A Curriculum that Fosters High Academic Ability for the Pursuit of Knowledge

1st Year	SL I (2)	Mathematics I (6)			9 10 Physics (2)	Chemistry (2)	13 14 Biology (2)	Information Studies (2)	Contemporary Society (2)	19 20 Art (2)	Health (1)	Physical Education (2)		regrated se Language (5)	English Communication I (4)	33 34 OCPD I * (2)	35 LHR (1)
2nd Year	SL II (2)	(4) Exte		Mathematics Extension (2)	Two Courses Out OfPhysics, Chemistry,Biology, and Earth Science (3x2)			World History A (2)	Japanese History A (2)	Home Economics (2)	Health (1)	Physical Education (2)	Contemporary Japanese Language B (2)	Japanese Classics B (3)	English Communication II (4)	OCPD II * (2)	LHR (1)
3rd Year	Mathematic (3)	cs II	Physicsl Education (3)	Contemporary Japanese Language B (2)	Readin	ng Skills 4)	Writing Skills (2)						Electives (10 To 20)				LHR (1)
Curriculum (2019) *OCPD···Oral Communication for Presentation and De														Debate			

Science Literacy I

In Science Literacy I, students learn research methods through classes by university or corporate experts, to gain a broad understanding of how scientists see the world. They learn research methods by coming face to face with the real thing and engaging in practical exercises, preparing them for a smooth entry to the second-year research course (Science Literacy II). The classes through the year follow the six areas of Science Literacy II. They also develop the required knowledge for Science Literacy II, such as theme-setting, hypotheses, planning, results, investigation, and so on.

The students undertake fundamental chemical experiments as conducted at universities, such as measuring absorbance to find the concentration of a substance. Their ability to learn and generate ideas is developed through discussions on what conditions are required to grow white radish sprouts, actually growing them and presenting their findings.







Themes in Science Literacy I (2019)

The Science of Light

Growing Plants and Comparative Experiments Generating Crystals and Comparative Experiments

Algorithms and Programming Exercises

Use of Tools for Chemical Experiments and **Experiment Exercises**

Egg Drop Contest

Computational Science and Comparative Experiments

The Science of Weather

Data Analysis of Seismic Waves Japan's Future and Identifying the Issues

> Mathematics, science and information are studied as science and mathematics subjects. Science, mathematics, and information subjects are taught in small classes. Mathematics is also taught according to students' learning levels. In the first year, all student study chemistry, biology and physics.





ysfFIRST: Forum for International Research in Science & Technology

YSFH collaborates with universities and affiliated institutions to foster science and technology specialists who will lead the future of Japan. Our students not only study math and science but also gain a broad knowledge of global issues through understanding concepts such as sustainable development goals (SDGs). Setting their own themes to deal with such issues, the students study how to use the power of science to cope with global problems.

Each year the international scientific forum called ysfFIRST is held as a place to present research on global issues using the power of science. Gifted students from not only within Japan but also abroad are invited to show the fruits of their research through poster or oral presentations.









Science Literacy II / III

Students who have engaged with science and learned the basics of research through Science Literacy I proceed to research studies on specific themes in the second-year Science Literacy II. Science Literacy II consists of 24 courses spread among six fields as shown in the diagram. They engage in research in the twice-weekly classes and after-school studies. At the end of August, they give interim reports in front of the faculty. These reports are used to create posters in English for their trip abroad to Malaysia in October. They give a final report on their entire year's work at the presentation meeting in January. Those who wish to continue their research further can go on to Science Literacy III in the third year.

The Six Fields of Science Literacy II



Materials Science



and



Learning through Surprise and Awe

Science and Mathematics Subjects

Malaysia Study Tour

All second-year students join in a study trip abroad in October. Their destination is Malaysia, a multi-cultural country where each different ethnic group has its own religions and customs, all blending together to create a unique whole. Though Malaysian is the official language, English is widely used among the different ethnic groups to communicate.

In addition to visiting urban areas and other activities, the students also go to Kolej Yayasan Saad, a partner school of YSFH, where all of them give presentations on their research in English. Twenty students are specially selected to give presentations at University Putra Malaysia.



International Exchange Programs with David Thompson Secondary School

Students can choose to join our international exchange program held each year, to visit Vancouver in Canada for 7 to 10 days. They enjoy homestays and classes at our sister school, where they give presentations in English on aspects of Japanese culture, enhancing a strong sense of internationalism as well as advanced communication skills in English.

Students from our sister schools are also accepted in March as part of the program, giving YSFH students a chance at international exchange while still being in Japan.

Participants in these programs report that the programs have opened their eyes to many new ideas, foremost of which is to realize that they are supported by many other people, and that communicating with others in a sincere manner is respected in every culture.

