

Lesson Outline

Educators are advised to read through each lesson plan completely so that they can better visualize each step of the lesson. This will then aid in preparing the appropriate materials, focus on activities that can be incorporated from other disciplines to engage students in the learning process, and adjust the lesson to meet the needs of the students.

How each lesson is outlined:

Unit #: Unit Topic

This is the main concept under which the series of lessons fall under.

(NOTE: The corresponding videos and some of the alternative materials will be labeled as “Seminar 1” which is the same as Unit 1, Seminar 2 is the same as Unit 2 etc.)

Lesson # - A focused discussion on a particular aspect of the topic of the Unit.

Time Length: 45-50 min. (Approximate time that it would take in the classroom to complete this lesson; this time allotment does *not* include the use of the extra resource materials.)

INSTRUCTIONAL OUTCOMES - Outlines the learning standards that apply to this lesson. Both Next Generation Science Standards and Common Core State Standards are addressed.

NGSS (Next Generation Science Standards)

Common Core State Standards (CCSS)

Content Learning Outcomes: Defines what students are going to learn during the lesson

The goal of what students should achieve at the end of the lesson. Teachers can more effectively teach with an understanding of a clear objective. Students can learn their overall goal at the start of the lesson so they know what to focus on and how the content applies to them.

Materials: The specialized materials the teacher and the students might need during the lesson are listed here, along with resource materials connected to the lesson. The point at which these materials can be utilized is mentioned in the lesson itself.

- Every lesson has Presentation Slides linked
- The videos that will be used in the lesson
- Assessment Questions that can be used for this lesson to assess student learning and comprehension
- Resource materials that would be helpful for the teacher, which can also be shared with the students as/when needed.
- Understood materials such as pen, paper, screen to project the slides, internet, an app for viewing YouTube videos, etc are not listed and are left at the discretion of the teacher to provide or mention the use of.

Instruction/Teacher Facilitation: This portion of the lesson is the direct instruction of the learning content and skills.

{SLIDE #} - indicates the corresponding slide for the teacher to present as this content is being taught.

Classroom Activities are also sewn into the lesson along with associated instructions on how to conduct the activity. These can be adapted to meet the needs of the students in the classroom.

Biology Connection and Islamic Studies Connection:

- In this section, there is a suggestion to make this lesson interdisciplinary by connecting to a specific topic in a Biology lesson or an Islamic studies lesson.

Assessments:

The assessment documents for each unit/lesson are linked under the “Materials” section of each corresponding lesson and can be used at the teacher's discretion, as homework, as formal assessments like quizzes or exams, or during instruction to check student comprehension. This document is essentially a bank of a variety of question types that can be utilized and adjusted as needed. This includes both an unanswered assessment, for the teacher to make copies of and hand out to students, and a Teacher's Edition, which contains the answers to the assessment.