# IAU- NASE Network for Astronomy School Education

# Quality in Education



# IAU-C1-WG Network for Astronomy School Education

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•NASE organises courses for secondary and primary school teachers and create Local Working Groups for repeating the course at least once per year and create supplementary materials.

The activities are in Language of the country



# Goals of NASE

- Promote teaching astronomy by means of teachers education (secondary and primary school teachers)
- Encourage astronomy learning by doing (by models and observation)
- Motivate teachers and students to observe in the school
- Organize in each country a NASE group with local teachers and professors to teach NASE course and prepare new materials for the NASE website



# **Quality management system**

Quality systems are based on standards focused on improving processes within organizations.

**NASE** highlight the standards issued by the **International Organization for Standardization (ISO)** in relation to the implementation of quality systems through the ISO 9000 Family of Standards

# **NASE STATISTICS**

NASE organized (June 2021) 220 international courses, in 41 countries 63 courses in co-operation, in 9 countries more

#### NASE prepared (November 2020)

- 60 NASE local working groups had been created involving 790 NASE members (50 IAU members and 740 non IAU members)
- <u>7530 teachers</u> involving 7 265 900 students (in average a teacher has 200 students per year)



#### Students Countries from LWG Courses Teachers 6 600 Egypt 34 800 Etiopia Ghana 74 800 41 600 Kenya Senegal 18 800 Tanzania 16 800 5 000 Togo Tunisia 39 000 24 800 Uganda 9 600 Zambia 271 800

Countries	from	LWG	Courses	Teachers	Students
Armenia	2019	1	1	27	10 800
China	2013	1	5	217	190 800
Indonesia	2016	2	4	179	119 600
Iran	2019	1	6	137	40 400
Japan	2019	1	1	38	14 000
Mongolia	2019	1	1	13	5 200
Philippines	2020	1	2	198	39 600
Thailand	2019	1	2	165	40 200
8		9	14	974	460 600

from	LWG	Courses	Teachers	Students
2016	3	9	282	74 800
2018	1	2	39	10 200
2014	1	7	212	160 600
2019	1	6	198	49 000
	7	24	731	294 600
	2016 2018 2014	2016 3   2018 1   2014 1	201639201812201417201916	20163928220181239201417212201916198

Countries	from	LWG	Courses	Teachers	Students
Argentina	2010	6	25	860	1 094 600
Bolivia	2012	2	4	317	452 800
Brasil	2012	3	5	243	282 600
Chile	2017	1	1	41	24 600
Colombia	2009	4	20	720	902 000
Cuba	2014	1	2	51	60 600
Ecuador	2009	1	10	553	522 800
Guatemala	2012	1	11	496	496 400
Honduras	2011	1	9	419	528 200
Nicaragua	2010	1	10	367	503 800
Mexico	2013	2	9	272	244 600
Panama	2011	2	7	153	143 800
Paraguay	2011	1	7	201	238 800
Peru	2009	2	7	341	522 300
Puerto Rico	2019	1	1	45	18 000
Rep. Dominica	2020	1	1	92	18 400
Salvador	2019	1	2	72	28 800
Uruguay	2012	1	3	81	134 200
USA	2015	2	1	19	21 600
19		34	135	5343	6 238 900

### Map of Courses (June 2021)



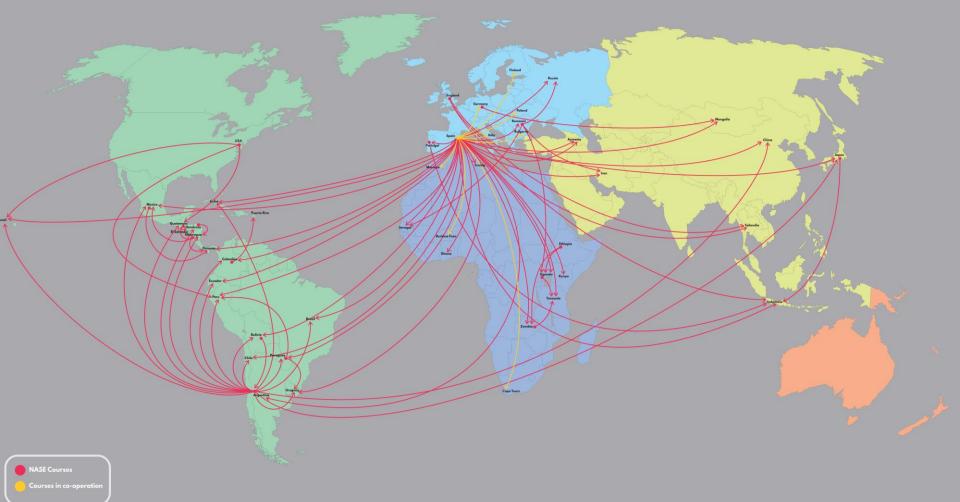
### Map of Countries (June 2021)





#### Visit other countries teaching international courses

#### NASE CONNECTIONS MAP



## Map of Conexions (June 2020)