## Astronomy Education in **Greece**



This overview is part of the project "Astronomy Education Worldwide" of the International Astronomical Union's Office of Astronomy for Education. More information: <u>https://astro4edu.org/worldwide</u>

**Structure of education:** Free public education starts at the age of 4. Mandatory education includes 2 years in kindergarten (pre-K and K), 6 years of primary education ("Dimotiko"), and 3 years in secondary education ("Gymnasio"). Students can then choose to continue for another 3 years either in Technical and Vocational High Schools ("Techniko kai Epaggelmatiko Lykeio") or in General High Schools ("Geniko Lykeio"). Public schools are either "standard" or "experimental"; in the latter, admission is by exam. Studies in both types of schools are free. There also exist minority schools (primarily for children of the Muslim minority in Thrace); intercultural schools; and music, arts, church, naval, evening and second chance schools; these are also public and free. In addition, there exist private, tuition-charging schools at all levels of education.

**Education facilities:** The maximum number of students per classroom is 27, but usually the number of students is smaller in island and remote mountainous areas. In such areas primary schools may have only one teacher for all classes. The state of buildings ranges from very good (new-construction buildings) to rather problematic (older-construction buildings). In some cases, schools are housed in prefabricated buildings. They have running water and the majority of them have access to the internet, but many do not have the necessary technological equipment to use it.

**Governance and organisation:** The education system is controlled by the central administration, in particular the Ministry of Education and Religion. The operational needs of the schools are covered by the local municipalities. Curricula are developed by the Institute for Educational Policy.

**Teacher Training:** Both primary and secondary school teachers obtain their 4-year degrees at Universities. The appointment is made through a written competition by an independent authority, although due to the financial crisis no new appointments have been made for over 10 years. A large number of teachers and professors are substitutes or part-time employees. Lifelong teacher training is not done on a systematic basis, except for a few hours when there are changes in the curriculum. Many teachers self-train by attending remote seminars offered by various organizations, some of which are offered for free; in the case of those that do charge a fee, this is covered by the teacher.

**Astronomy in the curriculum:** There is no separate Astronomy course in primary or secondary education. In the 6th grade of Elementary School, students are taught for a total of 6 hours the movements of the Earth as a planet, the seasons, the geographical coordinates and the bodies of our solar system. Various astronomical information is contained in the Physics course in High School, e.g. the Voyager journey, mainly in inserts. In High School astronomy projects with an astronomical subject of study are supervised by some teachers who love the subject, in the context of non-formal education.

Astronomy education outside the classroom: There are several, about 30, amateur astronomy clubs across the country that promote Astronomy education mainly through weekly lectures. The association of Volos has established a 3-year School of Astronomy with tuition fees for anyone interested and provides a degree after exams. The association of Patras provides free online lessons separately to elementary, high school and high school students. There are many videos from Youtubers on the internet, some of which are reliable, e.g. Astronio. Astronomy is promoted by some departments of Universities with lectures open to the public, but also through moocs such as the one on the Mathesis platform of Crete University Press. The National Observatory of Athens, and the Skinakas Observatory in Crete hold open nights for the public. The National Observatory of Athens also hosts educational games for children, and the Eugenidion Foundation holds planetarium performances.

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