### ACADEMIC SENATE PROPOSAL TRACKING SHEET

(Document To Be Originated by the Academic Senate Secretary On Canary Color Paper)

Proposal # 23-48 Title: Adding CAPP 156 as a Prerequisite to BGEN 253	
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(Proposal explanation, submitter and college dean signatures on attached program/degree or course revision form.)

All proposals MUST have their originating college faculty body (Arts, Sciences & Education; Health Sciences; Technical Sciences) approval and must be signed by the submitter and the college dean before being submitted to the Academic Senate Secretary.

- 1. Submit all proposals (using the appropriate Academic Senate program/degree and/or course revision forms or General Education Inclusion form) to the Academic Senate Secretary. NOTE: Level 1 or Level 2 forms must be submitted concurrent with this proposal where applicable. For Education proposals, PEU approval must be received prior to forwarding the proposal to the Senate.
- 2. The Academic Senate Secretary logs and numbers items and forwards them to the appropriate Academic Senate subcommittee(s): General Education (if applicable), or Curriculum. A digital copy of the proposal will be linked on the Academic Senate Proposal page by the Academic Senate Secretary.
- 3. The Academic Senate subcommittee(s) consider(s) the proposal. If approved, the proposal is returned to the Academic Senate Secretary for forwarding to the next committee. If a committee disapproves the proposal, the committee will provide written rationale to the originator, via the Academic Senate.\* The originator may request that the item be forwarded to the next body for consideration. Upon completion of subcommittee action, the proposal will be returned to the Academic Senate Secretary for consideration at the next Academic Senate meeting.
- 4. The Academic Senate considers the proposal and recommends approval or disapproval. If approved, the proposal is forwarded to the Provost for consideration within 10 working days. If the Academic Senate disapproves the proposal, the Academic Senate will provide written rationale to the originator. \* The originator may request that the item be forwarded to the Full Faculty for consideration, utilizing procedures set forth in the Senate Bylaws.
- 5. Approved proposals will be forwarded to the Provost. The Provost approves or disapproves the proposal. If approved, the proposal is then forwarded to the Chancellor. From this point forward, the Provost's Administrative Assistant will update the Proposal page on the website by contacting the webmaster.
- 7. The Chancellor approves or disapproves the proposal.
- 8. If approved, the proposal will then either be implemented or referred to MSU for further action. The tracking page on the Provost site will be updated as required.

Subcommittee and Academic Senate college representatives will notify their respective colleges of the progress of submitted proposals or the proposal may be tracked via the web page -- <a href="http://www.msun.edu/admin/provost/senate/proposals.htm">http://www.msun.edu/admin/provost/senate/proposals.htm</a>

Documentation and forms for the curriculum process are also available on the web page: http://www.msun.edu/admin/provost/forms.htm

<sup>\*</sup> If a proposal is disapproved, it is returned to the Dean of the submitting college who then notifies the originator.

	Date	Action Taken	Signature  DocuSigned by:	Date	Comments/Reason for Disapproval	Sent to	Date	Transmittal E-mail sent
Received by Senate Secretary	3/6/2024	Tracking form initiated	Brittany Garden	3/6/2024	Sent to Curriculum	Committee		
General Education		Approved	7131CC9454D9458					
Committee (if applicable)		Disapproved						
Curriculum			DocuSigned by:		In Fall 24, student			
Committee (if applicable)	3/14/2024		Casey Donoven	3/14/2024	not have had the op to take CAPP156 ye	portunity		
Academic Senate			DocuSigned by:					
	4/4/2024	Disapproved	Valerie Guyant	4/4/2024				
Provost		Approved	DE995B0729A143B	11	1			
		Disapproved	levator World	1004 2	4			
Chancellor		Approved						
		Disapproved	Duary D. Kenel	6.4.2024	/			
				/ /				
MSU		Approved	1 1					
		Disapproved	1					
BOR		Approved	NI					
		Disapproved	1					
NWCCU		☐ Approved						
		Disapproved						
Provost		Advise originating						
		college and Academic Senate of						
- 300 1100		status. Update Web			Santa Caraca Cara			
		page.						
Registrar	75	Catalog/Policy						
		Manual Update						

**NOTE:** The secretary of the Academic Senate will update the Academic Senate Proposal web page from initial receipt until the proposal reaches the Provost. The Provost's Administrative Assistant will ensure that the current status of each proposal is maintained on the Academic Senate Proposal web page from that point forward.

Academic Senate Form 1 (Revised 4/4/2023)

## **COURSE REVISION FORM – UPDATED** (with emendation approved)

NEW DROPPED • For purposes of this form, "For Info	_ MAJOR REVISIOD ormation Only" should be used for	N_X FOR INFORMATION ONLY or catalog description or objective changes ONLY
College MSU-Northern	Program Area B	Business
Submitter	Dean	ignature (indicates "college" level approval)
Signature	Si	ignature (indicates "college" level approval)
Please provide a brief expla	nation & rationale for	or the proposed revision(s):
MS Excel as a prerequisite t Excel skills they need to con	to this course. Stude mplete work in a suc	course at MSU-Northern is adding CAPP 156 ents in BGEN 253 are consistently lacking in the ccessful and timely manner. Requiring this course, as well as the technology skill they need in the
Please provide the following	g information:	
Course Prefix & No.: BGE	N 253	
Current Course Title: Bus Proposed Course Title (wh		Research
Current # of Credits: 3 Proposed # of Credits (wh	en applicable):	
[please specify degrees]: Required by: Bachelor of S Study in Business Selective in: Elective in:	Science Business Ac	dministration, Associate of Science Program of
General Education Catego	ory:	
Lecture: X Lecture/Lab: Gradable Lab:		
Lecture contact hours per Lab contact hours per wee		

**Current Catalog Description (include all prerequisites):** 

#### BGEN 253. Business Statistics & Research. 3 Credits.

This course builds on the basic mathematical skills learned in M 121 and adapts them for statistical analysis used by business and industry to aid decision making. Topics covered include data gathering, descriptive statistics, probability, inferential statistics, analysis of variance and regression analysis. Autocorrelation analysis, nonparametric statistics, decision making under uncertainty and business forecasting are introduced. Prerequisite: M 105 or M 121 or consent of instructor.

#### Proposed or New Catalog Description (include all prerequisites):

#### BGEN 253. Business Statistics & Research. 3 Credits.

This course builds on the basic mathematical skills learned in M 121 and adapts them for statistical analysis used by business and industry to aid decision making. Topics covered include data gathering, descriptive statistics, probability, inferential statistics, analysis of variance and regression analysis. Autocorrelation analysis, nonparametric statistics, decision making under uncertainty and business forecasting are introduced. Prerequisite: M 105 or M 121; CAPP 156; or consent of the instructor.

#### **Course Outcomes/Objectives:**

- 1) Implement linear equations to solve optimization problems, including:
  - a) Graphic linear equations
  - b) Finding points of intersection
  - c) Maximizing and minimizing objective functions
  - d) Discussing slack and surplus
  - e) Business applications
- 2) Implement sampling and experimental design in a business application, including:
  - a) Random sampling
  - b) Comparative experiments
  - c) Sampling distributions
- 3) Use descriptive statistics in a business application, including:
  - a) Charts and graphs
  - b) Correlation and regression models
  - c) Frequency distributions
  - d) Measures of central tendency and variation
- 4) Use probability in a business application
- 5) Binomial Distribution
- 6) Normal Distribution
- 7) Use confidence intervals in a business application

Upon successful completion of this course, students will be able to:

- 1. Understand basic statistical techniques and methods
- 2. Apply statistical techniques and methods to business decisions

Please note additional instructional resources needed, if any (including library materials, special equipment, and facilities). Approval does not indicate support for new faculty or additional resources.

Updated 4/4/2023

#### COURSE REVISION FORM

NEW DROPPED MAJOR REVISION_X FOR INFORMATION ONLY  * For purposes of this form, "For Information Only" should be used for catalog description or objective changes ONLY
College MSLL Northern Program Area Business
Submitted Lett Polls Bran Signature (indicates "college" level approval)  Date 3 06 2024
Submitter Kristi Peterson Dean Steven Don Date 3 06 2024
Please provide a brief explanation & rationale for the proposed revision(s):
The BGEN 253 Business Statistics & Research course at MSU-Northern is adding CAPP 156 MS Excel as a prerequisite to this course. Students in BGEN 253 are consistently lacking in the Excel skills they need to complete work in a successful and timely manner. Requiring this course will provide students a head start in BGEN 253, as well as the technology skill they need in the business world.
Please provide the following information:
Course Prefix & No.: BGEN 253
Current Course Title: Business Statistics and Research Proposed Course Title (when applicable):
Current # of Credits: 3 Proposed # of Credits (when applicable):
[please specify degrees]: Required by: Bachelor of Science Business Administration, Associate of Science Program of Study in Business Selective in: Elective in:

General Education Category:

Lecture: X
Lecture/Lab:
Gradable Lab:

Lecture contact hours per week: 3 Lab contact hours per week:

# Current Catalog Description (include all prerequisites): BGEN 253. Business Statistics & Research. 3 Credits.

This course builds on the basic mathematical skills learned in M 121 and adapts them for statistical analysis used by business and industry to aid decision making. Topics covered include data gathering, descriptive statistics, probability, inferential statistics, analysis of variance and regression analysis. Autocorrelation analysis, nonparametric statistics, decision making under uncertainty and business forecasting are introduced. Prerequisite: M 105 or M 121 or consent of instructor.

# Proposed or New Catalog Description (include all prerequisites): BGEN 253. Business Statistics & Research. 3 Credits.

This course builds on the basic mathematical skills learned in M 121 and adapts them for statistical analysis used by business and industry to aid decision making. Topics covered include data gathering, descriptive statistics, probability, inferential statistics, analysis of variance and regression analysis. Autocorrelation analysis, nonparametric statistics, decision making under uncertainty and business forecasting are introduced. Prerequisite: M 105 or M 121 or consent of instructor; CAPP 156. MS Excel.

#### Course Outcomes/Objectives:

- 1) Implement linear equations to solve optimization problems, including:
  - a) Graphing linear equations
  - b) Finding points of intersection
  - c) Maximizing and minimizing objective functions
  - d) Discussing slack and surplus
  - e) Business applications
- 2) Implement sampling and experimental design in a business application, including:
  - a) Random sampling
  - b) Comparative experiments
  - c) Sampling distributions
- 3) Use descriptive statistics in a business application, including:
  - a) Charts and graphs
  - b) Correlation and regression models
  - c) Frequency distributions
  - d) Measures of central tendency and variation
- 4) Use probability in a business application
- 5) Binomial Distribution
- 6) Normal Distribution
- 7) Use confidence intervals in a business application

Upon successful completion of this course, students will be able to:

- 1. Understand basic statistical techniques and methods
- 2. Apply statistical techniques and methods to business decisions

Please note additional instructional resources needed, if any (including library materials, special equipment, and facilities). Approval does not indicate support for new faculty or additional resources.

Updated 4/4/2023