

# Model Course Pathways for Science

Iowa Code requires that all students engage with all of the science standards throughout their school K-12 experience, including all of the standards in the high school band. This may require districts to restructure their graduation requirements so that all students engage with all of the science standards in a required three-year high school sequence. Districts are free to choose how the standards are spread over required courses and what those courses are named. Districts should consider not only the State of Iowa's education requirements, but also things like the regents and NCAA requirements.

The [Sequencing Secondary Science Standards professional development module](#) outlines topics educators should consider when planning their course sequences.

## All Standards for All Students

- The National Science Teaching Association provides a summary of [best practices meeting the needs of all learners](#) in science.
- [Engaging Teachers with Equity in Science Instruction](#) provides a “playlist” or series of teaching briefs and tools teachers can use individually or in PLCs to discuss issues of equity and social justice in science education.
- [Making Science Instruction Compelling for All Students: Using Cultural Formative Assessment to Build on Learner Interest and Experience](#) provides professional learning focused on learner interest and identity.
- [English Learners in STEM Subjects: Transforming Classrooms, Schools, and Lives](#) (2018): The imperative that all students, including English learners, achieve high academic standards and have opportunities to participate in science, technology, engineering, and mathematics (STEM) learning has become even more urgent and complex given shifts in science and mathematics standards
- Appendix D of the NGSS provides [seven case studies](#) of diverse student populations and provides example strategies classroom teachers can use to ensure the standards are accessible to all students.