Table 2. Summary of videos used in weekly homework assignments.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | **Reasons Videos Were Chosen** | | | | |  | |
| **Assign-ment** | **Video Title (Source)** | **Video Length** | **Topic Refresher** | **Diving Deeper** | **Linking Concepts** | **Research Application** | **Counter-stereotypical Scientist** | **Topics Covered** | **Matching Course Learning Objectives^** |
| HW1 | [Virus Adaptation to Environmental Change](https://youtu.be/xNCMgAgLoq4) (iBiology) | 47:01\* |  | X |  | X | X | Tradeoffs | CLO 4, CLO 12 |
| HW2 | [The Great Elephant Census](https://www.biointeractive.org/classroom-resources/great-elephant-census) (HHMI BioInteractive) | 8:24 |  |  |  | X |  | Census of wild populations | CLO2, CLO 12 |
| HW3 | [Youreka Science: Hardy-Weinberg Equilibrium](https://youtu.be/pEFWnOb7f2Y) (iBiology) | 10:25 | X | X |  |  |  | Allele/genotype frequency calculations | CLO 8, CLO 12 |
| HW3 | [Phases of Meiosis](https://youtu.be/16enC385R0w) (Bozeman Science) | 8:25 | X |  |  |  |  | Process of meiosis | CLO 5, CLO 12 |
| HW4 | [Genetics of Morphology](https://youtu.be/uM4LxBG74ag) (iBiology) | 36:12 |  |  | X | X | X | Mechanisms of genetic change | CLO 7, CLO 8, CLO 9, CLO 12 |
| HW5 | [The Origins of Species: Lizards in an Evolutionary Tree](https://www.biointeractive.org/classroom-resources/origin-species-lizards-evolutionary-tree) (HHMI BioInteractive) | 17:59 |  |  | X | X |  | Reproductive isolation and speciation | CLO 8, CLO 9, CLO 12 |
| HW6 | [Consequences of Amazon Deforestation](https://youtu.be/eA1XcORWmpU) (iBiology) | 26:11 |  | X |  | X |  | Biogeochemical cycling | CLO 3, CLO 12 |
| HW7 | [Finding *Tiktaalik*](https://www.ibiology.org/evolution/tiktaalik/)(iBiology) | 16:23 |  | X |  | X |  | History of life | CLO 9, CLO 12 |
| HW7 | [Great Transitions: The Origin of Birds](https://www.biointeractive.org/classroom-resources/great-transitions-origin-birds) (HHMI BioInteractive) | 18:59 |  | X |  | X | X | History of life | CLO 9, CLO 12 |

\* This video was assigned from 27:40-47:01; therefore, student viewing time was 19:21.

^ See full list of CLOs in Materials and Methods section.