Field Notes/Field Book Scoring Rubric

	Needs Improvement (3)	Satisfactory (4)	Exemplary (5)	Score
Knowledge	Information recorded on materials is accurate; information recorded on relevant geologic features is accurate	Information recorded on mineral composition, textural characteristics, and material type is accurate within student's background; information recorded on spatial dimensions, distribution, geometry, and physical relationships is accurate within student's background;	Information recorded on mineral composition, textural characteristics, and material type is consistently accurate; information recorded on spatial dimensions, distribution, geometry, and physical relationships of relevant geologic features is consistently accurate	
Skills	Observations recorded completely within limits of student's background; required measurements are recorded; presentation of data is organized; graphical representations is present;	Observations recorded feature relevant information on materials and relationships; accurate measurements are recorded; presentation of data is clear and well-organized; graphical representations highlight relevant features	Observations recorded completely convey relevant features, materials, and relationships; measurements recorded consistently and accurately; presentation of data is clear, concise, and consistently well-organized; graphical representations are representative, accurately scaled, with relevant features highlighted	
Dispositions	Observations reflect full participation in exercise; basic interpretation of field relations is provided; inclusion of relevant information	Distribution and detail of observations reflects exploration; attempt is made to interpret field relationships; inclusion of most highly relevant information	Distribution and detail of observations reflects optimal planning and execution; interpretation of field relations provides basis for continued inquiry; questions and/or predictions reflect reasonable hypothesis construction; inclusion of all relevant information; evaluate the accuracy and uncertainty of data within the detection limits of the equipment or observational technique	

Rubric Elements for Maps and Cross-Sections

Dimension	Needs Improvement (3)	Satisfactory (4)	Exceptional (5)	Score
1. Geologic Interpretation *(knowledge, skill)*	Geologic interpretations have some support by measurements; inferred elements are <u>not</u> distinguished from those directly observed.	Geologic interpretations are supported by measurements; inferred elements are <u>not</u> distinguished from those directly observed; both small and large scale features are represented.	Geologic interpretations are directly supported by structural or stratigraphic measurements; inferred elements are distinguished from those directly observed; both small and large scale features are represented.	
2. Symbology *(Skill)*	Correct symbols and markings are used for structural features, contacts; these symbols show orientation and position that do not support inferences; density of measurements insufficient to support inferences; measurements do not indicate majority of important features in the base map area, or are outside of base map area.	Correct symbols and markings are used for structural features and contacts; these symbols show proper orientation and position; show appropriate density to support inferences; measurements indicate majority of important features, omitting only a few important features of base map area	Correct symbols and markings are used for structural features, contacts, internal features; these symbols show proper orientation and position; show appropriate density to support inferences; clear and unambiguous representation of measurements and observations; measurements include all important features of base map area	
3. Presentation *(Skill, Affect)*	Generally neat, but frequent erasures and changes made on final map; layout of legend, key, etc., distracts from map or cross-section presentation, or is in an incorrect form.	Clean, neat; layout of legend, key, etc., is clear and supportive of map presentation. The "big picture" is clear from the map and supporting materials.	Clean, neat; meets or approaches professional standards; layout of legend, key, etc., is clear and supportive of map presentation. Attention to detail is evident.	

Rubric Elements for Lithologic Descriptions and Memoirs

Dimension	Needs Improvement (3)	Satisfactory (4)	Exceptional (5)	Score
1. Lithologic Description *(knowledge, skill)*	Description includes general information on rock type, mineralogy, grain size, and texture.	Description includes accurate information on rock type, mineralogy, grain size, and, texture, in largely clear and appropriate language.	Description includes accurate information on rock type, mineralogy, grain size and range, texture, and special characteristics, in clear language with proper syntax and grammar.	
2. Geologic Interpretation *(knowledge, skill)*	Geologic interpretations have some support by measurements; inferred elements are <u>not</u> distinguished from those directly observed.	Geologic interpretations are supported by measurements; inferred elements are <u>not</u> distinguished from those directly observed; both small and large scale features are represented.	Geologic interpretations are directly supported by structural or stratigraphic measurements; inferred elements are distinguished from those directly observed; both small and large scale features are represented.	
3. Supporting materials, such as stereonet plots, data tables, photographs, etc. *(skill, affect)*	Supportive materials are largely superfluous and not directly tied to inferences; measurements (scale, angles, etc.) are accurate; materials are clear/focused and legible	Supporting materials are tied to general inferences; measurements (scale, angles, etc.) are largely accurate; materials are clear/focused.	Supporting materials are directly tied to specific inferences; measurements (scale, angles, etc.) are accurate; materials are clear/focused and legible	
4. Tectonic Synthesis *(knowledge, affect)* *note: for memoir tasks only*	A few preceding components are referred to or presented without synthesis; "big picture" is incomplete, lacking detail on materials or structural features; conclusions are incomplete or unsubstantiated by data.	Most preceding components are synthesized or at least referred to; "big picture" develops overall framework of materials and structural features; conclusions have some support in data.	All preceding components, listed above, are synthesized as primary data; "big picture" of evolutionary history of materials and structural features well developed; all conclusions are well supported by data.	
5. Presentation *(Skill, Affect)*	Generally neat, but frequent erasures and changes made on final map; layout of legend, key, etc., distracts from map or cross-section presentation, or is in an incorrect form.	Clean, neat; layout of legend, key, etc., is clear and supportive of map presentation. The "big picture" is clear from the map and supporting materials.	Clean, neat; meets or approaches professional standards; layout of legend, key, etc., is clear and supportive of map presentation. Attention to detail is evident.	

Rubric Elements for Stratigraphy and Sedimentary Systems

Dimension	Needs Improvement (3)	Satisfactory (4)	Exceptional (5)	Score
1. Geologic Interpretation *(knowledge, skill)*	Geologic interpretations and correlations have some support by measurements; inferred elements are not distinguished from those directly observed.	Geologic interpretations and correlations are supported by measurements; inferred elements are not distinguished from those directly observed; both small and large scale features are represented.	Geologic interpretations and correlations are directly supported by structural or stratigraphic measurements; inferred elements are distinguished from those directly observed; both small and large scale features are represented.	
2. Symbology *(Skill)*	Correct symbols/markings are used for sedimentary/stratigraphic features, contacts; these symbols show position that do not support inferences; measurements do not indicate majority of important features in the section.	Correct symbols and markings are used for sedimentary/stratigraphic features and contacts; these symbols are in a position that support inferences; measurements indicate majority of important features, omitting only a few important features in the section.	Correct symbols and markings are used for sedimentary/stratigraphic features, contacts, internal features; these symbols are in a position that support inferences; clear and unambiguous representation of measurements and observations; measurements include all important features in the section.	
3. Basin Synthesis *(knowledge, affect) note: for memoir tasks only)*	A few preceding components are referred to or presented without synthesis; "big picture" is incomplete, lacking detail on materials or sedimentological features; conclusions are incomplete or unsubstantiated by data.	Most preceding components are synthesized or at least referred to; "big picture" develops overall framework of materials and sedimentological features; conclusions have some support in data.	All preceding components, listed above, are synthesized as primary data; "big picture" of evolutionary history of materials and sedimentological features well developed; all conclusions are well supported by data.	
4. Presentation *(Skill, Affect)*	Generally neat, but frequent erasures and changes made on final section; layout of legend, key, etc., distracts from section presentation, or is in an incorrect form.	Clean, neat; layout of legend, key, etc., is clear and supportive of section presentation. The "big picture" is clear from the section and supporting materials.	Clean, neat; meets or approaches professional standards; layout of legend, key, etc., is clear and supportive of section presentation. Attention to detail is evident.	
5. Oral Presentation *(Skill, Knowledge, Affect)*	Generally knowledgeable about sections, can defend most correlations and describe basic basin history.	Knowledgeable about sections, can defend correlations and describe basin history.	Completely knowledgeable about sections, can confidently defend correlations and proficiently describe basin history.	