RMS 4929: Can we measure that?
Winter 2018 Syllabus

Instructor: Denis Dumas (denis.dumas@du.edu)
Office: KRH 233; **Phone:** 303-871-4710
Office hours: Wednesdays 9am-12pm
Make office hour appointments by going to: https://denisdumas.youcanbook.me/
This app will automatically send confirmation emails and put the appointment on my calendar.
Try and book at least 12 hours in advance so I know what appointments I need to plan for.
Appointments are typically 20 minutes.

Mailbox: KRH 201A (or on office door)

Class Meetings:
Tuedays: 4:00pm-6:20pm
Classroom: Ruffatto Hall 306

Prerequisite: Graduate Standing and introduction to psychometric theory (RMS 4921). All experience levels beyond this prerequisite are welcome. Structural equation modeling, latent growth models, and item-response theory may be helpful in this course, but are not required. Those students with a client-centered measurement focus are also absolutely welcome.

Purpose and Goals: After taking an introductory psychometrics class, you might reasonably think that psychometrics is all about cognitive assessment (i.e., tests) in schools, or the measurement of mental-health related symptoms. This is a big part of what psychometrics is, but there is so much more. In this seminar, we will explore a number of innovations in psychological and educational measurement, organized in a construct-driven way. In compiling the topics and readings for the course, I asked myself, "what exciting work is going on right now?" I came up with enough topics to last a year, but distilled them down to nine general areas for this quarter. Some of these topics I know like the back of my hand, and even helped create. Other topics, I know from following the literature, and will be excited take a deep dive into them with you this winter. In general, the goal of this course is to acclimate you to the "cutting edge" of construct-driven measurement work, and build your knowledge-base for your own research endeavors going forward.

Materials

Texts

This course does not explicitly require you to purchase any texts. However, it does require you to be curious about and generally engaged with the literature. I will provide the weekly peer-reviewed readings that form the bulk of this course (see course schedule for specific author details). One non-required text that you might want to consider consulting is:

> AERA, APA, & NCME, (2014). *Standards for Educational and Psychological Testing.* AERA press: Washington, DC.

Your attendance, and the quality of your research artifact will be combined according to the percentages shown. Final grades will then be assigned based on the scale below.

Factors Effecting Course Grade

Attendance/Participation: 50%
Research Artifact: 50%

Official DU description of grade categories:

Grade	Percentage	Description
A A-	93-100 90-92	Denotes work of **superior quality**, which may be demonstrated in terms of criticism, logical argument, interpretation of material, originality, and creativity.
B+ B	87-89 83-86	Denotes work of **predominantly good quality**, demonstrating a sound grasp of content, together with efficient organization, and the capacity to make some critical appraisal of the material.
B- C+	80-82 77-79	Denotes work that is of **barely adequate quality**, with minimal achievement of the course objectives and understanding of the material.
C	73-76	Denotes work that is of weak quality, with **borderline achievement** of the course objectives and partial understanding of the material.
C-	70-72	Denotes work that is of low quality, and **minimal standing in terms of meeting University degree requirements**, with lowest level achievement of the course objectives and barely adequate understanding of the material.
D+ D D- F	67-69 63-66 60-62 0-59	Denotes work that is unacceptable for meeting University degree requirements.

Grades will not be changed unless a computational error has been made. No grades will be dropped. There will be no extra credit. Grades of "Incomplete" will not be given unless the student can demonstrate that near catastrophic events have led to a cause of extreme hardship.

Attendance/participation. This is a seminar course, the success of which is based almost entirely on meaningful group interaction and discussion. In order to have this meaningful discussion, we will all need to come to class with the readings prepared and ready to discuss. We will also all need to be open and interested in other students' points-of-view, perspectives, and experience. You can really drag down the class interactions if you are either not prepared or not open to discussion. So be prepared and open!

Research Artifact: This course is meant to support your own ongoing research projects by building your base of knowledge, but it should also support your ongoing research by allowing the opportunity to get feedback on some of your work. To do this, you will turn in a research artifact for feedback by the end of the course. One month before the deadline, you will turn in a brief proposal about the nature of your artifact-- and explain how it relates to this course-- for approval. I may not know your research so you will need to explain how it relates to the course.

This artifact can be drawn from a wide variety of research products that form the basis for our productivity in the social sciences. For example, you could turn in: a literature review about a particular construct, effect, or method; a methodological write-up of an analysis you have undertaken; or a conference poster or a presentation. Things I don't want for a research product: a raw analysis that is not written up meaningfully, your entire dissertation, or work that was first-authored by someone other than you. I'm expecting the research product to represent a substantial amount of time and effort and reflect doctoral level work at a research university. The artifact will be scored using the following categories, although it should be noted that the particulars of what I'll be looking for will vary depending on the exact nature of the artifact you turn in.

Score	Description
A	Nearing publishable quality: Artifact closely reflects the quality of work required for presentation, publication, etc. in the social sciences.
B	Good quality: Artifact is clearly presented and thoughtfully written, but falls short of publication standard.
C	Middling quality: Artifact "checks the boxes" but is otherwise not well-constructed or thoughtfully presented.
D	Poor quality: Artifact is missing aspects of what would be expected for that type of research product. What is available is not clear or meaningful.
F	Very poor quality or missing: Artifact is very poor or not turned in.

RMS 4929 Class Schedule: Winter 2018

Class Number	Class Day	Topic	Reading/Assignment
1	January 9	Why do we measure?	Lissitz & Samuelson, 2007; Plake & Wise, 2014; Duckworth & Yeager, 2015
2	January 16	Motivation	Duckworth & Quinn, 2009; Muenks et al., 2017; Flake et al., 2015; Azevedo, 2015; D'Mello et al., 2017
3	January 23	Creativity	Runco et al., 2010; Gajda et al., 2017; Acar & Runco, 2014; Dumas & Dunbar, 2014; Diedrich et al., 2017;
4	January 30	Social Media Personality	Back et al., 2010; Park et al., 2014; Farnadi et al., 2016; Chen et al., 2017;
5	February 6	Writing	Graham, 2012; Costa et al., 2012; Graham et al., 2015; Buzick et al., 2016; Hao et al., 2014;
6	February 13	Game-based Assessment	Rupp et al., 2010; Schute et al., 2016; Ninaus et al., 2017; Vallejo et al., 2017; ***One-page proposal for research artifact due***
7	February 20	Collaboration	Graesser et al., 2017; Scoular et al., 2017; Halpin et al., 2017; Von Davier et al., 2017;
8	February 27	Classroom Climate and Context	Marsh et al., 2012; Morin et al., 2014; Stapleton et al., 2016; Khajavy et al., 2017;
9	March 6	Learning Capacity	Tzuriel, 2014; Sternberg et al., 2002; Calero et al., 2015; Boosman et al., 2016; Passig et al., 2016; Dumas & McNeish, 2017;
10	March 13	Dbrief/pizza	***Research artifact due***