9. RESEARCH PRESENTATIONS

60 Points

The objective of this exercise is for you to finalize your oral presentations about your sediment hypotheses and then to give the presentation to the rest of the class. The presentation should include all the components normally expected in a scientific communication: an introduction, site description, methodology, results, discussion, conclusion, and a reference list.

YOU SHOULD BE ABLE TO:

- Assemble slide content to accompany a formal scientific oral presentation;
- Determine whether all the necessary components of scientific communications are included in the presentation; and,
- Give a formal scientific oral presentation to the rest of the class.

PROCEDURE

You already worked on the results of your oral presentation in Lab 8. For this lab, you need to assemble the rest of the information listeners will expect to hear in a scientific communication. Your presentation should be approximately 15 minutes long.

- Create a title slide that includes, in addition to the title of your presentation, the names of all team members and your affiliation with Geog/Geol 352: Geomorphology at UWSP. You should always include the institution you are affiliated with somewhere in your presentation.
- Create an introductory slide or set of slides. The introduction **must** state what your objective is, which might be a list of the hypotheses that will be tested, or if there is a common theme for all the hypotheses, the objective can be more general and relate to the common theme that ties the hypotheses together. The introduction **must** also include a statement, supported with citations, for why the project is important. You need to cite **at least** two sources in support of the importance of your project.
- Create a slide or set of slides describing the study site. You can use content from your poster for these slides, but be sure to include information relevant to streambed texture – something you may not have included in your poster.
- Create a slide or set of slides describing the methodology. Again, you can use content from your posters, but you must also include information on the sediment analysis, which was not included in your posters. You **must** include your cumulative frequency distribution chart as part of the methodology because without this chart, you could not determine the mean or median grain size or any of the other measures of grain size or degree of sorting.
- **Each individual** needs to add literature to the section of the presentation dealing with their individual hypothesis. Each individual needs to find **at least two** scientific sources to establish whether their results match those of other scientists. You can insert this slide or these slides between your hypothesis statement and your results – in which case you are essentially establishing an expectation. Or, you can insert this slide or these slides after your results – in which case you are comparing your results to the results of other researchers.
- Create a discussion slide or set of slides. The discussion should follow presentation of the individual hypothesis results. As part of the discussion, as with your hydraulic posters, you need to discuss the confidence you have in the accuracy of

our field and laboratory data. This is particularly important if your results are unexpected or do not match the results of others. You **must** include citations in this section to help support your level of confidence in our field and laboratory data.

- Create a conclusion slide or set of slides. Go back to your objective – restate your objective, state what you found with regard to your objective, whether your findings are supported by other research, and the degree of confidence you have in your results based on our methodology. Provide some suggestions for future research.
- Last, create a slide or set of slides containing your reference list.

If there are any individuals who are not part of your team but who helped you in some way, you should acknowledge them in a final slide (after the reference list). For example, if you had obtained a grant that provided funding for your work, you need to acknowledge the granting agency. This is also true for posters or written papers. Likewise, if you have field assistants or lab assistants who helped you collect information, they should also be acknowledged. These individuals are not authors, but they have aided you in accomplishing your project.

GRADING RUBRIC

Individual Effort 55%		Excellent (9-10 points)	Good (7-8 points)	Satisfactory (5-6 points)	Unsatisfactory (3-4 points)	Failing (0 points)
Research Effort and Accuracy (40%)	Question /Hypo-thesis	Clearly and concisely defined; readily testable with available data.	Defined; testable with available data.	Not very clearly defined; too terse or wordy; some difficulty testing with available data.	Not clearly defined; difficult to test with available data.	Not defined; inappropriate for available data;
	Excel work	Totally appropriate for hypothesis/question;	Appropriate for hypothesis/ question;	Not totally appropriate; better ways exist to analyze data;	Inappropriate for hypothesis/question;	Missing
		All charts/tables clearly and appropriately labeled;	Charts/tables appropriately labeled;	Some charts/tables missing labels or are inappropriately labeled;	Charts/tables not labeled or labeled inappropriately;	
		Charts well designed and look good.	Charts reasonably well designed and look good.	Charts not very well designed; are only marginally attractive.	Charts poorly designed and unattractive.	
	Results	Results accurate, clear and concise; addresses and interprets all key points correctly;.	Mostly accurate; minor omissions or mistakes interpreting data don't detract significantly from conclusion;	Results unclear; contain sufficient inaccuracies interpreting data to detract from conclusion; important points missing.	Results missing or fail to correctly interpret data; most important points missing;	Missing
		Decision clearly stated and supported by Excel work.	Decision stated and supported by Excel work.	Decision not very clear or not entirely supported by Excel work.	Decision unclear and not supported by Excel work.	
	Scientific citations	Presents clear, compelling evidence of how work fits in with existing research; evidence based on more than two appropriate scholarly resources.	Presents evidence of how work fits in with existing research; evidence based on just two appropriate scholarly resources.	Presents unclear or uncom-pelling evidence of how work fits in with existing research; or evidence not based on entirely appropriate resources; or based on just one scholarly resource.	Unclear, uncompelling evidence of how work fits in with existing research; evidence based on inappro-priate resources.	Presents no evidence of how work fits in with existing research; no resources cited.
	Overall	All information and explanations regarding key concepts completely accurate; all information relates directly to hypothesis/ question.	Information and explanations regarding key concepts contain no significant errors; all information relates to hypothesis/ question.	Some significant inaccuracies or incorrect explanations of key concepts; contains information not directly related to hypothesis/ question.	Many inaccuracies or incorrect explana-tions; much information unrelated to or unsupportive of hypothesis.	Totally inaccurate and incorrect explanations; none of the information relates to hypothesis/ question.
Grammar/ spelling		No grammar/spelling errors.	Minor grammar/spelling errors; insufficient to detract from overall presentation.	Sufficient grammar/ spelling errors to detract from overall presentation.	Numerous grammar/ spelling errors detract significantly from overall presentation.	Grammar incomprehensible.
Collegiate Level		Level is appropriate.	Level is generally appropriate.	Portions are too elementary or too sophisticated.	Much is too elemen-tary or sophisticated.	All is too elementary or sophisticated.

Individual Effort 55%		Excellent (9-10 points)	Good (7-8 points)	Satisfactory (5-6 points)	Unsatisfactory (3-4 points)	Failing (0 points)
Organization (15%)	Speaker	Presents information in a logical and interesting sequence;	Presents most of the information in a logical sequence;	Presents information in a sequence that is not always logical or interesting;	Presents information in an illogical sequence;	
		Has effective, smooth transitions between sections (e.g. lit. review, results, etc.) and between key points within a section.	Has transitions between sections and key points.	Has transitions between sections and key points that are not always effective or smooth.	Transitions not effective or smooth; some transitions missing; speaker jumps around from point to point or topic to topic.	Does not have transitions or transitions totally ineffective; presentation choppy and disjointed.
	Audience	Can easily follow and understand the presentation.	Can follow & understand presentation; minor reorganization would make following easier.	Can mostly follow and understand presentation; moderate reorganization would make it easier to follow.	Has difficulty following and understanding the presentation.	Cannot understand or follow the presentation.
Delivery (30%)		Maintains eye contact with audience; looks at all parts of room; seldom refers to notes.	Mostly maintains eye contact; looks at most parts of room; refers to notes more often.	Makes some eye contact; looks at only a few parts of room; refers to notes at least half the time.	Makes almost no eye contact with audience; reads more than half of the presentation.	Makes no eye contact with audience; reads entire presentation.
		Speaker clearly interested in and enthusiastic about topic.	Appears interested in but not overly enthusiastic about topic.	Speaker appears only somewhat interested in the topic; presentation lacks enthusiasm.	Speaker shows little interest in or enthusiasm for topic.	Speaker appears totally bored with topic.
		Articulates clearly; pronounces all terms correctly.	Articulates most words clearly; pronounces terms correctly.	Articulates enough words unclearly that audience has questions; mispronounces some terms.	Poor articulation; difficult for audience to understand; many terms mispronounced.	Mumbles; audience cannot understand; many terms mispronounced.
		Uses correct grammar; speaks in complete sentences; sentences flow together easily; uses a rich and varied vocabulary.	Uses correct grammar; some incomplete sentences or sentences that don't flow readily; vocabulary appropriate for context.	Makes some grammatical mistakes; multiple incomplete sentences or sentences don't flow; vocabulary not always appropriate for context.	Multiple grammar mistakes; most sentences incomplete and don't flow; vocabulary often not appropriate.	Grammar horrible; unable to string sentences together; vocabulary inappropriate for context.
		Modulates voice appropriately to maintain audience attention and to emphasize key points; uses an engaging tone.	Modulates voice appropriately to maintain audience attention and to emphasize key points; mostly uses an engaging tone.	Mostly modulates voice sufficiently to keep audience attention or emphasize key points, but doesn't talk in a monotone; or occasionally modulates voice too much.	Doesn't modulate voice sufficiently to keep audience attention or em-phasize key points; or modulates too much.	Talks in a monotone or modulates so wildly that audience loses interest.
		Talks at a proper volume so everyone in room can readily hear; not too soft and not too loud.	Talks at a volume that allows everyone to hear, may be slightly soft or loud.	Talks at a volume that occasionally makes it difficult for everyone in room to hear; or at a volume that occasionally is too loud.	Talks so softly that most of audience has trouble hearing or so loudly audience feels it is being shouted at.	Talks so softly that audience cannot hear or so loudly that audience feels it is being shouted at.
		Adheres to time limit within 10%; presents information at a normal speaking pace; audience can easily follow.	Adheres to time limit within 15%; speaking pace generally normal; audience can follow.	Adheres to time limit within 20%; speaks at a slightly accelerated rate – audience can follow, but needs to pay attention; or speaks at a slightly slow pace.	Within 30% of time limit; talks so fast audience gets lost, or so slowly audience loses interest –clearly trying to eat up time.	Is more than 30% off time limit; speaks at a rate that is either much too fast or too slow.
		Speaker is poised, confident, and comfortable speaking in front of a group; no distracting mannerisms.	Speaker is slightly nervous, but still competent at speaking in front of a group; no distracting mannerisms.	Speaker is nervous and only marginally competent at speaking in front of a group; minor distracting mannerisms.	Speaker is nervous and uncomfortable speaking in front of a group; moderate negative mannerisms.	Extremely nervous and uncomfortable; negative mannerisms make audience uncomfortable.
		Personal appearance is completely appropriate for occasion and audience.	Personal appearance is appropriate for the occasion and audience.	Personal appearance is mostly appropriate for the occasion and audience.	Appearance is margin-ally appropriate for occasion & audience.	Appearance is inappropriate for the occasion & audience.

Team Effort 45%		Excellent (9-10 points)	Good (7-8 points)	Satisfactory (5-6 points)	Unsatisfactory (3-4 points)	Failing (0 points)
Research Effort and Accuracy (50%)	Objective	Clearly and coherently defined.	Defined.	Not totally clear or coherent but audience can still figure it out.	Unclear or incoherent; audience uncertain.	Not defined; audience clueless.
	Importance	Clearly and coherently stated; supported by more than two appropriate citations.	Clearly stated; supported by just two appropriate citations.	Not totally clear or some-what contrived; supported by just one citation or by citations that are somewhat inappropriate.	Unclear or contrived; citations only marginally appropriate.	Not stated; no citations.
	Methodology	Clearly and concisely described; contains cumulative distribution curves; listeners could easily replicate methodology.	Correctly described; contains cumulative distribution curves; listeners could replicate methodology.	Not totally clear or misses a few key points; contains cumulative distribution curves; listeners could likely replicate methodology but with some difficulty.	Unclear; multiple key points missing; cumulative distribution curves missing; listeners would find it difficult to replicate.	Not described or incomprehensible; cumulative distribution curves missing; listeners could not replicate.
	Site description	Accurately and concisely describes all relevant site characteristics.	Accurately describes relevant site characteristics.	Not completely accurate; some relevant characteristics omitted; some irrelevant characteristics included.	Significant inaccuracies; multiple relevant char-acteristics omitted and irrelevant ones included.	Not described or totally inaccurate; relevant charac-teristics missing.
	Confidence in methods and results	Clearly stated and supported by at least two appropriate citations.	Clearly stated and supported by just two appropriate citations.	Statement somewhat unclear; supported by just one appropriate citation or by only marginally appropriate citations.	Statement unclear; citations inappropriate.	Not stated; no citations.
	Conclusion	Clear and coherent; provides thoughtful suggestions for future research.	Coherent; provides suggestions for future research.	Somewhat incoherent; provides limited or contrived suggestions for future research.	Incoherent and unclear; contrived or thoughtless suggestions for future research.	Missing; no suggestions for future research.
Citations (15%)		All sources cited;	All sources cited;	Some sources not cited;	Multiple sources not cited;	No citations;
		All citations are complete and properly formatted;	All citations are complete but have minor formatting errors;	Some citations are incomplete or improperly formatted;	Multiple citations are incomplete and improperly formatted;	No citations;
		Reference list complete and properly formatted using Department citation style.	Reference list complete; uses Department style but includes minor formatting errors.	Reference list missing a few items and includes formatting errors; does not always follow Department style.	List is incomplete and improperly formatted; does not follow Department style.	Reference list missing.
Group logistics (5%)		Each speaker knows when it's their turn; all transitions between speakers totally smooth and seamless.	Each speaker knows when it's their turn; not all transitions between speakers are totally smooth or seamless.	Speakers know when it's their turn but transitions are awkward.	Some speakers are unsure when it's their turn; transitions are awkward.	Most speakers are unsure when it's their turn; transitions are abrupt and disjointed.
Graphics and Visual Appearance (30%)	Excel work	Graphics are neither sparse nor busy;	Graphics are somewhat sparse or busy;	Graphics too sparse or too busy;	Graphics poorly prepared and detract from presentation;	No graphics.
		Charts/tables clearly, appropriately, and consistently labeled;	Charts/tables appro-priately but not always consistently labeled;	Charts/tables missing some labeling or have some inappro-priate or inconsistent labeling;	Charts not labeled or incorrectly labeled;	No graphics.
		Effective and artistic use of colors, fonts, line for-matting, etc. to create attractive, easy to under-stand charts/tables;	Effective and artistic use of colors, fonts, line formatting, etc. to create understandable charts/tables;	Generally effective use of colors, fonts, line formatting, etc. to create charts/tables;	Use of colors, fonts, line formatting, etc. often not effective or unattractive;	No graphics.
		Formatting and design consistently applied across all charts/tables.	Minor inconsistencies in formatting and design of charts/tables; don't significantly detract from presentation.	Sufficient inconsistencies in formatting and design of charts/tables to detract from presentation.	No consistency in formatting and design of charts/tables.	No graphics

Graphics and Visual Appearance of Slides Continued (30%)	**Photos, maps, images**	All are at an appropriate resolution, use appropriate colors, and are completely appropriate for the context; aid listeners understanding of content.	All are at an appropriate resolution, use appropriate colors, but a few are not completely appropriate for the context; or all are appropriate for the context but have somewhat inappropriate resolution or colors.	Some are at an inappropriate resolution, some use inappropriate colors, and some are not entirely appropriate for the context.	Many are at an inappropriate resolution, use inappropriate colors, and are inappropriate for the context.	All are at an inappropriate resolution, use inappropriate colors, and are inappropriate for the context.
	Overall slide design	Slide design is attractive and invites observers to attend to slide content;	Slide design is attractive; minor issues don't distract observers from slide content;	Slide design is not unattractive but Issues with design occasionally distract observers from slide content;	Slides poorly designed; observers often distracted from slide content;	Lousy slide design; hard for observers to pay any attention to slide content;
		Appropriate and artistic use of colors, fonts, etc. for emphasis or to aid organization of presentation;	Appropriate use of colors, fonts etc. for emphasis or to aid organization of presentation;	Mostly appropriate use of colors, fonts, etc. for emphasis or to aid organization	Minimal color/font variation; or slightly too many colors/fonts; detracts from organization of material;	No or too much color/font variation; nothing or everything emphasized; organization unclear;
		Appropriate amount of information per slide; easy for audience to follow presentation;	Appropriate amount of information per slide; audience can follow;	Some slides contain too much or too little information; audience has trouble following or spends too much time reading instead of listening;	Many slides contain too much or too little information; audience has trouble following;	All slides contain too much or too little information; audience cannot follow;
		Text sufficiently large to be read easily from the back of the room but not so large that presenter must continually change slides;	Text sufficiently large to be read from the back of the room but not so large that presenter must continually change slides;	Text not quite large enough; some difficulty reading from the back of a room; or text larger than necessary and presenter must change slides more often than necessary;	Text too small; difficult to read from the back of a room; or text too large and constant changing of slides detracts from continuity of information;	Text much too small; impossible to read from back of a room; or much too large;
		All slides consistently formatted and designed; text and graphics consistently positioned across all slides; visually appealing presentation.	Minor inconsistencies in slide formatting and design or positioning of text or graphics does not detract from overall visual impression.	Sufficient inconsistencies in slide formatting and design or positioning of text or graphics that audience notices it; detracts from but doesn't ruin overall visual impression.	Significant inconsistencies in slide formatting and design or positioning of text or graphics that the presentation has little visual appeal.	No consistency in slide formatting and design and positioning of text or graphics; no visual appeal at all.

ABBREVIATED GRADING RUBRIC

Individual Effort 55%	A: (10-9 pts) Excellent	B: (8-7 pts) Good	C: (6-5 pts) Satisfactory	D: (4-3) pts Unsatisfactory
Research Effort & Accuracy (40%)				
• Hypothesis/Research question definition	☐	☐	☐	☐
• Excel work				
o Appropriate	☐	☐	☐	☐
o Labeling	☐	☐	☐	☐
o Design	☐	☐	☐	☐
• Results				
o Accurate	☐	☐	☐	☐
o Decision	☐	☐	☐	☐
• Scientific citations	☐	☐	☐	☐
• Accurate and relevant information	☐	☐	☐	☐
Grammar/spelling	☐	☐	☐	☐
Collegiate level	☐	☐	☐	☐
Organization (15%)				
• Logical, interesting sequence	☐	☐	☐	☐
• Smooth transitions	☐	☐	☐	☐
• Audience can follow along	☐	☐	☐	☐
Delivery				
• Eye contact	☐	☐	☐	☐
• Interest and enthusiasm	☐	☐	☐	☐
• Articulation and pronunciation	☐	☐	☐	☐
• Grammar and vocabulary	☐	☐	☐	☐
• Voice modulation	☐	☐	☐	☐
• Volume	☐	☐	☐	☐
• Time limit & pacing	☐	☐	☐	☐
• Poise and mannerisms	☐	☐	☐	☐
• Personal appearance	☐	☐	☐	☐
Team Effort 45%	**A: (10-9 pts) Excellent**	**B: (8-7 pts) Good**	**C: (6-5 pts) Satisfactory**	**D: (4-3) pts Unsatisfactory**
Research Effort & Accuracy (50%)				
• Objective	☐	☐	☐	☐
• Importance	☐	☐	☐	☐
• Methodology	☐	☐	☐	☐
• Site characteristics	☐	☐	☐	☐
• Level of confidence				
• Conclusion & future research				
Citations (15%)				
• Sources cited	☐	☐	☐	☐
• Citations	☐	☐	☐	☐
• Reference list	☐	☐	☐	☐
Group logistics (5%)	☐	☐	☐	☐
Graphics and Visual Appearance of Slides (30%)				
• Excel work				
o Busyness	☐	☐	☐	☐
o Labeling	☐	☐	☐	☐
o Use of color, fonts, line formatting, etc.	☐	☐	☐	☐
o Formatting consistency	☐	☐	☐	☐
• Photos, maps, images	☐	☐	☐	☐
• Overall slide design				
o Attractive	☐	☐	☐	☐
o Use of colors, fonts, etc.	☐	☐	☐	☐
o Amount of information	☐	☐	☐	☐
o Text size	☐	☐	☐	☐
o Slides consistently formatted	☐	☐	☐	☐