

PSYC*3250, Course Outline: Winter 2021

General Information

**DUE to the ongoing COVID-19 pandemic, this course is offered in an alternative format.
Alternative Delivery Asynchronous – AD-A Remote: no day and time for class
BUT - please take note of the specific day/time for the midterm (March 8, 9:00am)**

Course Title: Psychological Measurement

Course Description:

This course is an introduction to the theory of psychological measurement and measurement procedures presently used in psychology. Coverage will include such topics as reliability, validity, factor analysis and test construction, and the measurement of ability, personality, and achievement. You will learn not only how to evaluate psychological tests and measures, but also construct and refine your own. This knowledge is essential for both future practitioners and researchers in the area of psychology.

Credit Weight: 0.50

Academic Department (or campus): Psychology

Semester Offering: W21

Class Schedule and Location: Asynchronous delivery

Instructor Information

Instructor Name: David Stanley

Instructor Email: psyc3250@gmail.com

Zoom office hours: See Courselink for details.

See [Courselink](#) each week for new content. Also be sure to check out the Brightspace Pulse iOS/Android app to access Courselink on your mobile devices (and receive notifications).

GTA Information

GTA Name: Molly Contini, mconti01@uoguelph.ca

GTA Name: Craig Leonard, cleona02@uoguelph.ca

GTA Name: Simon Coulombe, coulombs@uoguelph.ca

Zoom office hours: See Courselink for details.

Course Content

Specific Learning Outcomes:

2 Literacy, Facet 2. Methodological Literacy: The ability to understand, evaluate, and design appropriate methodologies for rigorous psychological science

2 Literacy, Facet 3. Quantitative Literacy: Includes numeracy, and competence in working with numerical data

2 Literacy, Facet 4 Technological Literacy: The ability to select and use appropriate technology

2 Literacy, Facet 5 Visual Literacy: The ability to effectively find, interpret, evaluate, use, and create images and visual media and content.

4 Communicating, Facet 2 Written Communication: The ability to express one's ideas and summarize theory and research through a variety of writing styles (e.g., American Psychological Association [APA] style, term papers, posters)

Lecture Content:

Lectures

Jan 11. Constructs and basic statistics. Read Chapter 1 and Cohen et al (ARES) pp. 240 - 262

Jan 18. Test construction. Read Chapter 2 and Chapter 3.

Jan 25. Scaling, percentiles, interpreting scores. Read chapter 1

Also – construct and item writing workshop this week

Feb 1. Correlation and covariance. Chapter 1.

Feb 8. Classical test theory (CTT) Part 1. Read Chapter 5

Feb 22. Classical test theory (CTT) Part 2. Read Chapter 7

Mar 1. Classical test theory (CTT) Part 3.

Mar 8. Midterm (up to and including Classical test theory Part 3).

Also item analysis workshop this week. Cohen et al (ARES) pp. 262 - 284.

Mar 15 Validity. Read Chapter 9. Read website: MTMR matrices.

Mar 22 Project work

Mar 29 Project work

April 5 Projects due

See [Courselink](#) each week for new content – and additional readings beyond those listed. Also be sure to check out the Brightspace Pulse iOS/Android app to access Courselink on your mobile devices (and receive notifications).

Beyond the above specifications: Additional content will be posted most weeks on the class notes website: <https://bit.ly/psyc3250>

Course Assignments and Tests:

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Course outline quiz	January 18	2	2 Literacy, Facet 2
Assignment 1 – R	January 25	2	2 Literacy, Facet 2, 3, and 4
Assignment 2 – Scaling	February 8	2	2 Literacy, Facet 2, 3
Assignment 3 – Score interpretation	February 22	2	2 Literacy, Facet 2, 3, and 4
Assignment 4 – CTT and covariance	March 1	2	2 Literacy, Facet 2, 3, and 4
Assignment 5 – Item Analysis	March 15	2	2 Literacy, Facet 2, 3, and 4
Midterm	Monday March 8. Begin between 9am and 10am.	25	2 Literacy, Facet 2, 3, 4, and 5
Project: Definitions and Items	February 12	10	2 Literacy, Facet 2 and 4
Project: Final	April 2	25	2 Literacy, Facet 2, 3, 4, 5 4 Communicating, Facet 2

Midterm (ONLINE): Monday March 8, 9:00am

The midterm takes place Monday March 8th, at 9:00am but you can start as late as 10:00am.

If you are unable write the midterm on this scheduled day/time – you must contact the instructor at least 7 days in advance in writing.

If you are unable to write the midterm at all due to acute medical, academic, or personal reasons, its contribution to their final grade will be automatically shifted to the final exam (i.e., the midterm will contribute 0% to their final grade, and the final exam 55%). **This is automatic - no instructor consent is required for this redistribution of grading.**

Additional Notes:

Midterm (Online): 25%

Final Exam (Online): 30%

Scale development project total: 35% (25% + 10%)

Course outline quiz: 2%

In class assignments: 8% (best 4 of 5)

Additional Notes (if required):

In this course we use a universal accommodation approach – that does not require medical documentation or instructor consent. If you are unable to write the midterm to acute medical, academic, or personal reasons, its contribution to their final grade will be automatically shifted to the final exam. Likewise, we only count the best 4 of 5 minor assignments – this is not to optimize your grade but rather to take into account extenuating circumstances that may be different for each student.

Both the midterm and final exam will take place online.

Final examination date and time: See [WebAdvisor](#)

Final exam weighting: 30%
[Examination Regulations](#)

Course Resources

Required Texts:

Kline, J.B. (2005). Psychological Testing: A practical approach to design and evaluation.

You may purchase this textbook at the [bookstore](#) it also available for **free** from the library via the ARES link in CourseLink.

Other Resources:

Via ARES link in CourseLink: (2 articles)

Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational research methods*, 1(1), 104-121.

Cohen, R. J., Swerdlik, M. E., & Phillips, S. M. (2013). *Psychological testing and assessment: An introduction to tests and measurement*. Mayfield Publishing Co. Chapter 8 only pp. 240 -284.

Via the web:

[CourseLink](#)

Additional course notes: bit.ly/psyc3250

Software: We will also use the software R and RStudio (both free), download links below. But please see the installation instructions on our [Course Notes](#) website.

[R](#) [RStudio](#)

Course Policies

Grading Policies

Only 4 of the 5 minor assignments will be counted for a maximum of 8%. Late minor assignments will receive a grade of zero.

Major Project Part 1:

Construct definitions and items (10%) must be submitted on time. Late submission at either stage will result in a grade of zero on this component of the Measure Development Project. There are two parts to this submission: 1) A group submission of the construct definition and items, this is called “Group Definition and Items” in the gradebook; 2) An individual submission of the rationale for the construct definition and the process used to generate the items, this is called “Individual Justification Definition and Items” in the gradebook. You must write this individual submission on your own. Be sure to emphasize the theory and literature underlying your definition.

Major Project Part 2:

The final Measurement Development Project must be submitted via Courserlink Dropbox by the specified date and time. Submissions submitted later than this will be loose 10 per day. Weekends count as two days. Thus, the final measurement project is due at 11:30 pm on the specified day (see above). This is an individual submission – you must write it entirely on your own (definition and items excepted). You should include an updated and revised version of your justification from Part 1 as part of this submission.

[Undergraduate Grading Procedures](#)

Course Policy on Group Work:

Unless otherwise noted, you must work individually on your projects and submit written work this based on your own thoughts and work. On the final project you should work together as a group to a) create a construct definition, b) items that reflect that construct definition. Because you work together on these items – they are a group submission. You must also write an overview of the process used to create the construct definition and items – this should be done on your own. You should NOT work with others when writing the rationale for your construct definition and items. Though, of course, you may well reference some similar papers given the nature of the project.

Additionally, for the item analysis in the final project – you may conduct the item analysis as a group. But you must write-up the result of that item analysis individually. If you prefer, you may conduct the item analysis on your own.

University Policies

Disclaimer: Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings and academic schedules. Any such changes will be announced via CourseLink and/or class email. All University-wide decisions will be posted on the COVID-19 website and circulated by email.

Illness

The University will not normally require verification of illness (doctor's notes) for fall 2020 or winter 2021 semester courses. However, requests for Academic Consideration may still require medical documentation as appropriate.

Academic Consideration

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for

Academic Consideration:

[Academic Consideration, Appeals and Petitions](#)

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar:

[Academic Misconduct Policy](#)

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment.

Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact [Student Accessibility Services](#) as soon as possible. For more information, contact SAS at 519-824-4120 ext. 54335 or email accessibility@uoguelph.ca or the [Student Accessibility Services Website](#)

Course Evaluation Information

Please refer to the [Course and Instructor Evaluation Website](#) .

Drop date

The last date to drop one-semester courses, without academic penalty, is April 12, 2021 . For regulations and procedures for Dropping Courses, see the [Schedule of Dates in the Academic Calendar](#).

Instructors must provide [meaningful and constructive feedback, at minimum 20% of the final course grade, prior to the 40th class day](#). For courses which are of shorter duration, 20% of the final grade must be provided two-thirds of the way through the course.

[Current Undergraduate Calendar](#)

Additional Course Information

Course instructors are allowed to use software to help in detecting plagiarism or unauthorized copying of student assignments. Plagiarism is one of the most common types of academic misconduct on our campus. Plagiarism involves students using the work, ideas and/or the exact wording of other people or sources without giving proper credit to others for the work, ideas and/or words in their papers. Students can unintentionally commit misconduct because they do not know how to reference outside sources properly or because they don't check their work carefully enough before handing it in. Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

In this course, your instructor will be using Turnitin.com to detect possible plagiarism, unauthorized collaboration or copying as part of the ongoing efforts to prevent plagiarism in the College of Social and Applied Human Sciences.

A major benefit of using Turnitin is that students will be able to educate and empower themselves in preventing misconduct. In this course, you may screen your own assignments through Turnitin as many times as you wish before the due date. You will be able to see and print reports that show you exactly where you have properly and improperly referenced the outside sources and materials in your assignment.