SASPAC 2026 DATES		
Week	Date	Topics 7:00 pm to 9:30 pm
1 Moon 97%	Wed 26 Aug	**Getting acquainted with the Southern Sky** Introduction to the course, website & participant activities Apparent star movement, the South Celestial Pole, the Celestial Sphere, Coordinate Systems, Right Ascension & Declination, Altitude & Azimuth, Ecliptic, Crux & the Pointers
2 Moon 78% Rises 11:01 pm	Wed 2 Sep	**Constellations from the Southern Hemisphere** The 88 IAU constellations, 13 Zodiac constellations (along the ecliptic), Southern constellations, Circumpolar constellations, Seasonal constellations, methods of designating stars in a constellation (Bayer & Flamsteed), Double stars (optical & physical), Eclipsing binaries, star hopping using Apps.
*Waterfall**	*Sat 5 Sep*	*Gate Open 5:00 pm. Sunset 5:39 pm No Moon*
3 Moon 6%	Wed 9 Sep	**Setting up Telescopes & Understanding Optics** Simple diagrams on telescope optics, refractors & reflectors, lenses, mirrors, eyepieces, different mounts, adapters, batteries, automated telescopes, binoculars, mounting cameras for photography
*Waterfall**	*Sat 12 Sep*	*Gate Open 5:00 pm. Sunset 5:44 pm Moonset 6:55 pm*
4 Moon 26%	Wed 16 Sep	**Observing The Solar System** Rocky planets, gas giants, ice giants, main belt of asteroids, Kuiper belt, dwarf planets, Oort cloud, comets & meteors. Planetary movements: apogee & perigee, retrograde, opposition, elongation, conjunction, occultation, transits, eclipses (Solar & Lunar). The Earth's moon phases
5 Moon 89%	Wed 23 Sep	**Stars have Colour & Brightness** Distances in space, balance of forces, structure & formation of stars, luminosity, apparent & absolute magnitude, colours & temperature, spectral classes. Hertzsprung-Russell diagram: evolution of normal & massive stars, lifecycle diagram, nova, neutron stars, supernova & black holes.
	Mon 29 Sep - Friday 9 Oct	*School Holidays*
*Waterfall**	*Sat 03 Oct*	*Gate Open 5:00 pm. Sunset 5:59 pm No Moon*
*Waterfall**	*Sat 10 Oct*	*Gate Open 6:30 pm. Sunset 7:04 pm No Moon*
6 Moon 12%	Wed 14 Oct	**Observing Deep Sky Objects** Open & Globular Clusters, Emission, Reflection & Dark Nebulae. Novae remnants (Planetary Nebulae), Supernovae remnants. Galaxies: spiral, elliptical & irregular. Multiple & variable stars. Catalogues (Messier, NGC, IC), Seeing & transparency, deep sky observing techniques (dark sky, averted vision, filters, dark adaptation, breathing, "steadily holding")
7 Moon 76%	Wed 21 Oct	**Introduction to Big Bang Theory** Einstein's Equations (don't panic), Doppler effect, Leavitt & Hubble (expanding Universe), Hoyle/Penzias & Wilson (CMBR), Guth (Inflation), Big Bang Timeline, Dark Matter, Dark Energy, End of the Universe
8 Moon 97%	Wed 28 Oct	**New Developments in Astronomy & Space, Intro to Astrophotography** Space telescopes, large Terrestrial telescopes & adaptive optics, radio telescopes, exoplanets, space craft & rovers. Astrophotography: basic concepts for the beginner, tracking & stacking. Course certificates, feedback
		* Waterfall = Dark sky observing opportunity on a Saturday