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## SEM BOOT CAMP - 2019

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OFFERED BY DR. JAMES GASKIN

**When:**

May 9<sup>th</sup> – May 11<sup>th</sup>, 2019. 9:00am – 5:00pm (lunch break from noon to 2pm).

**Where:**

Tanner Building, room TBD, Marriott School of Management, Brigham Young University, Provo, Utah, USA

**Schedule:**

Thursday

- Statistical preliminaries
  - Statistical assumptions
  - Data screening
  - ANOVA, t-tests
- Exploratory Factor Analysis
  - Adequacy, validity, reliability
  - Latent variable scores

Friday

- Confirmatory Factor Analysis
  - Validity, reliability
  - Common method bias
  - Measurement invariance
  - Model fit

Saturday

- Hybrid and Path Models
  - Multi-group moderation
  - Interaction (moderation)
  - Mediation
  - Control variables
  - Model fit
- Partial Least Squares
  - Factor analysis
  - Causal models (MGA, interaction, Mediation)
  - Model fit

**Who should come:**

Those who would like a firmer foundation in the concepts and mechanics of testing theories in social sciences using structural equation modeling. The seminar will focus primarily on mechanics – learning the statistical procedures and tools – rather than on the concepts, although we will discuss the concepts enough to make the statistics sensible. We will use AMOS and SPSS as our tools of choice. Accordingly, those who are already familiar with SEM but not with AMOS and SPSS may benefit from this boot camp as well.

**Who should not come:**

Those who are already fairly savvy with SEM in AMOS and SPSS. Also those without any sense of humor.

**Costs:**

- ❖ \$5 for BYU (Utah) students
- ❖ \$150 for BYU (Utah) employees
- ❖ \$200 for non-BYU students
- ❖ \$200 for remote attendees
- ❖ \$350 for all other non-BYU attendees

**Preparations:**

Please have AMOS and SPSS already installed and working on your laptop. AMOS only works on windows. It will not work in any non-windows operating system, but it will work on a windows installation on a Mac. You might also be able to access it via Citrix Receiver if your institution supports that. We will also rely on Excel. It would be best if this was also installed on your Windows side, as copying and pasting from Mac to Windows doesn't work.

*Participants are encouraged to bring their own data so that they may use their data to conduct analyses rather than using the data provided. However, I do have data if you'd like to follow along with me.*

**Contacts:**

- ❖ James Gaskin: [james.gaskin@byu.edu](mailto:james.gaskin@byu.edu) for content questions.
- ❖ Ashlyn Lewis: [ashlyn.lewis@byu.edu](mailto:ashlyn.lewis@byu.edu) for logistic questions.

**Registration:**

Registration is open until May 9<sup>th</sup>. Please visit the site below to register:  
<http://marriottschool.byu.edu/event/sembootcamp2019>

**Other details:**

The price is so low because we will not be providing food, lodging, or transportation. BYU is owned by The Church of Jesus Christ of Latter-day Saints. Accordingly, you cannot smoke or drink alcohol on campus. Coffee, Tea, Mountain Dew, Coke, or any other caffeinated beverages are fine. Many local businesses do offer alcohol, coffee and tea. Please walk off campus to smoke. We apologize for any inconvenience. Lastly, while on campus, we strongly encourage and appreciate participants to use clean language.