Subject: RE: BAIS:3800 description

Date: Tuesday, August 11, 2020 at 6:30:24 PM Central Daylight Time

From: Ohlmann, Jeffrey W **To:** Colbert, Michael W

In BA Track Courses...

I would remove "Rattle" from the list of items under BAIS:3500. This package isn't something I would tout and I don't think it will be taught in the course for long. Nothing is lost by removing it.

For BAIS:3800, I suggest the following revision:

In Optimization and Simulation Modeling, students learn the art and science involved with translating a business problem stated in layperson's terms into a mathematical model that can provide actionable insight for the decision-maker. Students learn to assess the business problem, acquire the appropriate data, and formulate a mathematical model that captures the essential elements of the decision-making problem. Using spreadsheet software, students will learn how to employ data to guide business decisions in areas such as operations, accounting, finance, marketing, economics, and human resources.

Students will:

- Understand what factors make a decision difficult and identify the appropriate modeling technique (optimization or simulation)
- Formulate optimization models by identifying the business objective and constraints and stating these in terms of decision variables
- Understand the difference between linear and nonlinear optimization models and the implication of this difference
- Model logical conditions using binary decision variables
- Use data to model uncertainty via probability distributions
- Construct Monte Carlo simulation models to quantify risk

From: Colbert, Michael W <michael-colbert@uiowa.edu>

Sent: Tuesday, August 11, 2020 11:19 AM

To: Ohlmann, Jeffrey W < jeffrey-ohlmann@uiowa.edu>

Subject: BAIS:3800 description

Jeff,

Would you visit here https://uiowa.libapps.com/libguides/admin_c.php?g=774582&p=7609315 and recommend any changes to the OSM class description I've written?

I tried to structure these as a short description, followed by tools or specific techniques the student would learn, followed by the course objectives.

Let me know any changes you would recommend. Ideally, I'd like to get this in the next few days.

Thanks, Mike