**Student Evaluator: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Ranking:** Each individual student evaluates 3 groups (video plus video article) and scores their deliverables. They cannot give the same score to more than 1 group.

When evaluating a group, the scores given should be for information presented in both the video and video article.

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| **Team & Group Number** | **Group Names** | | | **Total Score (~/100)**  **(no ties!)** | **Rank in Set (1= best)** |
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*Note: Each group will receive 7 or 8 evaluations, each comprised of a raw score and a “Rank in Set”.*

*Grades on this deliverable are based on a combination of average peer scores and average set rankings.*

See following pages for detailed assessment sheets.

**Assessment 1 Video Topic (Experiment): \_\_\_\_\_\_\_\_\_\_\_**

**Team \_\_\_ Group \_\_\_ Group Members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| --- | --- | --- | --- | --- | --- |
|  |  | **Outstanding** | **Minimum acceptable** | **Unacceptable** | **Score** |
|  |  | **10/10** | **7/10** | **5/10** |  |
| **Content (in Video AND Accompanying Video Article)** | **Introduction** | Group ID clear.  The objective of the experiment is clearly stated.  The experiment is effectively motivated and placed into context. | Group ID was rushed or hard to catch.  Objective was unfocused or unclear.  Background info is thin and/or motivation is not compelling. | Group ID was missing.  Objective was unclear, vague, or missing.  Poor background/motivation. | **\_\_\_/10** |
| **Theory /Technical** | Laser-focused on the key theory. Students effectively “teach” the key theory. Theory fully integrated with experimental operations & results. | General theory described, but not adequately focused. Students present but do not effectively “teach”. Theory not fully integrated with experiment. | Underlying theory not described. Not well-integrated into the experimental context. | **\_\_\_/10** |
| **Operating Procedures**  **& Data Collection** | The main idea of the experiment is clearly summarized. Key operations are demonstrated systematically. The viewer fully understands the data collection process: the parameters to be varied and the primary data to be collected (what, how, how often).  The video & article made learning experimental operation effortless. The viewer can perform the experiment independently. | The main idea of the experiment is summarized, but not clearly. Key operations are shown, but not clearly demonstrated. Various parameters and data to be collected are covered, but not systematically.  Significant effort was required to learn the experimental operations. The viewer needs support to perform the experiment. | The main idea of the experiment is not addressed. Depiction of key operations are unintelligible, or key operations are missing. The data collection process is unclear.  The viewer could not perform the experiment. | **\_\_\_/20** |
| **Data Analysis** | The objective of data analysis is clear. Key calculations are demonstrated systematically. The viewer could now independently perform the data analysis in the experiment. | The objective of data analysis is unclear. Demonstration of calculations may be incomplete or unclear. The viewer struggles to understand and needs support to reproduce analysis. | The objective of the data analysis is not addressed. Analysis is not demonstrated. The viewer could not repeat the data analysis. | **\_\_\_/10** |
| **Conclusions** | Comprehensive and fully effective comparison of primary data with theory, predictions, and other data. Discussion of statistical significance, error, and uncertainty are comprehensive & fully effective. Data and data analysis fully support substantial, relevant, & appropriate conclusions. | Not comprehensive or fully effective comparison of primary data with theory, predictions, and other data. Discussion of statistical significance, error, and uncertainty not comprehensive and/or fully effective. Conclusions may be insubstantial, not fully relevant, inappropriate or unsupported. | Primary data not compared with theory, predictions, or other data. Statistical significance, error, and uncertainty not addressed. No meaningful conclusions are drawn from the data. | **\_\_\_/10** |
| **Quality** | **Video** | Video quality is exceptional: visually appealing, commands attention, creative, innovative, and entertaining.  Organization is excellent with well-delineated transitions.  Video makes effective use of a combination of elements including movie segments, stills, schematics, animations, data slides, text, and audio.  Zero spelling, grammar, language, tone, formatting or citation flaws. | Video is complete, comprehensive, and comprehensible but may be ordinary or uninteresting.  Presentation may jump around and viewer may be lost in places.  Authors used only a few different approaches to convey information.  Some spelling, grammar, language, tone, formatting or citation flaws. | Video is minimalist, amateurish, unpolished, or messy.  Information poorly organized.  Information conveyed in 1 way.  Many spelling, grammar, language, tone, formatting or citation flaws. | **\_\_\_/20** |
| **Accompanying Video Article** | Document enables rapid scanning. Text is effortless to read and understand. Paragraphs are cohesive and express a single main idea. Sentences are short and clear. Terminology not varied. Quantitative, and sufficiently detailed.  Writing mechanics are flawless.  Figures, tables, equations consistently & correctly presented. Parameter values, units, & sig figs always correct. References always correct. | Some problems with organization or logic. Paragraphs may lack a single main idea. Some sentences are awkward, complex or require re-reading. Terminology varies at times. Some few spelling, punctuation, or grammatical errors.  Few errors in figures, tables, equations, presentation of parameters, and/or references. | Disorganized and logic is difficulty to follow. Evaluating the document requires extreme effort. Text is not clear. Terminology is imprecise. Many spelling, punctuation, and/or grammatical errors.  Frequent errors in figures, tables, equations, presentation of parameters, and/or references. | **\_\_\_/20** |

**Total Score: \_\_\_\_\_\_\_\_\_\_**

**I. Length-related Score Modification**

**Video Length: \_\_\_\_\_\_ minutes *Deduct 10% for each FULL minute < 5 mins or > 10 min***

**Modified Score: \_\_\_\_\_\_\_**

**II. Detailed Comments and Rationale for Score**

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| --- |
| **Introduction** |
| **Theory /Technical** |
| **Operating Procedures & Data Collection** |
| **Data Analysis** |
| **Conclusions** |
| **Quality of Video** |
| **Quality of Accompanying Video Article** |

**Assessment 2 Video Topic (Experiment): \_\_\_\_\_\_\_\_\_\_\_**

**Team \_\_\_ Group \_\_\_ Group Members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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|  |  | **Outstanding** | **Minimum acceptable** | **Unacceptable** | **Score** |
|  |  | **10/10** | **7/10** | **5/10** |  |
| **Content (in Video AND Accompanying Video Article)** | **Introduction** | Group ID clear.  The objective of the experiment is clearly stated.  The experiment is effectively motivated and placed into context. | Group ID was rushed or hard to catch.  Objective was unfocused or unclear.  Background info is thin and/or motivation is not compelling. | Group ID was missing.  Objective was unclear, vague, or missing.  Poor background/motivation. | **\_\_\_/10** |
| **Theory /Technical** | Laser-focused on the key theory. Students effectively “teach” the key theory. Theory fully integrated with experimental operations & results. | General theory described, but not adequately focused. Students present but do not effectively “teach”. Theory not fully integrated with experiment. | Underlying theory not described. Not well-integrated into the experimental context. | **\_\_\_/10** |
| **Operating Procedures**  **& Data Collection** | The main idea of the experiment is clearly summarized. Key operations are demonstrated systematically. The viewer fully understands the data collection process: the parameters to be varied and the primary data to be collected (what, how, how often).  The video & article made learning experimental operation effortless. The viewer can perform the experiment independently. | The main idea of the experiment is summarized, but not clearly. Key operations are shown, but not clearly demonstrated. Various parameters and data to be collected are covered, but not systematically.  Significant effort was required to learn the experimental operations. The viewer needs support to perform the experiment. | The main idea of the experiment is not addressed. Depiction of key operations are unintelligible, or key operations are missing. The data collection process is unclear.  The viewer could not perform the experiment. | **\_\_\_/20** |
| **Data Analysis** | The objective of data analysis is clear. Key calculations are demonstrated systematically. The viewer could now independently perform the data analysis in the experiment. | The objective of data analysis is unclear. Demonstration of calculations may be incomplete or unclear. The viewer struggles to understand and needs support to reproduce analysis. | The objective of the data analysis is not addressed. Analysis is not demonstrated. The viewer could not repeat the data analysis. | **\_\_\_/10** |
| **Conclusions** | Comprehensive and fully effective comparison of primary data with theory, predictions, and other data. Discussion of statistical significance, error, and uncertainty are comprehensive & fully effective. Data and data analysis fully support substantial, relevant, & appropriate conclusions. | Not comprehensive or fully effective comparison of primary data with theory, predictions, and other data. Discussion of statistical significance, error, and uncertainty not comprehensive and/or fully effective. Conclusions may be insubstantial, not fully relevant, inappropriate or unsupported. | Primary data not compared with theory, predictions, or other data. Statistical significance, error, and uncertainty not addressed. No meaningful conclusions are drawn from the data. | **\_\_\_/10** |
| **Quality** | **Video** | Video quality is exceptional: visually appealing, commands attention, creative, innovative, and entertaining.  Organization is excellent with well-delineated transitions.  Video makes effective use of a combination of elements including movie segments, stills, schematics, animations, data slides, text, and audio.  Zero spelling, grammar, language, tone, formatting or citation flaws. | Video is complete, comprehensive, and comprehensible but may be ordinary or uninteresting.  Presentation may jump around and viewer may be lost in places.  Authors used only a few different approaches to convey information.  Some spelling, grammar, language, tone, formatting or citation flaws. | Video is minimalist, amateurish, unpolished, or messy.  Information poorly organized.  Information conveyed in 1 way.  Many spelling, grammar, language, tone, formatting or citation flaws. | **\_\_\_/20** |
| **Accompanying Video Article** | Document enables rapid scanning. Text is effortless to read and understand. Paragraphs are cohesive and express a single main idea. Sentences are short and clear. Terminology not varied. Quantitative, and sufficiently detailed.  Writing mechanics are flawless.  Figures, tables, equations consistently & correctly presented. Parameter values, units, & sig figs always correct. References always correct. | Some problems with organization or logic. Paragraphs may lack a single main idea. Some sentences are awkward, complex or require re-reading. Terminology varies at times. Some few spelling, punctuation, or grammatical errors.  Few errors in figures, tables, equations, presentation of parameters, and/or references. | Disorganized and logic is difficulty to follow. Evaluating the document requires extreme effort. Text is not clear. Terminology is imprecise. Many spelling, punctuation, and/or grammatical errors.  Frequent errors in figures, tables, equations, presentation of parameters, and/or references. | **\_\_\_/20** |

**Total Score: \_\_\_\_\_\_\_\_\_\_**

**I. Length-related Score Modification**

**Video Length: \_\_\_\_\_\_ minutes *Deduct 10% for each FULL minute < 5 mins or > 10 min***

**Modified Score: \_\_\_\_\_\_\_**

**II. Detailed Comments and Rationale for Score**

|  |
| --- |
| **Introduction** |
| **Theory /Technical** |
| **Operating Procedures & Data Collection** |
| **Data Analysis** |
| **Conclusions** |
| **Quality of Video** |
| **Quality of Accompanying Video Article** |

**Assessment 3 Video Topic (Experiment): \_\_\_\_\_\_\_\_\_\_\_**

**Team \_\_\_ Group \_\_\_ Group Members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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|  |  | **Outstanding** | **Minimum acceptable** | **Unacceptable** | **Score** |
|  |  | **10/10** | **7/10** | **5/10** |  |
| **Content (in Video AND Accompanying Video Article)** | **Introduction** | Group ID clear.  The objective of the experiment is clearly stated.  The experiment is effectively motivated and placed into context. | Group ID was rushed or hard to catch.  Objective was unfocused or unclear.  Background info is thin and/or motivation is not compelling. | Group ID was missing.  Objective was unclear, vague, or missing.  Poor background/motivation. | **\_\_\_/10** |
| **Theory /Technical** | Laser-focused on the key theory. Students effectively “teach” the key theory. Theory fully integrated with experimental operations & results. | General theory described, but not adequately focused. Students present but do not effectively “teach”. Theory not fully integrated with experiment. | Underlying theory not described. Not well-integrated into the experimental context. | **\_\_\_/10** |
| **Operating Procedures**  **& Data Collection** | The main idea of the experiment is clearly summarized. Key operations are demonstrated systematically. The viewer fully understands the data collection process: the parameters to be varied and the primary data to be collected (what, how, how often).  The video & article made learning experimental operation effortless. The viewer can perform the experiment independently. | The main idea of the experiment is summarized, but not clearly. Key operations are shown, but not clearly demonstrated. Various parameters and data to be collected are covered, but not systematically.  Significant effort was required to learn the experimental operations. The viewer needs support to perform the experiment. | The main idea of the experiment is not addressed. Depiction of key operations are unintelligible, or key operations are missing. The data collection process is unclear.  The viewer could not perform the experiment. | **\_\_\_/20** |
| **Data Analysis** | The objective of data analysis is clear. Key calculations are demonstrated systematically. The viewer could now independently perform the data analysis in the experiment. | The objective of data analysis is unclear. Demonstration of calculations may be incomplete or unclear. The viewer struggles to understand and needs support to reproduce analysis. | The objective of the data analysis is not addressed. Analysis is not demonstrated. The viewer could not repeat the data analysis. | **\_\_\_/10** |
| **Conclusions** | Comprehensive and fully effective comparison of primary data with theory, predictions, and other data. Discussion of statistical significance, error, and uncertainty are comprehensive & fully effective. Data and data analysis fully support substantial, relevant, & appropriate conclusions. | Not comprehensive or fully effective comparison of primary data with theory, predictions, and other data. Discussion of statistical significance, error, and uncertainty not comprehensive and/or fully effective. Conclusions may be insubstantial, not fully relevant, inappropriate or unsupported. | Primary data not compared with theory, predictions, or other data. Statistical significance, error, and uncertainty not addressed. No meaningful conclusions are drawn from the data. | **\_\_\_/10** |
| **Quality** | **Video** | Video quality is exceptional: visually appealing, commands attention, creative, innovative, and entertaining.  Organization is excellent with well-delineated transitions.  Video makes effective use of a combination of elements including movie segments, stills, schematics, animations, data slides, text, and audio.  Zero spelling, grammar, language, tone, formatting or citation flaws. | Video is complete, comprehensive, and comprehensible but may be ordinary or uninteresting.  Presentation may jump around and viewer may be lost in places.  Authors used only a few different approaches to convey information.  Some spelling, grammar, language, tone, formatting or citation flaws. | Video is minimalist, amateurish, unpolished, or messy.  Information poorly organized.  Information conveyed in 1 way.  Many spelling, grammar, language, tone, formatting or citation flaws. | **\_\_\_/20** |
| **Accompanying Video Article** | Document enables rapid scanning. Text is effortless to read and understand. Paragraphs are cohesive and express a single main idea. Sentences are short and clear. Terminology not varied. Quantitative, and sufficiently detailed.  Writing mechanics are flawless.  Figures, tables, equations consistently & correctly presented. Parameter values, units, & sig figs always correct. References always correct. | Some problems with organization or logic. Paragraphs may lack a single main idea. Some sentences are awkward, complex or require re-reading. Terminology varies at times. Some few spelling, punctuation, or grammatical errors.  Few errors in figures, tables, equations, presentation of parameters, and/or references. | Disorganized and logic is difficulty to follow. Evaluating the document requires extreme effort. Text is not clear. Terminology is imprecise. Many spelling, punctuation, and/or grammatical errors.  Frequent errors in figures, tables, equations, presentation of parameters, and/or references. | **\_\_\_/10** |

**Total Score: \_\_\_\_\_\_\_\_\_\_**

**I. Length-related Score Modification**

**Video Length: \_\_\_\_\_\_ minutes *Deduct 10% for each FULL minute < 5 mins or > 10 min***

**Modified Score: \_\_\_\_\_\_\_**

**II. Detailed Comments and Rationale for Score**

|  |
| --- |
| **Introduction** |
| **Theory /Technical** |
| **Operating Procedures & Data Collection** |
| **Data Analysis** |
| **Conclusions** |
| **Quality of Video** |
| **Quality of Accompanying Video Article** |