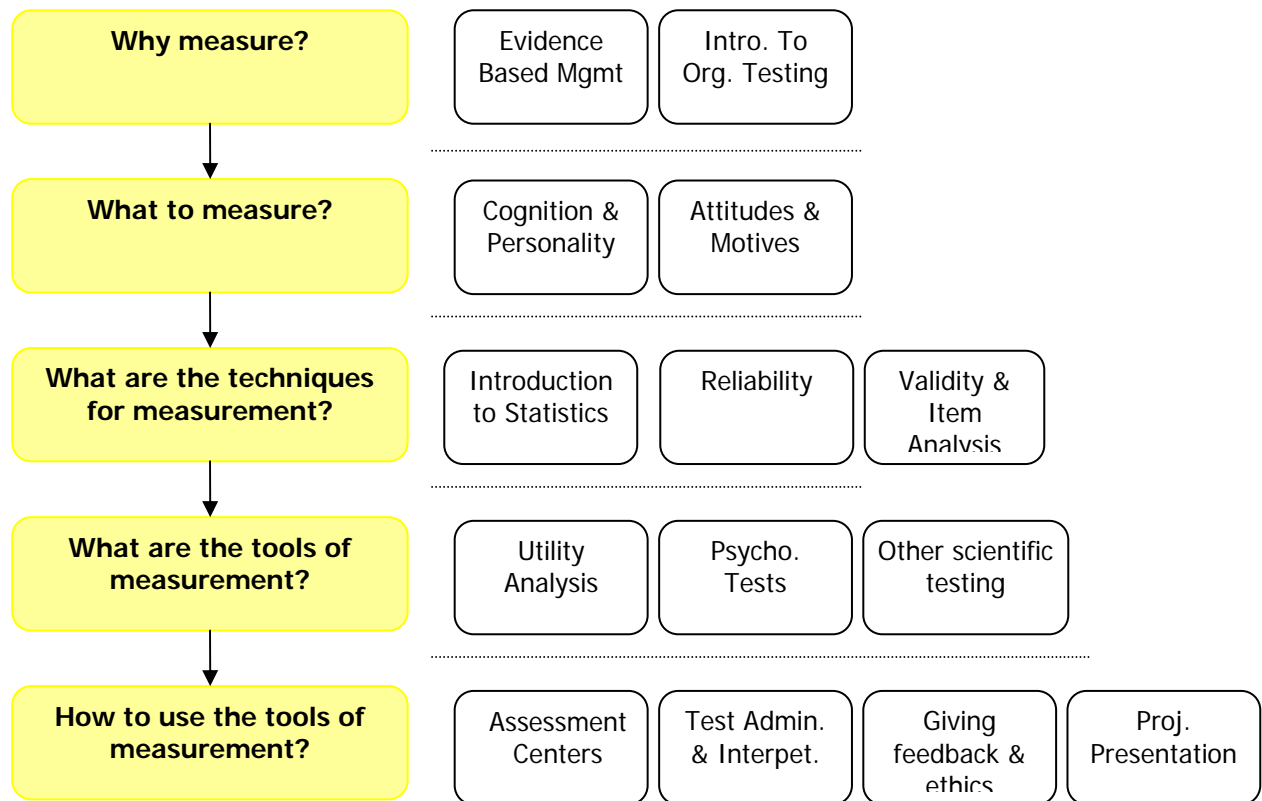


Psychological Testing

| Reference Texts |
|---|
| 1. <i>Testing People at Work: Competencies in Psychometric Testing</i> by Mike Smith and Pam Smith [2005]. BPS Blackwell. |
| 2. <i>Psychological Testing [Fifth Edition, 2001]</i> by Robert M. Kaplan & Dennis P. Saccuzzo, Thomson. |
| 3. <i>Psychological Testing [Seventh Edition, 2005]</i> by Anne Anastasi & Susana Urbina, Prentice Hall India. |

| Faculty Name | Contact numbers | E-mail ID |
|----------------|-----------------|-----------------------|
| Zubin R. Mulla | 98201 31024 | zubin.mulla@gmail.com |

The course will cover 13 sessions arranged in five modules as shown below. The first module addresses the importance of using empirical evidence in making managerial decisions and the role of organizational testing in providing that empirical evidence. The second module provides an overview of the characteristics of human beings that are mostly tested in organizations viz. intelligence, personality, attitudes, and motives. The third module deals with the computational mechanics of psychometric testing which help to build a reliable and valid measurement tool. The fourth module introduces different types of tests used in occupational testing, their selection, and their limitations. The last module deals with usage of psychometric tools.



| No. | Lecture coverage | Readings, Assignments, & Class Exercises |
|-----|---|---|
| L1 | Evidence-based management | <ul style="list-style-type: none"> ➤ Pfeffer, J., & Sutton, (2006). Evidence-based management. <i>Harvard Business Review</i>, Jan, 62-74. ➤ Kerlinger, F. N. (1973). Chap 1: Science & the scientific approach. In <i>Foundations of Behavioral Research</i>, pp. 2-16. Holt, Rinehart & Winston. ➤ Exercise: Is your intuition in line with HR Research? |
| L2 | Introduction to Org. Testing | <ul style="list-style-type: none"> ➤ Anastasi, A., & Urbina, S. (1997). Chap 1: Nature & use of psychological tests, pp. 16-45. In <i>Psychological testing (Seventh Edition)</i>. Pearson Education. ➤ Boyatzis, R. E., Stubbs, E. C., & Taylor, S. N. (2002). Learning cognitive and emotional intelligence competencies through graduate management education. <i>Academy of Management Learning and Education</i>, 1(2): 150-162. ➤ Exercise: Factor analysis ➤ Group Assignment: Understanding scale development <ul style="list-style-type: none"> ○ Singh, N., & Krishnan, V. R. (2005). Transformational leadership in India: Developing and validating a new scale using grounded theory approach. <i>International Journal of Cross-Cultural Management</i>. 5-17. ○ Kinjerski, V., & Skrypnek, B. J. (2006). Measuring the intangible: <i>Development of the Spirit at Work scale</i>. Academy of Management Proceedings. ○ Khuntia, R., & Suar, D. (2004). A scale to assess ethical leadership of Indian private and public sector managers. <i>Journal of Business Ethics</i>, 49(1): 13-26. ○ Barbuto Jr., J. E., & Wheeler, D. W. (2006). Scale development and construct clarification of servant leadership. <i>Group and Organization Management</i>, 31(3): 300-326. |
| L3 | The nature of personal attributes 1 (Cognition & Personality) | <ul style="list-style-type: none"> ➤ Behling, O. (1998). Employee selection: Will intelligence & conscientiousness do the job? <i>Academy of Management Executive</i>, 12(1): 77-86. ➤ Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. <i>Personnel Psychology</i>, 44(1): 1-26. ➤ Smith, F. L., & Hunter, J. (2004). General mental ability in the world of work: Occupational attainment & job performance. <i>Journal of Personality & Social Psychology</i> ➤ Exercise: <ul style="list-style-type: none"> ○ 5 Factor Personality Questionnaire (scoring & face validity) |

| | | |
|----|--|---|
| L4 | The nature of personal attributes 2 (Values, Motives, & Interests) | <ul style="list-style-type: none"> ➤ Smith & Smith (2005). Chap 5: An introduction to motives, needs, & values. ➤ Krishnan, V. R. (2001). Value systems of transformational leaders. <i>Leadership and Organization Development Journal</i>, 22(3): 126-132. ➤ Note on Leadership Motives & their Measurement [Source: House, R. J., Spangler, W. D., Woycke, J. (1991). Personality and charisma in the U.S. presidency: A psychological theory of leader effectiveness. <i>Administrative Science Quarterly</i>, 36(3): 364-396.] ➤ Lilienfeld, S. O., Wood, J. M., & Garb, H. N. (2001). What's wrong with this picture? <i>Scientific American</i>, 284(5). ➤ Igbaria, M., & Baroudi, J. J. (1993). A short-form measure of career orientations: A psychometric evaluation. <i>Journal of Management Information Systems</i>, 10(2): 131-154. ➤ Exercises: <ul style="list-style-type: none"> ○ Rokeach Value Survey ○ Meglino & Ravlin's Comparative Emphasis Scale ○ Schein's Career Orientations Inventory |
| L5 | Introduction to Statistics [Scale Development Due] | <ul style="list-style-type: none"> ➤ Introduction to Statistics: Measures of central tendency, Measures of dispersion, Sample, Population, Sampling Distribution, Central Limit Theorem, Confidence limits/intervals. |
| L6 | Principles of psychometrics 1 (Reliability) | <ul style="list-style-type: none"> ➤ Anastasi, A., & Urbina, S. (1997). Chap 4: Reliability, pp. 84-112. In <i>Psychological testing (Seventh Edition)</i>. Pearson Education. ➤ Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. <i>Psychological Assessment</i>, 7(3): 309-319. ➤ Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. <i>Journal of Management</i>, 21(5): 967-988. ➤ Exercise: <ul style="list-style-type: none"> ○ Reliability of Big 5 Scales ○ Reliability of Quiz 1 |
| L7 | Principles of psychometrics 2 (Validity & Item Analysis) | <ul style="list-style-type: none"> ➤ Kaplan, R. M., & Saccuzzo, D. P. (2001). Chapter 5: Validity, pp.130-152, in <i>Psychological Testing [Fifth Edition]</i> ➤ Kaplan & Saccuzzo (2001). Chap 6: Writing & evaluating test items ➤ Exercise: <ul style="list-style-type: none"> ○ Item Analysis of Big 5 ○ Item Analysis of Quiz 1 ○ Validity of Big 5 Scales |

| | | |
|-----|---|--|
| L8 | Utility Analysis [Data collection Due] | <ul style="list-style-type: none"> ➤ Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. <i>Psychological Bulletin</i>, 52, 281-302. ➤ Smith & Smith (2005). Chap 13: Calculating the sterling value of selection (utility analysis). ➤ Smith, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. <i>Psychological Bulletin</i>, 124(2): 262-274. ➤ Carlson, K. D., Connerley, M. L., & Mecham III, R. L. (2002). Recruitment evaluation: The case for assessing the quality of applicants attracted. <i>Personnel Psychology</i>, 55, 461-492. |
| L9 | Ethics, Norms & Profiles, Report writing | <ul style="list-style-type: none"> ➤ Smith & Smith (2005). Chap 22: Norms & Profiles ➤ Smith & Smith (2005). Chap 25: Written reports ➤ Smith & Smith (2005). Chap 27: Ethics & data protection ➤ American Psychological Association (2002). <i>Ethical principles of psychologists & code of conduct</i>. ➤ Bem, D. J. (2003). <i>Writing the empirical journal article</i>. (http://dbem.ws/) |
| L10 | Projective Tests | ➤ Introduction to Rorschach & TAT (Guest session) |
| L11 | Applications of Psychometric Tests in organizations [Analysis Due] | ➤ (Guest session) |
| L12 | Assessment Tools | <ul style="list-style-type: none"> ➤ McClelland, D. C. (1973). Testing for competence rather than intelligence. <i>American Psychologist</i>, 28(1): 1-14. ➤ Gottfredson, L. S. (2002). Where and why g matters: Not a mystery. <i>Human Performance</i>, 15(1/2), 25-46. ➤ Smith & Smith (2005). Chap 14: Choice of selection methods ➤ Smith & Smith (2005). Chap 15: Psychometric Tests 1 ➤ Smith & Smith (2005). Chap 18: Other scientific methods of selection ➤ Smith & Smith (2005). Chap 20: Assessment Centers |
| L13 | Limitations of the empirical approach [Final Report Due] | <ul style="list-style-type: none"> ➤ Pfeffer, J., & Fong, C. T. (2002). The end of business schools? Less success than meets the eye. <i>Academy of Management Learning and Education</i>, 1, 78-95. ➤ Bennis, W. G., & O'Toole, J. (2005). How business schools lost their way. <i>Harvard Business Review</i>, 83(5): 96-104. ➤ Presentation of group projects ➤ Feedback & course review |

Evaluation Schedule:

| No. | Method | Description | Credits |
|------------|------------------------------------|--|----------------|
| 1. | End term examination | (i) Objective questions; (iii) Short answers; (ii) Descriptive questions; (iv) Calculations; (v) Case study; (vi) Questions based on learning from class discussions & Group Project (please carry a scientific calculator with you for the end term examination). | 60 marks |
| 2. | Class Preparedness & Participation | Preparedness for the class will be tested individually either through individual oral questions (scored team-wise) or through homework assignments for which students will be called upon to make presentations in class. Quizzes will be tested & scored individually. | 25 marks |
| 3. | Group Project / Assignment | Students must form groups of 3 persons each. Each group will submit a group project having 15 marks weightage [7.5 marks for scale construction & theory building; 7.5 marks for data collection & analysis]. Scale construction will be due before Session 5; data collection will be due before Session 8; analysis will be due before Session 10; and final submission will be due before Session 13. Failing to adhere to the deadlines will result in loss of marks at the rate of 2 marks per day. All submissions must be made in soft copy format by email. Evaluation of the components of the group project will be done through class presentations. | 15 marks |

Absenteeism

Students who are unable to attend any session due to personal or professional constraints must get in touch with me by email prior to the start of the session. Failure to do so will result in loss of marks for oral questions/quizzes/presentations conducted during that session.

If a student has missed a class, he/she must submit a make up assignment consisting of a 750 word summary on each of the readings to me by email, prior to the start of the next class. Failure to submit the make up assignment on time will disqualify the student from attending the next class. *Please note that taking prior permission from the faculty or being absent due to medical reasons, institute's work, or other reasons does not exempt a student from submitting the make up assignment.*

Useful websites

- SHL www.shl.com
- Personnel Decisions International www.personneldecisions.com
- MeritTrac www.merittrac.com
- American Evaluation Association www.eval.org
- American Psychological Association www.apa.org
- Principles for the Validation and Use of Personnel Selection Procedures (SIOP)
http://www.siop.org/_Principles/principles.pdf
-

Group Project

The group project will involve test construction, data collection, and analysis (reliability, validity, items) of any one competency. Students will select any one competency from the list of competencies indicated below.

| <i>Self-management competencies</i> | <i>Relationship-management competencies</i> | <i>Cognitive competencies</i> |
|--|--|---|
| 1) Efficiency orientation 2) Planning 3) Initiative 4) Attention-to-detail 5) Self-control 6) Flexibility 7) Self-confidence | 1) Empathy 2) Social objectivity 3) Persuasiveness 4) Networking 5) Negotiating 6) Group management 7) Developing others | 1) Systems-thinking 2) Pattern recognition |

Source: Boyatzis, R. E., Stubbs, E. C., & Taylor, S. N. (2002). Learning cognitive and emotional intelligence competencies through graduate management education. *Academy of Management Learning and Education*, 1(2): 150-162.

Step 1: Test construction [Due before Session 5]

This step involves...

1. Understanding the construct in terms of its meaning, its theoretical background, its antecedents, its likely outcomes, and its likely relationship with other existing variables of interest.
2. Developing items to make up a scale to measure the construct or its dimensions
3. Face validation of scale through expert panel
4. Pilot data collection to ensure that items are understood by respondents (5-10 respondents from the target sample).
5. Instructions for test administration and training the class on the use of the test

Step 2: Data collection [Due before Session 8]

1. The individual tests of all the groups will be combined to form a single complete aptitude test for the respondents and relevant demographics will be added. Any three groups which will volunteer for this activity will get extra credit of two marks each towards the group project.
2. The respondents for the data will be the entire class of PGP 2007-2009 (i.e. the juniors).
3. Groups may divide the entire PGP 2007-2009 class such that all the students are administered the consolidated test

Step 3: Analysis [Due before Session 10]

1. Testing the reliability, and validity of the scale
2. Deriving ICC for each item
3. Scale refinement

Step 4: Final submission [Due before Session 13]

1. Refining any items as per feedback from analysis stage
2. Writing the test manual including norms, and test administration guidelines
3. Presentation to the class

Date: 29th June, 2007

Signature: