KELCE COLLEGE OF BUSINESS

Pittsburg State University

MINUTES

Kelce Faculty Meeting
2:00 p.m., September 21, 2023
Kelce 224

Present: Alex Binder, Jamie Brooksher, Bienvenido Cortes, Michael Davidsson, Chelsey Decker, Phillip Frank, Mary Jo Goedeke, Paul Grimes, Steve Horner, Anil Lal, Sang-Heui Lee, Mimi Morrison, Lynn Murray, Mary Judene Nance, Shipra Paul, Melissa Payne, Irene Robinson, Connie Shum, David Sikolia, Dwight Strong, Mary Kay Wachter, Larry Woodward, Gail Yarick

Absent: Jae Choi, Linden Dalecki, Holly Kent, Kay Kim, Kristen Maceli, Mike McKinnis, Young Nae, David O'Bryan, Theresa Presley, Wei Sha, David Weaver, Melissa Weed, Steve Zornes

I.   Math Curriculum Proposal
   a. Dr. Binder opened the meeting and thanked everyone who helped work on the proposal.

   b. Discussion on calculus requirements – mostly important for economics majors; econ faculty encouraged to develop a program of study which includes calculus for those students wishing to pursue graduate work in economics; no need to require all majors to take calculus.

   c. Dr. Binder reviewed the details of the curriculum revision proposal that was distributed to all before the meeting.
      i.   Content of our current math-based courses is outdated.
      ii. No other peer institutions require elementary statistics, just business statistics.
      iii. Proposing to change the titles of MGT 320 and MGT 420 to Business Analytics I & II and revise both course descriptions.
      iv. May change course prefixes and renumber courses to create a logical sequence; will first need to study impact of new prefixes on AACSB faculty qualification ratios.

   d. Faculty agreed to approve 3 course sequence, new course descriptions, and prerequisite changes as outlined in the proposal with Gail Yarick making the motion and Anil Lal seconding. Call for an oral vote – passed unanimously.

II. Progress Reports on Navigate – reviewed Navigate system along with how to submit early alerts. Need to flag students who are at risk so Student Success Center can track them down to see what type of assistance they need. Assigned mentees are listed in Navigate.

III. Dr. Murray – Need faculty to sign up for the Major's Fair which is next week (for existing students wishes to change majors). Also need faculty to assist with Rumble in the Jungle on October 7th. Sign up sheets are in each of the offices where there is an Admin.

IV. Personnel Issue – it was brought to light last spring during the performance appraisal process that a faculty member had plagiarized some of his own research over a number of years. As this is considered serious academic misconduct and breach of professional ethics, there is a stringent review process prescribed to investigate the offense and determine the appropriate sanctions. The college administration followed university policies to report the misconduct and invoke the process. Before any further steps could be undertaken, the faculty member made the decision to resign/retire. This was reported to our accreditation team in the CIR Report – all plagiarized articles were removed from our submitted data. Drs. Binder, Brooksher, and Grimes answered questions about the incident.

V. Meeting Adjourned 2:47 p.m.

Math Core Curriculum Revision Proposal

Premise: Our math curriculum needs to be modified and modernized. Our current requirements do not align with industry standards nor our peers' curriculum requirements.

Overview: MGT 320 Basic Quantitative Methods and MGT 420 Quantitative Decision Making are outdated. A large sampling of peer institutions found zero comparable courses in the business core. Furthermore, MGT 320 is a prerequisite to only MGT 420 and to ECON 318, for linear programming and calculus, respectively. The Kelce Math Survey indicated that calculus is used very little outside of economics, and linear programming (the content of MGT 420) is not used at all in any other Kelce courses.

The survey of peer institutions also found zero business schools which required an elementary stats course. Nearly all of them required a college algebra course or something similar. Nearly all of them teach their own business statistics course. Some of them also required their students to take calculus. Requiring our students to take college algebra *and* elementary stats makes us unique among our peers. It also contributes to us requiring our students to take more total math-based courses than any of our peers.

An informal survey of the Kelce Board of Advisors and other area employers indicated that statistics and data analysis remain skills in high demand, but none said linear programming or optimization was something business graduates needed for today's workforce. A more robust follow up survey of employers at Meet the Firms day found that forecasting, time series patterns, algebra, sampling & data collection, decision analysis, descriptive statistics, preparing data, and data visualization are skills entry-level business graduates need while calculus, hypothesis testing, and linear programming/optimization are not in high demand.

Based on this evidence, KLT has concluded that MGT 320 and MGT 420 need to be modified and modernized to better serve our students and regional employers. The courses should be renamed to Business Analytics I and Business Analytics II for the simplest possible indication of what they will be and what they will cover. The descriptions then need to be modified to include the content taught in each, respectively. The KLT also recommends no longer requiring both College Algebra and Elementary Statistics for general education, but rather allowing the option to choose between the two. Furthermore, we recommend modifying the Business Statistics course description to indicate its introductory level and to clarify the content it will cover.

Current math requirements for all BBA students (15 hours):

-MATH 113 College Algebra or MATH 110 College Algebra with Review (Pitt State Pathway)
-MATH 143 Elementary Statistics (prerequisite to MGT 310)
-MGT 310 Business Statistics (Kelce Core)
-MGT 320 Basic Quantitative Methods (Kelce Core)
-MGT 420 Quantitative Decision Making (Kelce Core)

Proposed math requirements for all BBA Students (12 hours):

-MATH 113 College Algebra or MATH 110 College Algebra with Review or MATH 143 Elementary Statistics or MATH 150 Calculus I (Pitt State Pathway)
-MGT 310 Business Statistics (Kelce Core)
-MGT 320 Business Analytics I (Kelce Core)
-MGT 420 Business Analytics II (Kelce Core)

Detailed Revisions:

MATH 113 College Algebra or MATH 110 College Algebra with Review or MATH 143 Elementary Statistics or MATH 150 Calculus I (KBOR Gen Ed)

> Comment: Reduces the number of gen ed math courses and therefore total math courses required to more closely match peer institutions. Students can pick which math course to count as their gen ed. This gives them some flexibility and by requiring them to get a C or better in it to take Business Stats, we ensure that they have enough of an understanding of math to proceed with our courses.

MGT 310 Business Statistics

Current Description: ~~Bayesian theory, probability distributions, decision trees, hypothesis testing, power curves, sampling theory, index numbers, and regression analysis.~~

Current Prerequisite: ~~""C"" in MATH 143 Elementary Statistics or equivalent, and junior standing.~~

Proposed Description: An introduction to basic statistics in the business environment. Topics include data summary, descriptive statistics, confidence intervals, hypothesis testing, tests of goodness of fit and independence, analysis of variance. A statistical software package will be utilized in the analysis of statistical applications in business.

Proposed Prerequisites: C or better in MATH 143 or MATH 113 or MATH 110 or MATH 150

> Comment: Updates the description and prerequisite.

MGT 320 ~~Basic Quantitative Methods~~ Business Analytics I

Current Description: ~~An overview of quantitative methods for managers, using data to solve managerial problems, representing data through graphing, understanding index numbers to signify rates of change, basic financial principles (including time value of money, annuities, etc.), linear algebra for business applications, rates of change and basic differentiation.~~

Current Prerequisite: ~~C or better in MATH 113 or MATH 110 or MATH 126~~

Proposed Description: An introduction to business analytics. Builds on topics covered in Business Statistics including descriptive statistics, probability, sampling and estimation, data mining, data visualization, statistical inference, linear regression, time series, and forecasting.

Proposed Prerequisites: MGT 310

> Comment: Modifies the name and description to match new course content. Subtracts & adds prerequisite to reflect its proper place in the business math course sequence.

MGT 420 ~~Quantitative Decision Making~~ Business Analytics II

Current Description: ~~Applications of quantitative and analytical approaches to decision making problems in business. Topics include linear programming, distribution and network models problems, integer linear programming, and decision analysis.~~

Current Prerequisite: ~~C or better in MATH 143 and MGT 320~~

Proposed Description: Builds on Business Analytics I with a focus on using business data to solve problems and make decisions. Topics include advanced data visualization, linear optimization, decision analysis, and applications in business disciplines.

Proposed Prerequisite: MGT 320

>Comment: Modifies the name and description to match new course content. Keeps number and prerequisite to reflect its proper place in the business math course sequence. Subtracts redundant prerequisite.