

“THE GAME OF PIG” PORTFOLIO

COVER LETTER FOR “THE GAME OF PIG”

1. Cover Letter Introduction (16 pts)

a. Identify and describe the unit’s central problem

- 0 – No central ideas or inappropriate central problem identified or described
- 1 – Limited, vague, or only somewhat appropriate central problem identified with no description provided
- 2 – Limited, vague central problem identified with minimal description
- 3- Satisfactory central ideas identified with adequate description and minimal reference to specific unit example
- 4 – Excellent statement of central ideas with extensive reference to specific unit examples

b. Identify and describe mathematical ideas addressed in the unit

- 0 – No mathematical concepts identified or described
- 1 – Limited, vague description of 2-3 mathematical concepts or 1 satisfactory description of a concept
- 2 – Limited, vague description of 4-5 mathematical concepts or only 2 satisfactory descriptions of concepts
- 3 – Satisfactory description of 3-4 mathematical concepts with minimal reference to specific unit examples
- 4 – Excellent description of 5-6 mathematical concepts with extensive reference to specific unit examples

c. Describe how the key ideas were developed

- 0 – No key ideas identified or described
- 1 – Limited, vague description of 2-3 key ideas or 1 satisfactory description of a key idea
- 2 – Limited, vague description of 4-5 key ideas or a satisfactory descriptions of 2 key ideas
- 3 – Satisfactory description of 3-4 key ideas with minimal reference to specific unit examples
- 4 – Excellent description of 5-6 key ideas with extensive reference to specific unit examples

d. Describe how the key ideas were used to solve the central problem

- 0 – No description provided
- 1 – Limited, vague description of how the key ideas were used to solve the central problem with no reference to specific examples
- 2 – Limited, vague description of how the key ideas were used to solve the central problem, with minimal reference to specific examples
- 3 – Satisfactory description of the how the key ideas were used to solve the central problem with several references to specific examples
- 4 – Complete and thorough description of the key ideas were used to solve the central problem with extensive reference to specific examples

2. Explanation for Selected Papers (24 pts)

a. Describe how your selected paper used a “simulation or experiment” to determine probability values (HW 28)

- 0 – No paper(s) selected
- 1- Limited, incomplete, or vague description of how selected paper(s) used a simulation or experiment to determine probability with no specific references to paper(s) selected
- 2- A fair description of how selected papers used a simulation or experiment to determine probability, but description lacks depth and there is little reference to selected paper(s)
- 3- A good description of how selected paper(s) used a simulation or experiment to determine probability, with some specific references made to selected paper(s)
- 4- A complete and thorough description of how selected used a simulation or experiment to determine probability, and there are extensive references to material in the selected papers

b. Describe how your selected paper used “theoretical analysis” to determine probability values (HW 28)

- 0 – No paper(s) selected
- 1 - Limited, incomplete, or vague description of how selected paper(s) used theoretical analysis to determine probability with no specific references to paper(s) selected
- 2 - A fair description of how selected papers used theoretical analysis to determine probability, but description lacks depth and there is little reference to selected paper(s)
- 3 - A good description of how selected paper(s) used theoretical analysis to determine probability, with some specific references made to selected paper(s)
- 4 - A complete and thorough description of how selected papers used theoretical analysis to determine probability, and there are extensive references to material in the selected papers

c. Describe how you used ideas about probability and strategy in POW 7: “Make a Game”

- 0 – No description provided
- 1 – A limited, incomplete, or vague description of how your game used ideas about probability and strategy, with no specific examples cited
- 2 – A fair description of some very basic ideas of probability and strategy, because game does not involve any “complex or multiple” strategies, and a limited number of game examples given
- 3- A good description of a several ideas concerning probability and strategy of your game with a few specific game examples given

4 – A detailed description of extensive ideas concerning probability and strategy that refers to many specific game examples

d. Describe how the key activities were important in developing the key idea of the unit

0 – No description provided

1 – A limited, incomplete or vague description of how the key activities of the unit were important in developing the key idea of the unit, with no reference to specific examples

2- A limited description of how the key activities of the unit were important in developing the key idea of the unit, with a few general supporting examples

3- A satisfactory description of how the key activities of the unit were important in developing the key idea of the unit, with several supporting examples

4- A detailed description of how the key activities of the unit were important in developing the key idea of the unit, with many well-selected examples

e. Describe why you selected a second POW to include in your portfolio

0 – No POW selected

1 – A limited, incomplete, or vague description of why you selected the POW you included in the portfolio with no specific references to any information in the POW

2 – A fair description of why you selected the POW, but lacks depth and there is little reference to specific information in the POW

3- A good description of why you selected the POW with some reference and explanation of specific information in the POW

4- A complete and thorough description of why you selected the POW, with extensive reference to information that is explained in detail

f. Describe other quality work that represents your “best efforts”

0 – No additional paper(s) selected

1 – A limited, incomplete, or vague description of how the additional work demonstrates your best effort

2 – A fair description of how your additional work demonstrates your best efforts, but lacks depth and there is little reference to specific information in the additional work

3 – A good description of how additional work demonstrates your best effort with some references to examples in the work that support your definition of “best work”

4 – A complete and thorough description of how additional work demonstrates your best effort with extensive references to examples that support your definition of “best work”

1. Homework #27: The Pig and I

- 0 – is not in portfolio
- 1 – in portfolio, but is incomplete or does not show evidence of a considerable amount of time and effort went into the finished product
- 2 – in portfolio, is complete with minimal evidence of time and effort
- 3- in portfolio, is complete with satisfactory evidence of time and effort
- 4 – in portfolio, is complete with extensive evidence of time and effort

2. Homework#28: Beginning Portfolio Selection

- 0 – is not in portfolio
- 1 – in portfolio, but is incomplete or does not show evidence of a considerable amount of time and effort went into the finished product
- 2 – in portfolio, is complete with minimal evidence of time and effort
- 3- in portfolio, is complete with satisfactory evidence of time and effort
- 4 – in portfolio, is complete with extensive evidence of time and effort

3. Selected paper on determining probability values from “simulations or experiments”

- 0 – is not in portfolio
- 1 – paper(s) in portfolio, but are incomplete or do not show evidence of a considerable amount of time and effort
- 2 –paper(s) in portfolio, are complete with minimal evidence of time and effort
- 3- paper(s) in portfolio, are complete with satisfactory evidence of time and effort
- 4– paper(s)in portfolio, are complete with extensive evidence of time and effort

4. Selected paper on determining probability values from “theoretical analysis”

- 0 – is not in portfolio
- 1 –paper(s) in portfolio, but are incomplete or do not show evidence of a considerable amount of time and effort
- 2- paper(s) are in portfolio, are complete with minimal evidence of time and effort
- 3- paper(s) are in portfolio, are complete with satisfactory evidence of time and effort
- 4 - paper(s) are in portfolio, are complete with extensive evidence of time and effort

5. POW 7: Make a Game

- 0 – is not in portfolio
- 1 – Game is in portfolio, but is incomplete or had a low overall self-assessment and does not show evidence of a considerable amount of time or effort
- 2 – Game is in portfolio, is complete with minimal evidence of time and effort and a low overall self-assessment score
- 3- Game is in portfolio, is complete with satisfactory evidence of time and effort, however not all scoring areas rated high
- 4 – Game is in portfolio is complete with extensive effort of time and effort and a high overall self-assessment

6. Selected papers for “Other Key Activities”

- 0 – No selected papers for other key activities
- 1 – A limited, incomplete or vague description of why you selected additional papers to identify other key activities with no references to the papers

- 2 – A limited description of why you selected additional papers to identify other key activities, with a few general examples used for support
- 3 – satisfactory description of why you selected additional papers to identify other key activities, with several examples cited for support
- 4 – A detailed description of why you selected additional papers to identify other key activities, with extensive, highly-specific examples cited for support

7. A selected POW

- 0 – No POW selected
- 1 – A limited, incomplete, or vague description of why you selected the POW you included in the portfolio with no specific references to any information in the POW
- 2 – A fair description of why you selected the POW, but lacks depth and there is little reference to specific information in the POW
- 3 – A good description of why you selected the POW with some reference and explanation of specific information in the POW
- 4 – A complete and thorough description of why you selected the POW, with extensive reference to information that is explained in detail

8. Selected paper(s) of “Other Quality Work”

- 0 – is not in portfolio
- 1 – is in portfolio, but is of poor quality and does not support the concept of “best efforts” or have any reason for its addition to the portfolio
- 2 – is in portfolio, but is of limited quality with no definite reason for its addition to the portfolio
- 3 – is in portfolio and is of satisfactory quality with possible reasons for its addition to the portfolio
- 4 – is in portfolio and is of excellent quality with definite reasons for its addition to the portfolio

PERSONAL GROWTH DISCUSSION FOR PATTERNS (32 pts)

1. Describe how do you feel you progressed in working with others

- 0 – No description
- 1 – A limited and/or vague description with no supporting examples
- 2 – A limited description with few supporting examples
- 3 – A satisfactory description with several supporting examples, however examples tend to rather general
- 4 – A detailed description with many specific supporting examples

2. Describe how do you feel you progressed in presenting to the class

- 0 – No description
- 1 – A limited and/or vague description with no supporting examples
- 2 – A limited description with few supporting examples
- 3 – A satisfactory description with several supporting examples, however examples tend to rather general

4 – A detailed description with many specific supporting examples

3. Describe how do you feel you progressed in orally describing your thought process

0 – No description

1 – A limited and/or vague description with no supporting examples

2 – A limited description with few supporting examples

3 – A satisfactory description with several supporting examples, however examples tend to rather general

4 – A detailed description with many specific supporting examples

4. Describe how do you feel you progressed in writing about your thought process

0 – No description

1 – A limited and/or vague description with no supporting examples

2 – A limited description with few supporting examples

3 – A satisfactory description with several supporting examples, however examples tend to rather general

4 – A detailed description with many specific supporting examples

5. Explain what you need to work on, and why

0 – No description

1 – A limited and/or vague description with no supporting examples

2 – A limited description with few supporting examples

3 – A satisfactory description with several supporting examples, however examples tend to rather general

4 – A detailed description with many specific supporting examples

6. Describe how will you work on the topics you feel you need to work on

0 – No description

1 – A limited and/or vague description with no supporting examples

2 – A limited description with few supporting examples

3 – A satisfactory description with several supporting examples, however examples tend to rather general

4 – A detailed description with many specific supporting examples

7. Describe how you think the ideas in this unit might affect your own behavior in situations that involve probability.

0 – No description

1 – A limited and/or vague description with no supporting examples

2 – A limited description with few supporting examples

3 – A satisfactory description with several supporting examples, however examples tend to rather general

4 – A detailed description with many specific supporting examples

8. Describe any other thoughts about your experience you want to share

0 – No description

1 – A limited and/or vague description with no supporting examples

2 – A limited description with few supporting examples

- 3 – A satisfactory description with several supporting examples, however examples tend to rather general
- 4 – A detailed description with many specific supporting examples

SELF-ASSESSMENT OF PORTFOLIO (4 pts)

- a. **Grade and Justify your work using a self-assessment scoring rubric**
 - 0 – Work not graded with rubric
 - 1 – Score values provide with no justification
 - 2 - Score values provide with minimal rational and many/most values not acceptable based on scoring guide criteria
 - 3 - Scores values provided with fair/good rationales, but some values not acceptable based on scoring guide criteria
 - 4 - Score values provided with strong rationales, all values acceptable based on scoring guide criteria