Points Scoring

Policies & Guidelines Section 2.1 Updated Jan 2020

1. A Classes score points from 6 points for first place, to 1 point for 6th place
2. B classes score points from 3 points for first place to 1 point for 3rd place
3. Pairs classes score points from 3 points for first place to 1 point for 3rd place
4. Where a class contains both primary and secondary students, only one set of points is assigned covering the placegetters irrespective of school type
5. In the events of a tie, equal points are allocated and the required number of places depending on the numbers participating in the tie are then skipped in the allocation of points

Start Draw Guidelines

1. Arrange the draw so that only a small number of courses are starting for the first 20 minutes to enable to start team to get the processes running smoothly. As some courses have much lower numbers this is always possible
2. If a course has too many competitors meaning the start draw would take too long, a new course can be created and the classes split between 2 courses.
3. Arrange the draw so that the last start times have multiple courses starting i.e. so that one course is not left with lone starters for the last part of the draw
4. The longer courses can have 4 minute intervals, these have lower numbers and in the generally visible terrain used, the competitors are spread more

Map information prior to the event

The schools championships are sometimes held in areas with permanent courses. If so the details are to be advertised on the web site, distributed to schools who entered as soon as possible, and included in the event information.

For all events, a PDF copy of the event area should be posted on the web site,

14 School Relays

SCHOOL RELAYS

COURSE INFORMATION

Course	Distance km	Climb m (max %)	Navigation Difficulty	Classes	Expected winning time
1	3.5-4.0	2-3	Moderate	Senior High Boys	25-30
2	3.0-3.5	2-3	Moderate	Senior High Girls	25-30
3	3.0-3.5	2-3	Easy	Junior High Boys Year 8-9	20-25
4	2.5-3.0	2-3	Easy	Junior High Girls Year 8-9	20-25
5	1.6-2.0	2-3	Very Easy	Primary Boys	15-25
6	1.6-2.0	2-3	Very Easy	Primary Girls	15-25

Course Planner:

Controller: (Level 1)

Course Notes:

Event Requirements:

- Manual timing
- Flag or Plate controls
- Cross country / park venue
- Avoid streets, otherwise any street crossings MUST be manned

15 SA Long MTBO Championships

SA LONG MTBO CHAMPIONSHIPSCOURSE INFORMATION

Course	Optimum Riding Kms*	Navigational Difficulty	Classes	Expected winning time
1	30-40	Moderate-Hard	M21	105-115
2	20-30	Moderate-Hard	M17-20 M40 M50 W21 NC2 (non-competitive) **	84-92 105-115 105-115 85-95
3	15-20	Moderate-Hard	M 16 M60 M70 W17-20 W40 W50 NC3 (non-competitive)**	84-92 105-115 105-115 68-76 85-95 85-95
4	11-15	Moderate	W16 W60 W70 NC4 (non-competitive)**	68-76 85-95 85-95

Event Requirements:

- Detailed guidelines can be found in the [OA MTBO Rules](#) (Jan 2019)
- A minimum of four courses must be offered.
- However, more courses can be offered to cater for a wider range of ages. For example M & W 12 , 14, 80
- **Length of courses** will be given as following **the shortest sensible route choice** from the start via the controls to the finish following permissible tracks/roads or open areas mapped as item 839 Open Land Permitted to Ride. ***This should be based on the riding route, not the straight line distance.*** This can be measured: a) on purple pen by putting intermediate points on each leg; b) by using a map measurer device; c) by using a ruler/string along the route.
- **Navigational difficulty** is based largely on route choice decision making. Ideally on all legs at least 2 choices should be provided.
- * **Distance of course lengths** should always be based on the expected winning time ***which in turn will vary according to the terrain.*** The course setter or another rider should pre-ride a planned course to give a good estimate of winning times. Kilometre rates can also be ascertained from prior courses planned in similar terrain or past events at the same venue.

Policies & Guidelines Section 2.1 Updated Jan 2020

- The total climb will be given as the climb in metres along the shortest sensible route choice.
- Map scale should be 1:15000 or 1:20000. In special cases 1: 10 000 may be justified.
- All courses to be pre-marked and printed on waterproof paper (e.g. teslin). The competition map should be 35cm x 42cm in size or below. If necessary 2 maps may be provided or maps printed back to back with overlap.
- Start interval should be 3 minutes.
- ** Non Championships classes are provided to suit novice entries; those who do not wish to be competitive or choose not to ride their designated age class. Prizes are not awarded for these classes.
- E-bikes may ride in the non-competitive classes.
- Pre-entry required for championship classes.
- Controller Level 1 unless associated with a national event in which case a Level 2 is required.
- Full SPORTident required