

## Celestial Events for 2017

Hōkūlani Imaginarium

Windward Community College

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all times HST

Month	Day	Time	Celestial Event 2017
Jan	<b>2</b>	<b>10:00 pm</b>	<b>Moon occults Mars</b>
	3	best after midnight	Quadrantid Meteor Shower peak
	4	4:18 am	Perihelion (earth closest to sun)
	5	9:47 am	First Quarter (Waxing Half) Moon
	9	8:07 pm	Moon at perigee (closest to earth)
	12	1:34 am	Full Moon
	19	12:14 pm	Last Quarter (Waning Half) Moon
	21	2:14 pm	Moon at apogee (farthest from earth)
	27	2:07 pm	New Moon
Feb	3	6:19 pm	First Quarter (Waxing Half) Moon
	6	3:59 am	Moon at perigee (closest to earth)
	10	2:33 pm	Full Moon
	18	9:33 am	Last Quarter (Waning Half) Moon
	18	11:14 am	Moon at apogee (farthest from earth)
	26	4:58 am	New Moon
Mar	2	9:24 pm	Moon at perigee (closest to earth)
	5	1:32 am	First Quarter (Waxing Half) Moon
	12	4:54 am	Full Moon
	14	sunrise 6:40 am sunset 6:40 pm	Spring Equilux (equilux: equal day & night—12 hrs of daylight & 12 hrs of nighttime)
	18	7:25 am	Moon at apogee (farthest from earth)
	20	12:29 am	Vernal Equinox (first day of spring)
	20	5:58 am	Last Quarter (Waning Half) Moon
	27	4:57 pm	New Moon
	30	2:39 am	Moon at perigee (closest to earth)
Apr	3	8:39 am	First Quarter (Waxing Half) Moon
	10	8:08 pm	Full Moon
	15	12:05 am	Moon at apogee (farthest from earth)
	18	11:57 pm	Last Quarter (Waning Half) Moon
	22	best after midnight	Lyrid Meteor Shower peak
	26	2:16 am	New Moon

	27	6:18 am	Moon at perigee (closest to earth)
May	2	4:47 pm	First Quarter (Waxing Half) Moon
	4	best after midnight	Eta Aquarid Meteor Shower peak
	10	11:43 am	Full Moon
	12	9:51 am	Moon at apogee (farthest from earth)
	18	12:17 pm	Hilo (kau ka lā i ka lolo = "Lāhaina Noon")
	18	12:21 pm	Kailua-Kona (kau ka lā i ka lolo = "Lāhaina Noon")
	18	2:33 pm	Last Quarter (Waning Half) Moon
	23	12:21 pm	Hāna (kau ka lā i ka lolo = "Lāhaina Noon")
	23	12:25 pm	Lāna'i City (kau ka lā i ka lolo = "Lāhaina Noon")
	24	12:23 pm	Kahului (kau ka lā i ka lolo = "Lāhaina Noon")
	24	12:24 pm	Lāhaina (kau ka lā i ka lolo = "Lāhaina Noon")
	25	9:44 am	New Moon <b>Super New Moon: largest new moon that occurs nearest perigee</b>
	25	12:25 pm	Kaunakakai (kau ka lā i ka lolo = "Lāhaina Noon")
	25	3:23 pm	Moon at perigee (closest to earth)
	26	12:29 pm	Honolulu (kau ka lā i ka lolo = "Lāhaina Noon")
	27	12:29 pm	Kāne'ōhe (kau ka lā i ka lolo = "Lāhaina Noon")
	30	12:35 pm	Līhue (kau ka lā i ka lolo = "Lāhaina Noon")
Jun	1	2:42 am	First Quarter (Waxing Half) Moon
	8	12:21 pm	Moon at apogee (farthest from earth)
	9	3:10 am	Full Moon <b>Micro Full Moon: smallest/dimmest full moon that occurs nearest apogee</b>
	17	1:33 am	Last Quarter (Waning Half) Moon
	20	6:25 pm	Summer Solstice (first day of summer)
	23	12:49 am	Moon at perigee (closest to earth)
	23	4:31 pm	New Moon <b>Super New Moon: largest new moon that occurs nearest perigee</b>
	28	7:30 pm	<b>Mercury &amp; Mars conjunction: 0.75° apart</b>
	30	2:51 pm	First Quarter (Waxing Half) Moon
Jul	3	10:11 am	Aphelion (earth farthest from sun)
	5	6:27 pm	Moon at apogee (farthest from earth)
	8	6:07 pm	Full Moon
	11	12:43 pm	Līhue (kau ka lā i ka lolo = "Lāhaina Noon")
	15	12:37 pm	Kāne'ōhe (kau ka lā i ka lolo = "Lāhaina Noon")
	15	12:38 pm	Honolulu (kau ka lā i ka lolo = "Lāhaina Noon")
	16	9:26 am	Last Quarter (Waning Half) Moon
	16	12:35 pm	Kaunakakai (kau ka lā i ka lolo = "Lāhaina Noon")
	17	12:33 pm	Lāhaina (kau ka lā i ka lolo = "Lāhaina Noon")
	18	12:32 pm	Kahului (kau ka lā i ka lolo = "Lāhaina Noon")
	18	12:34 pm	Lāna'i City (kau ka lā i ka lolo = "Lāhaina Noon")

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	19	12:30 pm	Hāna (kau ka lā i ka lolo = “Lāhaina Noon”)
	21	7:09 am	Moon at perigee (closest to earth)
	22	11:46 pm	New Moon
	24	12:27 pm	Hilo (kau ka lā i ka lolo = “Lāhaina Noon”)
	24	12:31 pm	Kailua-Kona (kau ka lā i ka lolo = “Lāhaina Noon”)
	27	best after midnight	Delta Aquarid Meteor Shower peak
	30	5:23 am	First Quarter (Waxing Half) Moon
Aug	2	7:55 am	Moon at apogee (farthest from earth)
	7	8:11 am	Full Moon  <b>PENUMBRAL LUNAR ECLIPSE</b> (occurs near moonset)
	12	best after midnight	Perseid Meteor Shower peak
	14	3:15 pm	Last Quarter (Waning Half) Moon
	18	3:14 am	Moon at perigee (closest to earth)
	21	8:30 am	New Moon  <b>PARTIAL SOLAR ECLIPSE</b> <b>(Great American Eclipse)</b> (begins at sunrise 6:11 am; max at 6:35 am — 27% obscured; ends at 7:25 am)
	28	10:13 pm	First Quarter (Waxing Half) Moon
	30	1:25 am	Moon at apogee (farthest from earth)
Sep	5	9:03 pm	Full Moon
	12	8:25 pm	Last Quarter (Waning Half) Moon
	13	6:04 am	Moon at perigee (closest to earth)
	16	5:15 am	Mercury & Mars conjunction: 0.1° apart
	19	7:30 pm	New Moon
	22	10:02 am	Autumnal Equinox (first day of fall)
	26	8:49 pm	Moon at apogee (farthest from earth)
	27	sunrise 6:22 am sunset 6:22 pm	Fall Equilux (equilux: equal day & night—12 hrs of daylight & 12 hrs of nighttime)
	27	4:54 pm	First Quarter (Waxing Half) Moon
Oct	5	5:00 am	Venus & Mars conjunction: 0.2° apart
	5	8:40 am	Full Moon
	8	7:51 pm	Moon at perigee (closest to earth)
	12	2:25 am	Last Quarter (Waning Half) Moon
	19	9:12 am	New Moon
	21	best after midnight	Orionid Meteor Shower peak
	24	4:25 pm	Moon at apogee (farthest from earth)

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	27	12:22 pm	First Quarter (Waxing Half) Moon
Nov	3	7:23 pm	Full Moon
	5	best after midnight	South Taurid Meteor Shower peak
	5	2:09 pm	Moon at perigee (closest to earth)
	12	best after midnight	North Taurid Meteor Shower peak
	10	10:37 am	Last Quarter (Waning Half) Moon
	13	5:45 am	Venus & Jupiter conjunction: 0.3° apart
	17	best after midnight	Leonid Meteor Shower peak
	17	5:47 pm	Pleiades rise at sunset (first condition needed for declaring start of Makahiki; must wait until the sighting of first visible crescent moon after this date)
	18	1:42 am	New Moon
	19	sunset	Beginning of Makahiki with sighting of first visible crescent moon (Hilo moon) after rise of Pleiades (this unofficially could be consider beginning of Makahiki; technically someone must visually sight the first crescent moon that occurs after the Mahakihi rise at sunset)
	21	8:52 am	Moon at apogee (farthest from earth)
	26	7:03 am	First Quarter (Waxing Half) Moon
	28	6:30 pm	Mercury & Saturn conjunction: 3° apart
Dec	3	5:47 am	Full Moon Super Full Moon: largest/brightest full moon that occurs nearest perigee
	3	10:42 pm	Moon at perigee (closest to earth)
	5	6:00 pm	Mercury & Saturn conjunction: 1.3° apart
	9	9:51 pm	Last Quarter (Waning Half) Moon
	13	best after midnight	Geminid Meteor Shower peak
	17	8:31 pm	New Moon Micro New Moon: smallest new moon that occurs nearest apogee
	18	3:27 pm	Moon at apogee (farthest from earth)
	21	6:29 am	Winter Solstice (first day of winter)
	22	best after midnight	Ursid Meteor Shower peak
	25	11:20 pm	First Quarter (Waxing Half) Moon