

PSYCHOLOGY 3201 YA – INTRODUCTION TO PSYCHOMETRIC THEORY
2015-2016 Course Outline

INSTRUCTOR: Dr. Dwight Mazmanian
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CLASS: Mondays and Wednesdays, 1:00 – 2:30; AT 1010
OFFICE HOURS: Tuesdays and Thursdays, 1:30 – 2:30, or by appointment

GRADUATE ASSISTANTS:

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COURSE DESCRIPTION:

In this course we will examine theories and principles underlying the construction and use of psychological tests. We will focus on psychometric theory and test construction during the first half of the course. During the second half of the course we will examine and critically evaluate a variety of tests that assess intelligence, achievement, aptitude, personality, and psychopathology. Issues and controversies associated with psychological testing will also be covered. Our approach to all topics will be rigorously empirical. Please note that this is a required course for students intending to enter the M.A. program in clinical psychology at Lakehead University (and clinical psychology programs at most other universities).

You will note that this is a 3000-level course. This means that it is a third-year course. As such, it would be reasonable to expect that it might be harder than a first or second-year course. It would also be reasonable to expect a greater work-load (e.g., more reading, more thinking, harder exams) than a first or second-year course.

Finally, it is not possible to teach a course on psychological tests and psychological testing without explicit discussion of the constructs being measured. These include but are not limited to emotional disorders, serious mental illnesses, suicidal behaviours, learning disorders, addictions, acquired brain injuries, and degenerative neurological conditions. If listening to lectures and reading material on these and related topics are likely to cause you any sort of emotional distress, you might wish to consider alternatives.

PREREQUISITES:

Psychology 1100 (Introductory Psychology) and Psychology 2101 (Statistical Methods for Behavioural Research) are the prerequisites for this course. Students who have not had a statistics course and exposure to statistical software packages (e.g., SPSS) will find some of the material very difficult.

TEXT & READINGS:

Murphy, K.R., & Davidshofer, C.O. (2005). *Psychological testing: Principles and applications* (6th ed.). Upper Saddle River, NJ: Prentice Hall.

Additional journal articles, book chapters, and/or test manuals will be available on reserve in the library or emailed to your Lakehead University email account. These are required readings. An *initial selection* of additional readings is provided below. A full reading list will be provided subsequently.

Bouchard, Jr., T. J. (2004). Genetic influences on human psychological traits: A survey. *Current Directions in Psychological Science*, 13, 148-151.

Dawes, R. M., Faust, D., & Meehl, P. E. (1989). Clinical versus actuarial judgment. *Science*, 243, 1668-

1674.

Helmes, E., & Reddon, J. R. (1993). A perspective on developments in assessing psychopathology: A critical review of the MMPI and MMPI-2. *Psychological Bulletin*, *113*(3), 453-471.

Jackson, D.N. (1971). The dynamics of structured personality tests: 1971. *Psychological Review*, *78*, 229-248.

Lilienfeld, S., Wood, J., & Garb, H. (2001). What's wrong with this picture? *Scientific American*, *284*(5), 80-87.

Streiner, D. (2007). A shortcut to rejection: How not to write the results section of a paper. *Canadian Journal of Psychiatry*, *52*, 385-389.

EVALUATION:	Midterm Exam	15%	(October 26)
	Assignment 1	10%	(November 16)
	Midyear Exam	20%	(exam period)
	Assignment 2	10%	(January 30)
	Midterm Exam	15%	(February 27)
	Assignment 3	10%	(March 22)
	Final Exam	20%	(exam period)

(Please note that the mark breakdowns and dates listed above are consistent with Lakehead University's "timely feedback" regulation.)

Tests and Exams. Tests and exams will cover material from the text, lectures, and the additional readings. A signed medical note or equivalent documentary evidence is required if a test or exam is missed because of illness. Other documentation and direct communication with me are required if a test is missed on compassionate grounds. Apart from the two exceptions just noted, a grade of "0" will be assigned for missed tests. For more information regarding formal exams during the scheduled exam period, please refer to the relevant sections of the academic calendar.

Assignments. Assignments must be received on or before the due date. One point per day will be deducted for work that is submitted after the due date (i.e., 1 point per day from the 10% each assignment is worth). If an assignment cannot be submitted on time for legitimate medical reasons, a note or equivalent documentary evidence will be required. Other documentation and direct communication with me are required if an assignment cannot be submitted on time for compassionate reasons. Assignment 1 and Assignment 2 involve statistical and psychometric analyses of archived test data using SPSS. Assignment 1 covers scale descriptive statistics, test-retest reliability, and validity. Assignment 2 focuses on item analysis, internal consistency, and aspects of test construction. For Assignment 3, you will be asked to select a published scale from a peer-reviewed journal, and submit a written critique or evaluation of that scale. All three reports must be word-processed and prepared using the style and format indicated in the *Publication Manual of the American Psychological Association* (6th edition). A detailed description of the database and specific instructions for each assignment will be provided.

Bonus Points. Students in this course may earn up to three (3) additional bonus points by participating in research being conducted in the psychology department, submitting a written an evaluation of a scale published in a peer-reviewed journal (one point per evaluation), or any combination of these. Further details are provided in the attached hand-out. Please note that acquiring bonus points is an optional activity, which means you can

ignore this section. This is not a course requirement. If you prefer not to earn the bonus points, you can still theoretically achieve a grade 100% in the course.

As a point of interest, there is usually a very high positive correlation between attendance and final grades in my courses. You can interpret that however you wish. My interpretation is that students who come to all of the classes get the higher grades.

If you are experiencing any difficulties with the material or if you have any questions, the best thing to do is see me during my office hours or arrange to meet with either of the graduate assistants. Although we make every effort to respond to emails from students in a timely manner, the number of emails we receive each year has been increasing, so please do not expect an immediate response to every email.

SCHEDULE:

September		7
	12	14
	19	21
	26	28
October	3	5
	10	12 (Study week – no scheduled classes)
	17	19
	24	26 (Test)
November	31	2
	7	9
	14	16 (Assignment 1 due)
	21	23
	28	30
December	5	

Classes end - exam period (December 8 – 18)

January	9	11
	16	18
	23	25
	30 (Assignment 2 due)	1 (February 3 - final course drop date)
February	6	8
	13	15
	20	22 (Study week – no scheduled classes)
	27 (Test)	1
March	6	8
	13	15
	20	22 (Assignment 3 due)
	27	29
April	3	5

Classes end - exam period (April 10 – 13, 15, 18 – 23)

TOPICS:

Course overview, history of psychological testing
Defining and measuring psychological attributes
Testing, ethical issues, and social issues
Measurement and statistics
Scales, transformations, and norms
Classical measurement theory, reliability
Validity
Item analysis
Test construction
Computerized test administration and interpretation
Intelligence, aptitude, ability, and achievement tests (individual and group tests)
Interests and interest tests
Personality and personality tests
Testing in organizations and industry
Issues in prediction and personnel selection
Diagnostic testing and clinical assessment
Issues in diagnostic testing and clinical assessment
The future of psychological testing

Please note that test dates, holidays, closures, and add/drop dates are *firm dates*. Please also note that the topics are covered in the same order as they appear in textbook. Finally, the specific chapters that will be covered on each of the four tests depends on how quickly (or slowly) we cover the topics. Some years we might be quicker and cover more topics, other years we might be slower and cover fewer topics. If we need to spend more time on a difficult topic, we will. If we find we can move ahead more quickly, we will. It is essential that you come to classes to find out where we are in the course, and to learn which chapters will be covered on the tests. That is the only safe, effective, and intelligent thing to do. Honest. I cannot say it more clearly than that. I can, however, repeat it using italic font for emphasis. *It is essential that you come to classes to find out where we are in the course, and to learn which chapters will be covered on the tests. That is the only safe, effective, and intelligent thing to do.*

A Note For Graduate Students. In order to preserve confidentiality, the graduate assistants will not be grading your exams, grading your assignments, or tabulating your marks. I will do these things myself. You may, of course, consult with the graduate assistants at any time with respect to all course matters, or you may see me.

A Note For Students With Disabilities. Lakehead University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you think you may need accommodations, you are strongly encouraged to contact Student Accessibility Services (SAS) and register as early as possible. For more information, please visit: <http://studentaccessibility.lakeheadu.ca>

Student Accessibility Services collaborates with all course instructors to provide appropriate accommodations for students with any disabilities. Such accommodations are designed to reduce the impact of the disability without compromising the academic integrity of the course curriculum. If you have a disability, it is your responsibility to provide appropriate documentation to Student Accessibility Services *as soon as possible (i.e., the first week of classes)*. Student Accessibility Services will then contact your instructors, and arrangements will be made to provide appropriate accommodations. Please note that for types of

accommodations that require providing tests in alternative format (e.g., oral or audio format, rather than written format), a minimum of four weeks notice is required to ensure the accuracy and equivalence of the alternative format. Please note that I cannot provide note-takers myself; Student Accessibility Services arranges for note-takers. Audio recordings of any nature are only permitted when the recording is made specifically to accommodate a documented disability. Please note that anyone who makes audio recordings of my lectures in the context of an official and approved accommodation will be asked to sign an agreement prohibiting the subsequent copying, disclosure, or distribution of the recordings, or the content of the recordings, in any physical format or electronic format, in keeping with existing legislation and accepted standards relating to “intellectual property”. It is assumed that any agreed-upon accommodations will remain in effect for the duration of the course, unless the nature of the disability has changed and appropriate documents have been provided to confirm the change. Students are not required to reveal medical information to or seek accommodations directly from the instructor or graduate assistants. Finally, if you will be requiring extra time for tests or exams, you should make arrangements to write the tests or exams at Student Accessibility Services (we are required to vacate our classroom at the end of our scheduled time to permit the next class to enter).

A Note For Students Who Are Experiencing Other Difficulties. Students who are experiencing general academic problems that are not related to a documented disability should consult with the Student Success Centre (formerly known as Academic Advising). Students who are experiencing medical problems or mental health problems are advised to seek assistance at Student Health and Counselling Services. For any matters that are specifically related to this course, you can, of course, see me or either of the two graduate teaching assistants. I am also very happy to discuss more general matters relating to graduate school applications or career options in psychology with you.