

## Psyc 402 - Midterm 1 Study Guide

- Online, 50 questions total, multiple choice, 50 minute time limit
- Topics:
  - K01 - History / Background (10 questions)
  - K02 - Descriptives (20 questions)
  - K03 - Linear Regression & Correlation (15 questions)
  - G01 & G02 - Mismeasure of Man (about 5 questions)

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## Exam Format

- See the class website for:
  - Schedule / Deadline
- Format: The exam is similar to the weekly quizzes, but has important differences...
  - time limit
  - no hints or feedback
  - random question selection
  - only go back 2 questions

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## Background / History (Ch 1)

- Psychological tests: Definitions and pros/cons
- Test domains
- History (Ancient, 18th-20th centuries)
- *Mismeasure of Man*: associated readings

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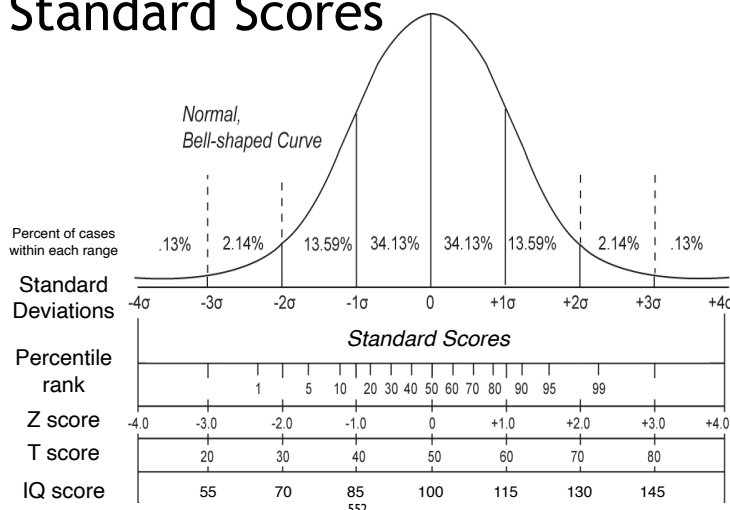
## Descriptive Statistics (Ch. 2)

- quantitative & qualitative measures
- histogram / frequency distribution
- central tendency (mean...)
- variation (SSR, variance, standard deviation)
- the Normal Curve
- Standard Scores (Rank, Percentile Rank, Z, IQ, T)
- LLN and CLT
- Fallacies
- *Mismeasure of Man*: associated readings

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## Standard Scores



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## Standard Scores: Z, T, IQ

|                                 | Z scores | T scores             | IQ scores             |
|---------------------------------|----------|----------------------|-----------------------|
| Mean                            | 0        | 50                   | 100                   |
| SD                              | 1        | 10                   | 15                    |
| Example: top 3%                 | 1.9      |                      |                       |
| Example: top 1%                 | 2.4      |                      |                       |
| Formula to convert from Z Score | Z        | $(Z \times 10) + 50$ | $(Z \times 15) + 100$ |

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## Linear regression & Correlation (Ch.3)

- Anecdotal relationships
- Simple Analyses: 2x2 / Chi Square
- Scatterplots
- Linear Regression
  - equation, residuals, SSR,  $R^2$
  - issues/problems
- Correlation
  - R,  $R^2$ , P-value
- DNA / Race review