Video Creation Guidelines and Grading Rubric

It's your turn to be the instructor and teach students about a topic of your choice. Below you will find some guidelines and helpful tips for creating your own video, self-assessment questions, and discussion questions.

Objectives:

1. Improve technical communication skills
2. Increase students' ability to explain fundamental electronics circuits and their practical applications
3. Apply core electronic principles to the field of bioinstrumentation

Creating Your Video:

1. Videos can include one or many of the following formats: Powerpoint, real-time drawings, animation, prop demonstration, etc.
2. Content can include:
    1. Brief introduction to your chosen topic
    2. Explanation of fundamental concepts
    3. Application of the topic to the field of Bioengineering. This can take the form of:
        1. Description of a clinical application
        2. Summary and explanation of relevant news article or peer-reviewed article
        3. Sample calculations related to the topic and fundamental concepts

Your audience is other students interested in learning about your chosen topic.
Your video should be between 5 and 10 minutes in length.
Please remove your name and other personal identifiers from your video prior to submission.
Please also avoid showing your face in the video.
While recording your video, please consider your volume and understandability.
Have fun creating your video and learning about Bioinstrumentation in the process!

Self-Assessment Questions (SAQ):

1. SAQs should be simple questions that can be answered directly from information contained within the video.
2. Try to draft 3-5 SAQs for the video that you create. Questions can be short answers, multiple choice, fill in the blank, matching, etc.
3. Write clear, brief solutions for each of your questions. If there is more than one possible solution, list all of them. *Example Question:* In a photoconductive circuit, photodetectors are reverse biased. Discuss the main advantage of this mode of operation. *Example solution:* Any short answer mentioning the following will be accepted: This photodetector circuit will have a decreased response time due to an increase in the width of the depletion region.

Evaluation Criteria

Criteria	**Weight**	**Excellent**				**Poor**
Technical Content (60%)						
Learning Objectives	5	5	4	3	2	1
Principle of Operation	20	5	4	3	2	1
Applications	15	5	4	3	2	1
Advantages and Disadvantages	10	5	4	3	2	1
SAQs	10	5	4	3	2	1
Delivery (25%)						
Clear presentation of material (structure)	10	5	4	3	2	1
Professional and appropriate	5	5	4	3	2	1
Video is engaging	10					
Visuals and Audio (15%)						
Video quality	5	5	4	3	2	1
Audio quality	5	5	4	3	2	1
Supporting visuals	5	5	4	3	2	1