

## REC 4031 Leisure Systems Design and Evaluation Final Exam

This is a “take-home” final exam. The exam is due to me by email attachment no later than 5:00 pm, December 13. No exceptions. Please email me your responses as a Word document ([browng@greenmtn.edu](mailto:browng@greenmtn.edu)).

The final exam consists of two parts—a design component and a data analysis component.

**Part 1. Design.** Read the attached case study for designing a trail system. Design a trail system and support your final trail design in writing. I will put an electronic version of the case study map on our course website (<http://campus.greenmtn.edu/faculty/gregbrown/REC4031/rec4031.htm>) so you can download and draw/annotate directly on the electronic map and attach to your Word file.

**Part 2. Data Analysis.** Download the SPSS data file of the Middletown Springs survey data from the class website. Use both descriptive and inferential statistical analysis to answer the questions below. Provide the SPSS output in addition to explaining in words your answer.

1. What do survey respondents view as the top five priorities for the new town plan (Q7)?
2. What do survey respondents view as the top five future development options for Middletown Springs (Q18)?
3. Some people might think secondary home owners (Q-2) have different opinions about zoning (Q-17) in Middletown Springs. Use a statistical test to determine whether the opinions of primary homeowners are statistically different from second homeowners.
4. Does having children (Q-24) influence one’s opinions about whether there should be changes to the town school (Q-14)? Examine the opinions between respondents who have children and those that do not. What is the largest response category for each group? Indicate whether any differences in opinion are statistically significant in your findings.
5. Is there a significant relationship respondents’ level of concern for the loss of scenic beauty and open space (Q5\_3) and their priority for regulating building on scenic ridgelines (Q7\_25)? Explain the strength and direction of the relationship between the two variables.
6. Divide the respondents into 2 groups—those that claim to be “very familiar” with the Town Plan (Q-25) and all others. Does being very familiar (or not) with the plan result in different responses to questions about town facilities priorities? (Q7\_10 through Q7\_14)? Indicate where the group mean responses differ—i.e., where the two groups have statistically different responses.
7. How does length of residence affect perceived priorities for the new town plan? The length of residence question (Q1) has been recoded into 3 groups (0-3 years, 4 to 9 years, and 10 or more years). The new recoded variable is called RQ1. Perform statistical analysis that compares the responses of the 3 groups on the priorities for the new town plan (Q7\_1 through Q7\_29). Indicate and explain which items have statistically significant differences in responses between groups. Write a paragraph that attempts to explain the pattern of differences between the groups across all items.