

Probability and Statistics

Knowledge Content

- Descriptive statistics
- Presenting data
- Grouped and continuous data
- Measures of central tendency
- Two-variable statistics
- Correlation
- Permutations
- Combinations
- Probability of an event
- Probability of compound events
- Tree diagrams
- The normal distribution.

Skills Content

Upon completion of this course, students will be able to:

- Group and analyse a set of data
- Presentation of data (including the use of I.T. tools)
- Create frequency tables
- Find mean, median, mode and quartiles (including the use of I.T. tools)
- Compare two sets of data
- Determine whether positive, negative or no correlation exists (including the use of I.T. tools)
- Calculate the number of permutations (with and without repetitions)
- Calculate the number of combinations
- Find the probability of simple events
- Find the probability of one or more events occurring
- Create tree diagrams and find probabilities from them
- Calculate z-scores
- Use the normal distribution to calculate probabilities.

Assessment

- Tests
- Quizzes
- Homework
- Classwork
- Investigations and experiments.

Examinations

Internal end of semester exams.

Resources

- Dobbs, Steve and Miller, Jane, Statistics 1. Cambridge University Press, U.K., 2006
- A graphic display calculator, such as the TI-84, is needed.

Prerequisites

Integrated Math 1 and Integrated Math 2.

Credits

One Half Credit.