

# Science teaching: Women physicists your students should know about

Australian research\* looking at the Physics syllabus, final exams and common textbooks for the New South Wales HSC (Higher School Certificate) found representation of male scientists significantly outnumber females. 'In the most recent syllabus (2019 onwards), a total of 10 individuals are mentioned and all are men ...In the past 25 years, male physicists have been mentioned in the examinations a total of 211 times and not a single female physicist has appeared'.

Here are just three (there are many more!) amazing women physicists to tell your students about



**Professor Marie Curie**

The only person to win a Nobel Prize in two scientific categories (Physics in 1903 and Chemistry in 1911). She discovered polonium and radium. Her research on 'radiation phenomena' changed our understanding of radioactivity. She was also a champion of useful scientific research for public good.

More information:

<https://www.nobelprize.org/womenwhochangedscience/stories/marie-curie>



**Dr Inge Lehmann**

A seismologist and geophysicist, she is best known for discovering the Earth has a solid inner core, and molten outer core – rather than being one liquid sphere. She spoke of her struggle in a male-dominated research community, but continued to publish and wrote her last paper at 99.

More information:

[https://en.wikipedia.org/wiki/Inge\\_Lehmann](https://en.wikipedia.org/wiki/Inge_Lehmann)



**Professor Donna Strickland**

One of only four women to have won the Nobel Prize in Physics (out of 218 recipients). She was recognised in 2020 for her work creating high-intensity laser pulses. The technique is called chirped pulse amplification, or CPA. Its uses include corrective laser eye surgery, medical imaging and industrial machinery.

More information:

<https://www.nobelprize.org/womenwhochangedscience/stories/donna-strickland>

\* Keast, V. J. (2022). Gender Bias in New South Wales Higher School Certificate (HSC) Physics. *Australian Journal of Education*, 66(1), 26–39. <https://doi.org/10.1177/00049441211059239>

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