

<b>Course Code</b>	HP4081
<b>Course Title</b>	Laboratory in Industrial and Organizational Psychology
<b>Pre-requisites</b>	HP1000 Introduction to Psychology HP1100 Fundamentals of Social Science Research and one of the following: HP2400 Social Psychology HP2500 Personality and Individual Differences
<b>No of AUs</b>	4

### Course Aims

Industrial and organizational psychology is the scientific study of human behavior in the workplace and applies psychological principles to workplace issues facing individuals, teams, and organizations. The objective of this lab course is to equip you with knowledge and skills in methodology and critical thinking that are needed to conduct independent research in industrial and organizational psychology. The course will cover research methodology commonly used in industrial and organizational psychology. You will gain hands-on experience in developing research questions and testable hypotheses, collecting and analyzing data, writing up a research paper, and presenting the finding. Those who are interested in the field of industrial and organizational psychology or those who are considering career in the field of industrial and organizational psychology may benefit from this course.

### Intended Learning Outcomes (ILO)

By the end of this course, you should be able to:

1. evaluate various research methodologies commonly used in industrial and organizational psychology in terms of their strengths and weaknesses
2. critique the results of published scientific papers on industrial and organizational psychology
3. conduct an empirical research study to address research question
4. communicate competently to an academic or professional audience via both written and oral presentations

### Course Content

The course will cover the following topics:

1. Research process and ethics
2. Research in the organizational setting
3. Qualitative research
4. (Quasi-) Experiment
5. Survey methodology
6. Field observation
7. Archival data

### Assessment (includes both continuous and summative assessment)

Component	ILO Tested	Related Programme LO or Graduate Attributes	Weighting	Team/Individual
1. Assignments	1, 2, 3	Creativity & Competence.	40%	Individual

2. Team Project	1, 2, 3, 4	Communication, Creativity & Competence	30%	Team
3. Individual Project	1, 2, 3, 4	Communication, Creativity & Competence	30%	Individual
Total			100%	

### Formative feedback

Feedback is central to this course. You will receive extensive feedback on your written submissions (assignments, proposal, etc.). Especially for the team project, each team will receive feedback in terms of style and content using the “Track Changes” feature of Word and revise the manuscript and submit the final draft. You will also receive summative feedback on your oral presentation.

### Learning and Teaching approach

Approach	How does this approach support you in achieving the learning outcomes?
Mini-lectures	Mini-lectures will be given at the beginning of each class. This is to summarize and highlight important points regarding various research methodologies in the most efficient manner. (ILO1)
Interactive and hands-on class activities	Various hands-on activities that resemble actual tasks in the empirical research process (e.g., synthesizing the literature, critiquing an empirical study, proposing a hypothesis, selecting a measurement, creating an online survey, conducting statistical analyses, etc.) will help you to practice and master necessary research skills (ILO2, 3, 4).

### Reading and References

Readings will be assigned from variety of sources, including selected sections from textbooks and peer-reviewed journal articles. The reading list will be adapted each time the course is taught to update it to the latest developments in the field. Some examples of the seminal books/chapters/articles that may be assigned are:

- Cook, M., & Cripps, B. (2005). *Psychological assessment in the workplace*. Hoboken, NJ: Wiley.
- Fields, D. L. (2002). *Taking the measure of work: A guide to validated scales for organizational research and diagnosis*. Thousand Oaks, CA: Sage.
- Gopen, G. D., & Swan, J. A. (1990). The science of scientific writing. *American Scientist*, 78, 550-558.
- Hodgkinson, G. P., & Ford, J. K. (2007, eds.). *International review of industrial and organizational psychology*. Wiley.
- Hoyle, R. H., Harris, M. J., & Judd, C. M. (2002). *Research methods in social relations* (7th ed.), Fort Worth, TX: Wadsworth.
- Mehl, M. R., & Conner, T. S. (2012, eds.). *Handbook of research methods for studying daily life*. New York, NY: The Guilford press.
- Rogelberg, S. G. (2004). *Handbook of research methods in industrial and organizational psychology*. Malden, MA: Blackwell Publishing Ltd.

Semmer, N. K., Grebner, S., & Elfering, A. (2004). Beyond self-report: Using observational, physiological, and situation-based measures in research on occupational stress. *Research in occupational stress and well-being (Vol. 3)*, 205-263.

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin.

Weekley, J. A., & Ployhart, R. E. (2006, eds.). *Situational judgment tests: Theory, measurement, and application*. Mahwah, NJ: LEA.

### Course Policies and Student Responsibilities

#### (1) General

You are expected to complete all assigned pre-class readings and activities, attend all classes punctually and submit all scheduled assignments by due dates. You are expected to take responsibility to follow up with course notes, assignments and course related announcements for any sessions you have missed. You are expected to actively participate in class discussions and activities.

#### (2) Absenteeism

Absence from class without a valid reason will affect the overall course grade. Valid reasons include falling sick supported by a medical certificate and participation in NTU's approved activities supported by an excuse letter from the relevant bodies.

### Academic Integrity

Good academic work depends on honesty and ethical behaviour. The quality of your work as a student relies on adhering to the principles of academic integrity and to the NTU Honour Code, a set of values shared by the whole university community. Truth, Trust and Justice are at the core of NTU's shared values.

As a student, it is important that you recognize your responsibilities in understanding and applying the principles of academic integrity in all the work you do at NTU. Not knowing what is involved in maintaining academic integrity does not excuse academic dishonesty. You need to actively equip yourself with strategies to avoid all forms of academic dishonesty, including plagiarism, academic fraud, collusion and cheating. If you are uncertain of the definitions of any of these terms, you should go to the [academic integrity website](#) for more information. Consult your instructor(s) if you need any clarification about the requirements of academic integrity in the course.

### Planned Weekly Schedule

Week	Topic	ILO	Readings/ Activities
1	Introduction and fundamentals of research in industrial and organizational psychology: Research process, ethics in organizational research, and academic writing	1,4	0.5 hr mini-lecture + 2.5 hr discussion and activities

2	Qualitative research – Study design, data collection, and data analysis	1,2,3,4	0.5 hr mini-lecture + 2.5 hr discussion and activities
3	(Quasi-) Experiment in organizational research	1,2,3,4	0.5 hr mini-lecture + 2.5 hr discussion and activities
4	Survey methodology (1) – Operationalization, reliability and validity, choosing measurements, creating an online survey	1,2,3,4	0.5 hr mini-lecture + 2.5 hr discussion and activities
5	Survey methodology (2) – Coding, cleaning, and analyzing the data	1,2,3,4	0.5 hr mini-lecture + 2.5 hr discussion and activities
6	Team project presentation and critique	2,4	Students presentations and feedback discussion
7	Field observation (1) – Observer training and data collection	1,2,3,4	0.5 hr mini-lecture + 2.5 hr discussion and activities
8	Field observation (2) – Inter-rater reliability and hypothesis testing	1,2,3,4	0.5 hr mini-lecture + 2.5 hr discussion and activities
9	Framing research paper – Research question and hypothesis for individual project	1,2,3,4	0.5 hr mini-lecture + 2.5 hr discussion and activities
10	Archival data – Finding data sources, creating and cleaning a dataset	1,2,3,4	0.5 hr mini-lecture + 2.5 hr discussion and activities
11	Archival data – Cleaning and analyzing the data, writing the results	1,2,3,4	0.5 hr mini-lecture + 2.5 hr discussion and activities
12	Situational judgment test – Developing and scoring	1,2,3,4	0.5 hr mini-lecture + 2.5 hr discussion and activities
13	Individual project presentation and critique	2,4	Students presentations and feedback discussion