Physics Assessment Plan and Tools for Written & Oral Communication

Reviewer:_____   Presenter:_____

Oral Communication Scoring Draft – See "Training" Draft (next page) for slightly more description.

Oral Com	Exceeds Expectation (3)	Meets Expectations (2)	Insufficient (1)
Central Message Central message is clear and consistent with the supporting material.			
Structure Structure only occasionally becomes confused and main ideas are connected to the central message			
Supporting Content (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) Supporting content make *appropriate* reference to information or analysis that *generally* supports the presentation or establishes the presenter's credibility/authority on the topic.			
Quantitative Representation & Interpretation *Fairly* clear mathematical portrayal (equations, tables, graphs, diagrams…) Provides *accurate* explanations of information presented in mathematical forms.			
Visuals **1. Integration-** Text emphasizes main points, but frequently is not concise, or some main points are missing from the slides; **2. Layout -** *Mostly* clean, simple, legible and effective with informative titles; and a few slides may be cramped **3. Pacing -** Only occasionally covers too much material per slide			
Audience Background, coverage, and vocabulary are *generally* appropriate for audience.			
Language Language choices are thoughtful and generally support the effectiveness of the presentation.			
Delivery Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation *interesting*, and speaker appears *comfortable*.			

Physics Assessment Plan and Tools for Written & Oral Communication

Oral Communication Training Draft – "Exceeds Expectations", "Meets Expectations", and "Insufficient" descriptions included, and some categories are split for finer detail.

Oral Com	Exceeds Expectation (3)	Meets Expectations (2)	Insufficient (1)
Central Message	Central message is clear, precisely stated, appropriately repeated, and strongly supported.	Central message is clear and consistent with the supporting material.	Central message is deducible but unclear and is not often repeated and is not memorable.
Structure	Structure is obvious, logical and easy to follow; ideas are linked to each other and the central message	Structure only occasionally becomes confused and main ideas are connected to the central message	Structure is unclear and confusing; ideas are seldom connected to each other or the central message
Supporting Content (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities)	A *variety* of types of supporting content make *appropriate* reference to information or analysis that *significantly* supports the presentation or establishes the presenter's credibility/authority on the topic.	Supporting content make *appropriate* reference to information or analysis that *generally* supports the presentation or establishes the presenter's credibility/authority on the topic.	*Insufficient* supporting content make reference to information or analysis that *minimally* supports the presentation or establishes the presenter's credibility/ authority on the topic.
Quantitative Representation & Interpretation Ability to present relevant information in various mathematical forms (e.g., equations, graphs, diagrams, tables, words)	Skillfully presents relevant information in an insightful mathematical portrayal in a way that contributes to a further or deeper understanding. Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information.	Fairly clear mathematical portrayal (equations, tables, graphs…) Provides accurate explanations of information presented in mathematical forms.	Mathematical portrayal is unclear, inappropriate or inaccurate. Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about what the information means.
Visuals 1. Integration	Emphasizes main points, Connects naturally to spoken word.	Text emphasizes main points, but frequently is not concise, or some main points are missing from the slides	slides do not sufficiently support spoken word
Visuals 2. Layout	Clean, simple, legible and concise text with informative titles;	*Mostly* clean, simple, legible and effective with informative titles; and a few slides may be cramped	Frequently cluttered with overly general titles; text is not legible
Visuals 3. Pacing	appropriate	Occasionally covers too much material per slide	Poorly paced, frequently spending several minutes on individual slides
Audience	Background, coverage, and vocabulary appropriate for audience.	*Generally* appropriate for audience.	Often inappropriate for audience.
Language	Language choices are clear and, precise, memorable, and compelling, and enhance the effectiveness of the presentation.	Language choices are thoughtful and generally support the effectiveness of the presentation.	Language choices are often unclear, imprecise, and ineffective
Delivery (posture, gesture, eye contact, and vocal expressiveness)	Delivery techniques make the presentation *compelling*, and speaker appears *polished* and *confident*.	Delivery techniques make the presentation *interesting*, and speaker appears *comfortable*.	Delivery techniques do not help to engage the audience or make the presentation understandable, and speaker appears *tentative*.

Largely based upon AAC&U Oral Communication, Quantitative Literacy, and Critical Thinking VALUE Rubrics, Loyola Marymount University Oral Presentation Example Rubric and informed by Tips for Giving Good Talks used with summer researcher students.

Do's: Hints for Giving a Good Talk

Slide

1. **Clean & Simple.** Slides must be well designed, simple, and readable by everyone in the audience.

2. **One to Two Minutes**. As a general rule, use one slide for each 1 or 2 minutes of the presentation. Each slide should remain on the screen *at least* 20 seconds.

3. **One Main Point.** Devote each slide to a single fact, idea, or finding. Illustrate major points or trends, not detailed data. Do not show long complicated formulas or equations.

4. **Few Words.** Use a minimum number of words in titles, subtitles, and captions – you want the audience paying attention to what you're saying, reading a dense slide.

5. **Large Font**. Do not make slides directly from illustrations or tables taken straight from publications – when projected, they are seldom legible from a distance.

6. **Use Color Effectively**. Be sure that there is high contrast between a slide's background and characters, graphs, etc. Remember, you get high contrast and luminosity on your computer monitor than you'll get on the projection screen.

7. **Introduction & Conclusion.** An introductory and a concluding slide help your audience to digest the information you present.

Tables

1. **Simple.** Do not use more than three or four vertical columns, six to eight horizontal rows. Any more and the information will not be readable.

2. **Visual.** Whenever possible, present data by bar charts or graphs instead of tables. Colored graphs are very effective.

Graphs

1. **Simple.** Generally, do not use more than one or two curves on one diagram; three to four as a maximum but only if they are well separated.

2. **Decipherable.** Label each curve rather than using symbols and legend (they are often too small to read and clutter the slide).

Presentation

1. **Focused.** Write the talk or a detailed outline in advance so that your ideas are logically organized and your points are clear. Prioritize and structure your talk around a few essential points, details can be saved for follow-up questions.

2. **Logical Structure.** Have a logical progression of ideas and slides.

3. **Justify.** State your purpose and how each slide relates to it.

4. **Segue.** Know which slide is coming next and lead into it.

5. **Understand.** Understand each slide thoroughly.

6. **Slow & Connected to Audience.** Speak slowly and clearly and make eye-contact with the audience.

7. **Speech Connected to Slides.** Words reference the accompanying slides.

8. **Timing.** Stay within your allotted time.

9. **Rehearse.** If possible, give your talk to one or more colleagues, and ask them for suggestions for improvement.

Don'ts: Hints for Giving a Terrible Talk

Strict adherence to the following time-tested guidelines will ensure that both you and your work remain obscure and will guarantee an audience of minimum size at your next talk.

Slides

1. **Flip 'em Fast.** Use lots of slides. A rule of thumb is one for each 10 seconds of time allotted for your talk. If you don't have enough slides, try rapidly flipping back and forth between the ones you do have.

2. **Pack 'em Tight.** Put as much information on each slide as possible. Graphs with a dozen or so crossing lines, tables with at least 100 entries, and maps with 20 or 30 units are especially effective; but equations, particularly if they contain at least 15 terms and 20 variables, are almost as good. A high density of detailed and marginally relevant data usually preempts penetrating questions from the audience.

3. **Read Verbatim.** Write on your slides, verbatim, everything you're going to say, so you can just read it to the audience. This greatly reduces eye-contact and the possibility of questions.

4. **Sloppy Slides.** Use lots of hand-written slides, preferably hastily written on the spot – this lends a tone of authenticity to your talk.

5. **Small Font.** Use a small print. Anyone who has not had the foresight to either sit in the front is not smart enough to understand your talk anyway.

6. **Scanned Figures.** Use figures and tables scanned directly from publications. They will help you accomplish goals 2 and 3 above and minimize the amount of preparation for the talk.

7. **Broken Slides.** Make sure at least one slide is garbled – broken links or animations, text running off the page, etc. This relieves tension in the room.

Presentation

1. **Disorganized.** Don't organize your talk in advance. It is usually best not even to think about it until your name has been announced by the session chair. Above all, don't write the talk out, for it may fall into enemy hands.

2. **Unrehearsed.** Never, ever, rehearse, even briefly. Talks are best when they are given spontaneously with thoughts organized in a random fashion. Leave it as an exercise for the listener to assemble your thoughts properly and make some sense of what you say.

3. **Pitched to Experts.** Pitch your talk exclusively at your direct research colleagues, they aren't apt to ask hostile questions, and everyone else will be lulled into silence by your incomprehensibility.

4. **Too Much Info.** Discuss each slide in complete detail, especially those parts irrelevant to the main points of your talk. If you suspect that there is anyone in the audience who is not asleep, return to a previous slide and discuss it again.

5. **Disconnect from Audience.** Face the projection screen, mumble, and talk as quickly and quietly as possible, especially while making important points. Remember, you don't have to answer people's questions if you don't see them raise their hands. An alternative strategy is to speak very slowly, leave every other sentence incomplete, and punctuate each thought with ―ahh, ―unhh, ―doehh, or something equally informative.

6. **Rapid Laser Pointer Action.** Wave the laser pointer around the audience – they can't question what they can't see. At least move the beam rapidly about the slide image in small circles. If done properly, this will make 50% of the audience sick.

7. **Exceed Your Time.** Use up all of your allotted time and at least half, if not all, of the next speaker's. This avoids foolish and annoying questions. Remember, the rest of the speakers don't have anything important to say anyway. If they had, they would have gone before you.