## Key Steps to Implementation of the new Science 7-10 Syllabus, a guide for faculty team leaders

### **Step One: Planning**

**Objective**: The team leader will have a clear overview of the new Science 7-10 Syllabus and be confident to lead its implementation.

# The team leader will Identify

- o the pattern of implementation that is appropriate for your school e.g. Years 7 and 9 in 2025, Years 8 and 10 in 2026.
- o sector advice on implementation e.g. Department of Education, Catholic Schools, Association of Independent Schools.
- o school requirements eg timelines, advice, school-wide templates.
- o special programs within the school that may need to integrate with Science programming e.g. support and enrichment programs, off-campus programs, IB Middle Years Program.

### **Engage**

- o with faculty team members to request a reading of the Science 7-10 Syllabus (2023) and stimulate constructive conversations.
- o with English, Mathematics and Technology to obtain advice on implementation.
- o with school leadership to advocate for teacher release time.
- o With NESA's Advice on Programming.

7-10 New Science Syllabus Resources



### **Explore**

- o links between syllabuses eg Mathematics and English (<u>NSW Curriculum</u>) and related Scopes and Sequences eg Year 7 Forces and Year 7 Algebraic Techniques; Stage 4 Working Scientifically Communicating and Stage 4 English Composing Texts.
- o professional development opportunities for yourself and your team members eg <u>STANSW</u> conferences and networks.



### **Step Two: Unpacking the Syllabus**

**Objective**: The faculty team will understand the features, strengths and challenges of the new Science 7-10 Syllabus and show enthusiasm for its implementation.

## The team leader will

#### Lead

- o an exploration of the NESA <u>NSW Curriculum</u> website and <u>Science 7-10 Syllabus</u> (2023) webpage.
- o an overview of the syllabus, its requirements and support documents.
- o an analysis of the syllabus eg strengths and opportunities, challenges and risks.
- o a deeper exploration of the focus areas, including targeted Working Scientifically outcomes, to identify content that is similar and different to the Science Years 7-10 Syllabus (2018).



7-10 New Science Syllabus Resources



## **Step Three: Developing a Scope and Sequence**

**Objective**: The faculty team will produce a Scope and Sequence for Years 7 to 10 which meets NESA requirements and is appropriate for the school context.

## The team leader and faculty team will Determine

- o the general order of focus areas. Implement focus areas in the syllabus order as intended by NESA or re-arrange them if there is a significant reason to do so.
- o the outcomes associated with each focus area. Check the "show aligned content" box on the <u>outcomes</u> page of the syllabus.
- o how you will treat the <u>Data Science</u> focus areas in Stages 4 and 5. Consider how this will affect the length of focus areas and where term breaks would fall in the Scope and Sequence.
- o the nature of four Depth Studies (2 in Stage 4 and 2 in Stage 5) and the focus areas in which they will be embedded.
- o the general time allocation for each focus area. Base this on experience, including time allocations for Depth Studies and Data Science. Consider, also, NESA's notes on Balance of Content.

### Design

o a Scope and Sequence for Years 7 to 10 with reference to NESA's <u>samples</u>.



## **Step Four: Programming and Resourcing**

**Objective**: The faculty team will produce programs with a cohesive progression of learning which include identified teaching resources.

# The team leader will Organise

- o selection of an appropriate programming template eg STANSW.
- o collaborative templates that will allow easy entry of syllabus outcomes, content and information by multiple team members.
- o your team to complete the programming task eg Years 7 and 9 in 2024, Years 8 and 10 in 2025, mini collaborative teams and time allocation.

## In collaboration, the faculty team will Identify

- o the order of content within each focus area to form a cohesive progression of learning.
- o teaching strategies to address the syllabus content and outcomes to ensure teaching addresses the full extent of the content but avoids going beyond it.
- o formal assessment tasks and where they take place in the Scope and Sequence. Backwards design teaching strategies to enable assessment.
- o optional <u>Working Scientifically</u> skills additional to the targeted skills in each focus area. These may be required to address Depth Studies or Data Science content.

### Design

o programs for focus areas, with optional new names.

# The faculty team will Identify

- o online, textbook and specialist resources relevant to content and Working Scientifically skills in the new Science 7-10 syllabus.
- o resources within the school and the local community, tertiary or commercial partners that could provide additional learning opportunities for students.
- o links between programs and teaching resources available on the NESA <u>NSW Curriculum</u> website.
- o hands-on experiences that will engage students.
- o resource needs eg equipment, professional library, textbooks and commercial products to purchase.



### **Step Five: Evaluating**

**Objective**: The team leader and faculty team will evaluate programs and Scopes and Sequences both during implementation and following initial implementation to improve student engagement and learning.

### The team leader and faculty team will Evaluate

- o the programs for development of Working Scientifically skills. Ensure that students will have an opportunity to apply and practise all Working Scientifically content.
- o the programs for time allocation and adjust Scopes and Sequences if necessary.
- o Depth Studies and assessment tasks and adjust if necessary.
- o available resources and identify gaps.
- o student engagement and learning.