# **APPENDIX**

Rubric: Report/Presentation/Video clips on Data Organization/Official Statistics Learning
Module in Descriptive Statistics

Criteria	Needs Improvement/1	Satisfactory/2	Good/3	Excellent/4	Score
Significance	Project is not significant; Demonstrates no evidence that the topic was selected, researched, and designed	Project is some- what significant; Demonstrates lim- ited evidence that the topic was se- lected, researched, and designed	Project is sig- nificant; Dem- onstrates some evidence that the topic was selected, researched, and designed	Project is significant; Demonstrates evidence that the topic was selected, re- searched, and designed well	/4
Content	Demonstrates mini- mal understand- ing of statistical concepts and skills with so many errors	Demonstrates some understand- ing of statistical concepts and skills with mini- mal errors	Demonstrates understanding of statistical concepts and skills with one or two errors	Demonstrates in-depth understanding of statistical concepts and skills with no error	/4
Appropriateness of descriptive statistics	Inaccurate pre- sentation of data using inappropriate tables/graphs/nu- merical measures	Accurate presentation of data using inap- propriate tables/ graphs/numerical measures	Accurate presentation of data using appropriate tables/graphs/ numerical measures with- out proper labels/titles	Accurate presentation of data using appro- priate tables/ graphs/numeri- cal measures with proper labels/titles	/4
Extensiveness of descriptive statistics	Presentation of data uses minimal number of graphs, tables, and numeri- cal measures discussed	Presentation of data uses fewer than 3 kinds of graphs, one-way table, two-way table, and not all numerical mea- sures discussed	Presentation of data uses at least 3 kinds of graphs, one-way table, two-way table, and all numeri- cal measures discussed with incorrect or missing inter- pretations	Presentation of data uses at least 3 kinds of graphs, one-way table, two-way table, and all numeri- cal measures discussed with correct inter- pretations	/4

Criteria	Needs Improvement/1	Satisfactory/2	Good/3	Excellent/4	Score
Organization	Presented concepts/ skills which were poorly organized and lacked support- ing evidence	Presented con- cepts/skills which were minimally organized with minimal supporting ideas	Presented concepts/ skills which were logically organized with some support- ing ideas	Presented concepts/ skills which were logically organized with complete sup- porting ideas	/4
Integration	Demonstrates no integration with other fields or dis- ciplines	Demonstrates limited integration with other fields or discipline	Demonstrates integration with other fields or disci- pline	Demonstrates integration with other fields or dis- cipline and has long-term impact	/4
Use of resources/ visual aids	Demonstrates no use of quality resources and ma- terials	Demonstrates limited use of quality resources and materials	Demonstrates some uses of quality re- sources and materials	Demonstrates appro- priate uses of quality re- sources and materials	/4
Overall presentation and creativity	Overall presenta- tion is neither cre- ative nor artistic with no innovative ideas	Overall presenta- tion shows lim- ited effort in its creativity and ar- tistic value with limited innova- tive ideas	Overall presentation shows some effort in its creativity and artistic value with some innovative ideas	Overall presentation is creative and artistic with innova- tive ideas	/4
TOTAL					/32

### **Rubric: Games of Chance Exhibit**

Criteria	Needs Improvement/1	Satisfactory/2	Good/3	Excellent/4	Score
Accuracy of probabilities calculated	Probabilities are calculated incor- rectly	Probabilities are calculated with some er- rors	Probabilities are calculated correctly but not explained well	Probabilities are calculated and explained cor- rectly with no error	/4
Use of resources/ visual aids	Demonstrates no use of quality resources and ma- terials	Demonstrates limited use of quality resources and materials	Demonstrates some uses of quality re- sources and materials	Demonstrates appropriate uses of quality resources and materials	/4
Overall presentation and creativ- ity	Overall presenta- tion is neither cre- ative nor artistic with no innovative ideas	Overall pre- sentation shows limited effort in its creativity and artistic value with lim- ited innovative ideas	Overall pre- sentation shows some effort in its creativity and artistic value with some in- novative ideas	Overall presentation is creative and artistic with in- novative ideas	/4
Mechanics and organi- zation	Presented no background and unorganized me- chanics of the game	Presented background of the game and mechanics which are not logically orga- nized	Presented background of the game and mechan- ics which are logically orga- nized	Presented back- ground of the game and mechanics which are logi- cally organized and understood by every participant	/4
TOTAL					/16

Criteria	Needs Improvement/1	Satisfactory/2	Good/3	Excellent/4	Score
Organiza- tion	Manuscript and the flow of infor- mation are disor- ganized	Manuscript shows organiza- tion but has sev- eral portions that are not relevant	Manuscript shows orga- nization but lacks coher- ence	Manuscript is well- organized and structured	/4
Statistical accuracy	Statistical explanations or facts presented/ cited are all mis- conceptions	Statistical explanations or facts presented/cited show a signifi- cant number of inaccuracies	Statistical explanations or facts pre- sented/cited show some inaccuracies	Statistical explanations or facts presented are 100% accurate	/4
Presenta- tion of ex- planations	Explanations pre- sented do not in any way address the problem/topic	Explanations presented only partially addressed the problem/topic	Explanations are clear, valid, and convincing but have sev- eral flaws	Explanations are clear, valid, and convincing	/4
TOTAL					/12

## Rubric: Movie /Article/Book Review/Game Critique

#### Needs Good/3 Excellent/4 Criteria Satisfactory/2 Score *Improvement/1* /4 Signifi-Project is not sig-Project is Project is sig-Project is significant; cance nificant; somewhat nificant; Dem-Demonstrates no significant; Demonstrates onstrates some Demonstrates evidence that the evidence that the evidence that topic was selectlimited topic was selectthe topic was ed, researched, evidence that the ed, researched, selected, reand designed topic was and designed searched, and selected, designed well researched, and designed Content Demonstrates Demonstrates Demonstrates /4 Demonstrates minimal undersome understandunderstanding of in-depth understanding standing of staing of statistical statistical contistical concepts and cepts and skills of statistical concepts and skills with with one or two concepts and skills with so minimal errors errors skills with no many errors error Accuracy Incorrect use of Some statistical All statistical All statis-/4 inferential statisanalyses are not analyses are cortical of statistical tical analysis correct rect with missanalyses are ing or lacking accurate with analysis interpretations correct interpretations /4 Extensive-No estima-Only one estima-At least At least ness of tion procedure/ tion procedure/ 2 estimation 2 estimation statistical test is procedures are statistical statistical test is procedures are analysis included in the included in the presented or at presented analysis analysis least 2 statistical and at least 2 statistical tests tests are included in the are analyses included in the analyses Presented Presented con-Presented con-Presented /4 Organization cepts/skills which concepts/ concepts/ cepts/skills skills which were were minimally which were logiskills which poorly organized organized with cally were logically and lacked supminimal organized with organized porting evidence supporting ideas with complete some supporting ideas supporting ideas

### **Rubric: Portfolio for Statistical Analysis**

Criteria	Needs Improvement/l	Satisfactory/2	Good/3	Excellent/4	Score
Integration	Demonstrates no integration with other fields or disciplines	Demonstrates limited integra- tion with other fields or discipline	Demonstrates integration with other fields or discipline	Demonstrates integration with other fields or dis- cipline and has long-term impact	/4
Use of resources/ visual aids	Demonstrates no use of quality resources and educational materials	Demonstrates limited use of quality resources and educational ma- terials	Demonstrates some uses of quality resources and educational ma- terials	Demonstrates appro- priate uses of quality resources and educational materials	/4
Overall presenta- tion and creativity	Overall presentation is neither creative nor artis- tic with no inno- vative ideas	Overall presentation shows limited effort in its creativity and artistic value with limited innovative ideas	Overall presentation shows some effort in its cre- ativity and ar- tistic value with some innovative ideas	Overall presentation is creative and artistic with innovative ideas	/4
TOTAL					/32

### **Rubric: Group Member Assessment**

Criteria	Needs Improvement/1	Satisfactory/2	Good/3	Excellent/4	Score
Contribution	Group member contributions were insignificant or nonexistent	Group member contributed little toward the project	Group member contributed sig- nificantly, but other members clearly contributed more	Group member completed an equal share of work and strived to maintain that equity throughout the project	/4
Depend- ability	Group member was undepend- able, forcing other members to take up the slack	Group member contributions were regularly late and often missed sched- uled group work	Group member contributions were mostly punctual and al- most always ap- peared for group work	Group member provided con- tributions with 100% punctual- ity and always appeared for group work	/4
Efficiency	Work performed was completely inef- fective and use- less in the final prod- uct	Work performed was inappropriate and mostly use- less toward the final product	Participation was inefficient and thus contribu- tions were less than expected	Work performed was very useful and contributed sig- nificantly to the final product	/4
Attitude	Group member often complained and generally demor- alized the group	Group member sometimes com- plained and was somewhat of a burden	Group member didn't complain but offered little enthusiasm	Group member was very positive and pleasant to work with	/4
Quality of work	Group member's work product was routinely of poor quality and lacked a sense of pride	Group member's work product was fre- quently unpolished and/ or incomplete	Group member's work product was sometimes unpolished and/or incomplete	Group member's work product was of extremely high quality	/4

Cooperation	You would never work with this person again under any circumstances	You would prefer to never work in a group setting with this person again	You would work with this person again but would choose someone else if given the opportunity	This person was an excellent partner, and you would eagerly work with him/ her again	/4
TOTAL					

