

**MIAMI UNIVERSITY  
BOARD OF TRUSTEES  
Minutes of the Board of Trustees Meeting  
Oxford Campus, Marcum Conference Center, Rooms 180-186  
Thursday, December 12, 2019**

The Secretary to the Board of Trustees confirms that as specified in the Regulations of the Board of Trustees of Miami University, and in compliance with Section 121.22 of the Ohio Revised Code, due notice was given prior to holding this meeting of Miami University's full Board of Trustees.

The meeting was called to order at 11:15 a.m. in the Marcum Conference Center, on the Oxford Campus with Board Chair, David Budig, presiding. Roll was called with a majority of Trustees present, constituting a quorum. In addition to the Trustees, President Gregory Crawford, Provost Jason Osborne, Senior Vice President David Creamer, Senior Vice President Tom Herbert; Vice Presidents Jayne Brownell, Ron Scott, David Seidl, Brent Shock (interim), and Michele Sparks; General Counsel Robin Parker, Director of Athletics David Saylor, and Director of Institutional Relations Randi Thomas, were present. Also present to address or assist the Board were; Director of Admission Bethany Perkins; and Ted Pickerill, Executive Assistant to the President, and Secretary to the Board of Trustees; along with many members of the Miami University community who were in attendance to observe, present and/or assist.

Roll call of Trustees:

Present: David H. Budig	John C. Pascoe
Megan Cremeans (Student Trustee)	Diane Perlmutter (National Trustee)
Robert E. Coletti (National Trustee)	Mark E. Ridenour
Sandra D. Collins	Rod Robinson
Zachary Haines	Mary Schell
Will Kulis (Student Trustee)	Robert W. Shroder
	Mark Sullivan (National Trustee)

Absent: C. Michael Armstrong (National Trustee)

### **Enrollment Update**

Director of Admission Bethany Perkins spoke of increased outreach by Admissions, and increased inquiries from prospective students, over the numbers-to-date of last year. She stated that key efforts include texting reminders, unbranded email from counselors, outreach to those who start an application, allowing test scores to be submitted on transcripts, and providing counselors with a limited number of application fee waivers for them to distribute.

Internationally, Director Perkins stated that Miami has hired a consultant to assist in enhanced recruitment in China. She informed the Board that Miami is working through QHI for all campuses as the exclusive pathway provider. Previously, QHI had only been the regional campus provider. Beyond China, she conveyed that international applications overall are up,

even with a reeducation in applications from China. She noted specifically the increase in applications from Vietnam, which are up by 120 applications, or 70.6% over 2019.

*The enrollment presentation is included as Attachment A.*

### **Strategic Plan and Academic Affairs Update**

Provost Osborne provided a retention and graduation rate update, stating regional campus retention overall is up, and above national averages. He identified gaps/shortfalls among various demographics, which the university is addressing, with the largest gaps being in four-year graduation rates between minority and non-minority students (gap of 9.1%), majors in different divisions (gap of 21%), and between female and male students (16.1%); for each comparison, the gap narrows when the six-year graduation rates are compared.

He also updated the Board on the status of the four Dean/VP searches in progress:

- VP For research and Innovation
- Dean of the Graduate School
- Dean of the College of Engineering and Computing
- Dean of the Farmer School of Business

He stated that the searches are proceeding well and are on track to identify the new leaders before the end of the Spring semester, with each to begin in these positions by the start of the 2020- 2021 academic year.

The Provost then provided highlights on the progress of Miami RISE. He featured the development of an Honors College, with a goal of seeing 400 new Honors first-year students per year, beginning in the Fall of 2021. He also featured the comprehensive curriculum review, stating that two consulting firms have been engaged to bring in national data as a companion to our internal data and review. A shared governance committee of subject experts will work with departments to identify opportunities. He also highlighted efforts to coordinate advising and retention/graduation rate enhancement efforts.

Provost Osborne also provided a Boldly Creative update, and stated that 19 vacant faculty lines have been reallocated to meet strategic priorities in Art, Engineering, Nursing, Analytics, and Social Work.

*Provost Osborne's presentation is included as Attachment B.*

### **Written Reports**

Status of Capital Projects, AVP Cody Powell, Attachment C.

### **Executive Session**

Trustee Robinson moved, Trustee Shroder seconded, and by unanimous roll call vote, with eight voting in favor and none opposed, the Board convened into Executive Session to Consult with Counsel, for the purchase of property, for items required to be kept confidential –

Trade Secrets, and Personnel Matters, the employment of public employees, as provided by the Open Meetings Act, Ohio Revised Code Section 121.22.

**Other Business**

The Board returned to public session.

**Adjournment of Meeting**

With no other business to come before the Board, Trustee Haines moved, Trustee Robinson seconded, and by unanimous voice vote, the Board adjourned at 2:00 p.m.



T. O. Pickerill II  
Secretary to the Board of Trustees

# Enrollment Update

## Board of Trustees Meeting

Finance and Audit Committee  
December 12, 2019



MIAMI UNIVERSITY

# Fall 2019 Confirmations

## *Key Metrics*

	Confirmations	ACT Best	GPA	Curriculum Strength	Non-Resident	Diversity	
<b>2015</b>	3,806	28.0	3.74	13.7	44.1%	13.7%	520
<b>2016</b>	3,798	28.5	3.77	13.9	44.0%	15.6%	592
<b>2017</b>	3,817	28.3	3.76	13.8	42.5%	16.8%	643
<b>2018</b>	3,925	28.1	3.77	14.1	39.2%	17.2%	677
<b>2019</b>	4,307	28.1	3.78	14.0	41.0%	16.4%	705

Data as of 10.15.2019

# Fall 2019 Confirmations

## *Residency*

	2017	2018	2019	Δ 2018 to 2019
Non-Resident	1,623	1,537	1,766	14.9%
Domestic Non-Resident	1,312	1,243	1,583	27.4%
International	311	294	183	-37.8%
China	247	230	79	-65.7%
Ohio Resident	2,194	2,388	2,541	6.4%
<b>Grand Total</b>	<b>3,817</b>	<b>3,925</b>	<b>4,307</b>	<b>9.7%</b>

Data as of 10.15.2019

# Fall 2019 Confirmations

## *Academic Division*

	2017	2018	2019	Δ 2018 to 2019
CAS	1,805	1,870	1,782	-4.7%
FSB	941	832	1,196	43.8%
CEC	465	488	553	13.3%
EHS	396	454	436	-4.0%
CCA	210	221	251	13.6%
CLAAS	--	60	89	48.3%
<b>Grand Total</b>	<b>3,817</b>	<b>3,925</b>	<b>4,307</b>	<b>9.7%</b>

Data as of 10.15.2019

# Fall 2019 Top Competitors

## Total

Institution	Count	Pct of Total	ACT Best
THE OHIO STATE UNIVERSITY	2,011	11.4%	30.1
UNIVERSITY OF CINCINNATI	1,302	7.4%	27.5
INDIANA UNIVERSITY	831	4.7%	28.9
UNIVERSITY OF DAYTON	538	3.1%	27.2
OHIO UNIVERSITY	485	2.8%	26.8
MICHIGAN STATE UNIVERSITY	395	2.2%	27.4
UNIVERSITY OF ILLINOIS	378	2.1%	29.5
PURDUE UNIVERSITY	350	2.0%	29.2
UNIVERSITY OF WISCONSIN	307	1.7%	30.4
PENNSYLVANIA STATE UNIVERSITY	299	1.7%	27.3



# Fall 2019 Top Competitors

## Ohio

Institution	Count	ACT Best
THE OHIO STATE UNIVERSITY	1,808	30.1
UNIVERSITY OF CINCINNATI	1,203	27.4
OHIO UNIVERSITY	459	26.8
UNIVERSITY OF DAYTON	364	27.2
KENT STATE UNIVERSITY	216	26.9
BOWLING GREEN STATE UNIVERSITY	175	26.6
XAVIER UNIVERSITY	138	26.8
THE OHIO STATE UNIVERSITY - NEWARK	132	25.7
UNIVERSITY OF KENTUCKY	118	27.7
UNIVERSITY OF TOLEDO	112	27.1

# Fall 2019 Top Competitors

## *Domestic Non-Resident*

Institution	Count	ACT Best
INDIANA UNIVERSITY	714	28.9
UNIVERSITY OF ILLINOIS	365	29.5
MICHIGAN STATE UNIVERSITY	307	27.7
UNIVERSITY OF WISCONSIN	289	30.4
PURDUE UNIVERSITY	269	29.1
UNIVERSITY OF MICHIGAN	224	32.4
UNIVERSITY OF COLORADO	204	28.1
UNIVERSITY OF DAYTON	174	27.3
PENNSYLVANIA STATE UNIVERSITY	174	27.2
THE OHIO STATE UNIVERSITY	145	30.3

# Fall 2019 Top Competitors

## *International*

Institution	Count	ACT Best
PENNSYLVANIA STATE UNIVERSITY	114	27.2
RUTGERS UNIVERSITY	95	27.0
UNIVERSITY OF CONNECTICUT	79	27.8
SYRACUSE UNIVERSITY	73	27.6
SUNY STONY BROOK UNIVERSITY	68	25.5
MICHIGAN STATE UNIVERSITY	60	25.1
THE OHIO STATE UNIVERSITY	58	29.9
INDIANA UNIVERSITY	40	26.6
UNIVERSITY OF CALIFORNIA-SANTA CRUZ	37	26.6
UNIVERSITY OF MASSACHUSETTS	29	28.2

# Key Enrollment Goals

*Fall 2020*

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- » Reverse declining trend in applications to exceed 30,000
- » Enroll a cohort of 4,300 to 4,400 first-year students
  - » Increase domestic non-residents to 42% of incoming class
  - » Enroll 250 international students, including ACE
  - » Maintain diversity and academic quality metrics

# Key Recruitment Efforts

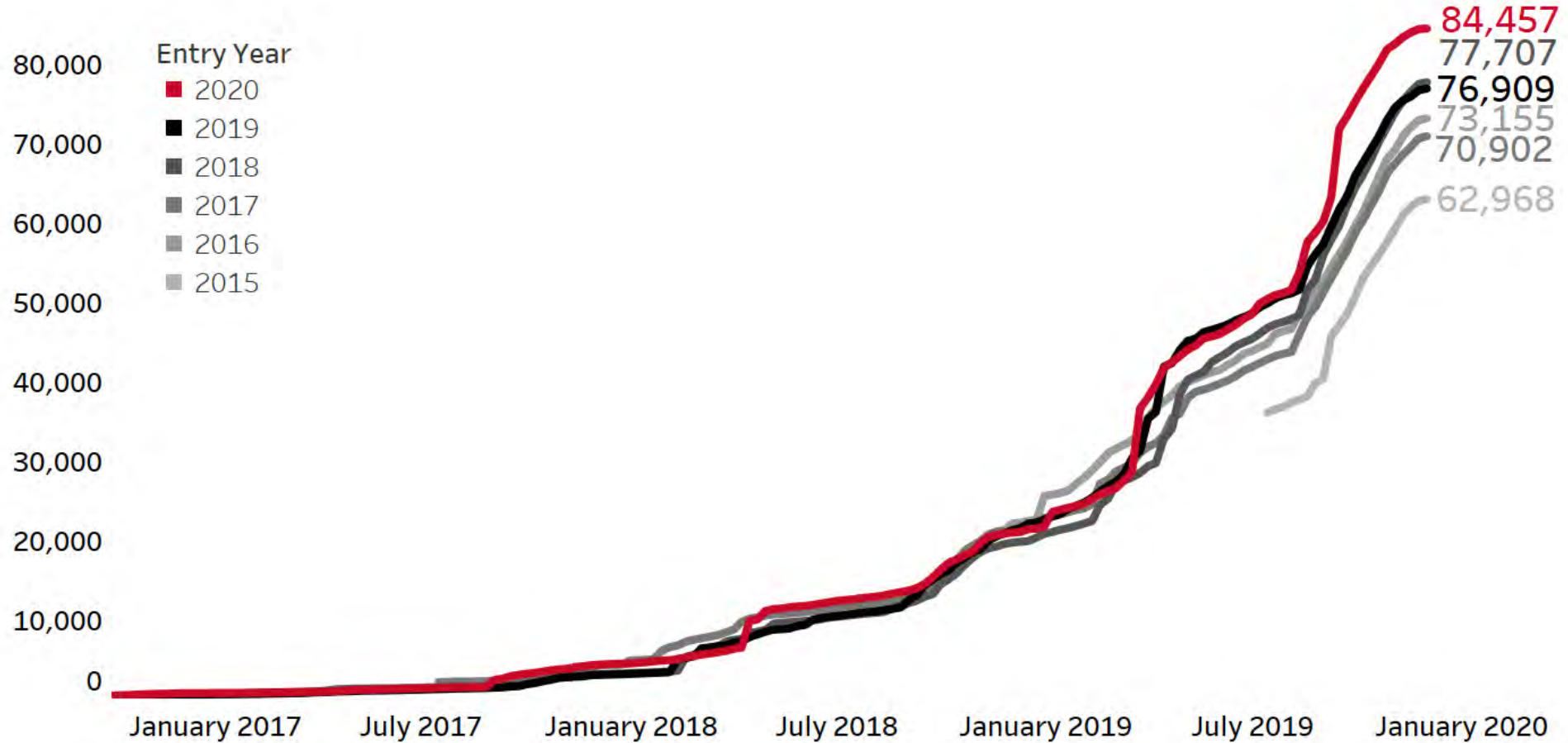
## *Maintain High Search Volume*

Population	Fall 2018	Fall 2019	Fall 2020
Ohio	44,880	44,343	44,692
Domestic Non-Resident	413,738	455,548	476,948
International	54,054	74,249	45,214
<b>Grand Total</b>	<b>512,672</b>	<b>574,140</b>	<b>566,854</b>

Data as of 12.02.2019

# Key Recruitment Efforts

## *Increase Inquiries by Diversifying Lead Sources*



Data as of 12.02.2019



# Key Recruitment Efforts

## *Expand Digital Efforts and Presence*

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- » Enhanced profiles on search engines
- » Triggered popovers and communications on website
- » Geo-fenced digital advertising around NACAC fairs
- » Social media campaigns



# Key Recruitment Efforts

## *Increased Outreach Pre-Application*

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- » Unbranded emails from counselors
- » Texting reminders prior to each application deadline
- » Outreach to students who started the application
- » Test scores can be submitted on transcripts
- » Limited application fee waivers to counselors



# Key Recruitment Efforts

## *Programmatic Marketing and Engagement*

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- » New visit registration that facilitates an academic appointment
- » Promotion of new majors to counselors and students
- » Advertising programs on web profiles
- » Graduate program inquiry process for admitted students

# Key Recruitment Efforts

## *International*

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- » Consultant hired to assess recruitment and operations
- » QHI will be exclusive pathway provider for Chinese students
- » Engaging agents in other select countries
- » Continued country-specific programming and outreach

# 2020 Applications

# Fall 2020 Applications

## *Residency*

	2018	2019	2020	Δ 2019 to 2020
Non-Resident	12,556	11,993	12,187	1.6%
Domestic Non-Resident	11,478	11,022	11,149	1.2%
International	1,078	971	1,038	6.9%
China	729	511	345	-32.5%
Ohio Resident	10,794	11,120	11,245	1.1%
<b>Grand Total</b>	<b>23,350</b>	<b>23,113</b>	<b>23,432</b>	<b>1.4%</b>

Data as of 12.02.2019

# Fall 2020 Applications

## Top Countries

	2018	2019	2020	Δ 2019 to 2020
China	729	511	345	-32.5%
Vietnam	99	170	290	70.6%
India	72	81	86	6.2%
Nigeria	3	12	39	225.0%
Nepal	4	14	28	100.0%
Bangladesh	--	6	20	233.3%
South Korea	14	13	20	53.8%
Ghana	7	11	16	45.5%
Canada	15	14	13	-7.1%
Pakistan	9	7	13	85.7%
Mexico	13	1	11	1000.0%
Other Countries	113	131	157	19.8%
<b>Grand Total</b>	<b>1,078</b>	<b>971</b>	<b>1,038</b>	<b>6.9%</b>

Data as of 12.02.2019

# Fall 2020 Applications

## *Academic Division*

	2018	2019	2020	Δ 2019 to 2020
CAS	9,118	9,253	9,679	4.6%
FSB	6,831	6,314	6,223	-1.4%
CEC	3,238	3,238	3,068	-5.3%
EHS	2,273	2,135	1,965	-8.0%
CCA	1,118	1,108	1,286	16.1%
CLAAS	772	1,065	1,211	13.7%
<b>Grand Total</b>	<b>23,350</b>	<b>23,113</b>	<b>23,432</b>	<b>1.4%</b>

Data as of 12.02.2019

# Fall 2020 Applications

## *Diversity*

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	2018	2019	2020	Δ 2019 to 2020
Ohio Resident	2,322	2,373	2,452	3.3%
Domestic Non-Resident	2,035	1,903	1,960	3.0%
<b>Grand Total</b>	<b>4,357</b>	<b>4,276</b>	<b>4,412</b>	<b>3.2%</b>

Data as of 12.02.2019

# Fall 2020

## *Application Deadline and Notification Dates*

Application Type	Application Deadline	Decision Notification Date	FAFSA Deadline	Confirmation Deadline
Early Decision	November 1	December 1	December 1	January 15
Priority Notification I	November 1	December 15	December 1	May 1
Priority Notification II	December 1	February 1	December 1	May 1
Regular Decision	February 1	March 15	February 1	May 1

### Early Decision

- » 491 admits
- » Profile: 3.61 GPA, 25.6 ACT
- » 30% domestic non-residents, 12% diversity



# Questions



# Provost Update for Board of Trustees

Provost Jason Osborne  
December 2019



# Good news on applications, retention and graduation

# >> Fall 2020 applications - Dec 1



- Total: (+1.4%)
- Ohio: (+1.2%)
- Domestic Non-res: (+1.0%)
- International: (+7.3%)
- SOC: (+3.2%)

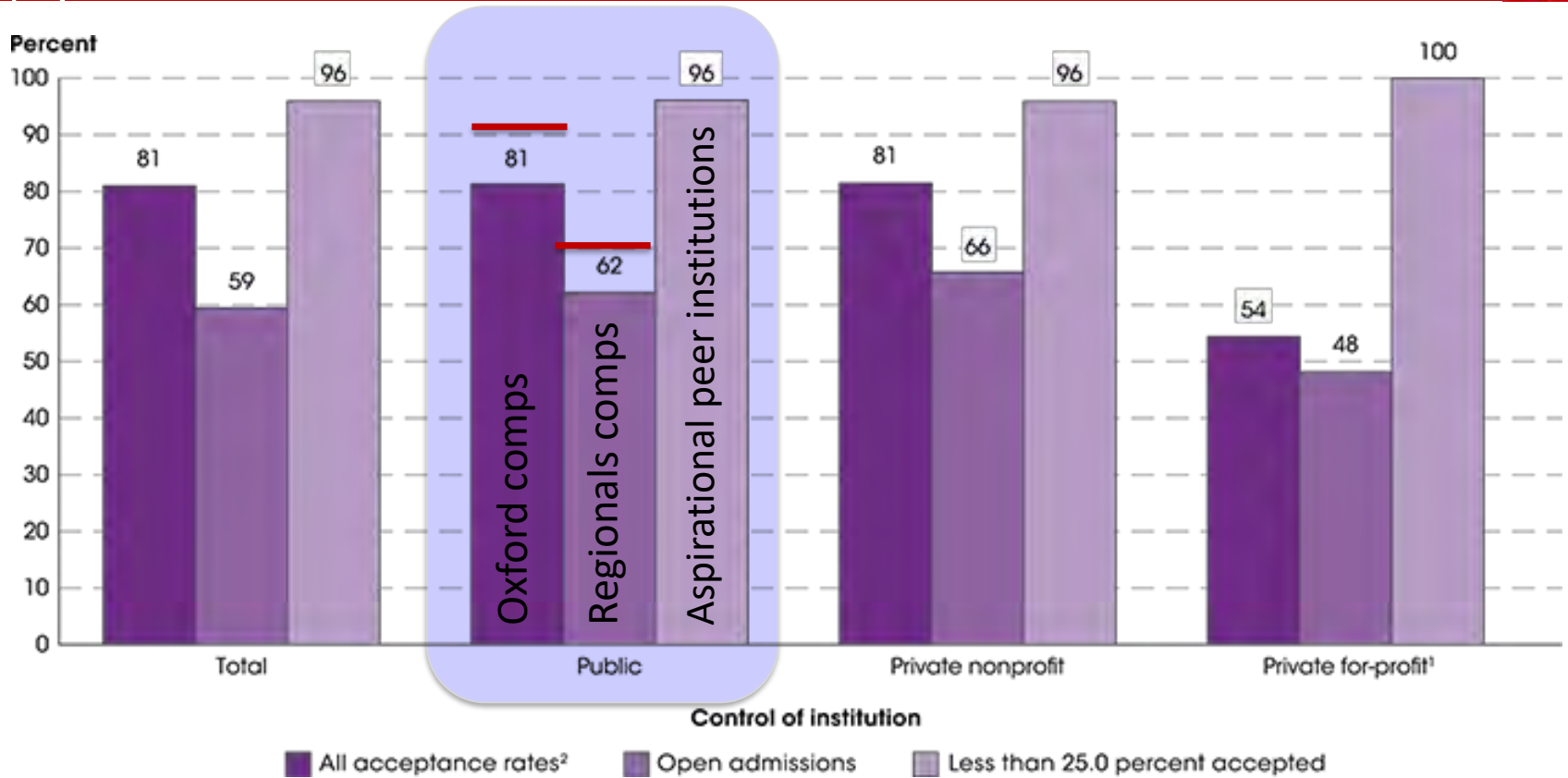


# Retention & Graduation Rates – More Work to Do

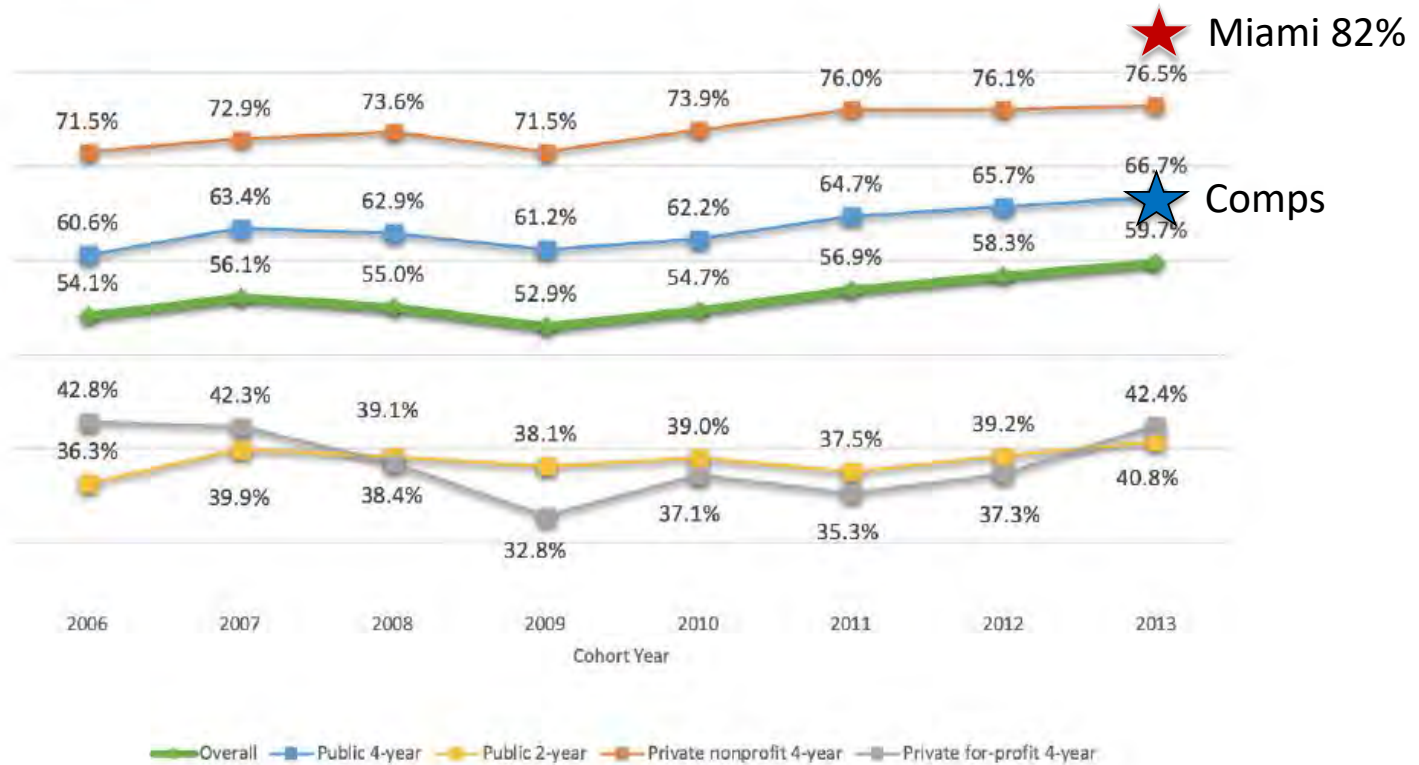


- Regional campuses: both significant increases in 6-yr graduation rates
- Retention up on Middletown, down on Hamilton;
- Oxford:
  - Retention dipped from 91.9 to 90%
  - 4-yr grad rate record high of 72.9%
  - 6-yr grad rate increased from 80% to 81.9%.
  - Promising signs in classes approaching these milestones
  - Student success continues to work on these areas

# National Norms for Retention



**Figure 1. Six-Year Completion Rates by Starting Institution Type: 2006-2013 Entering Cohorts**



# Institutions with Similar 4-yr Grad %



## Public:

- Univ. Connecticut
- SUNY Geneseo, Binghamton
- Delaware
- UMass Amherst
- UC Santa Barbara
- Univ. Maryland College Park
- UC Irvine
- Univ. Florida

## Private:

- Stanford
- Wheaton College
- Gonzaga University
- Pepperdine University
- Hobart & William Smith
- Transylvania Univ.
- Syracuse
- Ithaca College



# Achievement Gaps: Oxford



Retention has small gap between:

- domestic minority (88.1%) vs non-minority (90.6%)
- majors in different divisions (CEC: 87.9%, EHS: 92.1%)
- female (91.3%) vs. male (88.7%)

4-year graduation rate has significant gaps between:

- domestic minority (66.2%) vs non-minority (75.3%)
- majors in different divisions (CEC: 59.1%, FSB: 80.1%)
- female (80.8%) vs. male (64.7%) \*both record high

# >> Achievement Gaps, Oxford, con't



6-year graduation rate has significant gaps between:

- domestic minority (78.3%) vs non-minority (82.7%)  
vs. international student (74.6%)
- majors in different divisions (CEC: 79.7%; FSB & CCA: 86%)
- female (85.7%) vs. male (77.8%) \*both historically strong

National 6-year: 60% public, 66% private, F > M



# Leadership In Academic Affairs

# Academic Affairs Leadership Searches



All four searches continue to build strong applicant pools with the goal of bringing candidates to campus during the spring semester.

- Dean, Farmer School of Business - Dean Mullenix, Chair
- Dean, College of Engineering and Computing - Dean Bishop-Clark, Chair
- Dean, Graduate School - Dean Conley, Chair
- Vice President Research & Innovation - Dr. Suzanne Kunkel, Chair



# Transitions in Leadership Timeline





# >> *Boldly Creative: Second Round*



## Round 2 – Proposal Evaluation is Underway

- 9 new preproposals
- Each preproposal must have either:
  - A financial model that returns net revenue to replenish the *Boldly Creative* fund; OR
  - Mission-critical impact that warrants a permanent investment

# *Boldly Creative: The Future*



## What have we done to support this?

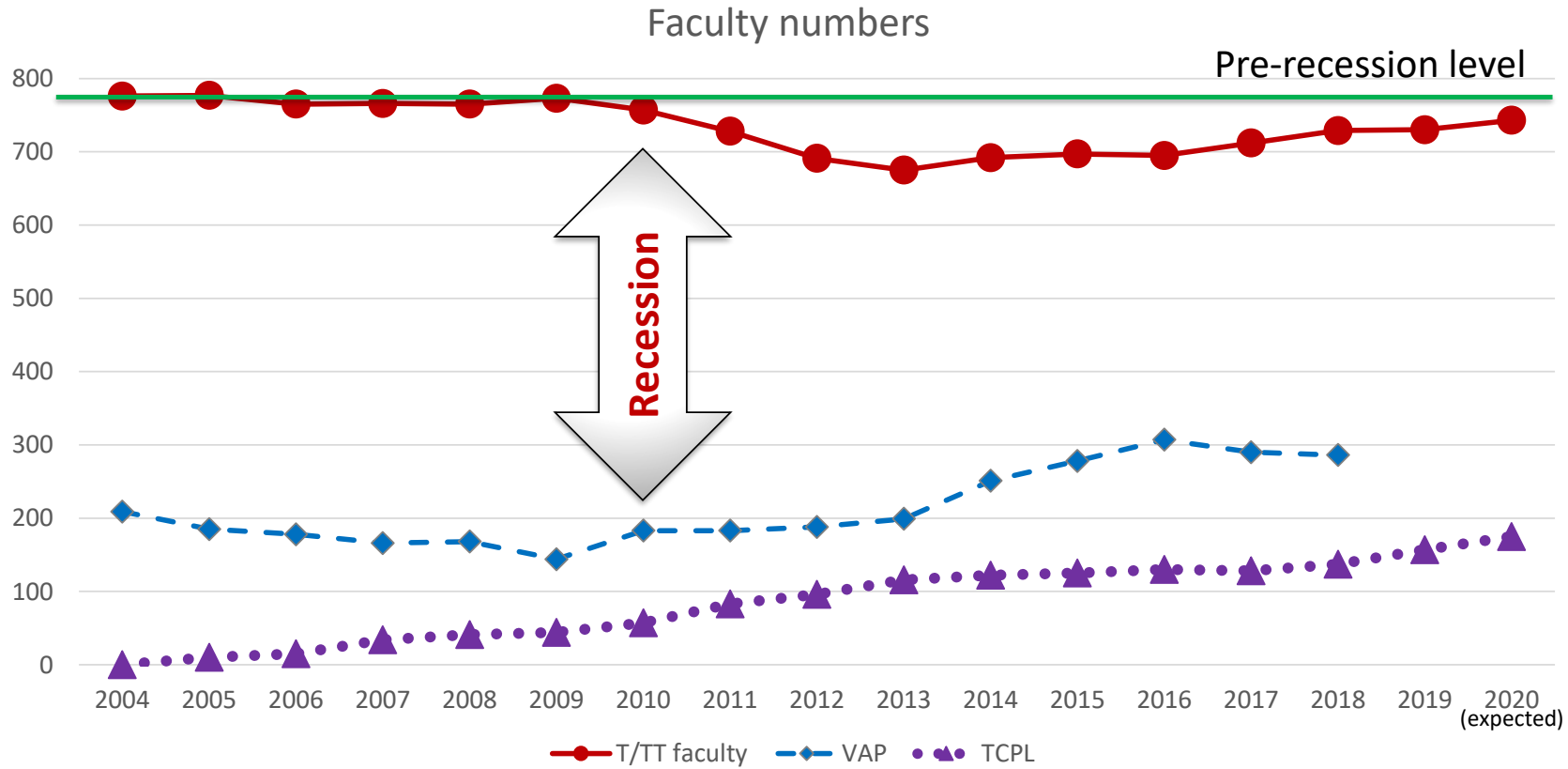
- ❖ Engaged two national consulting firms to guide us toward high-demand degree programs
- ❖ Positioning high-value online credentials
- ❖ Planning for a spring call for preproposals focused on online degree programs with potential for revenue/reputation





# Faculty Hiring, Faculty Mix, & Reallocation of Resources

# Faculty Trends 2004-2020



# >> Looking Forward to February



## Discussions topics for next time:

- Clinical Health Sciences academic planning
- Honors College, Prodesse Program
- Summer reading → One Year, One Idea
- Global Miami Plan
- Online for Oxford



# Questions & Discussion

# MiamiRISE Update







# Miami's Strategic Plan

## Year 1 Priorities and Roll Out



# Recommendation #1:



## Develop Honors college, should be a national leader

Goals:	May 2020: Shared governance committee create vision, vet with community	May 2021: Develop new policies and curricular structures; identify new dorms	Fall 2021: 400 new Honors Freshmen per year; Prodesse Program enroll first students
Metrics:	Develop budget, faculty support, logistics	Implement new policies, plan for dorm space	# new honors students, Prodesse, high ACT students enrolling in Miami
<b>R</b> Research, Scholarship, and Artistry	<b>I</b> Innovation	<b>S</b> Student Success	<b>E</b> Engagement



# Recommendation #3, 8, 9:



## Emphasize and revitalize scholarship, expand sponsored programs

Goals:	Research support and infrastructure improved to R2 levels	Ensure faculty are able to take research leave out of town	Sponsored programs applications, \$\$/ submission, awards, expenditures increase
Metrics:	VPRI hired by July 2020; Research office reorganization by July 2021	Policy changes by July 2021	Awarded \$40 million/year goal by July 2024
<b>R</b> Research, Scholarship, and Artistry	<b>I</b> Innovation	<b>S</b> Student Success	<b>E</b> Engagement

# Recommendation #19, 20:



## Perform comprehensive curriculum review, continuously improve curriculum offerings

Goals:	Engage external consultants, shared governance 12/2019	Identify programs to start, maintain, or re-tool; June 2020	More innovative undergrad & graduate offerings
Metrics:	Academic Program Evaluation Steering Committee formed, Gray Associates training, consultants	Consultant specialists work with departments to identify opportunities	Low enrolled sections, programs; applications, Yield, improved NTR by June 2024
<b>R</b> Research, Scholarship, and Artistry	<b>I</b> Innovation	<b>S</b> Student Success	<b>E</b> Engagement

# Recommendation #11:



## Coordinate advising and success/graduation efforts

Goals:	Student success committees develop plans to improve operations and end-to-end student support	Hybrid Centralized professional advising + disciplinary advising	Student retention and graduation rates in Top 20 amongst publics
Metrics:	Comprehensive plan by May 2020;	Plan for implementation by May 2021	Increased success by May 2024
<b>R</b> Research, Scholarship, and Artistry	<b>I</b> Innovation	<b>S</b> Student Success	<b>E</b> Engagement

# Recommendation # 3, 8, 9:



## Increase support for research/scholarship, sponsored programs

Goals:	Hire VPRI as separate individual	Ensure pre- and post-award support robust and effective	\$40 million in sponsored programs awards
Metrics:	By July 2020, VPRI hired	Faculty perceptions, increased submissions, awards, expenditures	Submissions, awards, expenditures by June 2024
<b>R</b> Research, Scholarship, and Artistry	<b>I</b> Innovation	<b>S</b> Student Success	<b>E</b> Engagement

# Reallocation of resources



- 19 vacant faculty lines moved to new strategic priorities:
  - Art
  - Engineering
  - Nursing
  - Analytics
  - Social Work

More reallocated than expected

- \$2.3 million vs. 2.1 million expected
- 19 positions vs 17 expected



# >> Reallocation via Boldly Creative

- All BC are reallocations of existing resources
- Awards were reduced significantly from asks
- Expenditures are significantly leaner than awards
  - 10 new hires, \$1.2 million in new personnel
  - Expected: 20 new hires, \$2.2 million
- Goals still on target within reason

# Questions and discussion





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## Status of Capital Projects Executive Summary December 12, 2019

### 1. Projects completed:

Three major projects were completed since the last report. All three projects were completed on the Western Campus. The renovation of Patterson Place replaced the roof and box gutters and repaired the soffit, fascia boards, porch railings and shutters. The work also improved the building's accessibility by adding an ADA ramp on the exterior and modified the first floor restroom to be ADA compliant. The Presser Hall Bridge Renovation has both restored and improved one of the iconic stone bridges on the Western Campus. The work also removed a steam tunnel that was originally incorporated into the structure as it is no longer needed. Finally, a dilapidated steam tunnel on Western Campus (the same one that also crossed the bridge) was removed and replaced with a standard sidewalk as the tunnel was no longer needed. The projects were completed within their respective budgets. Eight projects under \$500,000 were completed since the last report.

### 2. Projects added:

Two major projects and five projects under \$500,000 were added since the last report. The Ogden Hall/Bell Tower Place Renovation project will continue our work on the Long Range Housing Master Plan. Ogden Hall will be entirely renovated in a similar manner as the other residence halls completed thus far. The work will improve interior spaces, address infrastructure needs, improve life safety and improve energy efficiency. Bell Tower Place is a popular dining venue that is attached to Ogden Hall. Bell Tower will also be renovated as part of the project. It is our intent to renovate Bell Tower over two summers, but leave the venue open during the course of the academic year while the residence hall remains off-line. The Harris Hall Renovation is an enabling project for the new Clinical Health Sciences Building project. Harris Hall was a dining facility on the south end of campus. It has not been in use for over two years. A portion of the space was recently renovated to accommodate administrative offices for University Advancement. This project will renovate the remainder of the first floor to support exam rooms, counseling rooms, and administrative offices. The project will address needed infrastructure improvements within the building. The project supports a long-term need for sufficient office and administrative swing space. Planned future renovations require substantial swing space needs that do not currently exist.

### 3. Projects in progress:

Pearson Hall Phase 2 Renovation remains ahead of schedule. The third floor is the most complete and is now having the casework installed. The lower level is the least complete with framing installed and mechanical, electrical, and plumbing rough-in now in progress. The renovation of Stanton Hall is progressing well. Exterior work such as window installation and roof repairs have been completed ahead of the winter weather. Inside the building, drywall installation has been completed on the third and second floors and work to install electrical devices and lighting has begun.

Respectfully submitted,

Cody J. Powell, PE  
Associate Vice President –  
Facilities Planning & Operations



Miami University  
Physical Facilities Department  
Status of Capital Projects Report

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Miami University  
Physical Facilities Department  
Status of Capital Projects Report

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Miami University  
Physical Facilities Department  
Status of Capital Projects Report

	<u>Number of Projects</u>	<u>Value</u>
<b>Under Construction</b>	<b>3</b>	<b>\$50,225,000</b>
<b>In Design</b>	<b>4</b>	<b>\$48,960,000</b>
<b>In Planning</b>	<b>3</b>	<b>\$6,200,000</b>
<b>Projects Under \$500,000</b>	<b>73</b>	<b>\$15,853,678</b>
	<hr/>	
	<b>Total</b>	<b>\$121,238,678</b>

<u>New Projects Over \$500,000</u>	
<b>Harris Hall Renovation</b>	<b>Page 13, Item 2</b>
<b>Ogden Hall/Bell Tower Place Dining Renovation</b>	<b>Page 11, Item 4</b>

<u>Projects Completed Since Last Report</u>	
<b>Patterson Place Renovation</b>	<b>\$544,800</b>
<b>Presser Hall Bridge Renovation</b>	<b>\$1,500,000</b>
<b>Western Campus Tunnel Removal</b>	<b>\$900,000</b>
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	<b>Total</b>
	<b>\$2,944,800</b>

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Physical Facilities Department  
Status of Capital Projects Report

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Status of Capital Projects Report**UNDER CONSTRUCTION****(Under Contract)****Projects Requiring Board of Trustees Approval****1. Pearson Hall Renovation, Phase 2:**

Porchowsky

This project is to complete the balance of the renovation of Pearson Hall for the biological sciences, including the Departments of Biology and Microbiology. This phased, occupied renovation will address deferred maintenance issues with the facility through the installation of new and efficient mechanical, electrical, data, and fire suppression systems. The project also includes lab safety improvements. The project will be occupied during renovations.

Phase 2 will complete the remaining 50% of the necessary heating, cooling, and lab exhaust systems; upgrade electrical switchgear, modernize the public areas, remaining lab classrooms and research laboratories. This project will be completed in two, year-long segments ending August 2020. Research teams for this first segment have moved from their laboratories in Pearson to the swing space located in the Hughes Hall C-Wing.

The construction team is working down through the building with lab casework being installed on the third floor and flooring on the second floor. Drywall installation is nearing completion on the first floor and painting has begun. Framing is complete on the lower level which has allowed in-wall and overhead rough to begin. This project is tracking well ahead of schedule.



Under Construction

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**Pearson Hall Renovation, Phase 2 (continued):**

Delivery Method: Design-Build

Project Cost	
Design and Administration	\$2,571,630
Cost of Work	\$25,238,135
Contingency	\$1,500,000
Owner Costs	\$690,235
Total	\$30,000,000

Funding Source	
State	\$19,523,586
Local	\$10,476,414
Total	\$30,000,000

Contingency Balance: 40%  
Construction Complete: 75%  
Project Completion: August 2020

**2. Stanton Hall Renovation:**

Heflin

This project will renovate Stanton Residence Hall as a continuation of the 2010 Long Range Housing Master Plan. Stanton Hall will receive an upgrade in the mechanical systems, fire suppression, energy efficiency, and minor interior renovations. The design includes improvements in the heating, cooling, electrical, life safety systems and building envelope. The renovation extends the life of the facility.

Window installation and roof repairs are complete. Interior drywall and ceilings are complete on the third and second floors. Electrical devices, lighting, and fan coil installation are in progress. Restroom waterproofing and tile installation is ongoing. The project is on schedule and on budget.



Under Construction

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**Stanton Hall Renovation (continued):**



Delivery Method: Design-Build

<b>Project Cost</b>	
Design and Administration	\$1,111,000
Cost of Work	\$16,000,000
Contingency	\$1,089,000
Owner Costs	\$800,000
Total	\$19,000,000

<b>Funding Source</b>	
Bonds	\$1,500,000
Local	\$17,500,000
Total	\$19,000,000

Contingency Balance: 70%  
Construction Complete: 50%  
Project Completion: August 2020

Under Construction

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**UNDER CONSTRUCTION  
(Under Contract)  
Projects Between \$500,000 and \$2,500,000**

**1. UTL Electric Feeder J and Feeder I Upgrade 2019:**

Fellman

The UTL Electric Feeder J and Feeder I Upgrade 2019 project includes upgrading the existing 4,160 Volt electric feeder J and I to 12,470 Volt. This project will complete the conversion from the 4,160 Volt electric distribution system to the new 12,470 Volt electric system. The 12,470 Volt distribution system has increased the electric capacity on campus while also creating a more reliable electric looped distribution system.

The project includes new underground electric feeders and duct-bank. In addition to the upgraded feeder, a new electrical substation will be installed in the Campus Avenue Building, new pad mounted transformer will be installed for Williams Hall and Bonham House and new 12,470 Volt Electrical Switch will be installed behind Hanna House. Hanna House and Wells Hall will receive a relocated step-down electrical transformer. Finally, the feeder will serve Goggin Ice Arena and Recreational Sports Center to balance out existing circuits with new 12,470 Volts feeds to the buildings.

The original scope of the project was completed on schedule. The underground duct bank work is complete. Recreational Sports Center and MacMillan Hall conversions are complete. The Campus Avenue Building new switchgear installation is complete. The project has been extended to a December 2019 completion to include added scope to be complete around Thanksgiving. The added scope was funded through bid savings and will remove abandoned underground cable. The copper will be recycled, which will cover more than the cost to remove the cable. In addition, the removal will provide spare underground conduits for future use. **This will be the last report.**

Delivery Method: Single Prime Contractor

Project Cost	
Design and Administration	\$70,000
Cost of Work	\$1,045,000
Contingency	\$100,000
Owner Costs	\$10,000
Total	\$1,225,000

Funding Source	
Local	\$1,225,000
Total	\$1,225,000

Contingency Balance: 100%  
Construction Complete: 98%  
Project Completion: December 2019  
(revised since last report – October 2019)

Under Construction



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**IN DESIGN  
(Pre-Contract)**

**1. Dodds Hall Renovation:**

Morris

This project will renovate Dodds Residence Hall at the northeast corner of the South Quad as a continuation of the 2010 Long Range Housing Master Plan. This will be the last of the South Quad halls to be renovated. Dodds Hall will receive an upgrade very similar to what is currently being done at Porter Hall – mechanical systems, energy efficiency, finishes and accessibility. The design includes improvements in the heating, cooling, plumbing and life safety systems, as well as the building envelope. The renovation extends the life of the facility.

After evaluating the size of the incoming class, the decision was made to table this project and it is now remobilizing for a May 2020 construction start. The project has recently completed the Construction Document phase and GMP negotiation. The intent is to renovate Dodds Hall over the 2020-2021 school year. The proposed budget has been adjusted for inflation due to the one-year delay.

Delivery Method: Design-Build

Proposed Budget: \$17,660,000  
Desired Start: June 2020  
Desired Completion: August 2021

Funding Source	
Local	\$17,660,000
Total	\$17,660,000

**2. Clinical Health Sciences Building: (Previous Report – In Planning)**

Heflin

This project is performing programming related to consolidating and expanding health sciences. The possibility of renovation or new construction is being evaluated. These programs could include existing and potential new programs that would benefit Miami’s long-term goals. A Programming Committee comprised of faculty, administration and Physical Facilities staff was convened in January 2019 to determine the program of the facility. The team is working with the Criteria AE firm of Moody Nolan and Perkins and Will to develop the Program of Requirements, assist in site selection analysis, and provide Conceptual and Schematic Design.

A decision was made to include the health services and counseling clinics into the health science facility project. In addition, the Clinical Health Sciences building site was confirmed to take place on the existing footprint of the health and counseling center and adjacent parking lot. This location will require relocating the clinic operations to Harris Hall while the new facility is under construction. Renovation of Harris Hall will commence in December 2019 and be complete by mid-May 2020. The design team completed programming for the clinics, as well as the new PA program, Nursing, and Speech Pathology and Audiology in mid-November. The Health Science project is now in the Schematic Design phase.

Delivery Method: Design-Build

Proposed Budget: \$96,000,000  
Desired Start: Summer 2020  
Desired Completion: Summer 2022

Funding Source	
TBD	TBD
Total	TBD

In Design

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**3. High Street Safety Enhancements:**

Christian

This project will enhance pedestrian safety on High Street between Patterson Avenue and Campus Avenue, and also on Patterson Avenue between State Route 73 and Withrow Street. The project includes refuge islands, planted medians, safety signals, lighting, sidewalks, and reducing the number of crosswalks.

In the spring of 2018, the City of Oxford and Miami University jointly applied for and were awarded a transportation safety grant in the amount of \$1 Million from the Ohio Department of Transportation. The grant requires a minimum 15% local match for construction.

The City of Oxford and the University have developed a Memorandum of Understanding identifying the roles of staff and financial contributions from each entity. The University will perform the majority of design, project management, and day-to-day construction administration, with the City acting as the official Local Public Agency during bidding and construction. The University will fund the local construction match, design and administration fees, and contingency for the safety enhancements. The City will provide the local construction match and perform the design for the paving portion of the project.

The work will also include additional islands on Patterson and North Patterson Avenue to ensure the safety of pedestrians throughout this corridor. The project replaces the sidewalk along the entire south side of High Street between Patterson Avenue and Campus Avenue.

The project is out to bid.

Delivery Method: Single Prime Contractor

Proposed Budget: \$3,900,000  
 Desired Start: May 2020  
 Desired Completion: August 2020

Funding Source	
Grant Funds (ODOT to City of Oxford)	\$1,000,000
Local	\$2,900,000
Total	\$3,900,000

In Planning

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**4. Ogden Hall / Bell Tower Place Dining Renovation: (New Project This Report)**

Morris

This project will renovate Ogden Residence Hall and Bell Tower Place Dining Hall, both within the same building. This is a continuation of the 2010 Long Range Housing Master Plan. Ogden Hall will receive an upgrade in the mechanical systems, fire suppression, energy efficiency, finishes, interior renovations and accessibility. The design includes improvements in the heating, cooling, plumbing, electrical, life safety systems, as well as the building envelope. The renovation extends the life of the facility.

The existing Dining Hall will be remodeled to provide a contemporary and modernized dining facility meeting the needs and expectations of the students. It will feature flexible food offering stations that may easily be converted without replacing equipment. The renovated facility will be operated as a buffet-style venue and feature expanded and unique menus, visible food prep areas, and will create an environment that has the same quality that is present in the newer dining facilities. A C-Store will be moved outside of the dining zone and will offer popular pre-packaged food options for grab-and-go, dry goods, and refrigerated goods.

Delivery Method: Design-Build

Proposed Budget: \$27,400,000  
 Desired Start: May 2021  
 Desired Completion: August 2022

Funding Source	
Local	\$27,400,000
Total	\$27,400,000

In Planning

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**Intentionally blank**

In Planning

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**IN PLANNING  
(Pre-A&E)**

**1. Hamilton Campus – Knightsbridge Building Renovation:**

This project will provide for the renovation of the recently acquired 23,500 square feet Richard Allen Academy building located on the Hamilton Campus at the intersection of Knightsbridge Drive and University Boulevard in Hamilton. A facility assessment to be used in developing program and renovation cost has been completed. The assessment has identified the need for mechanical/electrical upgrades as part of the renovation, reporting approximately \$4,000,000 in probable cost. A recent professionally-prepared campus space plan is contributing to the programmed scope of this project.

Planning is underway to align the campus space requirements, academic priorities, and existing facilities condition/needs.

Proposed Budget: TBD  
Desired Start: TBD  
Desired Completion: TBD

Funding Source	
TBD	TBD
Total	TBD

**2. Harris Hall Renovation: (New Project This Report)**

Heflin

This project is a Clinical Health Sciences Building enabling project. The new Health Sciences Building is slated to be built on the current site of the Health Services Center. Harris Hall will be renovated to house the health and counseling clinics and the student wellness center during the new facility construction. These operations will then move into the new Clinical Health Sciences Building upon its completion. The renovation will prepare the facility to be utilized for future swing space, which is a critical need for future planned renovation projects.

This renovation will include demolition of the old kitchen and east dining areas for construction of clinic exam and counseling rooms. The design includes improvements in the electrical, heating, cooling, plumbing and life safety systems and extends the life of the facility.

The project is in the design stage. Demolition will commence in December 2019 with completion in May 2020.

Delivery Method: Design Build

Proposed Budget: \$6,200,000  
Desired Start: December 2019  
Desired Completion: May 2020

Funding Source	
TBD	\$6,200,000
Total	\$6,200,000

In Planning

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**3. Innovation/STEM Building:**

Christian

This project is performing programming related to innovation, multidisciplinary project-based work, and instilling a sense of leadership and entrepreneurship in our students. The possibility of renovation or new construction is being evaluated. A Programming Committee with representation from areas of STEM, data science, entrepreneurship, Interactive Media, and design thinking was convened in January 2019. The University has hired a Criteria AE firm to develop the program of requirements, assist in potential site selection, and provide conceptual design.

The Criteria AE firm is under contract, but commencement of the programming phase is on hold pending further direction by senior administration.

Proposed Budget: \$50,000,000  
Desired Start: To Be Determined  
Desired Completion: To Be Determined

Funding Source	
TBD	TBD
Total	TBD

In Planning

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**COMPLETED PROJECTS**

**1. Patterson Place Renovation:**

Dole

This project consisted of renovation of portions of the exterior and interior of Patterson Place for The Western College Alumnae Association. The major component of the interior renovation was the installation of an ADA restroom on the first floor of the building. On the exterior of the building, an ADA ramp was installed to the South of the building, the roof has been replaced, the box gutters and exterior trim have been repaired, and all exterior trim and porches have been repaired and painted.



Delivery Method: Single Prime Contractor

<b>Project Revenue</b>	
Design and Administration	\$44,800
Cost of Work	\$410,000
Contingency	\$50,000
Owner Costs	\$40,000
Total	\$544,800

<b>Project Expense</b>	
Design and Administration	\$44,800
Cost of Work	\$410,000
Contingency	\$41,000
Owner Costs	\$38,500
Total	\$534,300

Est. Contingency Balance Returned: \$9,000  
 Est. Contingency Balance Returned, Percent of Total: 18%  
 Est. Bid Savings / VE Returned: \$1,500  
 Est. Final Total: \$10,500

Completed Projects

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2. **Presser Hall Bridge Renovation:**

Dole

This project included the deconstruction of the existing bridge, demolition of the existing tunnel within the extents of the bridge, installation of new foundations, reconstruction of the bridge structure, reconstruction of the decorative stone façade, and installation of a new walking surface, railing, and new bridge lighting.



Delivery Method: Single Prime Contractor

Project Revenue	
Design and Administration	\$ 49,400
Cost of Work	\$ 1,004,500
Contingency	\$ 115,000
Owner Costs	\$ 331,100
Total	\$ 1,500,000

Project Expense	
Design and Administration	\$ 49,400
Cost of Work	\$ 1,004,500
Contingency	\$44,000
Owner Costs	\$193,000
Total	\$ 1,290,900

Est. Contingency Balance Returned: \$ 71,000  
 Est. Contingency Balance Returned, Percent of Total: 62 %  
 Est. Bid Savings / VE Returned: \$ 138,100  
 Est. Final Total: \$209,100

Completed Projects



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**3. Western Campus Tunnel Removal:**

Dole

This project consisted of the removal of an abandoned and damaged tunnel beginning at the east entrance of Presser Hall and stopping just east of Hoyt Hall. The demolition removed the tunnel top and sides as well as abandoned steam piping throughout the length of the tunnel. Once the tunnel top and walls were removed, the existing utilities, phone lines and fiber optic cable were placed in conduits and installed in a duct bank poured on top of the existing tunnel floor. Fill material was then placed on top of the duct bank raising the grade to match the surrounding area and a sidewalk was poured in the same path as the old tunnel.

Delivery Method: Single Prime Contractor

<b>Project Revenue</b>	
Design and Administration	\$ 29,000
Cost of Work	\$ 430,500
Contingency	\$ 65,000
Owner Costs	\$ 375,500
Total	\$ 900,000

<b>Project Expense</b>	
Design and Administration	\$29,000
Cost of Work	\$ 430,500
Contingency	\$ 32,500
Owner Costs	\$ 145,000
Total	\$ 637,000

Est. Contingency Balance Returned: \$32,500

Est. Contingency Balance Returned, Percent of Total: 50 %

Est. Bid Savings / VE Returned: \$230,500

Est. Final Total: \$263,000

Completed Projects

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Completed Projects

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Status of Capital Projects Report**Projects Between \$50,000 and \$500,000**

<b>Project</b>	<b>Budget</b>
Airport Pavement Repair 2018	\$230,000
Alumni Hall Graduate Studio	\$253,800
Armstrong Student Center – Elevator Upgrade 2019	\$104,000
Armstrong Student Center – Esports Café 2019	\$306,900
Armstrong Student Center – Smoothie Bar	\$191,360
Armstrong Student Center – Sushi Bar	\$71,075
Bonham House – Interior Refresh	\$110,075
Brandon Hall – HVAC Upgrades	\$499,090
Campus Services – Roof Repairs 2019 – Heritage Commons and Stoddard Hall	\$190,000
Center for Career Exploration & Success Renovation Phase 1	\$241,300
Center for Performing Arts – Horizontal Limestone Repair	\$150,000
Chestnut Fields Ropes Challenge Course	\$300,000
Cole Service Building – Purchasing Renovation 2017	\$400,000
Collins Hall – HVAC Upgrades	\$359,677
Dennison Hall – HVAC Upgrades	\$500,000
Ecology Resource Center – Ecology Classroom Facility	\$177,000
E & G Buildings – LED Retrofits 2019	\$350,000
E & G Buildings – LED Retrofits 2020	\$350,000
Engineering Building – Lab Gas Upgrades 2019	\$51,000
Engineering Building – Mezzanine Expansion	\$120,750
Engineering Workshop – State Route 73 Renovation 2018	\$275,000
Farmer School of Business 0042 Renovation	\$110,000
Farmer School of Business – Building Envelope Study	\$54,037
Field Hockey Field Upgrades	\$90,000
Garden Commons – Dishwasher Improvements 2019	\$200,000
Goggin Locker Room Energy Recovery 2020	\$325,000
Gross Family Athlete Development Center – One Stop	\$100,000
Hall Auditorium – Stage Lighting LED Replacement	\$125,000
Hamilton Campus – Mosler Hall E-Campus Expansion	\$500,000
Havighurst Hall – Chimney Caps 2020	\$100,000
Hepburn Hall – HVAC Upgrades	\$500,000
Hoyt Hall Partition Walls	\$80,000
Hoyt Hall UPS Upgrade 2020	\$175,000
HUB Quad Engraved Brick Replacement	\$145,500
Hughes Hall – Exterior Door Replacement	\$200,000
Institute for Food Farm – Solar Irrigation System	\$35,385
King Library – Howe Renovation	\$60,305
Lewis Place – Exterior repairs	\$250,000
Marcum Conference Center – Wallcovering Removal 2019	\$219,350
McGuffey Hall – Room 406 Renovation	\$100,000
Miami Inn – Roof Replacement 2020	\$300,000
Middletown Campus – Johnston Hall Career Services Offices	\$400,000
Middletown Campus – Thesken Hall Fire Suppression	\$400,000
Millett Hall – Gym Floor Replacement 2019	\$400,000
Morris Hall – Chimney Flashing Repairs	\$100,000

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Morris Hall – Shower Surrounds	\$250,000
Morris Hall & Thomson Hall - Masonry Work	\$55,000
MUO Campus Services Exterior 2020	\$173,000
MUO Dead Tree Removal 2019	\$150,000
MUO Masonry & Limestone Repairs 2019	\$195,000
MUO Misc ADA Projects	\$100,000
MUO Painting E & G Exterior 2019	\$150,000
North Campus & Campus Avenue Garage Water Infiltration	\$215,000
North Campus Garage Improvements 2019	\$295,000
North Chiller Plant – Automate Chemical Monitoring and Dosing	\$85,000
North Chiller Plant – Side-Steam Filtration for Condenser Water	\$115,000
North Chiller Plant – Upgrade Siemens BAS Panels	\$70,000
Old Manse – Electric Service Upgrade 2019	\$60,000
Peabody Hall – Electrical Distribution Improvement 2019	\$78,776
Peabody Hall – Restroom Upgrades 2019	\$499,000
Phillips Hall – Exterior Door Replacement	\$50,000
Recreational Sports Center – Ceiling Pad Replacement	\$123,536
Recreational Sports Center – Exterior Sealant Replacement	\$90,000
Recreational Sport Center – Natatorium Lighting Replacement 2018	\$200,000
Regional Campuses – Classroom AV Tech Upgrades 2018	\$65,650
Residence Halls – Ventilation A/E Fees	\$290,000
Roudebush Hall – Chiller Boiler and Humidifier Upgrade 2020	\$440,000
Simpson Shade House Renovation 2019	\$100,000
<b>Steam Plant – Wartsila 800 hour PM 2019</b>	<b>\$200,000</b>
Symmes Hall – HVAC Upgrades	\$498,982
Utility Enterprise Plant Security Upgrades	\$500,000
VOA – Exterior Repairs	\$100,000
Western Dining Commons – Express Renovation	\$98,000
Yager – Field Hockey Locker Room Upgrade	\$225,000
Yager West Shelter	\$181,130

**Projects Closed Between \$50,000 and \$500,000**

<b>Project</b>	<b>Original Budget</b>	<b>Returned Funds</b>
MUO Emergency Radio responders Coverage System (ERRCS) Upgrade	\$470,000	\$6,790
Hiestand Hall – Air Handler 2 Conversion & Chilled Water Pumps Replacement	\$75,000	\$20,520
Hiestand Hall – Fire Alarm Upgrades	\$250,000	\$81,418
Hoyt Hall APC UPS Refresh 2019	\$120,000	\$11,425
Lewis Place – Walter Infiltration Improvements 2019	\$52,950	\$8,695
Marcum Conference Center – Alumni Center Study	\$62,000	\$13,800
Roudebush Hall – Office Upgrade 2018	\$75,000	\$8,075
Tappan Hall – 2018 MEP Improvements	\$91,935	\$1,850
Williams Hall – Renovation 2018	\$338,200	\$23,110

Miami University  
Physical Facilities Department  
Status of Capital Projects Report**Glossary of Terms**

**Construction Manager at Risk (CMR)** – is a delivery method which entails a commitment by the construction manager to deliver the project within a Guaranteed Maximum Price (GMP). The owner contracts the architectural and engineering services to perform the design from concept through construction bid documents using the construction manager as a consultant. The construction manager acts as the equivalent of a general contractor during the construction phase. CMR arrangement eliminates a "Low Bid" construction project. This method will typically be used on projects with high complexity and demanding completion schedules.

**Contingency** – includes both owner contingency and the D/B or CMR contingency where applicable.

**Cost of the Work** – is the cost of construction. This includes general condition fees, contractor overhead and profit, D/B or CMR construction stage personnel.

**Design & Administration** – includes all professional services to support the work. This consists of base Architect/Engineer (A/E) fees, A/E additional services, A/E reimbursables, non-error/omission A/E contingency fees, geotechnical services, special inspection services partnering services, multi-vista photo documentation of projects, D/B or CMR pre-construction services, third party estimator, and local administration fees.

**Design Build (D/B)** – is a project delivery method in which the design and construction services are contracted by a single entity and delivered within a Guaranteed Maximum Price (GMP). Design Build relies on a single point of responsibility contract and is used to minimize risks for the project owner and to reduce the delivery schedule by overlapping the design phase and construction phase of a project. This method will typically be used on projects with less complexity and have demanding completion schedules.

**Guaranteed Maximum Price (GMP)** – is the negotiated contract for construction services when using D/B or CMR. The owner negotiates a reasonable maximum price for the project (or component of the project) to be delivered within the prescribed schedule. The D/B firm or CMR is responsible for delivering the project within the agreed upon GMP. This process eliminates bidding risks experienced by the owner, allows creative value engineering (VE) to manage the budget, and permits portions of the work to begin far earlier than traditional bidding of the entire project.

**Multiple Prime Contracting** – is a project delivery method historically allowed by the State of Ohio. The owner contracts the architectural and engineering services to perform the design from concept through construction bid documents. The construction services are divided into various trade specialties – each bid as a separate contract (general, plumbing, mechanical, electrical, sprinkler, etc.). The owner is responsible for managing the terms of each contract and coordinating the work between the multiple contractors.

**Owner Costs** – are costs directly borne by the owner to complete the project. This includes furniture, fixtures, and equipment (FF&E), audio/visual (A/V), IT networking, percent for art (applicable on State funded projects exceeding \$4 million), printing and advertising expenses, and any special moving or start-up funds.

**Preconstruction Services** – are the development and design services provided by a D/B firm or CMR to the owner. These services are typically performed for an identified cost prior to the negotiation of a GMP. These services are included in "Design and Administration."

**Single Prime Contracting** – is a project delivery method in which the owner contracts the architectural and engineering services to perform the design from concept through construction bid documents. The construction services are contracted separately, but through a single entity. Single Prime Contracting is beneficial on projects with specialized construction requiring more owner oversight or control. This method will typically be used on projects with high complexity and low schedule importance.

**MIAMI UNIVERSITY  
BOARD OF TRUSTEES  
Minutes of the Board of Trustees Meeting  
Oxford Campus, Marcum Conference Center, Rooms 180-186  
Friday, December 13, 2019**

The Secretary to the Board of Trustees confirms that as specified in the Regulations of the Board of Trustees of Miami University, and in compliance with Section 121.22 of the Ohio Revised Code, due notice was given prior to holding this meeting of the Board of Trustees.

The meeting was called to order at 9:00 a.m. in the Marcum Conference Center, on the Oxford Campus with the Board Chair, Trustee David Budig, presiding. Roll was called with a majority of Trustees present, constituting a quorum. In addition to the Trustees, President Gregory Crawford; Provost Jason Osborne; Senior Vice Presidents David Creamer, and Tom Herbert; Vice Presidents Jayne Brownell, Ron Scott, David Seidl, Brent Shock (interim), and Michele Sparks; General Counsel Robin Parker; David Saylor, Director of Athletics; Randi Thomas, Director of Institutional Relations; Dawn Tsirelis, Assistant to the President; and Ted Pickerill, Executive Assistant to the President, and Secretary to the Board of Trustees, were also present, along with many members of the Miami University community who were in attendance to observe, present and/or assist.

Roll call of Trustees:

Present: David H. Budig  
Megan Cremeans (Student Trustee)  
Robert E. Coletti (National Trustee)  
Sandra D. Collins  
Zachary Haines  
John C. Pascoe  
Diane Perlmutter (National Trustee)  
Mark E. Ridenour  
Rod Robinson  
Mary Schell  
Robert W. Shroder

Absent: C. Michael Armstrong (National Trustee)  
Will Kulis (Student Trustee)

**Comments from the Public**

There were no requests from the public to address the Board.

**Public Study Session**

Chair Budig welcomed everyone to the meeting, and introduced Suzanne Zazycki and Helaine Alessio, co-chairs of the Sustainability Committee, along with Adam Sizemore, Miami's Director of Sustainability.

**Sustainability**

Co-Chairs Zazycki and Alessio and Director Sizemore updated the Board on the progress in reviewing the pathway to carbon neutrality. The Sustainability Committee is reviewing the

benefits and limitations of both the President’s Climate Leadership Commitments (PCLC), and an independent commitment, and will soon deliver their report to President Crawford.

They discussed the three scopes of emissions, which under PCLC, must be addressed – Direct (such as coal), Indirect (such as purchased electricity), and Other Indirect (such as air travel). They noted that Miami has made significant progress over the past decade in reducing energy use, and in reducing carbon emissions. Highlights of Miami’s progress include:

- Zero use of coal beginning in 2017
- Gold STARS rating from AASHE
- Included in Sierra Club’s top 100 “Coolest Schools”
- Included in the Princeton Review Green College list
- 22 academic programs w/sustainability learning outcomes
- 100 courses & 322 research proposals
- Student Sustainability Council formed
- Bicycle Friendly Campus designation
- 29 LEED buildings
- Energy system transformation, to include geothermal

*Associated materials are included as Attachment A.*

### **Work Plus**

State Senator Bill Coley and Ohio Department of High Education Senior Vice Cancellor Gary Cates provided the Board with an update on Work Plus. Work Plus is a college-workforce partnership, promoted by the State of Ohio, whereby students can graduate from college debt-free, with significant workforce experience. Students work part-time at partner employers, and attend classes at a Miami Regional Campus. The students earns pay, and, after any scholarships and grants are applied, the employer pays the student’s remaining tuition costs.

Senator Coley has proposed legislation to promote Work Plus throughout the State, and it is anticipated that it will be sent to the Governor early next year.

*Associated materials are included as Attachment B.*

### **Associated Student Government**

Student Body President Jaylen Perkins and Branden Small, ASG Secretary for Diversity and Inclusion presented a student government proposal that the lobbies of the three Western campus residence halls be named in honor of Civil Rights advocates James Chaney, Andrew Goodman, and Michael Schwerner, who gave their lives fighting for the rights of others.

Vice President Scott introduced President Perkins and Secretary Small, explaining that this is the next step in Miami’s embracing and honoring the legacy of Western College for Women, and their role in promoting civil rights and the Freedom Summer of ’64. He told of the Freedom Summer of ’64 award created and awarded by Miami to recognize leaders in the fight for the rights of others; it was first awarded to Congressman John Lewis, a Summer of ’64

training attendee in Oxford, and to the Mt. Zion United Methodist Church, the last site Goodman, Chaney and Schwerner were known to have visited.

Western Campus is the site of Miami's Freedom Summer Memorial, dedicated in 2000, and rededicated on the 50<sup>th</sup> Anniversary of Freedom Summer in 2014, with the addition of three trees, sculptures and chimes to honor Goodman, Chaney and Schwerner; the site has been the location of University Convocations, including the 2014 Convocation, and more recently the 2018 Convocation of Wil Haygood, featuring his award-winning Civil Rights book "Tigerland."

Recently, National Civil Rights Conference presented Miami Professor Ann Elizabeth Armstrong, and the Western College Alumnae Association with the Civil Rights and Social Justice Award. And this summer, Miami will host the 10<sup>th</sup> annual National Civil Rights Conference on campus, in Oxford. The conference's theme will be "Rise, Advocate, Educate and Cooperate: The Challenge of Change."

President Perkins and Secretary Small, then told of their wish to make the legacy of 1964 a tangible component of student life. By choosing residence halls as a place to honor the three slain civil rights leaders, it would serve as daily reminder of their sacrifice, and the need for all to answer the call to serve others.

Chair Budig thanked the students for bringing this proposal to the Board and for the service they are providing their fellow students and the entire Miami Community.

The Board then transitioned to the Public Business Session, which began with consideration of the proposed namings.

### **Public Business Session**

#### **Naming of the Western campus residence Hall Lobbies to Honor Goodman, Chaney, and Schwerner**

Trustee Ridenour moved, Trustee Shroder seconded, and by voice vote, the following namings were unanimously approved, with all voting in favor and none opposed:

**James Chaney Lobby**  
Located in Beechwoods Hall

**Andrew Goodman Lobby**  
Located in Hillcrest Hall

**Michael Schwerner Lobby**  
Located in Stonebridge Hall



## **Approval of Prior Meeting Minutes**

Trustee Shroder moved, Trustee Ridenour seconded, and by voice vote, the minutes of the prior meetings of the Board of Trustees were unanimously approved, with all voting in favor and none opposed.

## **Consent Calendar**

Resolutions on the Consent Calendar, included:

- Designation of Emerita/Emeritus
- Campus Naming

Trustee Pascoe moved, Trustee Ridenour seconded, and by voice vote, the resolutions on the Consent Calendar were unanimously approved, with all voting in favor and none opposed.

*All resolutions from the Consent Calendar are included as Attachment C.*

## **Comments by the Chair**

***Chair David Budig relayed the following information:***

Good morning and welcome to this meeting of the Miami University Board of Trustees.

Thank you once again to our student leaders and their naming proposal which has led to the advancement and furtherance of our efforts to honor and keep alive, for future generations, the struggle, sacrifice, and noble goals of those involved in that fateful summer in 1964. Your recommendation of naming the western campus residence hall common areas after the three young men who lost their lives is truly admirable.

I'd like to begin by sharing with everyone some incredible news. Those of us who attended Miami, along with our faculty, staff, friends, community members and Miami parents, know how special this University is. In Oxford, and at our regional campuses, our academics are second to none and the entire Miami experience for all who attend is a lifelong treasure. We know this, but unless quantified or measured, it is difficult to convey to others just how special an education and an experience Miami provides. The news I want to share is that there is now a measure and a ranking to help convey the impact a university has upon one's life and career after they graduate.

Georgetown University's McCourt School for Public Policy's Center on Education and the Workforce has taken data from the expanded College Scorecard to rank 4,500 colleges and universities by return on investment. Among Ohio's public, four-year, bachelor degree institutions, Miami's Hamilton, Middletown, and Oxford campuses take the top three spots for greatest Net Present Value and overall return over the long term. This is no surprise for those of us familiar with all Miami has to offer, but it is refreshing to see it finally validated. Thank you to Georgetown University for providing this meaningful service and well done to our caring, committed and devoted faculty and staff.

I would like to recognize and thank Senator Bill Coley and Senior Vice Chancellor Gary Cates for being here today and for working closely with Miami and local employers to help lead the way in providing a pathway to employment and a debt-free education for the residents of Southwest Ohio. As I have stated in previous reports, Work Plus is a win for our students, a win for employers, a win for Miami and a win for the State of Ohio. We fully expect Work Plus to become a model program as it is implemented throughout the state and we firmly believe it will be a foundation that is replicated throughout the nation.

Work Plus is a prime example of a program that will meet the changing needs of our students, employers, our region, the state, the nation, and indeed the global workforce. Universities, if they are going to continue to serve the needs of students and succeed in the future, must adapt, restructure, refocus, and reallocate to shift from meeting yesterday's needs to facilitate today's and tomorrow's opportunities.

Change is not easy – but it is essential as we shift our focus from what was once vibrant in the past to what has become crucial and indispensable today and for the future. As I have mentioned often, Miami is not unique in facing challenges and strong headwinds as we adapt to meet a shifting landscape in higher education. We are however, grateful for the support and vision of Governor DeWine, the members of his administration and other state leaders such as Senator Coley and Senior Vice Chancellor Cates who understand the changing role of higher education in Ohio. When the people, leaders, employers, and organizations of our incredible State work together, no target is out of reach and great achievements are possible. We look forward to continuing to work with the state to advance Ohio initiatives.

Another example of working with the State is through Mr. Randi Thomas' Government Relations Network. The Government Relations Network is a group made up primarily of well-informed Miami students from wide-ranging majors who meet with our local, state and federal elected leaders to inform them of Miami University and what our students are doing to advance the community and our state. On October 29, more than 100 Miamians participated in the largest Statehouse Day in university history. The Miami delegation consisted of 70 undergraduate students, 5 graduate students, 26 faculty and staff, and 3 alumni. Team Miami met with over 120 Ohio General Assembly Members and shared their experiences in undergraduate research, experiential learning, community engagement and how the Miami community strives to fulfill state priorities. For Miami, it wasn't just "Statehouse Day" it was a "Statehouse Takeover Day."

In addition, nine undergraduates from our Government Relations Network group, along with President Crawford, were involved in a press conference at the Statehouse in November. They shared their work experiences with companies in Ohio - from internships at General Electric, to working with Ohio start-ups, to attacking data sets for the Cleveland Clinic as a part of their first-year business integrated core course requirement. Our students also discussed our focus on state priorities through research - one example of this is addiction and solutions to it. The student team and President Crawford also visited leadership from the Ohio Business Roundtable, Jobs Ohio, and Third Frontier. From computer science, digital studies and IMS, to science, technology, engineering, and mathematics and to political science, our students and graduates are impacting our state in positive ways as we accelerate even faster in the digital Artificial Intelligence world. On behalf of the Board, and all Miamians, please allow me to extend our gratitude and thanks to Randi Thomas and the Government Relations Network, and to our state leadership.

I would like to also thank our special guests today - Adam Sizemore, Helaine Alessio, Suzanne Zazycki and the entire Sustainability Committee who have worked diligently with our incredible team in Facilities Management to collaboratively find ways to reduce Miami's energy use and carbon emissions. Achieving a 39% reduction in energy use and a 45% reduction in emissions in just over ten years is nothing short of extraordinary. It speaks to our collective commitment to sustainability - and as Adam, Helaine and Suzanne remarked earlier - our leadership among like-institutions in making real, significant progress in reducing consumption, and progressing toward carbon neutrality – well done to you all!

I would now like to share an update on the special relationship between Miami University and the Myaamia Tribe. Last month, Miami Athletics hosted the inaugural “Celebrating Miami: Tribe & University” week in mid-November, highlighting the unique and longstanding partnership between Miami Athletics and the Myaamia Center on Miami's campus. This partnership stems directly from the relationship between Miami University and the Miami Tribe of Oklahoma that started in 1972 and was formalized in 2001.

Miami University is fortunate to have 32 Myaamia students enrolled on campus this academic year. In preparation for the special week, the Myaamia students played an integral part in planning the activities and events and it was clearly a huge success. Fans also had the opportunity to learn about the relationship between the Miami Tribe of Oklahoma and Miami University, the Myaamia language and culture, and they had the opportunity to interact with the Myaamia students on campus.

At all athletic home games for the week, Miami student-athletes paid tribute to the partnership with different uniform elements. For football and hockey, fans saw a new helmet decal celebrating the partnership, while at volleyball and men's basketball, the teams unveiled new uniforms with the inclusion of the Myaamia Heritage Logo. Additionally, the hockey team is playing all season long at the Steve “Coach” Cady arena with a specially-designed puck with the heritage logo.

That logo is a traditional Miami Tribe ribbon work pattern which highlights two large geometric diamonds extending on either side of a central diamond - the large diamond on the left represents the Miami Tribe while the large diamond on the right represents Miami University. The central diamond, made by the intersection of the two larger ones, represents the shared vision, cooperation and deep respect for the reciprocal learning that results from both groups working collaboratively. At the MAC Championship football game last weekend, we saw the ribbon work logo displayed once again, on each Miami football player's helmet.

We are also so proud of our alumni and I'd like to highlight Wil Haygood, who received the 2019 Ohioana Award which is given for the best book about Ohio or an Ohioan. Wil received this award for his book “Tigerland.” He was also a runner-up for the prestigious Dayton Literary Peace Prize.

Wil's book tells the story of East High School's Championship seasons against the backdrop of the tumultuous year of civil unrest in 1968. Many of our students were the very first to read the book, receiving a pre-edition copy for their first-year student reading program and it was fitting that they were able to hear Wil speak in person at that year's Convocation held on

Western Campus at the Freedom Summer Memorial. We are extremely proud of Wil and the many Miami alumni who are positively impacting so many lives every day.

Most importantly, I'd like to highlight the marquee event of the day - the recognition of our graduates this afternoon. Nearly 1,400 students will become our newest alumni, and six graduates will become our nation's newest military officers. Our featured speaker will be Richard Campbell, the 2019 recipient of the Benjamin Harrison Medallion, one of Miami's highest and most prestigious awards to faculty. It promises to be an exceptional, uplifting event, and I encourage everyone to join us there later today.

Lastly, I would like to congratulate David Saylor, Chuck Martin and his staff and the entire Miami football team on their thrilling MAC championship win and wish them luck at the Lendingtree Bowl on January 6 in Mobile, Alabama where we will meet – and beat - Louisiana–Lafayette. Good luck team!

On Behalf of the Board of Trustees, I hope you and your loved ones have a happy and safe holiday season.

Thank you, this concludes my remarks.

Love and Honor.

## **Reports, Ordinances and Resolutions**

### **President's Report**

President Crawford spoke of the challenges, changes and opportunities facing Higher Education and Miami University. He also spoke of what will define future success, which is our response to change, and must include:

- Efficient Administrative Infrastructure
- Advancing In-Demand Degrees
- Program Excellence (Quality)
- Program Distinctiveness (Unique)
- Modern Facilities & Infrastructure
- Reduce, Repurpose, Reinvest
- National and International Brand

He then featured many of the recent awards and recognitions received by Miami University, significant university events, the recent achievements of faculty, and outlined Miami's progress on sustainability.

*President Crawford's presentation is included as Attachment D.*

### **Report of the Chair of University Senate Executive Committee**

*The report is included as Attachment E.*

## **Report of the Student Body President**

*Student Body President, Jaylen Perkins, addressed the Board during the Public Study session.*

## **Academic and Student Affairs Committee**

### **Report of the Committee Chair**

***Committee Chair Diane Perlmutter relayed the following information:***

The Academic and Student Affairs Committee met yesterday in the Shriver Center. During the meeting, four resolutions were considered, and the Committee unanimously recommends approval for all of them today.

The Committee received written reports from the University Senate and from student leaders. The Committee heard from the Provost, the Vice President for Student Life, the Vice President for University Communications and Marketing, and the interim Vice President for Enrollment Management and Student Success. The Committee received presentations on several topics, and also reviewed written reports, which will be available in the meeting's minutes.

We began the meeting in the Admission Auditorium, where the Admissions staff treated the Committee to a prospective student welcome and information session. It was not a lecture, but their actual presentation - it was quite immersive and informative to have a true firsthand experience to better understand the admission process and what today's parents and prospective students are looking for with a college education. Thank you to our wonderful Admissions team for this opportunity.

Vice President Brownell then addressed the Committee, highlighting a transition to a new generation of students. Dr. Brownell was followed by interim Vice President Shock who updated the Committee on retention, and also provided a presentation on student debt. Vice President Sparks then updated the Committee, providing Social Media demographics, analysis, and recommendations.

Provost Osborne presented four resolutions for consideration – The IMS Department name change, a Bachelors in Business Analytics, a Masters in Business Management, and submission of the annual remediation report to the state. All are unanimously recommended for approval.

Finally, we also heard from Dean Dollár, Dr. Chagdes, Dr. Jones and several students regarding the College of Engineering and Computing.

Thank you, that concludes my report.

### **Resolutions**

*The Academic and Student Affairs Committee Resolutions are included as Attachment F.*

### **Renaming of the IMS Department**

Provost Osborne spoke in support of the departmental name change from the Department of Interactive Media Studies to the Department of Emerging Technology in Business and Design (ETBD).

Trustee Shrider then moved, Trustee Ridenour seconded, and by voice vote, the resolution was unanimously approved, with all voting in favor and none opposed.

### **Bachelor of Science in Business Analytics**

Provost Osborne spoke in support of the proposed in-demand, interdisciplinary degree.

Trustee Robinson then moved, Trustee Pascoe seconded, and by voice vote, the resolution was unanimously approved, with all voting in favor and none opposed.

### **Master of Science in Business Management**

Provost Osborne spoke in support of the new, in-demand, professional graduate degree.

Trustee Haynes then moved, Trustee Shroder seconded, and by voice vote, the resolution was unanimously approved, with all voting in favor and none opposed.

### **Annual Remediation Report to the State of Ohio**

Provost Osborne spoke in support of the resolution accepting the annual remediation report, and directing its submission to the State of Ohio.

Trustee Ridenour then moved, Trustee Pascoe seconded, and by voice vote, the resolution was unanimously approved, with all voting in favor and none opposed.

*The Academic and Student Affairs Committee Resolutions are included as Attachment F.*

### **Finance and Audit Committee**

#### **Report of the Committee Chair**

*Acting Committee Chair Mark Ridenour relayed the following information:*

The Finance and Audit Committee met yesterday at the Marcum Conference Center. The Committee considered one tuition ordinance and eight resolutions at the meeting. All nine items are recommended for approval later in today's meeting.

The Committee began the meeting with the annual report from the University's independent auditors. The report by RSM was relatively brief and routine. A great deal of work goes into the audit and the preparation of the annual financial statements and reports. I want to thank the University's associate controller, Jennifer Morrison, and her staff for their excellent

work again this year.

The Committee considered one tuition ordinance at the meeting. The ordinance proposes to maintain the current tuition and fees for the Professional MBA program for the fourth consecutive year and to establish a per credit hour rate of \$995 for a new graduate program in data analytics. Both of these graduate programs are offered by the Farmer School of Business.

A resolution to adopt the annual efficiency report was also considered at the meeting and was endorsed by the Committee. The efficiency report is submitted annually to the Ohio Department of Higher Education and for the third consecutive year the efficiency goal was exceeded by the University. More importantly, these savings are being used to grow student scholarships and make a Miami education more affordable.

The Committee also considered five facility related resolutions at the meeting. The capital plan that is submitted to the Ohio Department of Higher Education every other year was reviewed with the committee and the committee endorsed the funding request for the proposed Clinical Health Sciences building. The Ohio General Assembly is expected to pass a capital appropriations bill sometime in the new calendar year.

In consideration that the funding for the Clinical Health Sciences building may require the University to issue tax exempt bonds to partially fund the construction of the building, a capital expenditure declaration was recommended that will permit funds expended prior to the issuance of the debt to be funded by such bond proceeds. However, this declaration does not obligate or authorize any new debt.

The Committee also considered three capital project resolutions. The Committee received a request to renovate and repurpose the former Harris Dining Hall for swing space for departments displaced by future renovation projects. The initial need for this space is for the Student Health Center which is expected to be displaced for two years by the construction of the Clinical Health Sciences building.

The Committee also considered a resolution authorizing the renovation of Dodds Hall. As you may recall, this project was to be completed this year but the larger than expected freshman class caused the project to be delayed. The project is expected to commence this May and be completed for Fall 2021.

Finally, the Committee received a recommendation for completing safety and pedestrian improvements to both High and Patterson streets. These improvements will be similar to those completed on parts of Patterson Avenue two summers ago. All five of the proposed facility resolutions were endorsed by the Committee.

The final two resolutions considered by the Committee were presented and recommended by the investment subcommittee. The first is to establish a \$1.5 million quasi-endowment for scholarships from unrestricted endowment distributions. The second resolution is for changes to the non-endowment funds investment policy. The policy changes are intended to align the policy with the move to an outsourced chief investment officer and to update the standards used in funding the investment fluctuation fund. Both resolutions were endorsed by the subcommittee and the full committee.

Finally, the Committee received a brief update from senior vice president Creamer on the five year budget plan that the Trustees adopted in February. The budget plan has been amended to increase the amount to be reallocated for the next two fiscal years and to implement the five year budget adjustments earlier wherever possible. These changes will provide added financial flexibility and potentially provide additional funds for investing in new academic programs. The Committee endorses the proactive actions being taken by the administration in response to the constantly shifting financial landscape higher education faces today. These are difficult decisions but they also are decisions that will better serve the needs of our students and secure a promising future for our University.

Mr. Chairman, that concludes the report of the Finance and Audit Committee.

## **Ordinances and Resolutions**

*The Finance and Audit Committee Ordinances and Resolutions are included as Attachment G.*

### **Ordinances**

#### **Farmer School of Business Master Program Tuition**

Senior Vice President Creamer spoke in support of the ordinance setting tuition for graduate programs with unique costs and market conditions – the Professional MBA, and the MS in Business Analytics.

Trustee Ridenour then moved, Trustee Pascoe seconded, and by roll call vote, the ordinance was unanimously approved, with all eight voting in favor and none opposed.

### **Resolutions**

#### **Capital Improvement Plan and Funding Request**

Senior Vice President Creamer spoke in support of the resolution. As part of the biennial capital appropriation, the State asks each of Ohio's public universities and colleges to submit a six-year capital improvements plan and a biennial funding request. The resolution is to approve the 2021-2026 Capital Improvement Plan and the 2021-2022 funding request, and to authorize SVP Creamer to amend each as necessary to conform to allocations made by the State of Ohio.

Trustee Ridenour then moved, Trustee Shroder seconded, and by voice vote, the resolution was unanimously approved, with all voting in favor and none opposed.

#### **High Street Safety**

Senior Vice President Creamer spoke in support of the resolution to control pedestrian crossings and improve pedestrian safety on High Street



Trustee Pascoe then moved, Trustee Robinson seconded, and by voice vote, the resolution was unanimously approved, with all voting in favor and none opposed.

### **Dodds Hall Renovation**

Senior Vice President Creamer spoke in support of the resolution to renovate Dodds Hall. The Dodds Hall renovation was previously scheduled to begin last summer, but was delayed to provide increased housing capacity to better accommodate the large number of incoming first-year students during academic year 2019-2020.

Trustee Haines then moved, Trustee Ridenour seconded, and by voice vote, the resolution was unanimously approved, with all voting in favor and none opposed.

### **Harris Hall Renovation**

Senior Vice President Creamer spoke in support of the resolution. At one time Harris Hall was one of a number of peripherally located dining halls, before the campus plan shifted dining locations towards the center of campus to better meet student needs and desires. The Harris dining hall has not been operated for several years, and this resolution proposes its transition to swing space for the health center, assuming construction of the clinical health science building is approved. Following the completion of this project, Harris Hall will be used as swing space for future projects such as Bachelor Hall.

Trustee Shroder then moved, Trustee Ridenour seconded, and by voice vote, the resolution was unanimously approved, with all voting in favor and none opposed.

### **Declaration of Official Intent**

Senior Vice President Creamer spoke in support of the resolution. The resolution addresses the use of potential future bond proceeds. It is not a debt authorization itself, but states the intention of use, which can be referenced by a later debt issue. The declaration essentially allows today's spending to be funded by a future bond issue.

Trustee Ridenour then moved, Trustee Robinson seconded, and by voice vote, the resolution was unanimously approved, with all voting in favor and none opposed.

### **State of Ohio Efficiency Report**

Senior Vice President Creamer spoke in support of the resolution accepting and authorizing submission of the report.

Trustee Haines then moved, Trustee Ridenour seconded, and by voice vote, the resolution was unanimously approved, with all voting in favor and none opposed.

### **Quasi-Endowment**

Senior Vice President Creamer spoke in support of the resolution. The quasi-endowment would be funded by annual non-designated gift funds, with the annual distribution

from the quasi-endowment to be used primarily to support scholarships.

Trustee Ridenour then moved, Trustee Pascoe seconded, and by voice vote, the resolution was unanimously approved, with all voting in favor and none opposed.

### **Revised Investment Policy**

Senior Vice President Creamer spoke in support of the resolution which proposes changes to the non-endowment investment policy.

Trustee Shroder then moved, Trustee Haines seconded, and by voice vote, the resolution was unanimously approved, with all voting in favor and none opposed.

*The Finance and Audit Committee Ordinances and Resolutions are included as Attachment G.*

### **Student Trustee Reports**

#### ***Student Trustee Cremeans relayed the following information:***

Good morning and thank you. I can't help but admire our beautiful campus and little city of Oxford this morning. This time of year is certainly magical with the lights, winter chill, and students filled with excitement over the chance to take a long nap. The physical beauty of campus is unmistakable, but I have been intentional about finding beauty in the many tiny moments as my time as a student all too rapidly shrinks.

Perhaps a bigger moment I would like to call your attention to was a celebration on November 8th on all of Miami's campuses to celebrate our first generation students. In recognition of National First Generation Day, a team of staff, faculty, and students led by Craig Bennett had coffee, donuts, and other goodies for Miami's large community of first gen students. That evening, the Crawfords opened up Lewis Place to all to celebrate all First Gen Miamians. While all of the celebration was important, these students were also able to access other students, faculty and staff that are first gen, learn more about resources at Miami, and get information on filling out FAFSA. I am so thankful for this team and their efforts to make Miami a more inclusive place.

This semester, I was student teaching, but delighted to have enrolled in a class at Miami Hamilton. My newly intimate exposure to the branch campuses has clued me into the vibrant and wonderful community of staff, faculty, and students that are not to be forgotten. The Miami Regionals Tutoring and Learning Centers are home to activities shaping these communities and gearing students for success. Late this November, the Hamilton campus hosted their fifth annual "International Fest," celebrating the diverse backgrounds and experiences of hundreds of folks as part of the Miami family outside of Oxford. Food brought in by students and restaurants alike featured cuisine from places such as Brazil, China, Peru, Mexico, and India and was enjoyed by all. Likewise, students shared more about their culture while learning from others.

Just as is diversity, mental health is prioritized on the branch campuses. Hamilton and Middletown both offered a "Relaxation Room" to students during exam week, that is, this week,

in order to help students refresh and relax. The rooms were host to students relaxing with a massage chair, yoga, puzzles and games, warm drinks, and even coloring to help students find calm spaces. The Oxford campus offered many similar services to students.

Now, with finals wrapping up, we are facing graduation. I want to speak about a student I have mentioned before. One year ago, almost to the date, I spoke about a student who transferred into Miami from community college in the summer of 2018 to study physics. While at Miami, she has gotten involved in the Louis Stokes Alliance for Minority Participation, become a tutor, participated in undergraduate research, attended advocacy days with the Office of Institutional Relations, and more. I bring her up again not just because she is a talented student, but because she is a reminder of those little Miami moments that make all of the difference. This summer, she stared down the threat of leaving Miami without completing her degree. She faces financial burdens and is often the only caretaker for her three younger siblings. A first generation American in an immigrant family, she has faced incredible adversity in her educational journey. Fortunately, she was able to find the right resources that Miami has to offer and completed her summer classes and has gone on to a successful fall semester.

Today, she will be one of the many bright faces excitedly awaiting the presentation of her degree. She is only one of many students that have overcome great adversity to obtain their Miami education. She thanks her family at home and the Miami family that has taken her in. Her story is a testament to the power of our community here - one I am honored to be a part of. My congratulations go to her, her family, and all of the other graduates this semester.

Love and Honor.

### **Other Business**

#### **Report of the Nominating Committee**

The nominating committee was comprised of Trustee Mark Ridenour, Trustee Tom Gunlock and National Trustee Diane Perlmutter (Chair).

Trustee Perlmutter reported that the Committee took their job very seriously, to ensure Miami's strong future. They praised the current group of officers, then proposed the following slate for calendar year 2019:

Chair, David Budig  
 Vice Chair, Bob Shroder  
 Secretary, Sandra Collins  
 Treasurer, Rod Robinson

Trustee Pascoe then moved that the slate be adopted, Trustee Ridenour seconded, and by unanimous voice vote the slate of officers for calendar year 2020 was approved.

### **Written Reports**

*Tom Herbert, Senior Vice President for Advancement submitted a written report which is included as Attachment H.*

**Executive Session**

Trustee Ridenour moved, Trustee Shroder seconded, and by unanimous roll call vote, with eight voting in favor and none opposed, the Board convened to Executive Session to consult with counsel, review pending litigation, and for Personnel Matters, the appointment of a public official, as provided by the Open Meetings Act, Ohio Revised Code Section 121.22.

**Other Business**

The Board returned to public session.

**Resolutions**

***Appointment of a National Trustee***

It was proposed that Jeff Pegues be appointed a National Trustee. Several spoke in support of Mr. Pegues and highlighted his expertise, support of Miami, and experience.

Trustee Robinson then moved, Trustee Pascoe seconded, and by unanimous voice vote, with all in favor and none opposed, the Board appointed Jeff Pegues as a National Trustee, with a three-year term from February 1, 2020 through January 31, 2023.

*The resolution is included as Attachment I.*

**Adjournment of Meeting**

With no other business to come before the Board, Trustee Ridenour then moved, Trustee Robinson seconded, and by unanimous voice vote, with all in favor and none opposed, the Board, adjourned at 1:00 p.m.



T. O. Pickerill II  
Secretary to the Board of Trustees

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# Sustainability Progress at Miami University & Next Steps

DECEMBER 13, 2019  
Presentation to Miami University Board of Trustees



MIAMI UNIVERSITY

**Suzanne Zazycki, JD**  
Co-Chair Sustainability Committee  
Associate Director of IES

**Helaine Alessio, PhD**  
Co-Chair Sustainability Committee  
Chair of Kinesiology & Health

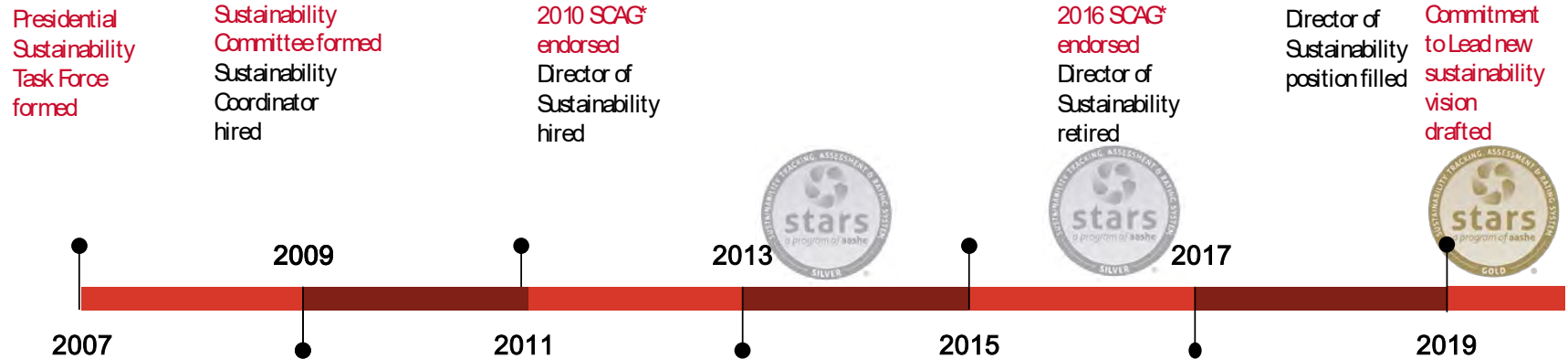
**Adam Sizemore, PhD**  
Member Sustainability Committee  
Director of Sustainability

# Presentation Overview

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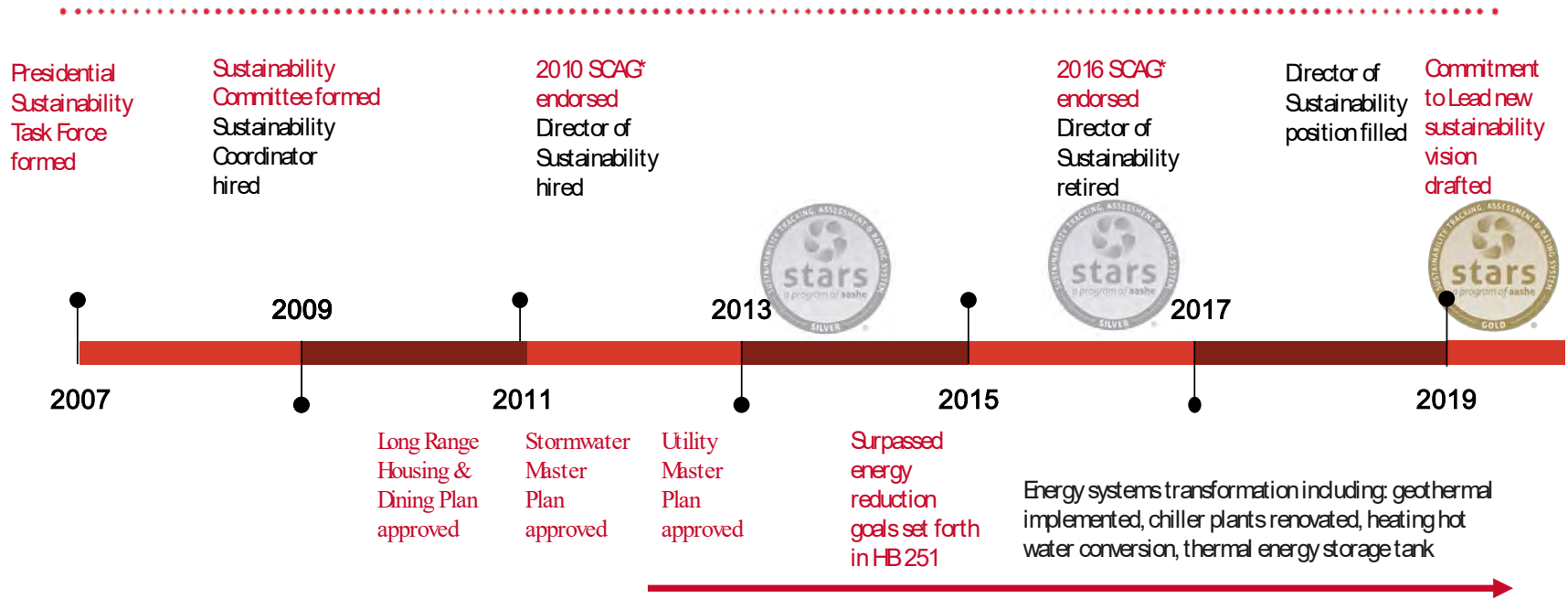
- Sustainability milestones at Miami University
- Next steps
- Overview of Sustainability Committee current charge
- Presidents' Climate Leadership Commitments - Pros/Cons
- Q & A

# Sustainability Milestones at Miami



\*Sustainability Commitments & Goals

# Sustainability Milestones at Miami



\*Sustainability Commitments & Goals



# Sustainability Successes

- Gold STARS rating
- Included in Sierra Club’s top 100 “Coolest Schools”
- Included in the Princeton Review Green College list
- 22 academic programs w/sustainability learning outcomes
- 100 courses & 322 research proposals
- Student Sustainability Council formed
- Bicycle Friendly Campus designation
- 29 LEED buildings
- Energy system transformation



## Reducing Energy Use at Miami: 39% Reduction 2008 to 2019; Projected 54% by 2026 (KBTU/GSF)

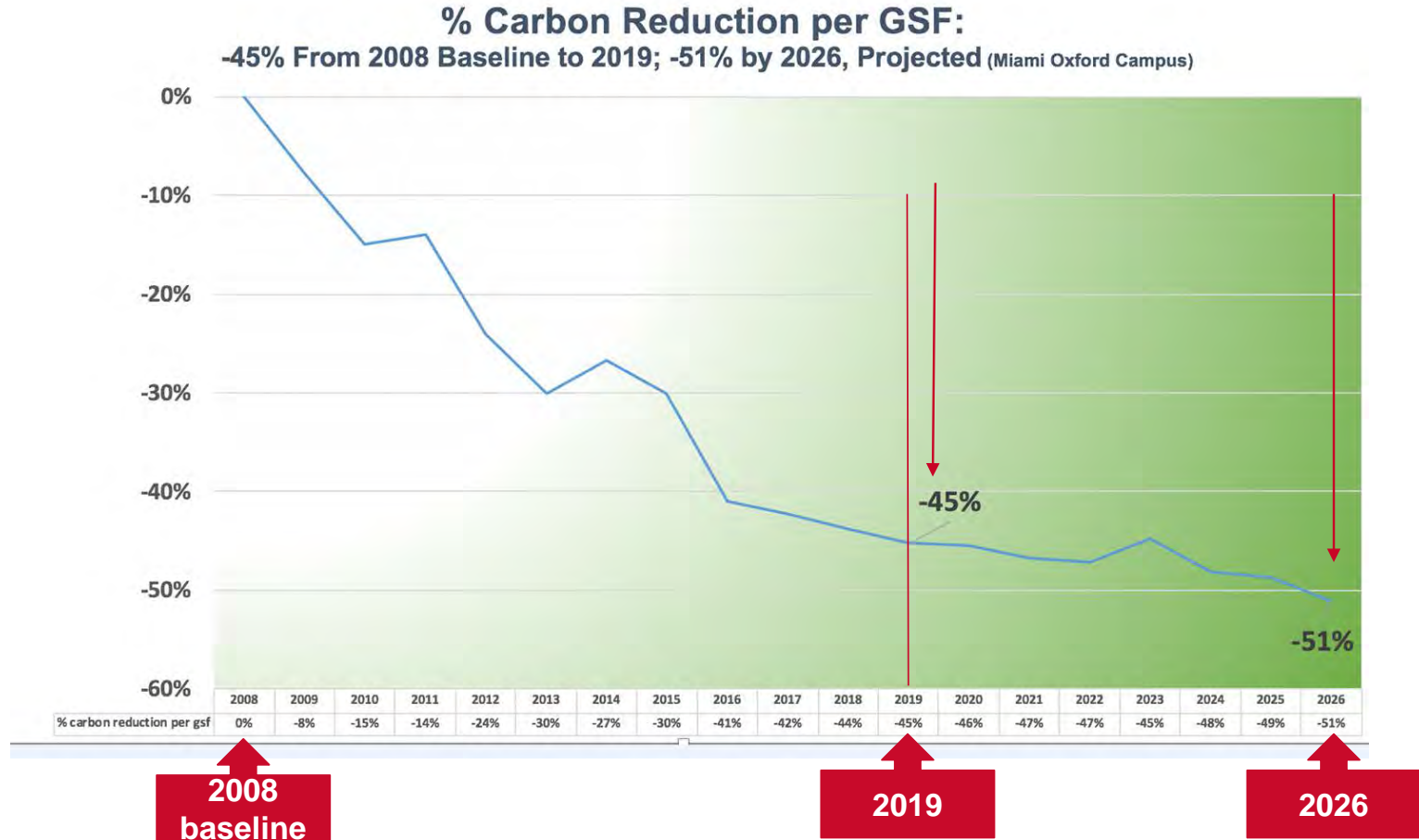
(GSF = Gross Square Foot)



**2008  
baseline**

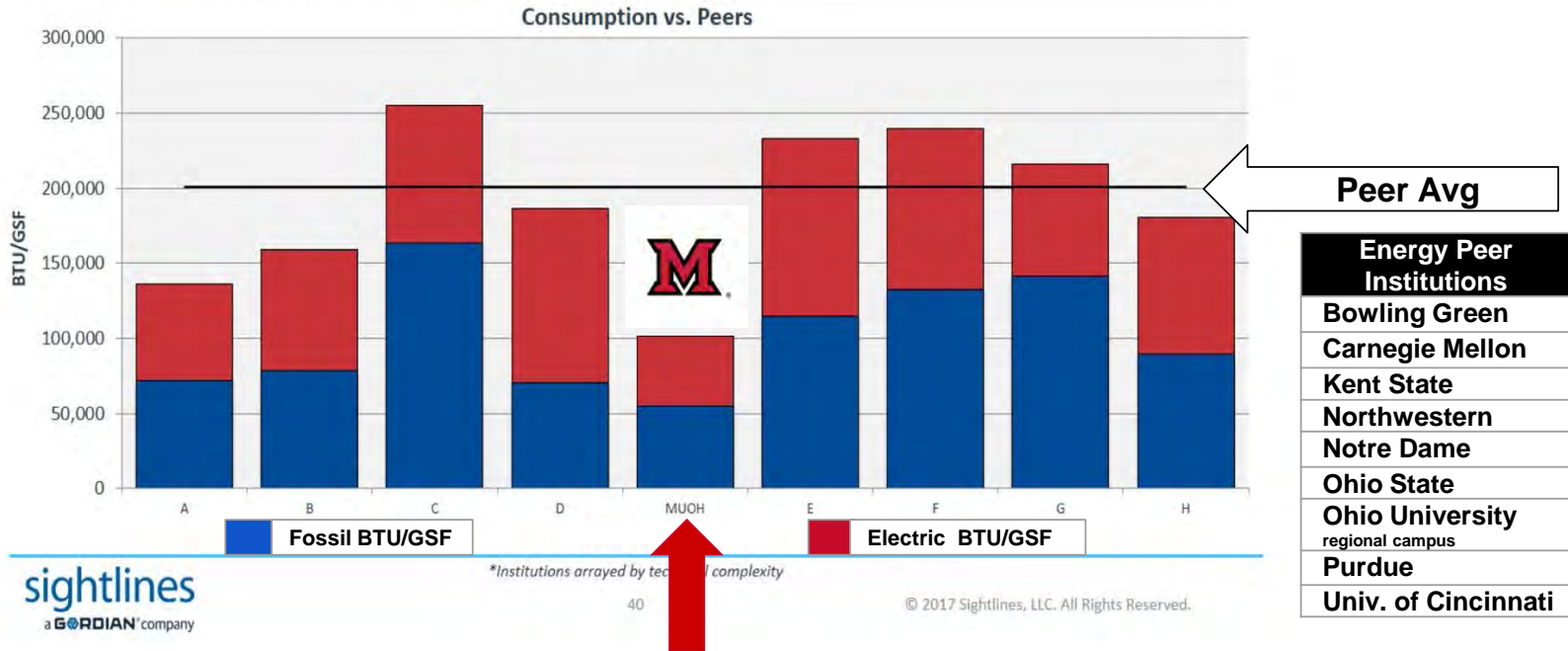
**2019**

**2026**



# Energy Consumption Below Peer Levels

MUOH consumes half as much as peer average



Source: 2017 study prepared for Miami University by Sightlines

# Next Steps

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“

We have made significant benchmark achievements ..over the past ten years [which] have been crucial to strategically situate us on a path towards carbon neutrality. What is unclear is the process and timeline.



Whether the path is through the PCLC or an internal plan, I, as well as that same leadership team that got us to this point, are as passionate as you are about continuing this momentum and working towards net zero emissions.

I am committed to charging a path towards  
**carbon neutrality at Miami University.**”

<https://www.wsj.com/articles/a-college-presidents-spin-on-fitness-1535203800>

# What is carbon neutrality?

## Net zero carbon emissions

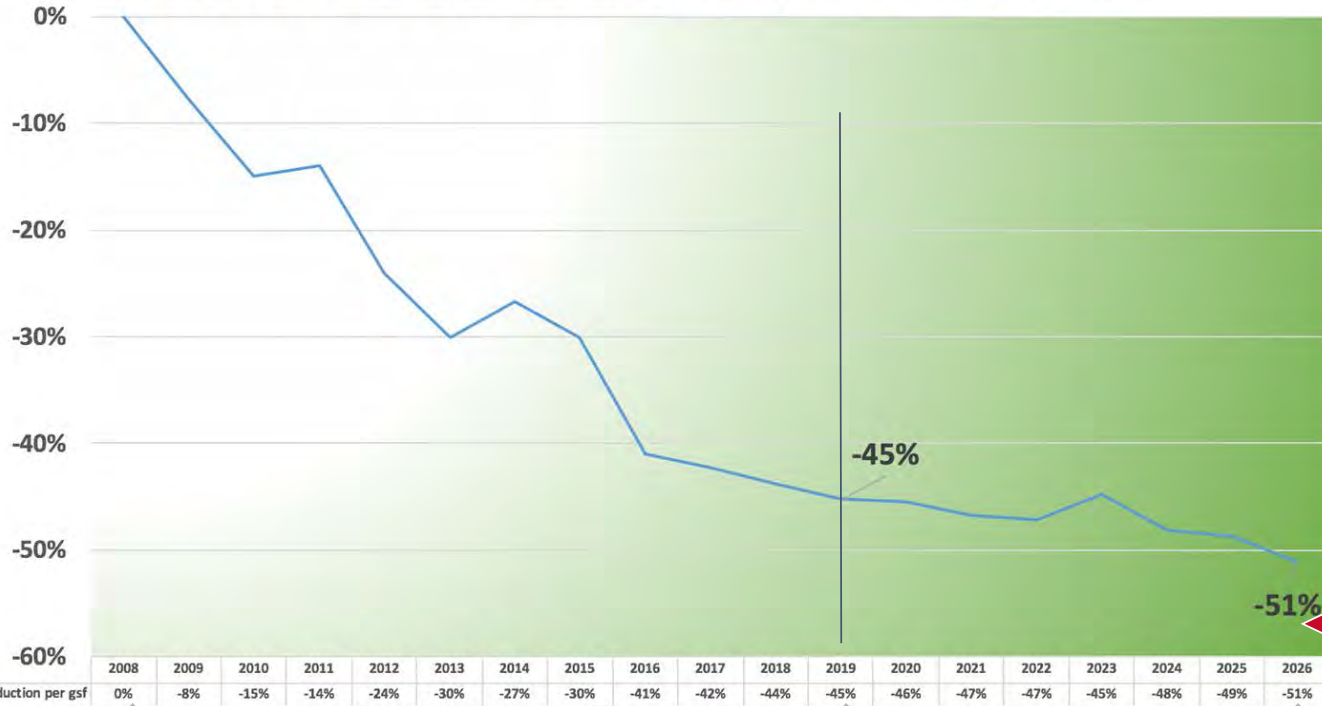
Balancing carbon emissions with carbon removal.

- **First minimize** GHG emissions as much as possible
- Mitigate remaining with various measures, including offsets



<http://www.globalstewards.org/go-carbon-neutral.htm>

### % Carbon Reduction per GSF: -45% From 2008 Baseline to 2019; -51% by 2026, Projected (Miami Oxford Campus)



Reduce as much as possible - offset the rest

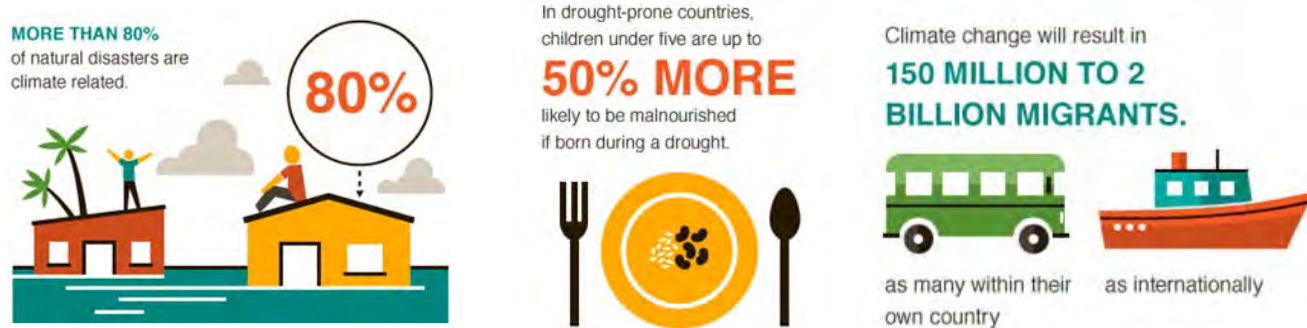
2008  
baseline

2019

2026

# Why carbon neutrality?

Impacts of increasing global temperatures, accelerated by human activity



<https://www.climatealityproject.org/blog/telling-story-eight-great-infographics-climate-change>

What needs to be done? (Intergovernmental Panel on Climate Change, 2018)

- Far-reaching behavioral changes
- Limit global warming to 1.5°C
- **And 'net zero' around 2050**



# Sustainability Comm. Current Charge

---

## Charge:

Conduct research to help Miami decide whether it should sign the **Presidents' Climate Leadership Commitments (PCLC)** or develop our plan to carbon neutrality outside of the PCLC framework.


Draft report: Jan. 1, 2020

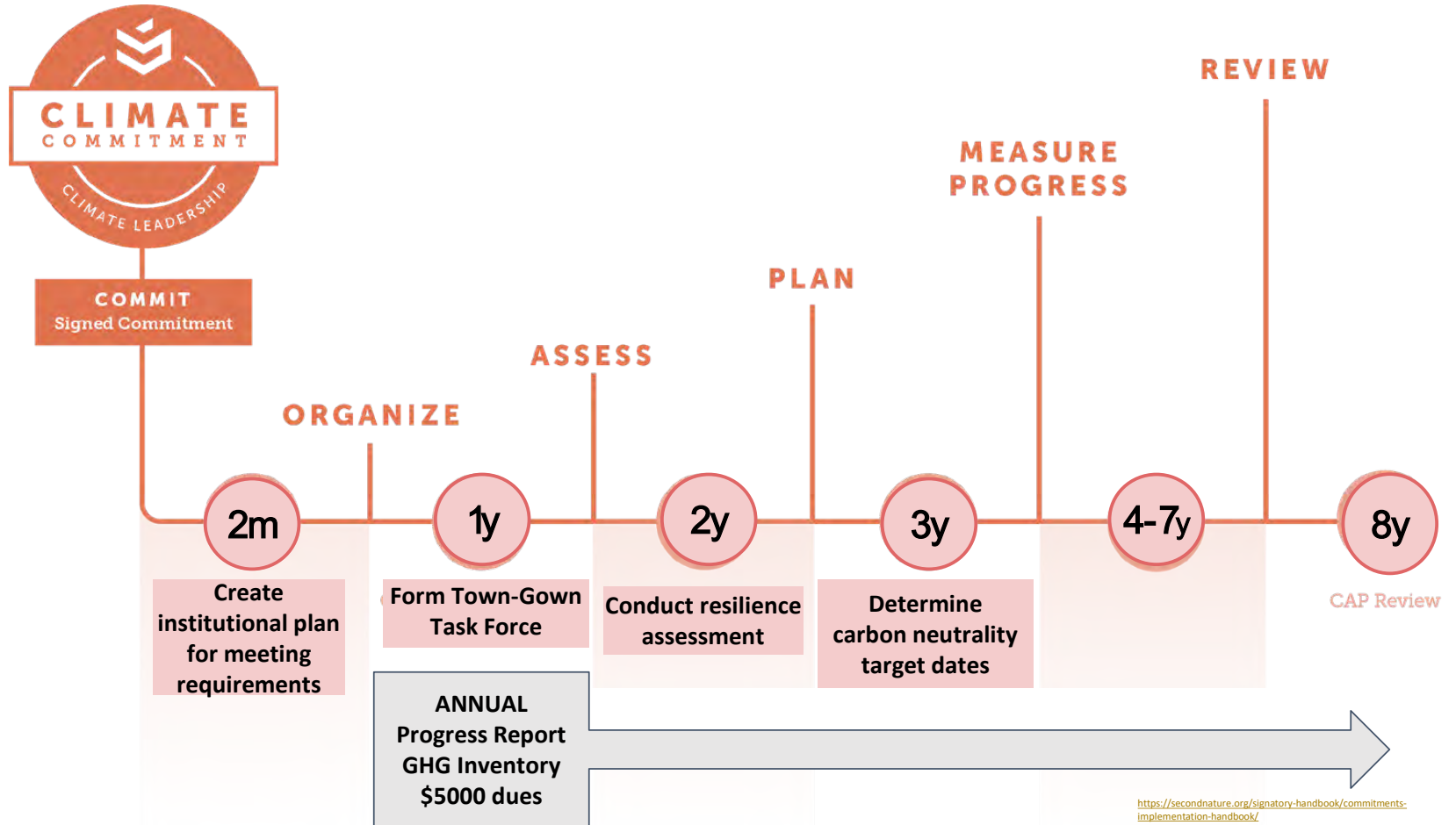
Final report: Feb. 1, 2020

Methods: Examining over 60 colleges & universities

# Our preliminary findings investigating the PCLC

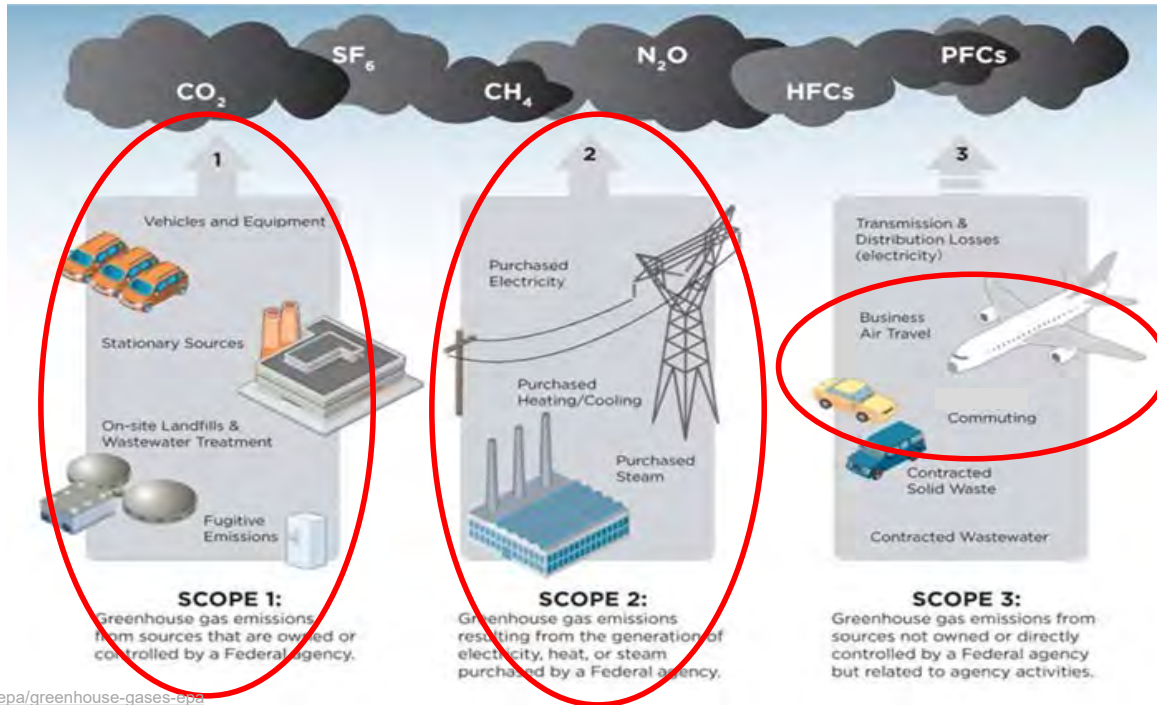
## What are the Presidents' Climate Leadership Commitments (PCLC)?

- **Framework to guide colleges' and universities' climate action planning**
  - Set own carbon neutrality target
  - But - required to follow uniform reporting timeline
  - Reports accessible to public via web interface
  - Managed by  Second Nature
  - 436 signatories
- **3 commitments to choose from:**
  - Resilience: plan for impacts of climate change (5 institutions)
  - Carbon: carbon neutrality (321 institutions)
  - Climate: resilience & carbon neutrality (110 institutions)



# Under PCLC, carbon neutrality must include

- Direct emissions (energy, fleet)
- Indirect emissions from purchased electricity, air travel, commuting.



<https://www.epa.gov/greeningepa/greenhouse-gases-epa>

## MIAMI UNIVERSITY (OXFORD) FY2018 GHG INVENTORY

	Source	MTCO <sub>2</sub> e	% Footprint
<b>Scope 1</b>			
<b>Direct emissions</b> 26%	Coal	0	0.00%
	Natural Gas	26,871.29	24.53%
	Refrigerants & Chemicals	1,616.47	1.49%
	Direct Transportation	761.98	0.70%
	Agriculture (Horses)	22.37	0.02%
	<b>Total</b>	<b>29,272.11</b>	<b>26.74%</b>
<b>Scope 2</b>			
<b>Indirect emissions</b> 52%	Purchased Electricity	57,765.92	52.73%
	<b>Total</b>	<b>57,765.92</b>	<b>52.73%</b>
<b>Scope 3</b>			
<b>Other indirect emissions</b> PCLC Air + Commuting ~15%	Business Travel (Air + Mileage Reiml	4,941.87	4.51%
	Commuting (Student+Faculty+Staff)	13,077.00	11.94%
	Waste	641.7	0.59%
	T&D	2,817.82	2.57%
	BCRTA Mileage	136.17	0.12%
	Wastewater	71.69	0.07%
	<b>Total</b>	<b>21,686.25</b>	<b>19.79%</b>

**Total GHG Emissions = 108,724 MTCO<sub>2</sub>e**

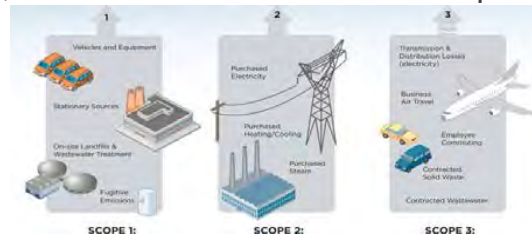
# Preliminary findings: Non-PCLC Schools

Colleges/universities committed to carbon neutrality - that did not sign PCLC


- Determine own carbon neutrality target date
- Develop own timeline for reporting
- Report on own webpage, STARS, The Climate Registry

Examining 11 non-PCLC schools committed to carbon neutrality

- Carbon Neutrality definition
  - 5 - Scopes 1 and 2
  - 2 - Scopes 1, 2 and Scope 3 commuting and air travel
  - 4 - Scopes 1, 2, and “where feasible” or “exploring” Scope 3



# Signing the PCLC – Preliminary Pros/Cons

Pros	Caveats
 Support from <b>Second Nature</b>	Unclear how much support
Including air travel & commuting demonstrates stewardship	Difficult to mitigate - purchase offsets
Good for public relations & recruitment?	Not quantified
Public reporting highlights progress, allows comparisons with peers	We already report (e.g., SCAG, USEPA, STARS)

Cons	Caveats
Annual fee of \$5,000	If report on other website, may need to pay anyways (eg The Climate Registry)
Must include air travel & commuting –require behavior change and purchase offsets	Some non-PCLC schools do include these.
Unclear if reporting timeline is realistic	

# 2020 and beyond

---

For Miami University's carbon neutrality commitment to succeed:

- **Continue to support the successful transformation of energy systems on campus.**
- Form a task-force –particular attention to address Scope 3.
- Collaborate with City of Oxford and others.
- Invest financial and human resources.
- Be thoughtful, committed, transparent, accountable.
- **All faculty, staff and students will need to change behavior and share financial impact.**



# 2020 and beyond

---

**A question remains:**

**Could signing the PCLC be the catalyst that is needed to get Miami University faculty, staff and students working together to address air travel and commuting, and perhaps other Scope 3 categories?**



Questions?



# COLEY OHIO WORK+ PROGRAM

Partnership with Miami University

# Video from WPCO



# Miami University Regionals

# WORK+

WORK + TUITION | WORK + COLLEGE DEGREE | WORK + EXPERIENCE

Jul 01, 2019



**Innovative Work+ program offers Ohio residents part-time jobs, work experience and paid tuition.**

## Barnhill finds excellent work+ fit at thyssenkrupp Bilstein

Regionals | Regional News

Aug 23, 2019

*By Perry Richardson, Senior Director Media & Community Relations*

Garrison Barnhill, a 2015 Edgewood High graduate from Seven Mile, is feeling lucky these days.

Equipped with two associate degrees in Pre-Engineering and Electrical Systems from Cincinnati State Technical & Community College in Clifton, Barnhill transferred seamlessly into the Engineering Technology program at Miami Regionals to earn a bachelor's degree in [Electrical and Computer Engineering Technology \(ECET\)](#).

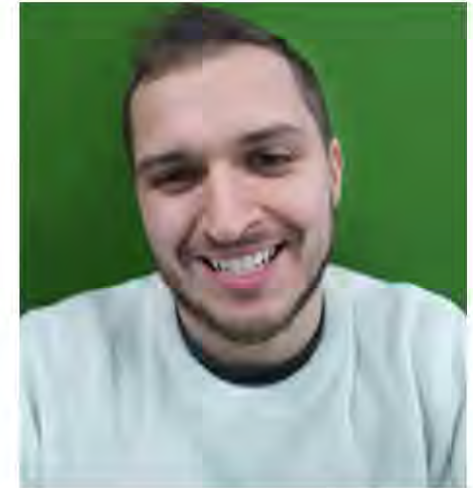
He read about Miami's collaborative [work+ program](#) on the Miami Regionals' website and immediately applied, interviewed with local manufacturing company [thyssenkrupp Bilstein](#), and was hired. He was on the job at Bilstein for three weeks before his classes even started at Miami.

"I have been trying to save money any way I can. The big thing is having a job in my field. This is a big plus on my resume," Barnhill said.

Work+ is a program designed for Miami University Regionals students to obtain an associate or bachelor's degree while working part-time and getting their tuition paid. Students typically work 20-25 hours a week with one of the participating work+ employers and take classes at Miami Regionals in a major of their choice. Work+ makes it possible for a student to earn a college degree debt-free.

"The company (Bilstein) was impressed that I already had two associate degrees. They were willing to pay for my tuition at Miami if I helped them out on the (assembly) line. I'm learning about different kinds of shock absorbers and how to build them. I feel lucky," Barnhill said.

All of his college credits transferred from Cincinnati State, and Barnhill is on schedule to graduate with a bachelor of science in ECET from Miami in 2021.



Butler County News Education

# State Senator Bill Coley Unveils New Workforce-Education Partnership with Miami University Hamilton

By **Staff Report** - May 30, 2019



- DEPT. OF HIGHER EDUCATION ▾
- STUDENTS ▾
- EDUCATORS ▾
- BUSINESS ▾
- AGENCY INITIATIVES ▾
- NE



## Miami University Regionals + Local Businesses = Graduating Debt Free



Innovative Work+ program to offer Ohio residents work experience through part-time jobs and paid tuition

*Perry Richardson, Miami University Regionals  
(Monday, July 29, 2019)*



# As country grapples with mounting student loan debt, program helps students go to college for free

Posted: 5:00 AM, Sep 13, 2019 Updated: 7:10 PM, Sep 13, 2019



By: Lisa Smith



WCPO's ongoing series, [Move Up Cincinnati](#), tracks regional growth and how our community is working to uplift those left behind. To contact the Move Up Cincinnati team, email us at [moveupcincinnati@wcpo.com](mailto:moveupcincinnati@wcpo.com).

# Ohio BUSINESS

HOME OHIO ENTREPRENEUR TRAVEL & TOURISM EVENT CALENDAR ▾ SUBSCRIBE OHIO SUCCESS AWARD NOMINATIONS

## Earning, Learning and Staying Out of Debt

September 9, 2019 ohiobusinessmagazine Feature Stories, Ohio's Guide to Colleges & Universities 0



### Work+ offers real world work experience and a decent wage

By David Holthaus

A new program starting in Ohio this school year will deliver the trifecta for some fortunate college students: real-world work experience, a decent wage and the cost of tuition covered.

### STAY CONNECTED

Tweets by @OhioBusinessMag

**Ohio** OhioBusinessMagazine @OhioBusinessMag  
Replying to @OhioBusinessMag @toledochamber  
[ohiobusinessmag.com/celebrating-12...](http://ohiobusinessmag.com/celebrating-12...)

2h

**Ohio** OhioBusinessMagazine @OhioBusinessMag  
#ToledoBusiness Celebrating 125 Years – @toledochamber plays a key role in region's economic development! Read insights from Wendy Gramza, the organization's president and chief executive officer. Link in the replies!



2h

Embed

View on Twitter

# Plastics News

Plastics News Europe   Plastics

NEWS   MULTIMEDIA   OPINION   BLOGS   EVENTS   RESIN RESOURCES   RANKINGS   K SHOW

September 04, 2019 09:40 AM

## Deceuninck offers window of opportunity to college students

CATHERINE KAVANAUGH      

Plastics News Staff

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Story from  **MIAMI UNIVERSITY**  
REGIONALS

# Ohio work+ program helps college students graduate debt-free — and earn money

Tom Lang, for Miami University Regionals Published 6:00 a.m. ET Oct. 17, 2019





NEWS

WEATHER

SPORTS

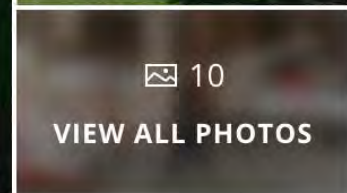
LOCAL 12 INVESTIGATES

CHIME IN

WATCH

# Miami University partners with businesses to help student graduate without debt

by Brad Underwood, WKRC | Monday, June 10th 2019



*As presidential candidates continue to talk about the rising cost of student debt and possibly eliminating it, Miami University is already doing something about. (WKRC)*

# JOURNAL-NEWS

Butler County's Local News Now

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Sen. Bill Coley says new college-workplace partnership will 'make a huge difference'



LOCAL NEWS | June 03, 2019

By Michael D. Clark, Staff Writer



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 OXFORD, OHIO 45056  
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 (513) 529-3911 FAX  
 WWW.MIAMIOH.EDU

December 13, 2019  
 Consent Calendar

**RESOLUTION R2020-13**

BE IT RESOLVED: that the Board of Trustees hereby approves the following for the rank of Professor Emeritus effective on the formal date of retirement:

**James Janik**  
 Biological Sciences/Biology

BE IT FURTHER RESOLVED: that the Board of Trustees hereby approves the following for the rank of Administrator Emerita effective on the formal date of retirement:

**Holly Gage**  
 Information Technology Services

**Judy Worley**  
 Miami Recreation

*Approved by the Board of Trustees  
 December 13, 2019*

A handwritten signature in black ink, appearing to read 'T. O. Pickerill II'.

T. O. Pickerill II  
 Secretary to the Board of Trustees



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December 13, 2019  
Consent Calendar

**RESOLUTION R2020-12**

BE IT RESOLVED: that the Board of Trustees hereby approves the following naming recommendation of the Committee for Naming Campus Facilities:

**Pilot Paper Machine Lab presented by Packaging Corporation of America**  
Located in the Engineering Building

**Piccolo Family Foundation and Gaff Family Collegiate Skating Locker Room**  
Located in Goggin Ice Center

**James Chaney Lobby**  
Located in Beechwoods Hall

**Andrew Goodman Lobby**  
Located in Hillcrest Hall

**Michael Schwerner Lobby**  
Located in Stonebridge Hall

*Approved by the Board of Trustees  
December 13, 2019*

T. O. Pickerill II  
Secretary to the Board of Trustees



# Miami University Board of Trustees December 2019





# Changing World

## Challenges

- Demographics down
- Cost of Education
- NTR Down
- Growth Mega Universities

## Changes

- Jobs Don't Exist Yet
- Future Proof
- Industry 4.0 (STEM)
- Market Dynamics

Bold  
Invest  
Accelerated

## Opportunities

- Transdisciplinary Breadth
- Masters & Certificates
- Online Options
- Leadership in 4.0 World
- Connectivity with Alumni

# >> Future Success Defined by – Response to Change

- Efficient Administrative Infrastructure
- Advance In-Demand Degrees
- Program Excellence (Quality)
- Program Distinctiveness (Unique)
- Condition of Modern Facilities & Infrastructure
- Reduce, Repurpose, Reinvest
- Nat'l & Int'l Brand



# Progress & Highlights

September-December 2019



# National Simon Award (Washington D.C.)



- Comprehensive Internationalization
- Awarded by NAFSA
- Innovation & Accomplishment in Campus Internationalization
- International throughout all facets of the university education & life.



# >> Study Abroad Ranking (#3)



#3 in Nation among Publics  
>46% of recent graduates  
Open Doors Ranking

# >> Game Design and eSports – #1



eSports (#1) Value Gamers  
eSports (#1) Intelligent  
eSports (#3) Best Colleges  
Game Design (#11/#1 Ohio) — Princeton Review

# >> Altman Institute for Entrepreneurship (#5)



#5 in Nation among Publics  
12th Consecutive Year top 10  
Princeton Review &  
Entrepreneurship Magazine







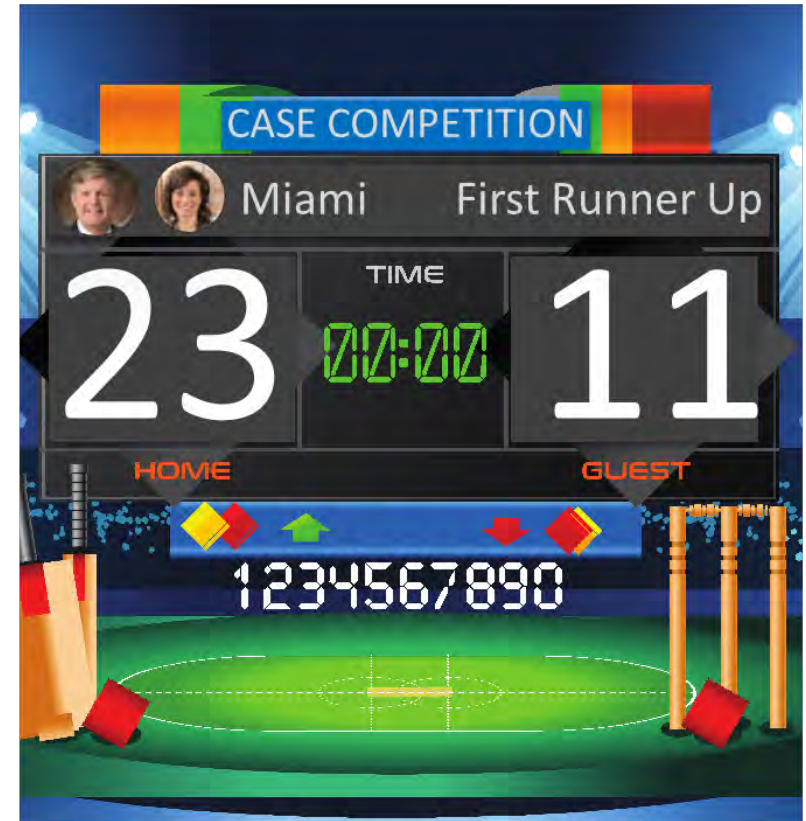
# CASE Awards "Galore"

- Winner of 23 CASE Awards
- Most among CASE V Institutions
- 3 Platinum Awards – BEST IN:

Diversity Programing  
*Diversity Conference & Events*

Advancement Services  
*Portfolio Prudence*

Fundraising  
*#MoveinMiami*



# Progress on Sustainability 2019



Sierra Club's Greenest & Coolest  
Colleges (70<sup>th</sup>, #1 Ohio Publics)



Princeton Review's Green  
Colleges (Score — 96 out of 99)



AASHE Gold Rating

# Sustainability – Success Driving 2019 Accolades



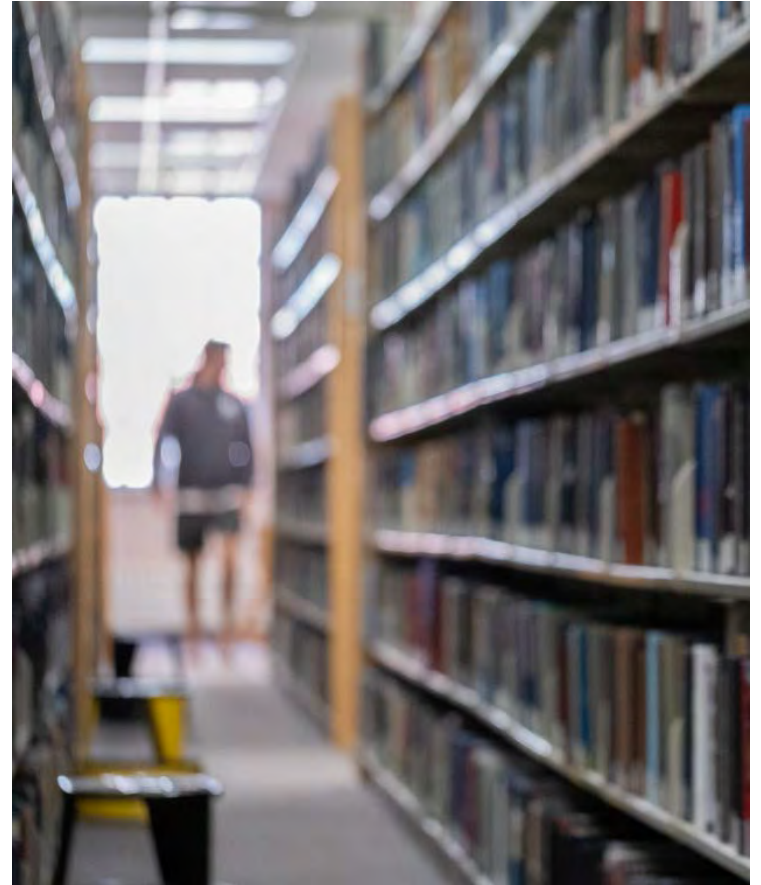
- 45% Reduction since 2008
- No Coal, since 2016
- 10 Buildings geothermal
- Consume ½ fuel of peers
- 29 LEED Buildings so far
- Down 49% Steam Buildings
- 43% Reduction water use
- 50<sup>th</sup> IES (Before EPA)



# >> Research Updates & Highlights



- Moved up 21 spots on NSF expenditures list
- Two years >\$24M (up from \$17M)
- New Focus on Research (Provost)
- Goal—Top Carnegie R2 Category
- VP Search Ongoing (split)



# >> Professor Mike Vanni (Biology) - Lake Acton



25 years of Research  
NSF Grant



# Psilocybin – Drug Candidate to Treat Depression



- Andrew Jones (CPBM Eng) & student team
- Optimize production of psilocybin E-coli bacteria
- Published “Metabolic Engineering”
- In clinical trials, promising results
- Probing commercialization



# >> Professor Patti Newberry (MJF)



President of the Society  
of Professional Journalists

>> Asst Professor Daisy Hernández (Dept of English) 

A New Edition  
of *Colonize This! Young  
Women of Color on  
Today's Feminism*

# NEW BOOKS



AT MIAMI



Massachusetts Institute of Technology chose Hernández's memoir *A Cup of Water Under My Bed* as its Fall '19 reading book for students.



# >> Community Outreach Commerce Hub & SBDC



Miami West Chester VOA  
hosting Small Business  
Development Corporation

# >> Professor Mark Tremblay (FSB) Engages City



Figuring out Airbnb Market in Oxford

# >> Freedom Summer 55



- 55th Anniversary Celebration
- Then, Now & Future
- Partnered with UG Railroad Museum
- 1964 Volunteers back
- Professor Rodney Coates led organization & planning with colleagues



# >> Dance Theater



Phenomenal Performance

# >> Professor Richard Campbell (MJF)



December Graduation Speaker  
Benjamin Harrison Medallion



# RedHawks on Roll – MAC Champions



Field Hockey  
Volleyball  
Football

>> Thank You!



Orchestra "Two Faces"


**EXECUTIVE COMMITTEE of UNIVERSITY SENATE**

Dana Cox, Chair

James Bielo, Chair-elect

University Senate Website: [www.MiamiOH.edu/senate/](http://www.MiamiOH.edu/senate/)

December 12, 2019

To: Board of Trustees, Academic and Student Affairs Committee  
 From: Dana Cox, Chair, Executive Committee of University Senate  
 RE: University Senate Report to Board of Trustees – September 19, 2019 Meeting

Executive Committee of University Senate membership:

- Dana Cox, (Mathematics), Chair
- James Bielo, (Anthropology), Chair-Elect
- Chip Hahn, (Speech Pathology and Audiology), at-large member
- Jaylen Perkins (Student Body President), undergraduate
- Ikaika McKeague-McFadden, graduate student
- Jason Osborne, Provost, Chair of University Senate
- Jeffrey Wanko, (Associate Provost), Secretary of University Senate
- Becky Sander (Executive Assistant for Admin Services), Recording Secretary

The following summarizes items of University Senate Business conducted since the Executive Committee submitted a report to the Board of Trustees on September 19, 2019.

- New Business, Specials Reports and Updates delivered to University Senate:
  - **September 9, 2019**
    - Benefit & Retirement 2020 Updates – Karen Wilson, Director of Benefits, Human Resources
    - Composition Change to the Council for Undergraduate Curriculum
  - **September 23, 2019**
    - Composition and Name Change to the International Education Committee
  - **October 7, 2019**
    - Partitioning of Kinesiology and Health - Dana Cox – Chair, Senate Executive Committee and Helaine Alessio – Chair, Department of Kinesiology and Health
    - Process for Reconsidering Reporting Arrests Policy – Dana Cox – Chair, Senate Executive Committee
  - **October 21, 2019**
    - Ad Hoc Committee on Composition – Report – Kate de Medeiros and Jen Green, Co-Chairs
    - SR 20-04 – Committees created during Strategic Planning implementation process
  - **November 4, 2019**
    - Bachelor of Science in Business – Business Analytics Major
    - Master of Science in Business Management – Business Administration Major
    - Ad Hoc Committee on Composition – Discussion – Kate de Medeiros and Jen Green, Co-Chairs
  - **November 18, 2019**
    - TCPL Grandfather Clause Discussion – Jason Osborne
    - SR 20-04 – Committees created during Strategic Planning implementation process - Update



- Ad Hoc Committee on Composition – Discussion – Kate de Medeiros and Jen Green, Co-Chairs
- Minors, revisions to existing degrees, name changes and University Policies received and approved on the University Senate consent calendars:
  - **September 9, 2019**
    - Revision of an Existing Major, EDL – Education Studies
    - Revision of an Existing Minor, ART – Communication Design
    - Revision of an Existing Minor, KNH – Sport Management
    - New Minor, ART – Studio Art
  - **September 23, 2019**
    - Graduate Students - Registration – Dual Enrollment in Undergraduate Degree Programs – G.H. 1.2
    - Graduate Students - Registration – Graduate Course Load for Part-Time and Post-Candidacy Students – G.H. 1.2
    - Graduate Students – Registration - Combined Bachelor’s/Master’s Degree
    - Revision of an Existing Major, IMS – Experience Design, MFA
    - Revision of an Existing Minor, ART – 2-D Fine Arts Minor
    - Revision of an Existing Minor, ART – 2-D Fine Arts Minor (for majors in ART other than Studio)
  - **October 7, 2019**
    - Revision of an Existing Major, CJS – Forensic Science
    - Revision of an Existing Major, PSY – Psychology, MA
    - Revision of an Existing Major, PSY – Psychology, PhD
  - **October 21, 2019**
    - New Certificate, BUS – Graduate Certificate in Business Management
    - Revision of an Existing Major, CPB – Chemical and Biomedical Engineering, M.S. in Chemical and Biomedical Engineering
    - Revision of an Existing Major, ISA – Information Systems, B.S. Business
  - **November 4, 2019**
    - Student Handbook 1.2 – Withdrawal from the University – Revision
    - Student Handbook 1.2.C.3 – Undergraduate Course Repeat Policy – Revision
    - MUPIM 6.6 – Summer and Winter Term Teaching – Revision
    - MUPIM 7.2 – Student Evaluation of Teaching – Revision
    - Revision of an Existing Certificate, KNH – Sport Management Graduate Certificate
  - **November 18, 2019**
    - Annual Review of Probationary Faculty (MUPIM 7.5) – Revision
    - Proposal to Revise Time Limit Policies
    - Proposal to Revise Exceptions to Scholastic Regulations Policy
    - IMS Department Name Change
    - Revision of an Existing Major, EDT – Spanish Education, B.S. Education

- Revision of an Existing Major, ENT – Engineering Technology, B.S. Applied Science
- **December 2, 2019**
  - Revision of an Existing Major, FIN – Finance, B.S. Business
  - Revision of an Existing Major, KNH – Public Health, B.S. Kinesiology and Health
- Senate Resolutions

**SR 20-01**

**September 9, 2019**

BE IT HEREBY RESOLVED that University Senate endorse proposed revisions to the ByLaws of University Senate, 6.B.12.a, regarding Committee composition and membership of the *Council for Undergraduate Curriculum*.

SR 20-01 was unanimously approved by voice vote.

**SR 20-02**

**September 23, 2019**

BE IT HEREBY RESOLVED that University Senate endorse proposed revisions to the ByLaws of University Senate, 6.C.7, regarding Committee composition and membership of the *International Education Committee*.

SR 20-02 was unanimously approved by voice vote.

**SR 20-03**

**October 7, 2019**

BE IT HEREBY RESOLVED that an ad-hoc committee be appointed by Senate Executive Committee to reconsider the NOTIFICATION OF POLICE REPORTS, ARRESTS, CRIMINAL CHARGES AND INDICTMENTS Policy originally approved by Senate on April 22, 2019 and to make a recommendation to University Senate about further necessary actions.

**Executive Committee charge to the Ad-Hoc Committee:** As the resolution states, the outcome of the committee’s charge is “make a recommendation to University Senate about further necessary actions.”

When making this recommendation, we ask the committee to gather information from a broad representation of stakeholders including:

- The rationale behind the policy;
- A clear statement about how this policy will be enacted; and
- The concerns shared by members of our community.

The Chair of this Ad-Hoc Committee should report the findings of the committee to University Senate on or before December 2, 2019 with an accompanying motion that reflects that recommendation about how to proceed.

SR 20-03 was approved by voice vote with two Nay votes.

**SR 20-04**

**November 18, 2019**

BE IT HEREBY RESOLVED that the university senate seeks to act proactively in the strategic planning implementation process by requesting that each of the new or repurposed Senate committees tasked with implementing any of the strategic priorities pertaining to curriculum include, ideally, at least 2 senators (at least 1 in their first or second year as a senator) to serve as senate liaisons. The primary functions of the senate liaisons on the committees are: 1) to share their expertise in the content area foci of the appointed committees and 2) to communicate thoroughly, efficiently, substantively, and in a deliberative way the progress (or not) directly to the senate over the course of each committee's work.

We also request that, where feasible, committees charged with implementing strategic priorities recommendations pertaining to curriculum contain at least six elected members (one from each academic division). These elected committee members need not be senators, but if they are senators, they may also serve in the role of senate liaisons. The primary function of the elected members of committees would be: 1) to share their expertise in the content area foci of the appointed committees and 2) to serve as elected representatives for their divisions who communicate with their divisions their committee's implementations of strategic priorities pertaining to curriculum.

Finally, all committees engaged in the implementation of the strategic priorities goals pertaining to curriculum would operate under the guidance of University Senate Executive Committee, which would work with the committees to organize and execute the work.

Our intent is to operationalize both the spirit and the practice of shared governance, as a leadership body charged with decision-making and communication of Miami's new directions that emerge from the strategic planning processes of 2018-2019.

SR 20-04 was approved by voice vote with one abstention.

*Pending December 16, 2019*

**SR 20-05**

**November 4, 2019**

BE IT HEREBY RESOLVED that University Senate endorse the proposed degree, Bachelor of Science in Business, with a major in Business Analytics, Farmer School of Business;

AND FURTHERMORE, that the endorsement by University Senate of the proposed degree and major will be forwarded to the Miami University Board of Trustees for consideration.

SR 20-05 was unanimously approved by voice vote.

**SR 20-06**

**November 4, 2019**

BE IT HEREBY RESOLVED that University Senate endorse the proposed degree, Master of Science in Business Management, with a major in Business Administration, Farmer School of Business;

AND FURTHERMORE, that the endorsement by University Senate of the proposed degree and major will be forwarded to the Miami University Board of Trustees for consideration.

SR 20-06 was unanimously approved by voice vote.

**SR 20-07**

**November 18, 2019**

BE IT HEREBY RESOLVED that University Senate endorse proposed revisions to the Miami University Policy and Information Manual (MUPIM) 7.11, *Teaching, Clinical Professors and Lecturers*, as set forth below

Grandfather Clause-

All Assistant TCPL faculty members who began teaching at Miami in their current position prior to July 1, 2019 may elect to opt out of this policy. Upon such written election, the Assistant TCPL will be eligible to receive, but not entitled to expect, additional one-year appointments without limitation on the number of years of employment at the Assistant rank but will not be eligible for promotion. Eligible TCPLs have until December 20, 2019 to opt out and such decision is irrevocable.

Assistant TCPLs who began teaching at Miami in their current position prior to July 1, 2019 who do not opt out of this policy have four academic years before they are required to apply for promotion to the rank of Associate ( i.e. until the 2022-2023 academic year.) With the approval of the department chair, program director (as appropriate), dean and Provost, a TCPL faculty member may credit up to three years of prior Miami service at the Assistant rank toward the four year promotion period.

SR 20-07 was unanimously approved by voice vote.

*Pending December 16, 2019*

cc: Provost Jason Osborne, Chair, University Senate  
Dana Cox, Chair, Executive Committee of University Senate  
Jeffrey Wanko, Secretary, University Senate  
Becky Sander, Recording Secretary, University Senate



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December 13, 2019  
Academic and Student Affairs

### RESOLUTION R2020-14

BE IT RESOLVED: that the Board of Trustees hereby approves the departmental title change from the Department of Interactive Media Studies to the Department of Emerging Technology in Business and Design (ETBD), to become effective as determined by the Office of the Provost.

*Approved by the Board of Trustees  
December 13, 2019*

A handwritten signature in black ink, appearing to read 'T. O. Pickerill II', with a long horizontal flourish extending to the right.


T. O. Pickerill II  
Secretary to the Board of Trustees



COLLEGE OF CREATIVE ARTS  
*Office of the Dean*

104 Center for Performing Arts  
420 S. Patterson Avenue  
Oxford, OH 45056-3440  
(513) 529-6010 office  
(513) 529-1992 fax  
arts.MiamiOH.edu

October 23, 2019

To: Board of Trustees  
From: Dean Liz Mullenix   
Re: Official name change for new IMS Department

With this memo, I formally request **approval to change the name** of the Department of Interactive Media Studies (newly created in the Fall of 2019) to *Emerging Technology in Business and Design (ETBD)*. Approval for the new Department was conferred both by the University Senate and by the Board of Trustees in the Spring of 2019.

**Rationale:** The term “interactive media studies” no longer captures the true nature of the programming in this burgeoning Department, for students’ core curriculum is focused on three areas: technology (front end development), entrepreneurship, and design. The new name will better communicate the **Department’s mission**, which is to explore both the intersection of tech/design/business and the ways in which digital technology can transform traditional areas of inquiry. Moreover, the new name will be easier for students to understand, thus attracting more potential majors to the program.

**Context:** The programs in IMS/ETBD came out of curriculum developed by the Armstrong Institute for Interactive Media Studies (AIMS), an institute exploring the intersection of technology, entrepreneurship, and design. All programming to emerge from AIMS was intended to be transdisciplinary, a principle that remains foundational for IMS/ETBD. What started as one class soon became programs with large numbers of students. The programs grew up outside of a typical departmental structure, beginning with a minor and co-major administered by the College of Arts and Science followed by a major administered by the College of Creative Arts. In the Fall of 2017, the minor and co-major were transferred to the CCA for administration in addition to the major. In the Summer of 2017 an E&G budget and a personnel budget were created from RCM revenue from IMS and approved by the University. Student enrollment in IMS>ETBD programs as of October 23, 2019 is as follows: primary majors=397, secondary majors= 56, co-majors=92, IMS minors=174, Games minors=27. Total students in IMS programs is 746.



BOARD OF TRUSTEES  
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December 13, 2019  
Academic and Student Affairs

### RESOLUTION R2020-15

WHEREAS, University Senate on November 4, 2019 passed SR 20-05, endorsing a new degree, a Bachelor of Science in Business, with major in Business Analytics, in the Farmer School of Business.

NOW THEREFORE BE IT RESOLVED, that the Board of Trustees hereby approves the establishment of a Bachelor of Science in Business, with major in Business Analytics, in the Farmer School of Business.

*Approved by the Board of Trustees  
December 13, 2019*

A handwritten signature in black ink, appearing to read 'T. O. Pickerill II', with a long horizontal flourish extending to the right.

T. O. Pickerill II  
Secretary to the Board of Trustees



**EXECUTIVE COMMITTEE of UNIVERSITY SENATE**

Dana Cox, Chair

James Bielo, Chair-elect

University Senate Website: [miamioh.edu/academic-affairs/university-senate/](http://miamioh.edu/academic-affairs/university-senate/)

November 22, 2019

To: Gregory P. Crawford, President  
 From: Jeffrey Wanko, Secretary of the University Senate  
 Re: Degree Program Approval  
 SR 20-05, Bachelor of Science in Business, with a major in Business Analytics, Farmer School of Business

The Miami University Policy and Information Manual, Section 11.1.E, Adding a New Degree, states that a proposal for any curriculum or program leading to a new undergraduate or graduate degree shall be submitted to the President, the Board of Trustees, and the Ohio Board of Regents/Ohio Regents' Advisory Committee on Graduate Study for approval following approval by the department or program, the academic division, the Council for Undergraduate Curriculum/Graduate Council, the Council of Academic Deans, and University Senate.

On November 4, 2019, University Senate adopted SR 20-05:

**BE IT HEREBY RESOLVED** that University Senate endorse the proposed degree, Bachelor of Science in Business, with a major in Business Analytics, Farmer School of Business;

**AND FURTHERMORE**, that the endorsement by University Senate of the proposed degree and major will be forwarded to the Miami University Board of Trustees for consideration.

**Approval of the President**

I, Gregory P. Crawford, President of Miami University, approve / ~~do not approve~~ Bachelor of Science in Business, with a major Business Analytics, Farmer School of Business.

<input checked="" type="checkbox"/>	Approve Forward to the Board of Trustees for action (copy to Secretary of University Senate)
<input type="checkbox"/>	Do Not Approve

  
 Gregory P. Crawford, President

12-4-19  
 Date

cc: Dana Cox, Chair, Executive Committee of University Senate  
 Jason Osborne, Provost, Chair University Senate  
 Ted Pickerill, Secretary to the Board of Trustees and Executive Assistant to the President



**OhioHigherEd**

Department of Higher Education

Mike DeWine, Governor  
Randy Gardner, Chancellor

**REQUEST FOR APPROVAL**

**SUBMITTED BY  
MIAMI UNIVERSITY**

**ESTABLISHMENT OF A  
[Bachelor of Science in Business] DEGREE IN  
[Business Analytics]**

**(3/29/19)**



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**Supplements:** List the supplement or supplements included with the proposal

**REQUEST****Date of submission:** [3/20/19]**Name of institution:** Miami University**Degree/degree program title:** [Bachelor of Science in Business] degree in [Business Analytics]**Primary institutional contact for the request****Name:** John Benamati**Title:** Chair & Professor**Phone number:** 513-529-4835**E-mail:** benamajh@miamioh.edu**Department chair/program director****Name:** John Benamati**E-mail:** benamajh@miamioh.edu**Delivery sites:** Oxford campus(es)**Date that the request was approved by the institution's governing board:**Approved by the Miami University Senate on [date], and  
the Board of Trustees on [date]**Proposed start date:** [FALL] [2020]**Date Institution established:** 1809**Institution's programs:** associate, bachelor's, master's, educational specialist,  
doctoral degrees (total \_\_\_\_ degree majors as of \_\_\_\_ )**Educator Preparation Programs:**

Indicate the program request leads to educator preparation licenses or endorsements.

**Licensure**  Yes  No**Endorsement**  Yes  No**SECTION 1: INTRODUCTION****1.1 Brief summary of the request**

Create a new major called Business Analytics that consists of the exact coursework in the current Business Analytics track of the ISA major. This is to give more visibility to the Business Analytics major at Miami and reduce the confusion currently experienced by students, advisors, and industry recruiters resulting from it being a track embedded in a major.

**SECTION 2: ACCREDITATION****2.1 Regional accreditation**

Original date of accreditation: 1913

Date of last review: 2015  
Date of next review: 2025

## 2.2 Results of the last accreditation review

Miami University is accredited by the [Higher Learning Commission](#) (HLC) of the North Central Association of Colleges and Schools. HLC accredits degree-granting post-secondary educational institutions in the North Central region of the United States. Miami's most recent comprehensive accreditation review was in 2015 (see <https://www.hlcommission.org/component/directory/?Action=ShowBasic&Itemid=&instid=1573>), while the next reaccreditation comprehensive review will occur in 2025.

## 2.3 Notification of appropriate agencies

Provide a statement indicating that the appropriate agencies (e.g., regional accreditors, specialized accreditors, state agencies, etc.) have been notified of the institution's request for authorization of the new program. **Provide documentation of the notification as an appendix item.**

# SECTION 3: LEADERSHIP—INSTITUTION

## 3.1 Mission statement

Miami University, a student-centered public university founded in 1809, has built its success through an unwavering commitment to liberal arts undergraduate education and the active engagement of its students in both curricular and co-curricular life. It is deeply committed to student success, builds great student and alumni loyalty, and empowers its students, faculty, and staff to become engaged citizens who use their knowledge and skills with integrity and compassion to improve the future of our global society.

Miami provides the opportunities of a major university while offering the personalized attention found in the best small colleges. It values teaching and intense engagement of faculty with students through its teacher-scholar model, by inviting students into the excitement of research and discovery. Miami's faculty are nationally prominent scholars and artists who contribute to Miami, their own disciplines and to society by the creation of new knowledge and art. The University supports students in a highly involving residential experience on the Oxford campus and provides access to students, including those who are time and place bound, on its regional campuses. Miami provides a strong foundation in the traditional liberal arts for all students, and it offers nationally recognized majors in arts and sciences, business, education, engineering, and fine arts, as well as select graduate programs of excellence. As an inclusive community, Miami strives to cultivate an environment where diversity and difference are appreciated and respected.

Miami instills in its students intellectual depth and curiosity, the importance of personal values as a measure of character, and a commitment to life-long learning. Miami emphasizes critical thinking and independent thought, an appreciation of diverse views, and a sense of responsibility to our global future.

-- June 20, 2008

<https://miamioh.edu/policy-library/mission-values/>

### 3.2 Organizational structure

Miami University is governed by a Board of Trustees which has 11 members appointed by the Governor with the consent of the Ohio Senate. The Board of Trustees delegates responsibility for administration of the university to the President. The President is advised by an Executive Committee that includes the Provost and Executive Vice President for Academic Affairs, Vice President for Finance and Business Services, Vice President for Enrollment Management & Student Success, Vice President for Student Life, Vice President for University Advancement, Vice President for Information Technology, Vice President of University Communications & Marketing, General Counsel, Secretary to the Board of Trustees, and Director of Intercollegiate Athletics.

The Division of Academic Affairs includes six academic divisions (College of Arts & Science, College of Creative Arts; College of Education, Health and Society; College of Engineering and Computing, Farmer School of Business; College of Liberal Arts & Applied Science), the Graduate School, University Libraries, and the Miami University Dolibois European Center (MUDEC).

The administrative leadership of Miami University can be found at: <https://miamioh.edu/about-miami/leadership/>

## SECTION 4: ACADEMIC LEADERSHIP—PROGRAM

### 4.1 Organizational structure

Describe the organizational structure of the proposed program. In your response, indicate the unit that the program will be housed within and how that unit fits within the context of the overall institutional structure. Further, describe the reporting hierarchy of the administration, faculty, and staff for the proposed program.

This reports to the Department of Information Systems and Analytics.

Provide the title of the lead administrator for the proposed program and a brief description of the individual's duties and responsibilities. Include this individual's CV/resume as an appendix item.

[benamati vita 12-2018](#)

Describe any councils, committees, or other organizations that support the development and maintenance of the proposed program (e.g., curriculum and assessment committees, external advisory committees). In your response, describe the individuals (by position) that comprise these entities, the terms of their appointment, and the frequency of their meetings.

This program will be advised by the Information Systems & Analytics Advisory Board and the Center for Analytics & Data Science.

### 4.2 Program development

Describe how the proposed program aligns with the institution's mission.

The proposed program is an existing track within an existing major. The ISA-Business Analytics track has a healthy enrollment. The name, however, is confusing to students. To be more student centered and to attract more students into our outstanding program, we wish to change the name to better reflect our curriculum.

Indicate whether the institution performed a needs assessment/market analysis to determine a need for the program. If so, briefly describe the results of those findings. If completed, submit the full analysis as an appendix item.

We do not need a market analysis for this program because it is an existing program within the Farmer School of Business. We are proposing only to rename the existing ISA-Business Analytics track as the Business Analytics Major within the Farmer School of business to give the major more visibility and to help clarify the skillset of the graduates.

Indicate whether the institution consulted with advisory groups, business and industry, or other experts in the development of the proposed program. If so, briefly describe the involvement of these groups in the development of the program.

In the original development and evolution of the ISA programs, the ISA department consulted closely with industry through its advisory board and through its participation in the Center for Analytics and Data Science. The curriculum is informed through these ongoing relationships.

Indicate whether the proposed program was developed to align with the standards of a specialized or programmatic accreditation agency. If so, indicate whether the institution plans to pursue programmatic/specialized accreditation for the proposed program and provide a timeline for achieving such accreditation. If the program is already accredited, indicate the date that accreditation was achieved and provide information on the next required review.

The Farmer School of Business is accredited through the Association to Advance Collegiate Schools of Business (AACSB). As an existing track within the ISA major, the proposed Business Analytics major is compliant with AACSB standards.

#### **4.3 Collaboration with other Ohio institutions**

Indicate whether any institution within a 30-mile radius of your institution offers the proposed program. If so, list the institutions that offer the proposed program, and provide a rationale for offering an additional program at this site.

There is no school within a 30-mile radius that offers a Bachelor of Science in Business Analytics.

Indicate whether the proposed program was developed in collaboration with another institution in Ohio. If so, briefly describe the involvement of each institution in the development of this request and the delivery of the program.

The program was not developed in collaboration with another school in Ohio.

## SECTION 5: STUDENT SERVICES

### 5.1 Admissions policies and procedures

Describe the admissions requirements for the program. In your response, highlight any differences between the admission requirements for the program and for the institution as a whole.

Students must be admitted to the Farmer School of Business in order to obtain a Bachelor of Science in Business with a major in Business Analytics.

Miami University has policies and procedures in place to recognize transfer courses appropriately and provide equity in the treatment of incoming transfer students and students native to the receiving institution. Transfer credit will be accepted for all successfully completed college-level courses completed in and after Fall 2005 from Ohio public institutions of higher education. Most college level courses taken fall term 2010 or after at regionally accredited institutions across the United States will be transferable to Miami University if the student earns a grade of D- or better. Prior to fall term 2015, credit earned on a pass/fail basis, credit/no-credit basis, etc., is also transferable if it can be determined the student earned a C or better. All credits earned at two-year institutions can transfer only as introductory or lower division (typically 100 and 200 level) credit, except that a course taken at the lower division level which bears the same title as an upper division course at Miami will be considered equivalent if validated by the division and/or department in which the course has applicability. Miami also has many courses that may be transferred according to the Ohio Department of Higher Education's Transfer Assurance Guide (TAG), Career Technical Credit Transfer (CT<sup>2</sup>), Guaranteed Transfer Pathways, Military Transfer Assurance Guides, and One-Year Option initiatives; and other types of transfer credit awarded toward major program requirements (e.g., AP, life experience, CLEP, portfolio, etc.). For more information, see:

<http://bulletin.miamioh.edu/admission-undergraduate-students/transfer-student/#text>

Commensurate with policies at Miami University and the Farmer School of Business, TAG approved courses will be accepted for transfer credit. To our knowledge, the only TAG approved courses are currently prerequisites to courses in the proposed program.

### 5.2 Student administrative services

Indicate whether the student administrative services (e.g., admissions, financial aid, registrar, etc.) currently available at the institution are adequate to support the program. If new or expanded services will be needed, describe the need and provide a timeline for acquiring/implementing such services.

Currently available services are adequate to serve the proposed program.

### 5.3 Student academic services

Indicate whether the student academic services (e.g., career services, counseling, tutoring, ADA, etc.) currently available at the institution are adequate to support the program. If new or expanded services will be needed, describe the need and provide a timeline for acquiring/implementing such services.

Existing student academic services are adequate to support the program.

## SECTION 6: CURRICULUM

### 6.1 Introduction

Provide a brief description of the proposed program as it would appear in the institution's catalog (*General Bulletin*). The description should be no more than 150 words.

The Business Analytics major provides the managerial and technical skills to leverage data for decision making in an organization. The major focuses on the use of data to guide evidence-based decision-making. Analytics combines numerous traditional disciplines including information systems and statistics. This major provides a framework for the collection and use of data; for analyzing structured and unstructured data; and for developing models to describe and predict behavior in data-rich environments.

### 6.2 Program goals and learning objectives

The stated student learning outcomes (SLO) from the program are

1. Identify and frame data-related business problems and opportunities using analytical methods.
2. Describe how data are collected, stored, retrieved, analyzed, and communicated to direct data-driven decision making.
3. Gather, store, and preprocess data to produce data sets for analytical purposes.
4. Apply appropriate methods for data analysis including descriptive, predictive, and prescriptive models.
5. Effectively communicate the results of a data analysis to stakeholders.

These objectives will be operationalized throughout the curriculum as much of the course work will use data from industry and other sources to frame problems, analyze relevant data and present results. Here are several examples of the types of activities prevalent throughout the program.

1. In ISA 491 students will do a real-world data analysis project where they frame a business problem analytically, apply predictive modeling to execute the project, and then communicate the results.
2. In ISA 321 through a real-world data analysis project where students will apply prescriptive modeling to a business problem and present results.
3. In ISA 401 through specific hands-on data analysis exercises where the collection, storage, retrieval, analysis, and communication of analysis are practiced.

### 6.3 Course offerings/descriptions

Complete the following table to indicate the courses that comprise the program. Please list courses in groups by type (e.g., major, general education, elective) and indicate if they are new or existing courses.

Course (number/name)	Cr hrs	Major	General Education (Miami Plan)	Elective	OTM TAG CTAG	New/Existing Course
<b>MAJOR REQUIREMENTS</b>						
ISA 245 Database Systems and Data Warehousing	3	■				Existing
ISA 281 Concepts in Business Programming	3	■				Existing



ISA 291 Applied Regression Analysis in Business	3	■				Existing
ISA 401 Business Intelligence and Data Visualization	3	■				Existing
ISA 414 Managing Big Data	3	■				Existing
ISA 491 Introduction to Data Mining in Business	3	■				Existing
<b>Must take two of the following electives</b>						
ECO 411 Advanced Empirical Methods	3			■		Existing
ISA 321 Quantitative Analysis of Business Problems	3			■		Existing
ISA 365 Statistical Monitoring and Design of Experiments	3			■		Existing
ISA 444 Business Forecasting	3			■		Existing
ISA /STA 432 Survey Sampling in Business	3			■		Existing
ISA 496 Business Analytics Practicum	3			■		Existing
STA 402 Statistical Programming	3			■		Existing
STA 404 Advanced Visualization	3			■		Existing
<b>ADDITIONAL REQUIREMENTS</b>						

Provide a brief description of each course in the proposed program as it would appear in the course catalog. In your response, include the name and number of the course. **Submit course syllabi as appendix items.**

All courses are already taught and descriptions are available in Miami's [General Bulletin](#)

- 6.4 Program sequence:** Provide the intended/ideal sequence to complete the program in the table below. Add additional time period as needed.

Time Period	Curriculum component	Time period	Curriculum component
<b>Freshman Year</b>			
Year 1 Fall Semester	Courses/Activities (hrs.)	Year 1 Spring Semester	Courses/Activities (hrs.)
	MTH 151		First Year Integrated Core
	CSE148		ISA 125
	ENG 211		ISA 235
	Physical Science		Global Perspectives
	BUS 106		
Time period	Curriculum component	Time period	Curriculum component
<b>Sophomore Year</b>			
e.g., Year 2 Fall Semester	Courses/Activities (hrs.)	e.g., Year 2 Spring Semester	Courses/Activities (hrs.)
	ISA 245		ISA 291
	Diversity Class		ECO 201
	ISA 225		ACC 222
	ACC 221		Humanity
	Bio Science and Lab		BUS 284

Time period	Curriculum component	Time period	Curriculum component
<b>Junior Year</b>			
e.g., Year 3 Fall Semester	Courses/Activities (hrs.)	e.g., Year 3 Spring Semester	Courses/Activities (hrs.)
	ISA 281		ISA 401
	ECO 202		ISA 491
	FIN 301		MGT 291
	Thematic Sequence		MKT 291
	Elective		Thematic Sequence
Time period	Curriculum component	Time period	Curriculum component
<b>Senior Year</b>			
e.g., Year 4 Fall Semester	Courses/Activities (hrs.)	e.g., Year 4 Spring Semester	Courses/Activities (hrs.)
	ISA Elective		ISA Elective
	BLS 242		ISA 414
	Thematic Sequence		Business Capstone
	MGT 302		Global perspective
	Elective		Creative Arts
			Elective

### 6.5 Alternative delivery options (please check all that apply):

- More than 50% of the program will be offered using a fully online delivery model  
 More than 50% of the program will be offered using a hybrid/blended delivery model  
 More than 50% of the program will be offered using a flexible or accelerated delivery model

For the purposes of this document, the following definitions are used:

- an **online course** is one in which most (80+%) of the content is delivered online, typically without face-to-face meetings;
- a **hybrid/blended course** is one that blends online and face-to-face delivery, with substantial content delivered online;
- a **flexible or accelerated program** includes courses that do not meet during the institution's regular academic semester (fall or spring) as well as courses that meet during the regular academic term but are offered in a substantially different manner than a fixed number of meeting times per week for all the weeks of the term.

### 6.6 Off-site program components (please check all that apply):

- Co-op/Internship/Externship  
 Field Placement  
 Student Teaching  
 Clinical Practicum  
 Other

If one or more of the items is checked, please provide a brief description of the off-site component(s).

## SECTION 7: ASSESSMENT AND EVALUATION

### 7.1 Program assessment

Assessment efforts are directed by the Office of Institutional Research and Effectiveness. Because of the accreditation standards of the Higher Learning Commission, each department and program at Miami University is required to implement a full cycle assessment program for each undergraduate major, general education, free-standing certificates, and all graduate programs.

Each major or degree program specifies at least three learning outcomes to assess. Each year, data are collected and analyzed related to the outcomes and used for program improvement. When beginning the process of assessment for the first time, departments and programs create an assessment plan for each degree program or major. Annually or biennially, the assessment data for the three or more learning outcomes are analyzed and discussed and plans for improving teaching and learning based upon those findings are put in place. The summary of the data collected, the analysis and the steps for improvement are recorded in an assessment report which is submitted each year. Plans and reports are reviewed annually annually by the Office of Institutional Research & Institutional Effectiveness and once every 6 years by a committee in the academic division.

Is your program externally accredited? If yes, does the external body require the program to do **direct assessment of student work showing student achievement of your stated learning outcomes**? If so, please provide a copy of the assessment requirements/plan to the Office of Institutional Research & Institutional Effectiveness. If not, please answer all the following questions:

- List at least 3 specific student learning outcomes (SLOs) that the students are expected to achieve by the time they complete the program. If the program includes liberal education course(s), articulate any specific linkages between your stated SLOs and Miami Plan principles or competencies.
  1. Identify and frame data-related business problems and opportunities using analytical methods.
  2. Describe how data are collected, stored, retrieved, analyzed, and communicated to direct data-driven decision making.
  3. Gather, store, and preprocess data to produce data sets for analytical purposes.
  4. Apply appropriate methods for data analysis including descriptive, predictive, and prescriptive models.
  5. Effectively communicate the results of a data analysis to stakeholders.
- Identify courses (and examinations or assignments within them) or other culminating projects where these outcomes are emphasized and can be measured, especially near the point of graduation. If relevant, specify any licensing or external exams you intend to use.

SLO #1, 4, and 5 will be assessed in ISA 491 through a real-world data analysis project where students frame a business problem analytically, apply predictive modeling to the project, and communicate the results.

SLO #5 will also be assessed through ISA 321 through a real-world data analysis project where students apply prescriptive modeling to a business problem.

SLO#2 and #3 will be assessed in ISA 401 through specific hands-on data analysis exercises where the collection, storage, retrieval, analysis, and communication of analysis are practiced.

- Describe how you intend to evaluate the learning outcomes by means of the assignment(s)—e.g., rubric(s), scoring guides, or answer key(s) to exam.

A rubric will be developed for the assignments in ISA 491, 321, and 401 that will assess each of the SLO's.

- Describe the sampling procedure. What percentage of your student body will comprise your sample? If the sample size is small, make the case that they adequately represent the whole.

At least 10% of the student assignments will be sampled at random, and at least two faculty members will assess the assignments according to the developed rubric.

- Describe how you intend to collect student perceptions of their achievement of the program learning outcomes.

We will include additional questions on the end-of-semester evaluations that address student perceptions of learning outcomes.

- Describe your plans for regular (annual or biennial, depending on program size) collection and summary of data.

We assess and summarize the data at least annually.

- Describe your plans for a regular faculty meeting in which faculty discuss assessment data findings and make plans for improvement of teaching and learning based upon the data.

All faculty teaching the particular course will be initially involved in discussing the findings and proposing plans for reacting to the results. The findings and the plans will be presented to the department at a department meeting.

- Identify who will be responsible for creating and submitting an annual assessment report to the assessment coordinator at the end of each academic year.

The department assessment coordinator will be responsible for coordinating all assessment efforts in the department.

## 7.2 Other means of measuring student success

In addition to program assessment, describe the other ways that individual student success in the proposed program will be measured (e.g., exit interviews, job placement, alumni

surveys). Describe the measurements to be used, frequency of data collection and how the results will be shared and used for program improvement.

The Miami University Student Success Committee with the support of The Office of the Provost and the Office of Institutional Research and Institutional Effectiveness guides and implements the university's student success evaluation and assessment. Student success is measured through national surveys and projects (e.g., the National Survey of Student Engagement, CIRP Freshman survey, Collegiate Learning Assessment, College Senior Survey, Your First College Year, HERI Faculty Survey, Faculty Survey of Student Engagement, and the Voluntary System of Accountability) as well as in-house graduate survey and alumni survey.

## SECTION 8: FACULTY

### 8.1 Faculty appointment policies

Describe the faculty designations available (e.g., professor, associate professor, adjunct, instructor, clinical, etc.) for the proposed program's faculty. In your response, define/describe the differences between the designations.

SA currently has 1 Full Professor, 3 Assistant Professors and 2 TCPLs dedicated to our analytics curriculum. We also have 2 full professors, 2 associate and 2 assistant professors that teach both analytics and information systems courses.

The program is already fully staffed we are simply splitting this track out into a separate major to reduce the confusion that currently exists in students, advising and recruiting companies.

Describe the credentialing requirements for faculty who will be teaching in the program (e.g., degree requirements, special certifications or licenses, experience, etc.). Note whether you will be using traditional qualifications (i.e., instructor has a degree at least one level above and directly related to the level of the courses being taught) or tested experience qualifications. Please make sure that the [tested experience qualifications](#) have been approved.

Tenure track faculty have a terminal degree. TCPLs have at least a masters.

The faculty teaching in this program will abide by Miami's [overload teaching policy](#).

Indicate whether the department will need to hire additional faculty to begin the proposed program. If additional faculty members are needed, describe the appointment process (by referencing Miami's [search and appointment procedures](#)) and provide a timeline for hiring such individuals.

The program is already fully staffed and populated with students. There essentially is no beginning to this proposal.

### 8.2 Program faculty

Provide the number of existing faculty members available to teach in the proposed program.

Full-time: 6  
Less than full-time: 6

Provide an estimate of the number of faculty members to be added during the first two years of program operation.

Full-time: 0  
Less than full-time: 0

### 8.3 Expectations for professional development/scholarship

Miami's tenure-eligible faculty are expected to produce high-quality scholarship for promotion and tenure (see [policy library](#)). Teaching faculty, visiting and part-time faculty are not expected to engage in scholarly activity. However, all faculty are provided opportunities for professional development such as programming offered by the Center for Teaching Excellence and the Howe Center for Writing Excellence. Tenure-eligible faculty are provided additional support for research and creative activity, such as [assigned research appointments](#).

Indicate the department's support (including financial) provided for such activities.

Standard expectations for both tenure track and TCPL faculty.

### 8.4 Faculty matrix

Complete a faculty matrix for the proposed program. A faculty member must be identified for each course that is a required component of the curriculum. If a faculty member has not yet been identified for a course, indicate that as an "open position" and describe the necessary qualifications in the matrix (as shown in the example below). **A copy of each faculty member's CV must be included as an appendix item.**

As stated previously, all of the courses in the programs are already populated and offered. There are currently 88 students declared in the business analytics track. All of these courses also programs offered by the department.

Here is a table of faculty who are already on board who have or will soon teach each of the required classes. All electives in the program are also already offered and staffed.

ISA 245 Database Systems and Data Warehousing	Jay Shan, Arthur Carvalho
ISA 281 Concepts in Business Programming	Xiang Fang
ISA 291 Applied Regression Analysis in Business	Maria Weese, Waldyn Martinez
ISA 401 Business Intelligence and Data Visualization	Zafer Ozdemir, Fadel Megahed
ISA 414 Managing Big Data	T.M. Rajkumar, Jay Shan, Arthur Carvalho
ISA 491 Introduction to Data Mining in Business	Maria Weese, Waldyn Martinez

## SECTION 9: LIBRARY RESOURCES

**Librarian representative to do:** [http://www.lib.MiamiOH.edu/subject librarians/](http://www.lib.MiamiOH.edu/subject_librarians/)

### 9.1 Library resources

Describe the involvement of a professional librarian in the planning for the program (e.g., determining adequacy of current resources, working with faculty to determine the need for additional resources, setting the budget for additional library resources/services needed for the program).

N/A - The program is already running as a track

Describe the library resources in place to support the proposed program (e.g., print, digital, collections, consortia, memberships, etc.).

Describe any additional library resources that will be needed to support the request and provide a timeline for acquiring/implementing such services. Where possible, provide a list of the specific resources that the institution intends to acquire, the collaborative arrangements it intends to pursue, and monetary amounts the institution will dedicate to the library budget to support and maintain the proposed program.

N/A - The program is already running as a track

## SECTION 10: BUDGET, RESOURCES, AND FACILITIES

### 10.1 Resources and facilities

List the facilities/equipment currently available for the program. Where possible, provide a list of the specific resources that the institution intends to acquire, the collaborative arrangements it intends to pursue, and monetary amounts the institution will dedicate to the library budget to support and maintain the proposed program.

N/A - The program is already running as a track

### 10.2 Budget/financial planning:

Complete the table on the following page to describe the financial plan/budget for the first three years of program operation.

This is not the normal FIS for new degree programs because this is not new in the normal sense. Due to the confusion from having an Information Systems and Analytics major with two very well populated tracks (101 and 88), we are simply splitting one of the tracks out into its own program.

There are no curriculum changes to either track. All of the faculty to teach the program are in place and all courses are already taught. Essentially, there is no financial impact of the new major.

### Fiscal Impact Statement for New Degree Programs

	Year 1	Year 2	Year 3	Year 4

<b>I. Projected Enrollment</b>				
Headcount full time				
Headcount part time				
Full-time equivalent (FTE) enrollment				
<b>II. Projected Program Income</b>				
Tuition (paid by student or sponsor)				
Expected state subsidy				
Externally funded stipends, as applicable				
Other income (if applicable, describe in narrative section below)				
<b>Total Projected Program Income</b>				
<b>III. Program Expenses</b>				
New Personnel				
<ul style="list-style-type: none"> <li>• Instruction (technical, professional and general education ) <ul style="list-style-type: none"> <li>Full _____</li> <li>Part Time _____</li> </ul> </li> <li>• Non-instruction (indicate roles in narrative section below) <ul style="list-style-type: none"> <li>Full _____</li> <li>Part time _____</li> </ul> </li> </ul>				
New facilities/building/space renovation (if applicable, describe in narrative section below)				
Scholarship/stipend support (if applicable, describe in narrative section below)				
Additional library resources (if applicable, describe in narrative section below)				
Additional technology or equipment needs (if applicable, describe in narrative section below)				
Other expenses (if applicable, describe in narrative section below)				
<b>Total Projected Expense</b>				

**Budget Narrative:**

Use narrative to provide additional information as needed based on responses above.



<b>APPENDICES</b>
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**Please note that the institution is required, at a minimum, to submit the following the items as part of the review:**

Results of recent accreditation reviews	Course syllabi
Organizational Chart	Faculty CVs
Faculty/student handbooks (or link)	Current catalog (or link)

Appendix	Description
A	Course Syllabi
B	Faculty CVs
C	Benamati vita 12-2018
D	
E	
F	
G	

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Miami University is committed to continual support of the delivery of the [DEGREE] in [MAJOR]. If Miami University decides in the future to close the program, the university will provide the necessary resources and means for matriculated students in the program to complete their degree.

Miami University verifies that the information in the application is truthful and accurate.

Respectfully,

Provost & Executive Vice President  
Miami University

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**Department Chair/Program Director Approval and Forwarding:**

**Name:**  **Email:**  **Phone:**  **Date:**

**Department Chair/Program Director approval indicates that the program and its student learning outcomes will be assessed in accordance with the department's/program's overall assessment plan.**

**Divisional Dean approval indicates that the new program fits into the mission of the division, and that any overlap between the courses and other extant courses in the divisional curriculum has been identified and any related concerns resolved. By approving, the Dean (A) takes oversight responsibility for ensuring that the new program meets divisional standards for rigor, (B)**

indicates a recognition and acceptance of the staffing model and implications, and (C) forwarding of other related resource issues, when approved. When approved by the Dean, following the divisional curriculum approval, forward for Registrar action within the curriculum approval process.

Please submit completed approved forms (in Microsoft Word) via e-mail to: [courseapproval@MiamiOH.edu](mailto:courseapproval@MiamiOH.edu)

**NOTE: New Degrees:** This form requires approval by the department/program, division, Council of Undergraduate Curriculum or Graduate Council, Academic Deans, a vote by University Senate plus ten (10) class days for review, the President, the Miami University Board of Trustees and the Ohio Department of Higher Education (see MUPIM, Section 11). Upon submission of this form, the Office of the University Registrar will verify the information and forward this request to the appropriate contact.

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**NOTE: New Majors:** This form requires approval by the department/program, division, Council of Undergraduate Curriculum or Graduate Council, Academic Deans, and a vote by University Senate plus ten (10) class days for review (see MUPIM, Section 11). Upon submission of this form, the Office of the University Registrar will verify the information and forward this request to the appropriate contact.

## ISA 245 – Database Systems 2019 Fall

### Class Information

Prerequisite: ISA 235 (or equivalent approved by instructor)  
Meeting Times: Session C: TR 4:25pm - 5:45pm, FSB 2050  
Session D: TR 10:05am - 11:25am, FSB 2037

### Instructor

Name: Dr. Zhe (Jay) Shan  
Office: 3035 FSB  
Office Hours: TR 2pm-4pm, or by appointment.  
E-Mail: jayshan@miamioh.edu

### Textbook (Optional):

**Data Management: Databases and Organizations**, 6th edition, by Richard T. Watson  
(ISBN: 978-1-943153-03-9)

### Course Overview

This course is designed to provide an understanding of the use of database systems in organizations, their design methodologies, how data is accessed by means of Structured Query Language (SQL), how they support data warehouses and business analytics, and issues related to the maintenance and control of database systems. We will analyze, design, and implement database applications using the database management software by Oracle. You will be expected to demonstrate proficiency in data modeling, database design, and SQL.

### Learning Objectives

Upon successful completion of the course, you should be able to fully comprehend the following concepts:

#### *Conceptual knowledge*

- Understand and use the terminology of the database management field.
- Articulate the importance of data integrity requirements inside organizations.

#### *Database design*

- Construct a graphical representation (ERD) of a conceptual data model.
- Evaluate alternative conceptual models.
- Translate entity-relationship diagrams into a set of normalized tables to be implemented using a relational DBMS.
- Generate appropriate database documentation.

#### *Database implementation*

- Write SQL statements to build database tables and populate them with data.
- Write SQL statements to retrieve information from databases.
- Demonstrate the value of databases for managerial decision making.

#### *Transaction Management*

- Understand the basics of transaction management and concurrency control

### *Data Warehouses*

- Describe the differences between transaction/operational data and decision support data.
- Conduct dimensioning modeling in building data warehouses
- Write SQL statements to populate a simple data warehouse using transaction/operational data (ETL).

### **Homework Assignments, Exams, and Group Project**

The course involves individual assignments, exams, and a group project. You will demonstrate your mastery of the material by applying what you learn – not only in-class through exercises and exams, but also by doing assignments and the project. Some assignments and some portions of the project will be well specified; others will be purposely vague. One objective of these assignments is for you to learn how to approach database design and development in real-life situations.

Note that this course covers technical material. Typically, you will not understand the material without reading – and rereading – it carefully. I expect you to devote on average about **4 to 8 hours** per week **outside of class** to this course, including reading, studying, and working on homework assignments and the course project.

The liberal education objectives of the course are accomplished through the use of class discussions, written exam questions, and a group project. The exams, class discussions, and especially the group project aid in the development of critical thinking skills. Lectures are designed to link topics in such a way that students understand the context for each issue in the course. Presentations, the group project, and in-class discussions are opportunities for students to engage with other learners. Time for reflecting and acting comes through assignments, exams, and in-class discussions/exercises. The liberal education objectives of this class can only be met if you attend each class and are prepared to ask and answer questions and discuss the day's material.

### **Grading Policy**

Assignment and exam grades are final the next day of class after their return, i.e., you need to see me during office hours before the following class in case you have any questions about your grade. Your work will be evaluated based on the following grading scheme:

- Assignments 25% (5% each)
- Group project 20%
- Midterm exam 25%
- Final exam 25%
- Class participation 5%

Final letter grades will be assigned using the following scale:

GRADE	Scores	GRADE	Scores	GRADE	Scores	GRADE	Scores
A+ (4.0)	[97, 100]	B+ (3.3)	[87, 90]	C+ (2.3)	[77, 80]	D+ (1.3)	[67, 70]
A (4.0)	[94, 97)	B (3.0)	[84, 87)	C (2.0)	[74, 77)	D (1.0)	[64, 67)
A- (3.7)	[90, 94)	B- (2.7)	[80, 84)	C- (1.7)	[70, 74)	D- (0.7)	[60, 64)

*Exams:* There will be two exams given during the semester - a midterm exam and a final exam. The midterm exam will cover all class materials and readings for the period immediately prior to that exam. Clearly, some of the material on the midterm exam will also be covered on the final exam. Makeup exams will only be available to students with legitimate reasons. A physician's certificate or some other official documentation is required.

*Group Project:* Your team of at most 4 members will design and implement a database and develop queries that would meet the needs of a business domain. This project will begin after the midterm exam and continue until the end of the semester. You should work on it in stages: analysis and design, implementation, and operation. The final deliverable will be a single report documenting and describing the work performed throughout the semester as well as an in-class presentation of your work. You are expected to be a responsible team member and contribute meaningfully to the project. **A peer evaluation will be conducted to make sure each group member can contribute fairly and equally to the team project.**

*Assignments:* There will be five graded assignments given during the semester. The graded assignments are take-home assignments, normally short research or problem-based tasks. Non-graded exercises will also be assigned for practice, the content of which can be covered on the exams. Meeting deadlines for assignments is crucial. **Assignments are individual tasks. Any work assigned to be done individually which is found to be done in a team fashion will be reported as a case of academic dishonesty.** All work should be completed and delivered in a business professional manner. Grade deductions might occur due to poorly delivered assignments. Once again, I expect you to meet the writing standards commonly used in business, e.g., proper organization and use of titles, correct spelling, subject/verb agreement, complete sentences, etc. The Howe Writing Initiative provides excellent support in case you need to improve your writing skills.

### **Class Attendance**

I will create an active education environment to motivate you to understand and apply the information technologies for database management. Therefore, attendance and class participation are critical. **Students that attend classes and participant in-class discussion often score much higher on exams, assignments and project.** According to the Miami University Bulletin's Class Attendance policy, "*you are expected to attend every class for which you are registered.*" Furthermore, "*if your instructor notifies the Registrar's office that in his or her opinion you have missed too many classes, you can be dropped from the course with a grade of F.*" Hence, it is important to attend all classes. If you must miss a class, it is your responsibility to understand the material covered that day. **I reserve the right to drop someone that misses a significant number of classes.**

### **Communication:**

Email is the best way to communicate with me. I intend to reply your emails within 24 hours (48 hours in weekend). Therefore, I expect the same courtesy from you. Email will be a very important mode of communication in this class as we meet only once/twice a week. **Please start your subject line of your emails with 'ISA245-X' (X is your section number, C or D).**

Also make sure to check Canvas on a regular basis for updates or additional course material.

**Please keep your email information on Canvas up to date. Whenever possible, I will announce changes to the course via the Canvas announcement function.**

**Class Conduct:**

**IMPORTANT !**

**The use of any mobile device, such as laptop, smart phones, etc., during a lecture session is not permitted unless the instructor has approved its use. Please silence your devices and put them in your bag or jacket. Please be professional!**

One of our goals in Farmer School of Business is to prepare you for a professional career and we wish to instill good habits through insisting on a high level of conduct in all your classes. The following behaviors are unacceptable in this class:

1. Not on time
2. Failing to notify the professor by email when you are absent from class.
3. Excessive tardiness/absences.
4. Leaving while class is in session for reasons other than an emergency.
5. Working on non-course related assignments.
6. Falling asleep or resting head on desk.
7. Wearing headphones while class is in session.
8. Web surfing in class
9. Other types of disrespectful behaviors.
10. No food or drinks will be allowed in the computer lab. Food should be kept in backpacks.
11. You should pick up any papers and trash before leaving the lab - be a good citizen.

**Academic Integrity:**

**IMPORTANT !**

**I personally take academic integrity very seriously, and if there are any violations, the consequences will be unfortunate. Please don't take this issue lightly because plagiarism in any form will not be tolerated.**

All individual assignments should be your work. You may consult with each other to understand the requirements of an assignment or for trouble-shooting. However, you must do individual assignments on your own! Any individual work found to be done in a team fashion will be reported as an act of academic dishonesty. You are required to observe the rules of academic integrity promulgated by the university, including the prohibition on academic misconduct, such as (but not limited to) cheating, dishonesty, plagiarism, submission of other's work, and complicity in academic dishonesty. For more information on academic integrity at Miami University, please take a look at <http://miamioh.edu/fsb/academics/integrity/index.html>

## Disabilities Policy

Students with disabilities are encouraged to request reasonable accommodations. Student Disability Services (SDS) registration should be completed prior to the provision of accommodations. Please visit the Student Disability Services Website for more information You can also contact SDS at 513-529-1541 or [sds@miamioh.edu](mailto:sds@miamioh.edu).

If you are eligible to receive accommodations please schedule an office hours appointment at the beginning of the semester to discuss accommodation plans.

### Course Schedule (Tentative):

Module	Topics	Related Chapters
0	Course Introduction and Logistics	Syllabus
1	Introduction to Relational Models	Chapter 3
2	Introduction to SQL	Chapter 10
3	The 1:M Relationships	Chapter 4
4	The M:M Relationships	Chapter 5
5	1:1 and Recursive Relationships	Chapter 6
6	Data Modeling	Chapter 7
7	Normalization	Chapter 8
8	Advanced SQL Statements	Chapter 10
9	Advanced Topics	Handouts

## *ISA 281 Business Programming*

<b>COURSE</b>	<b>ISA 281, Fall 2019</b>
<b>SECTIONS</b>	<i>1:15am - 2:35 pm, 2:50 pm - 4:10 pm, 4:25pm - 5:45pm on Mon and Wen</i>
<b>CLASSROOM</b>	Room 2050, Farmer School of Business
<b>INSTRUCTOR</b>	Dr. Xiang Fang (pronounced as Sean Fong)
<b>OFFICE</b>	3100, Farmer School of Business
<b>EMAIL</b>	<a href="mailto:fangx@miamioh.edu">fangx@miamioh.edu</a>
<b>PHONE</b>	9-1390 (my office) OR 9-4826 (ISA department office)
<b>OFFICE HOURS</b>	<i>Every Mon and Wen between 9:00 AM and 11:30 AM or by appointment</i>
<b>TEXTBOOK</b>	<p><b>Starting Out with Python</b></p> <p>Author: Tony Gaddis</p> <p>ISBN-13: 978-0134444321</p> <p>ISBN-10: 0134444329</p> <p>Paperback: 744 pages</p> <p>Publisher: Pearson; 4 edition (2017)</p>
<b>COURSE OBJECTIVES AND LEARNING OUTCOMES</b>	<p>The goal of this course is to provide the students with a comprehensive introduction to the programming tools and skills required to build and maintain business applications.</p> <p>The learning outcomes include using structured programming techniques to develop business applications, developing business application modules using subroutines and functions, reading from and write data to a variety of file formats and databases, and developing data driven business applications using objects and libraries.</p> <p>The focus is on the concepts used to develop data-driven business applications independent of the language or technology used. Students will be exposed to the following concepts: datatypes, variables, structured programming concepts such as if-then-else, loops; structures such as lists, dictionaries; object oriented techniques such as classes, inheritance, use of objects, Web APIs in developing applications; file and data handling techniques. Short programs will be written to demonstrate the concept usages in developing business applications.</p>



<p><b>EVALUATION</b></p> <p>(See plus and minus grading)</p>	<p>Your final grade for the course will be based on the following items:</p> <p>Exam1: 20% (80 points )</p> <p>Exam2: 20% (80 points )</p> <p>Final: 25% (100 points )</p> <p>Programming assignments: 25% (100 points)</p> <p>Assignment1: 30 points</p> <p>Assignment2: 30 points</p> <p>Assignment3: 40 points</p> <p><b>Instructor's Discretionary Items: 10% (40 points maximally)</b></p> <p>Quizzes (27 points for 12 pop quizzes), attendance (13 points)</p> <p>Total points maximum for the course: 400 points</p>
<p><b>COMP. FINAL EXAM</b></p>	<p>The final exam will cover most of the topics covered throughout the semester. The questions will come from textbooks, readings, class lectures/discussions, handouts, website reading assignments, etc.</p>
<p><b>ADDITIONAL RESOURCES OUTSIDE CLASS</b></p>	<p>If you, or others, in the class need additional help with exercises or other material, please let me know. We can schedule a review session or help sessions. Also, you should frequently check the shared G: drive for notes, examples, etc. Students are required to check their emails periodically, including their Spam folder of their email accounts to receive emails related to the course.</p>
<p><b>MAKE-UPS</b></p>	<p>I do not schedule make-up assignments. I will provide a make-up test in the case of serious illness or other comparable official situation. You must notify me, or the ISA office, in advance and fill out an excused absence form prior to the make-up. No make-ups will be given for any quizzes. All assignments are due at the beginning of the class on the due date.</p>
<p><b>CLASS &amp; TEST PREPARATION</b></p>	<p>For each class it is my expectation that you will read the assigned material and complete any related homework assignments. By doing this you will be prepared for the in-class quizzes and the hands-on exercises.</p>

ACADEMIC DISHONESTY	No form of academic dishonesty will be tolerated and any incident will be dealt with according to the <i>Miami Student Handbook</i> .
ATTENDANCE	<p>Class Meetings: You are required to attend all class meetings. If you miss a meeting, it is your responsibility to obtain notes from a fellow student. Office hours are not meant for individual lectures.</p> <p>Class Participation: Class attendance is useful to the student as a means of acquiring knowledge and clarification, and is a prerequisite for class participation. Class participation is the active engagement in questions and answers, and contribution of comments in class sessions.</p>
COVER PAGE	A student's identity should appear on the cover page of the every assignment. Student's name, course, section number, assignment number, and due date should be clearly shown on the cover page of your assignment for full credit.
HELP	Tutors are available through the Office of Learning Assistance. 9-8741. Help sessions will be given to help students to finish assignments.
NOTE	<p>No attempt is made at the college level to discuss all the materials in the texts during class lectures. No <i>INCOMPLETE (I)</i> will be given for this class. This syllabus is subject to changes announced in class.</p> <p>More than one backup of computer assignment works should be maintained in different locations. Students must have backup disks or flash drives for lab sessions.</p> <p>Students must obtain a valid Oracle server account. <b>Any login issues should be reported to SBA tech office (529-4940) politely.</b> Or send emails to <a href="mailto:sbahelp@miamioh.edu">sbahelp@miamioh.edu</a></p> <p><a href="https://fsboracle.fsb.muohio.edu/oracle/webcreate.htm">https://fsboracle.fsb.muohio.edu/oracle/webcreate.htm</a></p>

**Grades are based on the following scale (*Plus/Minus Grading*):**

A+ 97.5-100	B+ 87.5-89.49	C+ 77.5-79.49	D+ 67.5-69.49
A 92.5-97.49	B 82.5-87.49	C 72.5-77.49	D 62.5-67.49
A- 89.5-92.49	B- 79.5-82.49	C- 69.5-72.49	D- 59.5-62.49

***Tentative Schedule for ISA 281***

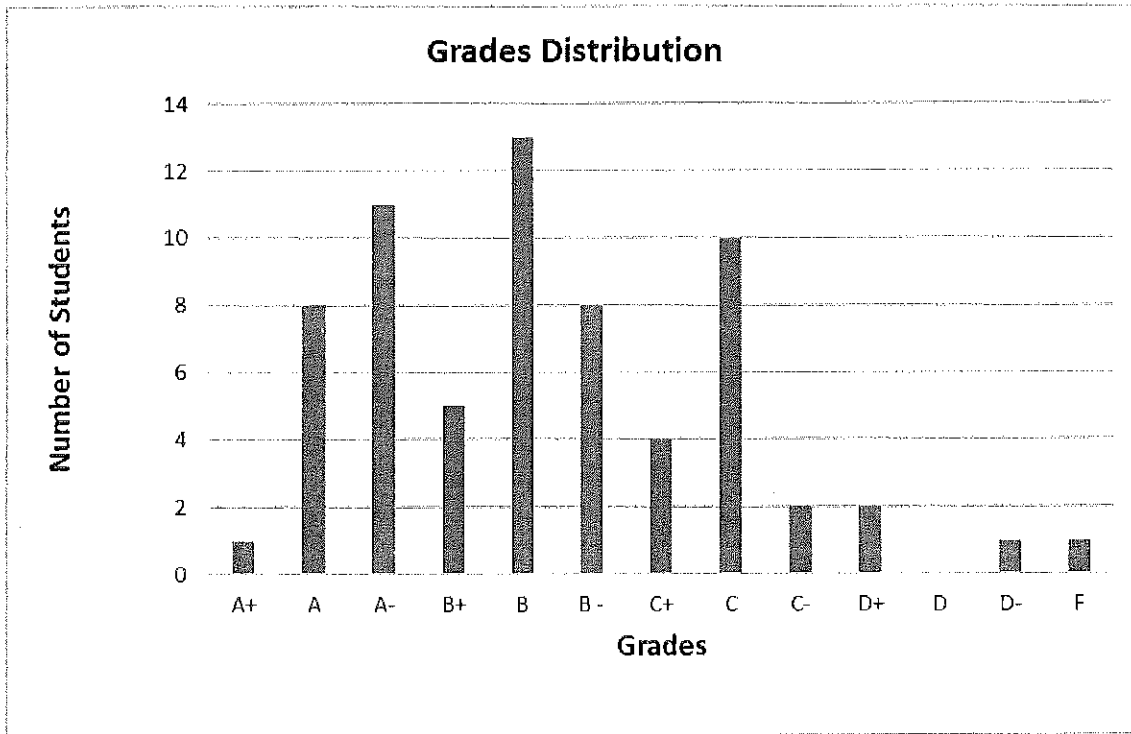
<b>Weeks</b>	<b>Topics and Events</b>	<b>Chapter and other Materials</b>
8/26	<i>Introduction to Computers and Programming</i>	<b>Ch1</b>
8/28 – 9/4	<i>Input, Processing, and Output</i>	<b>Ch2</b>
9/9- 9/11	<i>Decision Structures and Boolean Logic</i>	<b>Ch3</b>
9/16 - 9/23	<i>Repetition Structures</i>	<b>Ch4</b>
9/25 – 10/2	<i>Functions and Modules</i>  <i>Exam One on 10/2</i>	<b>Ch5</b>
10/7 - 10/9	<i>Files and Exceptions</i>	<b>Ch6</b>
10/14- 10/21	<i>Lists and Tuples</i>	<b>Ch7</b>
10/23 – 10/30	<i>Dictionaries and Sets</i>	<b>Ch9</b>
11/4– 11/13	<i>Classes and Object-Oriented Programming</i>  <i>Exam Two on 11/4</i>	<b>Ch10</b>
11/18– 11/25	<i>Inheritance</i>	<b>Ch11</b>
12/2 - 12/4	<i>Database Application via Pythan</i>	<b>Handouts</b>
12/8 (Sunday)	<i>Final Review ( attendance: optional)</i>	<b>Review Sheet</b>
12/9 - 12/14	<b>Finals Week</b>	

IT professionals may be invited to come to our classroom for presentation and lecture during the semester. In that situation, schedule might be changed accordingly.

***For technology resource at Farmer School of Business, please access:***

*<http://miamioh.edu/fsb/facilities/office-of-technology/student-resources/index.html>*

**Grades Distribution of ISA 281 in fall 2018:**



A+	A	A-	B+	B	B -	C+	C	C-	D+	D	D-	F
1	8	11	5	13	8	4	10	2	2	0	1	1

**Average: B                      83.00%                      (332 out of 400)**

<https://spectrum.ieee.org/at-work/innovation/the-2018-top-programming-languages>

**ISA 291 C Fall 2019****Applied Regression Analysis in Business**

**Class Meetings:** W/F, 8:30 am – 9:50 am FSB 0012

**Professor:** Pat Schur  
 FSB 3012  
 513.604.286 (c), 513.529.9368 (o)  
[schurpj@miamioh.edu](mailto:schurpj@miamioh.edu)

**Office Hours:** W/F 7:15am – 8:15am, 10:00am – 11:15am

**Prerequisite(s):** ISA 205 or ISA 225 or equivalent

**Required Materials:**

1. *A Second Course in Statistics: Regression Analysis*, 7th edition by Mendenhall and Sincich, ISBN-10 0-321-69169-5.
2. Powerpoints. Available on Canvas course site.
3. Access on your laptop to R and R-studio.

**Course Objectives:**

By the end of this course, you should be able to:

- Apply regression-based predictive modeling techniques in business. The modeling techniques discussed include
  - Simple linear regression
  - Multiple linear regression
  - Multiple regression with qualitative predictors
  - Multiple regression with interaction terms
  - Polynomial regression
- Evaluate the strengths and limitations of regression models by
  - Validating model assumptions
  - Remedying certain departures from model assumptions
  - Testing for model significance
  - Testing for significance of model coefficients
  - Using measures of comparative fit
- Use variable selection methods to build statistically sound and practically useful models.
- Properly frame business problems in a regression modeling context. This includes:
  - Translating a business problem into a predictive modeling context.
  - Fitting and validating models while balancing both practical business guidelines and statistical soundness of the analysis.
  - Accurately and clearly interpreting the results of models to a business audience.

**Requirements & Grading:**

- |                           |     |
|---------------------------|-----|
| • Comprehensive Exams (3) | 50% |
| • Homework                | 5%  |
| • Weekly Computer Labs    | 10% |
| • Data Analysis Exercises | 15% |
| • Final Project           | 20% |

A+	97.50% - 100.00%	B+	87.50% - 89.49%	C+	77.50% - 79.49%	D+	67.50% - 69.49%
A	92.50% - 97.49%	B	82.50% - 87.49%	C	72.50% - 77.49%	D	62.50% - 67.49%
A-	89.50% - 92.49%	B-	79.50% - 82.49%	C-	69.50% - 72.49%	D-	59.50% - 62.49%

**Course Calendar:** The course calendar is available on the course site. This is a tentative guide to the material that will be covered, exam dates, reading assignments, homework assignments, and due dates. The calendar is likely to be revised several times during the semester if the class moves more slowly or quickly than expected. The most up-to-date calendar will be posted on the course site; thus, it is imperative that you refer to an online, not a printed copy of the calendar.

**Exams:** Three equally weighted exams will be given during the semester. Exams will cover material in the assigned readings, homework assignments, labs, lecture and lecture slides. Please refer to the course calendar for approximate exam dates. The exams will be given during class. All exams are comprehensive.

**Homework:** Homework assignments may be in the form of textbook problems, data gathering exercises, or open-ended questions. These assignments are vital to the learning process. On each assignment, you may be given recommended problems and required problems. Only the required problems will be handed in and graded. In grading these assignments, I will consider form and structure in addition to getting the right answer. Your assignments should be typed and include pertinent computer output as necessary. If necessary, pertinent output should be cut and pasted into a word processing document for easy reference. Failure to annotate your output does not convince me that you understand how to interpret it, and will result in a reduced grade on an assignment. All assignments should be turned in on Canvas. Late assignments will receive no credit. No exceptions.

**Data Anal. Exercises:** Several times throughout the semester, you will be given data analysis exercises. These exercises will emphasize the analysis of real (or realistic) data. You will be asked to write up the results of your analysis in a brief report. Most of this work will be done in pairs or small groups and only one report will be turned in for each group of students. The approximate due dates are given on the course calendar and the assignments will be provided to you on the course site. Please note that the final project is a lengthy assignment and includes a Powerpoint presentation to be given during the scheduled final exam time. Late assignments will receive no credit. No exceptions.

**Reading Assignments:** Reading the assigned material is critical to your success in this course. You are expected to read the assignment before coming to class on the date listed on the calendar. For example, a reading assignment for 2/7, should be completed no later than class time on 2/7. You may not understand everything you read completely; however, reading before I lecture on this material will ensure that the first time you see the material is not when I present the lecture. This familiarity with the material to be covered is the minimum that you need to do to prepare for class. If you fail to complete the assigned reading on time, you cannot expect to understand the material that is presented in the lecture.

**Computer Labs:** We will have computer labs each class. Some portion of each class will be allocated to these computer labs and they will cover material covered that day. In order to receive credit for a lab, you will need to be in class and complete the lab during the allocated class time. Work is due at the end of each class. These labs are crucial to helping you practice new material and learning how to accomplish various things in R. Late assignments will receive no credit. No exceptions.

**Attendance and Participation:**

Each of you is a valuable member of this learning community. Thus, you are expected to come prepared to each class, to listen effectively, to ask questions, and to be an active participant in this course.

**Academic Integrity:**

The Miami University policies pertaining to academic dishonesty apply to all university courses. Please refer to <http://miamioh.edu/integrity/undergraduates/index.html> for details regarding these policies.


**Special Accommodations for Students with Disabilities:**

Students who need special accommodations as provided for by the Americans with Disabilities Act, should refer to the office of Student Disability Services (SDS) for assistance. Website: <http://miamioh.edu/student-life/sds/>; Email: [sds@MiamiOH.edu](mailto:sds@MiamiOH.edu); Phone: (513)529-1541.

8/15/2019

Syllabus for ISA401 A

# Course Syllabus

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## CLASS INFORMATION

- Prerequisite: ISA 245
- Location: 2050 FSB

## INSTRUCTOR

### Zafer Ozdemir

- Professor of Information Systems
- Email: [ozdemir@miamioh.edu](mailto:ozdemir@miamioh.edu)
- Office Hours: Mon & Wed 11:45 am - 12:45 pm, or by appointment, 3011 FSB, possibly through [my virtual WebEx room](#) (<https://miamioh.webex.com/meet/ozdemir>)

## CATALOG DESCRIPTION

An introduction to the use of business intelligence and data visualization in organizations, with emphasis on how information is gathered, stored, analyzed, and used. Topics covered include business intelligence, data warehousing, data visualization, and data mining.

## REQUIRED MATERIALS

- Practical Analytics, by Jones and Kale -- available for purchase [here](#) (<http://epistemypress.com/books/practical-analytics/>). Please note that this book has no hard copy.
- **Microsoft Power BI Desktop** (<https://powerbi.microsoft.com/en-us/desktop/>) (free). Power BI Desktop is Windows only. If you have a mac, you will have to rely on **Microsoft Virtual Desktop** (<http://miamioh.edu/fsb/facilities/office-of-technology/student-resources/inst.html>) or use FSB labs.
- **Tableau** (<http://www.tableau.com/support/esdalt>) (version **2019.1.0**) -- Tableau's **data visualization software** (<http://www.tableau.com/data-visualization-software>) is provided through the Tableau for Teaching program.



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- Activation key to use on your machine: <TCXA-4E44-EF80-7A5B-79DB> (This key is to be used on your machine, not on the Virtual Server! To activate Tableau on FSB Virtual Server, see the icon right below Tableau.) PLEASE DO USE THIS KEY TO ACTIVATE THE SOFTWARE ON ONLY ONE COMPUTER.
- Instructions: If you are presented a form, enter your university email address for "Business email"; and under "Organization", input Miami University.
- These software are available on Microsoft Virtual Desktop (<http://miamioh.edu/fsb/facilities/office-of-technology/student-resources/inst.html>) and the labs in FSB (2037 and 2050). See FSB lab schedule here (<http://miamioh.edu/fsb/facilities/office-of-technology/labs/index.html>). **Problems with accessing the Virtual Desktop is not a valid excuse for submitting an assignment late.**

## STUDENT OUTCOMES

Upon completion of this course students will be able to

1. Explain the role of data warehousing and business intelligence in managerial decision making
2. Describe the importance of business performance management tools such as dashboards and score cards
3. Retrieve data from multiple sources
4. Clean, manipulate, and transform data using using Power BI
5. Design and implement data models for decision support using Power BI
6. Work with visualization software to create visualizations and dashboards using Tableau
7. Explain the importance of data mining and the capabilities of some of the data mining methods

## GRADING POLICIES

Don't wait until the end of the course to get concerned about your grade, because extra credit work is not an option. Please see me during the semester as needed to ask questions and get assistance. Grades are considered final one week after their return.

Please note that **70% of your grade** will come from application of course concepts (see below in blue).

### Grading Scheme

- **for ISA 401:**
  - Two conceptual exams -- 30%
  - Final (application) exam -- 25%
  - Application assignments -- 30%

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- Group project -- 15% (Individual grades will depend on peer evaluations to be collected at the end of the semester)
- **for ISA 501:**
  - Two conceptual exams -- 27%
  - Final (application) exam -- 22.5%
  - Application assignments -- 27%
  - Group project -- 13.5% (Individual grades will depend on peer evaluations to be collected at the end of the semester)
  - Semester paper -- 10%

### Letter Grade Definition

- A+ > 97%
- A > 93%
- A- > 90%
- B+ > 87%
- B > 83%
- B- > 80%
- C+ > 77%
- C > 73%
- C- > 70%
- D+ > 67%
- D > 63%
- D- > 60%

## ACADEMIC DISHONESTY

**All application assignments should be your own work.** You may consult each other to understand the requirements of an assignment. However, you must do application assignments on your own! Any work found to be done in team fashion will be reported as an act of academic dishonesty. You are required to observe the rules of academic integrity promulgated by the University, including the prohibition on academic misconduct, such as (but not limited to) cheating, dishonesty, plagiarism, submission of other's work, and complicity in academic dishonesty. For more guidance on academic integrity, including plagiarism, see Miami University's **web page on Academic Integrity** (<http://www.miamioh.edu/integrity/>)

## ADA & STUDENTS WITH DISABILITIES

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Miami University is committed to ensuring equal access to students with disabilities. Miami's Office of Student Disability Services (SDS) assists students with determining eligibility for services and accommodation planning. Students who are entitled to disability-related academic adjustments, auxiliary aids, etc., must register with SDS to receive accommodations in university courses. Please understand that formal communication from SDS must be presented prior to the coordination of accommodations for this course. For more information, students may contact SDS at (513) 529-1541 or via email at [sds@miamioh.edu](mailto:sds@miamioh.edu) (<mailto:sds@miamioh.edu>).

## EXAMS, ASSIGNMENTS, AND PROJECT

The dates and times of evening exams have been made known to you prior to your enrolling in this class. Any request for rescheduling requires written documentation of an academically valid excuse and should be made at least **five business days** in advance.

Late submissions will be marked down 10% per day -- unless when the solution is discussed in class, after which no late submissions will be accepted.

Students should act honestly in the completion of all course assignments and ask the instructor for clarification on any assignment guidelines that are not clear.

I will collect peer evaluations on your group project work and reserve my right to adjust grades up/down based on these evaluations.

## FOR ISA 501 STUDENTS ONLY

I expect you to write an open-ended paper for which you will find and deep dive into an area within course topics that is of interest, and you will research how it relates to your future career. What are the emerging technologies? What are the important skills employers want? Discuss with me your idea before investing too much time in it. I encourage you to discuss it with me further along the process as well. Final papers should be around 15-20 pages (double spaced, Times New Roman, 12 pt font, 1 inch margins) excluding figures, tables, and references.

I also expect you to do more advanced/varied data analyses for the group project. All 501 students will be in the same group to the extent possible.

## CLASS PARTICIPATION

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I value your active participation during our meetings (via questions, comments, helping your friends with in-class exercises, group discussions and group exercises etc.). Your cumulative class participation can move you **up** or **down** a letter grade.

According to the Miami University Bulletin Class Attendance policy, "you are expected to attend every class for which you are registered." Furthermore, "if your instructor notifies the Registrar's office that in his or her opinion you have missed too many classes, you can be dropped from the course with a grade of F." If you have to miss a class, you will need to get the notes from a classmate.

## COMMUNICATION

Course communication will be mainly through Canvas Announcements--typically within three hours after a class meeting. You are responsible to read these announcements that will come to your email inbox in a timely manner and prepare for the next class meeting accordingly. You are also responsible to keep up with assignments and their due dates; these are all published at the beginning of the semester.

## LIBERAL EDUCATION OUTCOMES

*ISA 401 is the third course in the ISA-3 thematic sequence (Web Mining and Knowledge Management).*

The liberal education objectives of the course are accomplished through the use of class discussions, essay exam questions, and group projects. The exams, class discussions, and projects aid in the development of critical thinking skills. Lectures are designed to link topics in such a way that the student understands the context for each issue in the course. Presentations, group projects, and group discussions in class are opportunities for engaging with other learners. Time for reflecting and acting comes through exams and in-class discussions. The liberal education objectives of this class can only be met if you attend each class and are prepared to ask/answer questions and discuss the day's material.

To foster critical thinking students will study current enterprise systems issues, understand the context in which business decisions are made, and investigate enterprise system problems and enterprise processes.

To understand contexts of organizations and work groups this course will focus on the use of enterprise systems to solve business problems and improve productivity. This course encourages engagement with other learners by providing interactive discussions and individual and small group projects.

To foster reflection and purposeful acting, this course emphasizes identification and investigation of problems and solutions while building technical and analytical skills.

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## FSB MISSION

The mission of the Farmer School of Business is to be a premier business program that provides students with the life-long ability to acquire knowledge and translate it into responsible action in a competitive global environment. Toward that end, across the curriculum we seek to develop a number of important skills/perspectives in all of our graduates, including: critical thinking and ethical decision making, effective communication, IT proficiency, and international/diversity perspectives.

The primary skill(s)/perspective(s) promoted in this class will be IT proficiency, effective communication and critical thinking.

In part, these skills will be developed through computer projects, presentations and applying the concepts to case studies and/or essay questions.

## INFORMATION SYSTEMS PROGRAM OBJECTIVES

ISA 401 also contributes to the following student learning outcomes for the Information Systems program:

- Systematically identify, analyze and evaluate information-related business problems and opportunities
- Solve business problems and exploit business opportunities using information technologies

This is achieved by having students (i) analyze various business processes and associated document flows and (ii) make data-driven business decisions in a competitive simulation environment.

## LAB POLICIES

- After the class starts, computers are to be used for only class-related material.
- Except for bottled water, no food or drinks are allowed in the computer lab. Food should be kept in backpacks if in the possession of students.
- You should pick up any papers and trash before leaving the lab. Please report to me inoperable computers (if any). I will relay the information to the IT staff for correction.












**Course materials provided to you, including presentations, tests, outlines, and similar materials, are copyright protected by the faculty member(s) teaching this course. You may make copies of course materials solely for your own use. You may not copy, reproduce or electronically transmit any course materials to any person or company for commercial or other purposes without the faculty member's**

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











**express permission. Violation of this prohibition may subject the student to discipline/suspension/dismissal under the Miami's Code of Student Conduct or Academic Integrity Policy.**

## Course Summary:

Date	Details	
Wed Aug 28, 2019	 <b><u>M1   Assignment: Working with PowerPivot and OLAP Functions</u></b> ( <a href="https://miamioh.instructure.com/courses/105778/assignments/1069407">https://miamioh.instructure.com/courses/105778/assignments/1069407</a> )	due by 11:59pm
Wed Sep 4, 2019	 <b><u>M2   Assignment: Data Modeling using Power BI</u></b> ( <a href="https://miamioh.instructure.com/courses/105778/assignments/1069411">https://miamioh.instructure.com/courses/105778/assignments/1069411</a> )	due by 11:59pm
Sun Sep 15, 2019	 <b><u>M2   Assignment: Star Schema Design</u></b> ( <a href="https://miamioh.instructure.com/courses/105778/assignments/1069413">https://miamioh.instructure.com/courses/105778/assignments/1069413</a> )	due by 11:59pm
Thu Sep 19, 2019	 <b><u>Practice Quiz 1 (Remotely Proctored)</u></b> ( <a href="https://miamioh.instructure.com/courses/105778/assignments/1069404">https://miamioh.instructure.com/courses/105778/assignments/1069404</a> )	due by 5pm
	 <b><u>Conceptual Exam 1 (Remotely Proctored)</u></b> ( <a href="https://miamioh.instructure.com/courses/105778/assignments/1069400">https://miamioh.instructure.com/courses/105778/assignments/1069400</a> )	due by 8pm
Sun Sep 22, 2019	 <b><u>M2   Assignment: Creating Measures in Power BI</u></b> ( <a href="https://miamioh.instructure.com/courses/105778/assignments/1069410">https://miamioh.instructure.com/courses/105778/assignments/1069410</a> )	due by 11:59pm
Wed Sep 25, 2019	 <b><u>M2   Assignment: Cleansing &amp; Transforming Data with Power BI</u></b> ( <a href="https://miamioh.instructure.com/courses/105778/assignments/1069408">https://miamioh.instructure.com/courses/105778/assignments/1069408</a> )	due by 11:59pm
Sun Sep 29, 2019	 <b><u>M2   Assignment: Data Preparation and Analysis using Power BI</u></b> ( <a href="https://miamioh.instructure.com/courses/105778/assignments/1069412">https://miamioh.instructure.com/courses/105778/assignments/1069412</a> )	due by 11:59pm
Sun Oct 6, 2019	 <b><u>M2   Assignment: Converting an ERD to a Star Schema using Power BI</u></b> ( <a href="https://miamioh.instructure.com/courses/105778/assignments/1069409">https://miamioh.instructure.com/courses/105778/assignments/1069409</a> )	due by 11:59pm
	 <b><u>Phase 1: Staging Data for Analysis (QVC)</u></b> ( <a href="https://miamioh.instructure.com/courses/105778/assignments/1069422">https://miamioh.instructure.com/courses/105778/assignments/1069422</a> )	due by 11:59pm
Wed Oct 9, 2019	 <b><u>M3   Assignment: Building Gapminder</u></b> ( <a href="https://miamioh.instructure.com/courses/105778/assignments/1069415">https://miamioh.instructure.com/courses/105778/assignments/1069415</a> )	due by 11:59pm

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Date	Details	
Wed Oct 23, 2019	 <b><u>M3   Assignment: Calculations in Tableau</u></b> <a href="https://miamioh.instructure.com/courses/105778/assignments/1069416">https://miamioh.instructure.com/courses/105778/assignments/1069416</a>	due by 11:59pm
	 <b><u>M3   Assignment: Introduction to Tableau</u></b> <a href="https://miamioh.instructure.com/courses/105778/assignments/1069418">https://miamioh.instructure.com/courses/105778/assignments/1069418</a>	due by 11:59pm
	 <b><u>M3   Assignment: Map of NYC Wifi</u></b> <a href="https://miamioh.instructure.com/courses/105778/assignments/1069419">https://miamioh.instructure.com/courses/105778/assignments/1069419</a>	due by 11:59pm
Sun Nov 3, 2019	 <b><u>M3   Assignment: Analyzing Yelp Data</u></b> <a href="https://miamioh.instructure.com/courses/105778/assignments/1069414">https://miamioh.instructure.com/courses/105778/assignments/1069414</a>	due by 11:59pm
Sun Nov 10, 2019	 <b><u>M3   Assignment: Visual Hierarchy with Airbnb Data</u></b> <a href="https://miamioh.instructure.com/courses/105778/assignments/1069421">https://miamioh.instructure.com/courses/105778/assignments/1069421</a>	due by 11:59pm
Thu Nov 14, 2019	 <b><u>Practice Quiz 2 (Remotely Proctored)</u></b> <a href="https://miamioh.instructure.com/courses/105778/assignments/1069402">https://miamioh.instructure.com/courses/105778/assignments/1069402</a>	due by 1:30pm
	 <b><u>Conceptual Exam 2 (Remotely Proctored)</u></b> <a href="https://miamioh.instructure.com/courses/105778/assignments/1069403">https://miamioh.instructure.com/courses/105778/assignments/1069403</a>	due by 8pm
Sun Nov 17, 2019	 <b><u>M3   Assignment: Developing a Dashboard using Tableau</u></b> <a href="https://miamioh.instructure.com/courses/105778/assignments/1069417">https://miamioh.instructure.com/courses/105778/assignments/1069417</a>	due by 11:59pm
Sun Nov 24, 2019	 <b><u>M3   Assignment: Story Points in Tableau</u></b> <a href="https://miamioh.instructure.com/courses/105778/assignments/1069420">https://miamioh.instructure.com/courses/105778/assignments/1069420</a>	due by 11:59pm
	 <b><u>Phase 2: Data Visualization, Dashboarding &amp; Storytelling</u></b> <a href="https://miamioh.instructure.com/courses/105778/assignments/1069423">https://miamioh.instructure.com/courses/105778/assignments/1069423</a>	due by 11:59pm
	 <b><u>Final Application Exam (Remotely Proctored)</u></b> <a href="https://miamioh.instructure.com/courses/105778/assignments/1069401">https://miamioh.instructure.com/courses/105778/assignments/1069401</a>	
	 <b><u>Final Exam - Data Preparation</u></b> <a href="https://miamioh.instructure.com/courses/105778/assignments/1069405">https://miamioh.instructure.com/courses/105778/assignments/1069405</a>	
	 <b><u>Final Exam - Data Visualization</u></b> <a href="https://miamioh.instructure.com/courses/105778/assignments/1069406">https://miamioh.instructure.com/courses/105778/assignments/1069406</a>	
	 <b><u>Semester Paper (ISA 501 students only)</u></b> <a href="https://miamioh.instructure.com/courses/105778/assignments/1069424">https://miamioh.instructure.com/courses/105778/assignments/1069424</a>	

**ISA 414 – Managing Big Data**  
2019 Fall  
Course Syllabus

**Class Information**

Meeting Times: Tuesdays and Thursdays, 08:30 - 09:50, FSB 2037

**Instructor**

Name: Dr. Arthur Carvalho  
Office: 3024 FSB  
Office Hours: Tuesdays and Thursdays 12:00 – 14:00  
E-Mail: arthur.carvalho@miamioh.edu

**Textbook:** no textbook is required for this course. All the materials (slides, source code, readings) will be provided by the instructor.

**Course Overview:** this course provides an introduction to big data management, *i.e.*, how to effectively collect, store, and analyze potentially unstructured and large data sets. To this end, the first part of this course is designed to provide an understanding of how to derive information from unstructured data, with a particular focus on how to collect and analyze textual data. In the second part of the course, we shift focus to modern big data technologies, when we discuss the concept of cloud computing and storage and modern frameworks and technologies used for distributed storage and processing of large data sets.

**Learning Objectives:** upon successful completion of the course, students will obtain valuable analytics skills that are in high demand in the job market. In particular, students will be able to:

*Conceptual knowledge*

- Articulate the importance of data analytics and big data management inside organizations.
- Develop (big) data-driven plans to support business decisions and new business strategies.

*Data Collection*

- Collect data using APIs, by means of web scrapping, and by querying relational and document-oriented databases.

*Data Analysis*

- Preprocess and build statistical models based on textual data.
- Perform sentiment analysis on textual data.

*Cloud Computing*

- Understand the pros and cons of using cloud-based data analytics services.
- Configure basic services on a cloud platform.

*Distributed Data Analysis and Storage*

- Understand the inner workings of the Hadoop environment.
- Understand and use services built on top of core Hadoop, including MapReduce, Hive, and Spark.



This course involves individual assignments, exams, and a group project. Keep in mind that some assignments and some portions of the project will be well-specified, while others will be intentionally ambiguous so as to simulate real-life situations. Note that this course covers highly technical material. It is very unlikely that you will master its content without practicing. Overall, I expect you to devote on average about 6 to 8 hours per week outside of class to this course.

**Grading Policy:** students' work will be evaluated based on the following grading scheme:

- |                 |                |
|-----------------|----------------|
| • Assignments   | 40% (10% each) |
| • Group project | 40%            |
| • Midterm exam  | 10%            |
| • Final exam    | 10%            |

*Grades:* final letter grades will be assigned using the following scale:

Percentage Grade	Letter Grade
[97, 100]	A+
[94, 97)	A
[90, 94)	A-
[87, 90)	B+
[84, 87)	B
[80, 84)	B-
[77, 80)	C+
[74, 77)	C
[70, 74)	C-
[67, 70)	D+
[64, 67)	D
[60, 64)	D-
[0, 60)	F

Students should not expect final grades to be rounded up. This means that, for example, a student who receives the final grade of 89.99% will receive the letter grade B+, as opposed to A-.

*Assignments:* there will be four graded assignments released throughout the semester. The graded assignments are take-home assignments, normally short research or problem-based tasks. Meeting deadlines for assignments is crucial. Late submissions will not be accepted. Assignments are individual tasks. Any work assigned to be done individually which is found to be done in a team fashion will be reported as a case of academic dishonesty.

*Group Project:* a group of at most 5 members will design and implement a big data solution to an academic and/or business problem. The main deliverable is a report documenting and describing the work performed throughout the semester. Each student is expected to be a responsible team member and contribute meaningfully to the project. Peer evaluations will be collected to estimate each student's contribution. Individual grades will then be adjusted based on such evaluations. Students are expected to meet the writing standards commonly used in business and academia, *e.g.*, proper organization and use of titles, correct spelling, subject/verb agreement, complete sentences, *etc.* The Howe Writing Initiative provides great support in case one needs to improve her/his writing skills. Grade deductions might occur due to poorly delivered reports.

*Exams:* there will be two exams given throughout the semester - a midterm exam and a final exam. The midterm exam will cover all class materials and readings for the period immediately prior to that exam. Clearly, some of the material in the midterm exam will also be covered in the final exam. Makeup exams will only be available to students with legitimate reasons. A physician's certificate or some other official documentation is required.

**Class Attendance:** according to the Miami University Bulletin's Class Attendance Policy: "*you are expected to attend every class for which you are registered.*" Furthermore, "*if your instructor notifies the Registrar's office that in his or her opinion you have missed too many classes, you can be dropped from the course with a grade of F.*" Hence, it is important to attend all classes. If one must miss a class, it is the student's responsibility to understand the material covered that day. The instructor reserves the right to drop someone who misses a significant number of classes, which in this course means four or more classes.

**Academic Integrity:** all individual assignments should be done individually. Students may consult with each other to understand the requirements of an assignment or for troubleshooting. However, each student must complete the individual assignments on her/his own! Any individual work found to be done in a team fashion will be reported as an act of academic dishonesty. Students are required to observe the rules of academic integrity promulgated by the university, including the prohibition on academic misconduct, such as (but not limited to) cheating, dishonesty, plagiarism, submission of other's work, and complicity in academic dishonesty. For more information on academic integrity at Miami University, please see <http://miamioh.edu/fsb/academics/integrity/index.html>

**Copyright Policies:** the course materials provided to you, including slides, exams, solutions, source codes, outlines, and similar materials, are copyright protected by the faculty member teaching this course. You may make copies of course materials solely for your own use. You may not copy, reproduce or electronically transmit any course materials to any person or company for commercial or other purposes without the faculty member's express written permission. Violation of this prohibition may subject the student to discipline/suspension/dismissal under the Miami's Code of Student Conduct or Academic Integrity Policy.

**Lab Policies:** refrain from checking emails or surfing the web during class. This is distracting to the instructor and others. You should pick up any papers and trash before leaving the lab.

**Disabilities Policy:** the instructor will consider and accommodate students with disabilities. Let the instructor know as soon as possible if you need special accommodation to fulfill the essential functions of the course as listed in this syllabus.

**Class Communication:** the instructor will use *Canvas* to post announcements and send emails. Students are expected to read all the information conveyed in this manner.

**Class Schedule:** The following class schedule represents a general plan for the semester. Deviations may be necessary.

Lecture	Date	Content
1	August 27 <sup>th</sup>	Course Introduction
2	August 29 <sup>th</sup>	Preliminaries: Introduction to Programming with R (Part I)
3	September 3 <sup>rd</sup>	Preliminaries: Introduction to Programming with R (Part II)
4	September 5 <sup>th</sup>	Preliminaries: Introduction to Programming with R (Part III)
5	September 10 <sup>th</sup>	Preliminaries: Introduction to Programming with R (Part IV)
6	September 12 <sup>th</sup>	Data Collection: Web Scraping (Part I)
7	September 17 <sup>th</sup>	Data Collection: Web Scraping (Part II)
8	September 19 <sup>th</sup>	Data Collection: APIs (Part I)
9	September 24 <sup>th</sup>	Data Collection: APIs (Part II)
10	September 26 <sup>th</sup>	Data Collection: Querying Relational Databases
11	October 1 <sup>st</sup>	Data Collection: Querying Document-Oriented Databases
12	October 3 <sup>rd</sup>	Data Analysis: Supervised Learning
13	October 8 <sup>th</sup>	Data Analysis: Text Mining and Sentiment Analysis (Part I)
14	October 10 <sup>th</sup>	Data Analysis: Text Mining and Sentiment Analysis (Part II)
15	October 15 <sup>th</sup>	Review Session #1
16	October 17 <sup>th</sup>	<b>Midterm Exam</b>
17	October 22 <sup>nd</sup>	Cloud Computing and Storage (Part I)
18	October 24 <sup>th</sup>	Cloud Computing and Storage (Part II)
19	October 29 <sup>th</sup>	Introduction to the Hadoop Ecosystem (Part I)
20	October 31 <sup>st</sup>	Introduction to the Hadoop Ecosystem (Part II)
21	November 5 <sup>th</sup>	The Hadoop Ecosystem: MapReduce (Part I)
22	November 7 <sup>th</sup>	The Hadoop Ecosystem: MapReduce (Part II)
23	November 12 <sup>th</sup>	The Hadoop Ecosystem: Spark (Part I)
24	November 14 <sup>th</sup>	The Hadoop Ecosystem: Spark (Part II)
25	November 19 <sup>th</sup>	Project: Presentation of Preliminary Ideas
26	November 21 <sup>st</sup>	Project: Presentation of Preliminary Ideas
27	November 26 <sup>th</sup>	Project: In-Class Group Work
28	December 3 <sup>rd</sup>	Project: In-Class Group Work
29	December 5 <sup>th</sup>	Review Session #2
30	December 12 <sup>th</sup>	<b>Final Exam (8:00 am – 10:00 am)</b>

**ISA 491 (Data Mining)**  
**(Section A: M, W: 10:05am – 11:25am, Section B: M, W: 11:40am – 1:00pm)**

**Professor:** Dr. Waldyn Martinez                      **Office:** FSB 2020, 529-2154                      **E-mail:** martinwg@miamioh.edu  
**Office Hours:** M, W: 2:00 p.m – 3:30 p.m FSB 2020

**Text:** Data Mining for Business Analytics: Concepts, Techniques, and Applications in R, by Galit Shmueli, Peter C. Bruce, Inbal Yahav, Nitin R. Patel, Kenneth C. Lichtendahl Jr.

**Course Goals:**

By the end of this course, you should be able to:

1. Understand and complete the data mining process
2. Visualize data in light of the end goal of the analyses
3. Understand the difference between explanatory and predictive modeling.
4. Know the difference between supervised and unsupervised learning.
5. Perform and understand cluster analysis using k-means for segmentation and dimension reduction.
6. Use Principle components analysis for dimension reduction.
7. Build predictive models using decision trees, random forests and boosting.
8. Build a predictive model using logistic regression and interpret a logistic regression model.
9. Build a predictive model using neural networks
10. Choose the best predictive model based on multiple measures of predictive accuracy and the business question of interest.

**Grading:**

2 Exams	--	40%
Homework	--	10%
Final Project	--	20%
Final Exam	--	20%
Quizzes, Labs	--	10%

A+	97.50% - 100.00%	B+	87.50% - 89.49%	C+	77.50% - 79.49%	D+	67.50% - 69.49%
A	92.50% - 97.49%	B	82.50% - 87.49%	C	72.50% - 77.49%	D	62.50% - 67.49%
A-	89.50% - 92.49%	B-	79.50% - 82.49%	C-	69.50% - 72.49%	D-	59.50% - 62.49%

**Exams:** Two equally weighted exams will be given during the semester. Exams will cover material in the assigned readings, homework assignments, lecture and lecture slides. Please refer to the course calendar for approximate exam dates. The first two exams will be given during class. The third exam will be given during the scheduled final exam time for the course and accounts for 20% of the grade. The final exam is comprehensive.

**Final Project:** You may work in teams of 2. Data Delivery: Directly after the first exam, I will introduce the project data. The project will be divided in two parts: Project Part 1: Approximately 3 weeks later, your initial data visualization and exploration will be due. This will include all data preparation, imputation, and dimension reduction. Project Part 2: Second part of project will involve finalizing your predictive model and potentially an in-class competition with a hold out sample.

**Software:** We will use R. It is freely available, for download as well as available in the lab and on the remote desktop connection.

**Homework:** Homework is to be turned in on Canvas prior to the due date. Assignments will be posted on the course Canvas site. Most of the homework will require the use of R. You will have at least a week to complete each assignment. Last minute software/vpn problems are not an excuse for late homework. Please give yourself enough lead time so that you have plenty of time to work around any problems.

**Quiz, Labs:** Each class you might get a quiz of the material covered in the last two classes before the quiz date. In addition, each week a LAB containing practical topics will be due, generally on Friday night. The LABs are self-explanatory and can be completed without covering the topics in class. At the end of the semester the lowest 2 grades (from quizzes or labs) will be automatically dropped in Canvas. The are no excused quizzes or labs, so you can use your dropped quiz/lab grades if you have an excused absence.

**ISA 591:** You will complete your project individually. You will be required to answer additional questions on the homework assignments. You will have different/more exam questions. And lastly, as graduate students, I expect you to research and implement a new modeling method on the project.

**Attendance:** Each of you is a valuable member of this learning community. Thus, you are expected to come prepared to each class, to listen effectively, to ask questions, and to be an active participant in this course.

**Integrity:** The Miami University policies pertaining to academic dishonesty apply to all university courses. Please refer to <http://miamioh.edu/integrity/undergraduates/index.html> for details regarding these policies.

Students who need special accommodations as provided for by the Americans with Disabilities Act, should refer to the office of Student Disability Services (SDS) for assistance. Website: <http://miamioh.edu/student-life/sds/>; Email: [sds@MiamiOH.edu](mailto:sds@MiamiOH.edu); Phone: (513)529-1541

## Arthur Carvalho, Ph.D.

### Education

- Ph.D., University of Waterloo, 2014  
Major: Computer Science
- M.Math., University of Waterloo, 2010  
Major: Computer Science
- B.Sc., Federal University of Pernambuco, 2008  
Major: Computer Science

### Academic and Professional Positions

- Dinesh & Ila Paliwal Innovation Chair**, Miami University (July 2018 - Present)
- Assistant Professor**, Miami University (July 2016 - Present)
- Assistant Professor**, Erasmus University Rotterdam (May 2009 - August 2014)

### Research Publications (13 Refereed Journal Articles, 2 Book Chapters, 14 Referred Papers in Conference Proceedings). Last 10 Journal Papers Published:

- Arthur Carvalho, Adam Levitt, Seth Levitt, Edward Khaddam, and John Benamati. "On the Shelf Artificial Intelligence Technologies for Sentiment and Emotion Analysis: A Tutorial on Using IBM Natural Language Processing". *Communications of the Association for Information Systems*, forthcoming.
- Arthur Carvalho, Stanko Dimitrov, and Kate Larson. "On Proper Scoring Rules and Cumulative Prospect Theory". *EURO Journal on Decision Processes*, vol. 6(3-4), p. 343-376, 2018.
- Dario Pevec, Jurica Babic, Martin A. Kayser, Arthur Carvalho, Yashar Ghiassi-Farrokhfal, and Vedran Podobnik. A Data-Driven Statistical Approach for Extending Electric Vehicle Charging Infrastructure. *International Journal of Energy Research*, vol. 42, p. 3102-3120, 2018.
- Jurica Babic, Arthur Carvalho, Wolfgang Ketter, and Vedran Podobnik. Evaluating Parking Policies for Parking Lots Handling Electric Vehicles, *IEEE Access*, vol. 6(1), p. 944-961, 2018.
- Arthur Carvalho. On a Participation Structure that Ensures Representative Prices in Prediction Markets. *Decision Support Systems*, vol. 104, p. 13-25, 2017.
- Arthur Carvalho, Stanko Dimitrov, and Kate Larson. Inducing Honest Reporting of Private Information in the Presence of Social Projection. *Decision*, vol. 4(1), p. 25-51, 2017.
- Arthur Carvalho. A Note on Sandroni-Shmaya Belief Elicitation Mechanism. *The Journal of Prediction Markets*, vol. 10(2), p. 14-21, 2016.
- Arthur Carvalho. An Overview of Applications of Proper Scoring Rules. *Decision Analysis*, vol. 13(4), p. 223-242, 2016.
- Arthur Carvalho, Stanko Dimitrov, and Kate Larson. How Many Crowdsourced Workers Should a Requester Hire? *Annals of Mathematics and Artificial Intelligence*, vol. 78(1), p. 45-72, 2016.
- Arthur Carvalho. Tailored Proper Scoring Rules Elicit Decision Weights. *Judgment and Decision Making*, vol. 10(1), p. 86-96, 2015.

### Teaching Experience

- Miami University: *Managing Big Data, Database Systems*
- Erasmus University: *Big Data and Business Analytics, Applied Business Methods*

### Editorial Service

- International Journal of Decision Support System Technology (Editorial Board - since 2018)
- International Journal of Business and Data Analytics (Editorial Board - since 2017)

**Xiang Fang, Ph.D.**  
**Associate Professor**  
**Information Systems & Analytics**  
**Farmer School of Business**  
**Miami University,**  
**Oxford, OH-45056**  
[fangx@miamiOH.edu](mailto:fangx@miamiOH.edu)

Ph.D. University of Kentucky, Lexington, KY, DSIS, 2001  
MBA. University of Wisconsin Oshkosh, Oshkosh, WI, (MIS focus), 1997  
M.E. Harbin Institute of Technology, Harbin, China, (Engineering Management), 1986  
B.E. Heilongjiang Institute of Commerce, Harbin, China, Mechanical (Refrigeration), 1982

#### WORK EXPERIENCE

##### Academic Experience

Assoc. Professor, Miami University (2007 - 2019).  
Asst. Professor, Miami University (2001 - 2007).  
Lecturer, Nanjing University of Science & Technology (1986-1993)

##### Non-Academic Experience

Engineer, Wuchang Vehicle Corporation (1982-1983).

#### Refereed Articles (Since 2007)

- 1) Xiang, F., Rajkumar, T.M., & Sena, M. (in press, 2019). The Effects of National Culture Dimensions and Online Medium Type on Decision Confidence: a Study based on US and China. ***Issues in Information Systems***.
- 2) X. Fang and Lee, S (2016), "Comparative Empirical Analysis on Computer Software Piracy Behaviors between China and the United States: An Exploratory Study", ***Journal of International Technology and Information Management***, Vol. 25, No. 2, pp. 47-66.
- 3) X. Fang., Lederer, A.L. and Benamati, J.H. (2015) "The Influence of National Culture on IT Development, Implementation and Support Challenges in China and the U.S.", ***Journal of Global Information Technology Management***, Vol 19, No. 1, pp 26-43.
- 4) X. Fang and Lee, S. (2014) "Empirical Analysis of Software Piracy in Asia (Japan VS. Vietnam): An Exploratory Study", ***International Journal of Information Security and Privacy (IJISP)***, Vol 8, No. 2, pp. 33-54.
- 5) X. Fang and T.M. Rajkumar (2013), "The Role of National Culture and Multimedia on First Impression Bias Reduction," ***IEEE Transactions on Professional Communication***, Vol. 56, No. 4, pp. 354-371.
- 6) X. Fang, Skip Benamarti, and Albert Lederer (Sep 2011) "Coping with Rapid Information Technology Change in Different National Cultures", ***European Journal of Information Systems***, 20, pp. 560-573.
- 7) X. Fang and Clyde Holsapple (2011), "The Impact of Web Site Navigation Structure, Task Complexity, and User Domain Knowledge Level on Web Site Usability--An Empirical Study", ***Information Systems Frontiers***. Volume 13, Number 4, pp. 453-469.
- 8) X. Fang and S. Lee (2008), "Perception Gaps about Skills Requirement for Entry-Level IS Professionals between Recruiters and Students: An Exploratory Study". ***Information Resources Management Journal***, 21(3), pp. 39-63.

- 9) X. Fang and C. Holsapple (2007), "An Empirical Study about Web Site Navigation Structures' Impact on Web Site Usability", ***Decision Support Systems***, 43 (2), pp. 476-491.

#### Teaching Experience

Miami University: Business Programming Intro, Web Development, Database Management, Business Data Communication, System Analysis and Design, Project Management.



# Waldyn Martinez

## *Curriculum Vitae*

*"I can do all things through Christ which strengtheneth me." Philippians 4:13*

## Research Fields

Statistical Learning, Machine Learning, Deep Learning, Outlier & Noise Detection, Application of Machine & Statistical Learning Techniques in Industry.

## Education

2007–2012 **Ph.D. Applied Statistics**, *The University of Alabama*, Tuscaloosa, AL. 2007–2009 **M.Sc. Applied Statistics**, *The University of Alabama*, Tuscaloosa, AL. 2004–2006 **M.B.A.**, *The University of Alabama*, Tuscaloosa, AL. 2001–2004 **M.Sc. Management**, *Pontificia Universidad Católica Madre y Maestra*, Dominican Republic. 1996–2000 **B.Sc. Computer Science/Informatics Engineering**, *Universidad Tecnológica de Santiago*, D.R.

## Experience

2013–Current **Assistant Professor Business Analytics**, Miami University, Oxford, OH.  
2012–2013 **Assistant Vice President, Risk Modeling & Analytics**, JPMorgan, Columbus, OH. 2007–2012 **Teaching Assistant (Instructor)**, The University of Alabama, Tuscaloosa, AL. 2006–2007 **Assistant Vice President, Market Analytics**, Bank of America, Charlotte, NC.  
2005–2005 **(Intern) HR Productivity Analysis**, Macy's Logistics & Operations, Secaucus, NJ. 2001–2004 **Airport Operations**, American Airlines, POP Airport, Dominican Republic.

## Publications [6]

- [1] Weng, B., **Martinez, W.**, Tsai, Y.T., Li, C., Lu, L., Barth, J., Megahed, F. M.: Macroeconomic Indicators can Help Predict the Monthly Closing Price of Major U.S. Indices: Insights from Artificial Intelligence, Time-Series Analysis and Hybrid Models, *Applied Soft Computing*, 2018, <https://doi.org/10.1016/j.asoc.2018.07.024>
- [2] Weng, B., Wang, X., Lu, L., **Martinez, W.**, Megahed, F. M.: Predicting Short-Term Stock Prices using Ensemble Methods and Online Data Sources, *Expert Systems with Applications*, 2018, <https://doi.org/10.1016/j.eswa.2018.06.016>
- [3] Weese, M., **Martinez, W.**, Jones-Farmer, A.: On the Selection of the Bandwidth Parameter for the k-Chart, *Quality and Reliability Engineering International*, 2017, 33 (7): 1527-1547
- [4] **Martinez, W.** and Gray, J. B: Noise Peeling Methods for Improving Boosting Algorithms, *Computational Statistics and Data Analysis*, 2016, 93: 483-497.
- [5] Weese, M., **Martinez, W.**, Megahed, F., Jones-Farmer, A.: Statistical Learning Methods for Statistical Process Control, *Journal of Quality Technology*, 2016, 48 (1).
- [6] **Martinez, W.** and Gray, J. B: The role of margins in the performance of Boosting, *Wileys Interdisciplinary Reviews (WIREs) Computational Statistics*, 2014, 6: 124-131.

## Current Research: Submitted, under Review, under Revision [4]

- [1] **Martinez, W.**: Ensemble Pruning via Margin Maximization, under revision: *The Journal of Machine Learning Research*, 2018

- [2] **Martinez, W.** and Gray, J. B: On the Insufficiency of the Large Margins Theory in Explaining Boosting Algorithms, under 2nd-round review: *The Journal of Machine Learning Research*, 2018
- [3] Mercado, G. R., Chakraborti, S., **Martinez, W.**: A Data-driven Adaptive Distribution-free Control Chart for Monitoring Location, under 2nd-round review: *Journal of Quality Technology*, 2018
- [4] **Martinez, W.**, Weese, M., Jones-Farmer, A.: A One-Class Peeling Method for Multivariate Outlier Detection with Applications in Phase I SPC, under review: *Technometrics*

## Teaching Experience

ISA-491 **Introduction to Data Mining in Business, Miami University** Instructor  
 ISA-480B **Business Statistics using R, Miami University** Instructor  
 ISA-291 **Applied Regression Analysis in Business, Miami University** Instructor  
 ISA-205 **Business Statistics, Miami University** Instructor  
 ST-509 **Statistics for Business (MBA), University of Alabama** Teaching Assistant  
 ST-475/575 **Statistical Quality Control, University of Alabama** Teaching Assistant

## University Service

Current High Performance Computing Committee, Miami University Current Curriculum Committee, ISA Department, Miami University Current Diversity Committee, Farmer School of Business, Miami University 2017 Center for Analytics and Decision Sciences (CADS) Faculty Project Lead 2015 STARS Seminar Committee, ISA Department, Miami University  
 2014 Student Scholarship Awards Committee, ISA Department, Miami University  
 2014 Faculty Search Committee (Assistant Professor B. Analytics), ISA Department, Miami University  
 2014 Faculty Search Committee (Van Andel Chair Professorship B. Analytics), ISA Department, Miami University

## Awards & Grants

2017 "**FSB Summer Research Grant**," \$6,000 Award. Farmer School of Business, Miami University.  
 2014 "**Outstanding Dissertation Research Award**," Culverhouse College of Commerce and Business Administration, University of Alabama.  
 2014 Nominated for "**University-Wide Award for Outstanding Dissertation Research**," University of Alabama. 2011 "**Summer in Excellence Research Grant**." \$5,000 Award. University of Alabama.  
 2010 "**CB&A Excellence in Teaching Award by a Doctoral Student**," Culverhouse College of Commerce and Business Administration, University of Alabama.  
 2010 Nominated for "**University-Wide Award for Excellence in Teaching by Doctoral Student**," University of Alabama.  
 2010 "**Jeff Kurkjian Teaching Award**," University of Alabama.  
 2010 "**Summer in Excellence Research Grant**." \$5,000 Award. University of Alabama. 2009 "**Jeff Kurkjian Teaching Award**," University of Alabama.  
 2004 "**Fulbright Scholar**".  
 2003 "**Employee Excellence Award for the Dominican Republic**," American Airlines. 2002 "**Excellent Performance as Customer Service Agent**," American Airlines.  
 1996 "**Valuable Contribution to Society Award for Youth**," Dominican Republic Department of Education. (Academic achievement, among top scores in the country's high school standard tests).  
 1995 Memorial Award "**Marjorie Bolton**" & **Class Valedictorian**, Mary Lithgow H.S. (#1 out of > 500).  
 1995 "**Top honors student Mathematics, Sciences & Physics Track**" (#1 out of 36) & "**Gold Medal**" for academic performance throughout high school. (Mary Lithgow High School).

## Fadel Megahed

### Academic Employment:

Assistant Professor of Information Systems and Analytics, 2016-Present | Miami University  
 Assistant Professor of Industrial and Systems Engineering, 2012-2016 | Auburn University

### Education:

Ph.D. Industrial and Systems Engineering. Virginia Tech (2012).  
 M.S. Industrial and Systems Engineering. Virginia Tech (2009).  
 B.S. Mechanical Engineering. The American University in Cairo (2008).

### Research:

- Summary: 30 refereed journal articles, 1 invited discussion, 1 scholarly book chapter.
- Funding: Over \$840K in research funding (PI share of: ~\$475). Sponsors include: Aflac, Amazon Web Services, American Society for Safety Professionals Foundation, National Science Foundation (NSF), NIOSH Deep South Center for Occupational Health & Safety, P&G, and Windows Azure.
- Impact: Total Google Scholar Citations: 473; h-index: 13; i10-index: 14.
- Last 10 journal articles published:
  1. Yazdi, M.A.A.\*, Negahban, A.\*, **Megahed, F.M.**, Cavuoto, L.A., 2019 Optimization of SplitKeyboard Design for Touchscreen Devices", *International Journal of Human-Computer Interaction*, 35, 468-477.
  2. Weng, B., Martinez, W., Tsai, Y. T., Li, C., Lu, L., Barth, J. R., & **Megahed, F. M.** (2018). Macroeconomic indicators alone can predict the monthly closing price of major US indices: Insights from artificial intelligence, time-series analysis and hybrid models. *Applied Soft Computing*, 71, 685-697.
  3. Weng, B., Lu, L., Wang, X., **Megahed, F. M.**, & Martinez, W. (2018). Predicting Short-Term Stock Prices using Ensemble Methods and Online Data Sources. *Expert Systems with Applications*. DOI: <https://doi.org/10.1016/j.eswa.2018.06.016>.
  4. Alamdar Yazdi, M. A., Negahban, A., Cavuoto, L., & **Megahed, F. M.** (2018). Optimization of Split Keyboard Design for Touchscreen Devices. *International Journal of Human-Computer Interaction*, 1-10. DOI: <https://doi.org/10.1080/10447318.2018.1464255>
  5. Tsai, Y. T., Swartz, S. M., & **Megahed, F. M.** (2018). Estimating the Relative Efficiency of Highway Safety Investments on Commercial Transportation. *Transportation Journal*, 57(2), 193-218.
  6. Mohabbati-Kalejahi, N., Yazdi, M. A. A., **Megahed, F. M.**, Schaefer, S. Y., Boyd, L. A., Lang, C. E., & Lohse, K. R. (2017). Streamlining science with structured data archives: insights from stroke rehabilitation. *Scientometrics*, 113(2), 969-983.
  7. Dag, A., Oztekin, A., Yucel, A., Bulur, S., & **Megahed, F. M.** (2017). Predicting heart transplantation outcomes through data analytics. *Decision Support Systems*, 94, 42-52.
  8. He, K., Zhang, M., Zuo, L., Alhwiti, T., & **Megahed, F. M.** (2017). Enhancing the monitoring of 3D scanned manufactured parts through projections and spatiotemporal control charts. *Journal of Intelligent Manufacturing*, 28(4), 899-911.

9. Weng, B., Ahmed, M. A., & **Megahed, F. M.** (2017). Stock market one-day ahead movement prediction using disparate data sources. *Expert Systems with Applications*, 79, 153-163.
10. Maman, Z. S., Yazdi, M. A. A., Cavuoto, L. A., & **Megahed, F. M.** (2017). A data-driven approach to modeling physical fatigue in the workplace using wearable sensors. *Applied Ergonomics*, 65, 515-529.

### **Teaching:**

- Educator with six years of experience teaching industrial engineering and data analytic courses. Taught undergraduate, MS and PhD level courses on data analytics (e.g., Big Data, Data Mining, Data Visualization and Prescriptive Analytics).
- Supervised five Master's students and six Ph.D. students.

### **Professional Service:**

1. Editorial Board, *Journal of Quality Technology* since 2018.
2. International Program Committee Member, *ISSAT International Conference on Data Science in Business, Finance and Industry*, 2018-2019 (to be held in Da Nang, Vietnam July 3-5, 2019).
3. Scientific Committee Member, *13<sup>th</sup> International Workshop on Intelligent Statistical Quality Control*, 2018-2019 (to be held in Hong Kong Aug 13-15, 2019).
4. Have reviewed for over 20 journals.

## Zafer Devrim Ozdemir

### EDUCATION

**Doctor of Philosophy**, 2004

Purdue University, West Lafayette, IN

**Master of Arts** (Business Administration), 1997

Boğaziçi University, Istanbul, Turkey

**Bachelor of Science** (Civil Engineering), 1996

Boğaziçi University, Istanbul, Turkey

### ACADEMIC EXPERIENCE

2015-Present: Professor, Farmer School of Business, Miami University, Oxford, OH

2013-2015: Endres Associate Professor Fellow, Farmer School of Business, Miami University, Oxford, OH

2010-2015: Associate Professor, Miami University, Oxford, OH

2004-2010: Assistant Professor, Miami University, Oxford, OH

### REFEREED JOURNAL PUBLICATIONS

1. Akcura, M.T. and Ozdemir, Z.D. (2019). "Data-driven manufacturer-retailer collaboration under competition," *Enterprise Information Systems*, 13(3), 303-328.
2. Tarakci, H., Kulkarni, S. Ozdemir, Z.D. (2018). "The Impact of Wearable Devices and Performance Payments on Health Outcomes," *International Journal of Production Economics*, 200, 291-301.
3. Ozdemir, Z.D., Smith H.J., and Benamati, J.H. (2017). "Antecedents and Outcomes of Information Privacy Concerns in a Peer Context: An Exploratory Study," *European Journal of Information Systems*, 26(6), 642-660.
4. Akcura, M.T. and Ozdemir, Z.D. (2017). "A Strategic Analysis of Multi-Channel Expert services," *Journal of Management Information Systems*, 34(1), 206-231.
5. Benamati, J.H., Ozdemir, Z.D., and Smith, H.J. (2017) "An Empirical Test of an Antecedents – Privacy Concerns – Outcomes Model," *Journal of Information Science*, 43(5), 583-600.
6. Akcura, M.T., Ozdemir, Z.D., and Rahman, M.S. (2015). "Reach versus Competition: Selling Services through Online Intermediaries," *Decision Sciences*, 46(1), 37-62.
7. Akcura, M.T. and Ozdemir, Z.D. (2014). "Drug Prescription Behavior and Decision Support Systems," *Decision Support Systems*, 57, 395-405.
8. Akcura, M.T., Ozdemir, Z.D., and Jain, S. (2013). "Expert Competition and the Internet," *International Journal of Electronic Commerce*, 18(1), 11-44.
9. Bandyopadhyay, S., Ozdemir, Z.D., and Barron, J.M. (2012). "The Future of Personal Health Records in the Presence of Misaligned Incentives," *Communications of the AIS*, 31(7), 155-166.
10. Ozdemir, Z.D., Barron, J.M., and Bandyopadhyay, S. (2011). "An Analysis of the Adoption of Digital Health Records under Switching Costs," *Information Systems Research*, 22(3), 491-503.
11. Altinkemer, K., Ozcelik, Y., and Ozdemir, Z.D. (2011). "Productivity and Performance Effects of Business Process Reengineering: A Firm Level Analysis," *Journal of Management Information Systems*, 27(4), 129-161.
12. Ozcelik, Y., and Ozdemir, Z.D. (2011). "Market Transparency in Business-to-Business e-Commerce: A Simulation Analysis," *International Journal of E-Business Research*, 7(4), 62-78.

13. Ozdemir, Z.D., Altinkemer, K., De, P., and Ozcelik, Y. (2010). "Donor-to-Nonprofit Online Marketplace: An Economic Analysis of Impacts on Fundraising," *Journal of Management Information Systems*, 27(2), 213-242.
14. Benamati, J., Ozdemir, Z.D., and Smith, J. (2010). "'Sure, We'll Get on That Right Away': Aligning Undergraduate IS Curricula with Industry Needs," *Communications of the ACM*, 53(3), 152-156.
15. Akcura, M.T., Ozdemir, Z.D., and Altinkemer, K. (2009). "Privacy, Customization, and Cross-Selling of Personal Information," *Journal of Organizational Computing and Electronic Commerce*, 19(2), 112-132.
16. Chen, Q., Ozdemir, Z.D., and Liu, Y. (2009). "The Diffusion of Internet-based Distance Education Technology among U.S. Associate Colleges," *Economics of Innovation and New Technology*, 18(5), 471-489.
17. Tarakci, H., Ozdemir, Z.D., and Sharafali, M. (2009). "On the Staffing Policy and Technology Investment in a Specialty Hospital Offering Telemedicine," *Decision Support Systems*, 46(2), 468-480.
18. Ozdemir, Z.D., Altinkemer, K., and Barron, J.M. (2008). "Adoption of Technology-Mediated Learning in the U.S.," *Decision Support Systems*, 45(2), 324-337.
19. Ozdemir, Z.D. and Abrevaya, J. (2007). "Adoption of Technology-Mediated Distance Education: A Longitudinal Analysis," *Information & Management*, 44(5), 467-479.
20. Ozdemir, Z.D. (2007). "Optimal Multi-Channel Delivery of Expertise: An Economic Analysis," *International Journal of Electronic Commerce*, 11(3), 89-105.
21. Ozdemir, Z.D., Akcura, M.T., and Altinkemer, K. (2006). "Second Opinions and Online Consultations," *Decision Support Systems*, 42(3), 1747-1758.
22. Altinkemer, K., De, P., and Ozdemir, Z.D. (2006). "Toward a Consumer-to-Healthcare Provider Electronic Marketplace," *Communications of the AIS*, 18(1), 413-430.
23. Ozdemir, Z.D. (2006). "A Belief Revision Framework for Probabilistic Object-Oriented Databases," *Review of Business Information Systems*, 10(3), 53-62.

### **TEACHING EXPERIENCE**

ISA 235, IT and the Intelligent Enterprise, Miami University  
 ISA 245, Database Systems & Data Warehousing, Miami University  
 ISA 303, Enterprise Systems, Miami University  
 ISA 381, Design and Analysis of Business Web Sites, Miami University  
 ISA 385, Electronic Commerce, Miami University  
 ISA 401, Business Intelligence & Data Visualization, Miami University  
 BUS 373, International Business in Focus, Miami University  
 MGMT 544, Database Management Systems, Purdue University

### **PROFESSIONAL SERVICE**

Session chair, 28<sup>th</sup> POMS Annual Conference, May 5-8, 2017, Bellevue, WA.  
 Editorial board member, *Decision Support Systems* Special Issue on "Modeling for Better Healthcare".  
 Program committee member, Workshop on Health IT and Economics, Washington D.C., October 8-9, 2010.  
 Session chair, 40<sup>th</sup> Annual Meeting of the Decision Sciences Institute, November 14-17, 2009, New Orleans, LA.  
 Session chair, 37<sup>th</sup> Annual Meeting of the Decision Sciences Institute, November 18-21, 2006, San Antonio, TX.  
 Ad-hoc reviewer for numerous journals.

**T.M. Rajkumar, Ph.D.**  
**Professor**  
**Information Systems & Analytics**  
**Farmer School of Business**  
**Miami University,**  
**Oxford, OH-45056**  
[rajkumtm@miamiOH.edu](mailto:rajkumtm@miamiOH.edu)

Ph.D. Texas Tech University, Lubbock, TX, MIS, 1989  
M.S.E.E. Texas Tech University, Lubbock, TX, Electrical Engineering, 1983  
B.Tech Indian Institute of Technology, Madras, Chennai, India, Electrical (Power), 1977

#### WORK EXPERIENCE

##### Academic Experience

Professor, Miami University, (2014 – to date)  
Assoc. Professor, Miami University (1995 - 2014).  
Asst. Professor, Miami University (1989 - 1995).  
Visiting Professor, University of Seoul (June, 2010 - July, 2010).

##### Non-Academic Experience

Testing Engineer, BHEL (1977 - 1980).

##### Refereed Articles (Since 2010)

Havelka, D., & Rajkumar, T.M. (in press, 2019). Antecedents to Software Training Success. *Issues in Information Systems*.

Xiang, F., Rajkumar, T.M., & Sena, M. (in press, 2019). The Effects of National Culture Dimensions and Online Medium Type on Decision Confidence: a Study based on US and China. *Issues in Information Systems*.

Benamati, J. S. & Rajkumar, T.M. (2013). Undergraduate Student Attitudes Toward MIS: Instrument Development and Changing Perceptions of the Field Across Gender and Time. *Communication of AIS*. Vol 33(1). <http://aisel.aisnet.org/cais/vol33/iss1/pdf>

Chen, J. V., Rungtungsamrit, D., Rajkumar, T.M. & Yen, D. C. (2013) Success Of Electronic Commerce Websites: A Comparative Study In Two Countries. *Information & Management*. 50 (6), 344-355. DOI: 10.1016/j.im.2013.02.007 [pdf](#)

Fang, X. & Rajkumar, T.M. (2013). The Role of National Culture and Multimedia on First Impression Bias Reduction: An Experimental Study in US and China,. *IEEE Transactions on Professional Communications*. DOI: 10.1109/TPC.2013.2251503 [pdf](#)

Mani, R.V.S., Baul, U., Mohanty, R. P., & Rajkumar, T.M. (2013). An Empirical Study of Information Technology Infrastructure Capability and its Impact on Digitally Enabled Customer Management Processes in Life Insurance Companies. *International Journal of Business Information Systems*. 14 (4), 461-479. [pdf](#)

Rajkumar, T. M., Anderson, P., Benamati, J., & Merhout, J. W. (2011). Are Student Self- Assessments a Valid Proxy for Direct Assessments in Efforts to Improve Information Systems Courses and Programs? An Empirical Study. *Communications of the Association for Information Systems*., 28 (31). [pdf](#)

Chen, J. V., Yen, D. C., Rajkumar, T.M., & Tomochko, N. A. (2010). The Antecedent Factors on Trust and

Commitment in Supply Chain Relationships. Computer Standards and Interfaces, 33 (3), 262-270. [pdf](#)

#### Books

Davis, W. S. & Rajkumar, T. M. (2004). Operating Systems: A Systematic View - Sixth Edition Addison Wesley.

Davis, B. & Rajkumar, T. M. (2000). Operating Systems A Systematic View 5 th Edition Addison- Wesley.

Rajkumar, T.M. (1994). Exceleator Casebook for Davis's Business Systems Analysis and Design Wadsworth Publications.



## Zhe 'Jay' Shan, Ph.D.

### Education

**Ph.D. in Business Administration & Operations Research, Major:** Information Systems, **Minor:** Statistics, The Pennsylvania State University, 2011

**M.Phil. in Computer Science**, City University of Hong Kong, 2003

**B.Sc. in Computer Science**, Nanjing University, China, 2000

### Academic & Professional Positions

**Assistant Professor**, Dept. Information Systems and Analytics, Farmer School of Business, Miami University, Aug 2018 – Present

**Assistant Professor**, Dept. Operations, Business Analytics, and Information Systems, Lindner College of Business, University of Cincinnati, Aug 2013 – Aug 2018

**Assistant Professor**, Dept. Accounting, Law, and Computer Information Systems, School of Business, Manhattan College, Aug 2011 - May 2013

### Research Activity

#### **Refereed Journal Articles:**

Akhil Kumar, Rong Liu, Zhe Shan: Is Blockchain a Silver Bullet for Supply Chain Management? Technical Challenges and Research Opportunities. Accepted by *Decision Sciences*, May 2019.

Danny T.Y. Wu, Smruti Deoghare<sup>1</sup>, Zhe Shan, and Katherine Blondon: Navigation Patterns and Dashboard Use in an Electronic Health Record System – A Simulation Handoff Study. Accepted by *Health Systems*, May 2019.

Dong-Gil Ko, Feng Mai, Zhe Shan, David Zhang (in alphabetical order): Operational Efficiency and Patient-Centered Health Care: A View from Online Physician Reviews. Accepted by *Journal of Operations Management*, Feb 2019.

Jingguo Wang, Zhe Shan, Manish Gupta, H. Raghav Rao: Opportunity Makes Peek: A Longitudinal Investigation of Unauthorized Access Attempts to IS Applications in a Financial Institution. Accepted by *MIS Quarterly*, Aug 2018.

Feng Mai, Zhe Shan, Qing Bai, Xin Wang, Roger Chiang: How does social media impact Bitcoin value? A test of the silent majority hypothesis. *Journal of Management Information Systems*, 35(1), 19-52, Mar 2018.

Zhe Shan, Akhil Kumar: Optimal Adapter Creation for Process Composition in Synchronous vs. Asynchronous Communication. *ACM Transactions on Management Information Systems*, 3(2), 1-33, July 2012.

Liangjie Zhang, Zhe Shan, Zhihong Mao: An optimal-control-based decision-making model and consulting methodology for services enterprises. *IEEE Transactions on Engineering Management*, 57(4), 607-619, November 2010.

Dickson K. W. Chiu, Qing Li, Patrick C. K. Hung, Zhe Shan, S. C. Cheung, Yu Yang, Matthias Farwick: Service Composition and Interaction in a SOC

Middleware Supporting Separation of Concerns with Flows and Views.  
*Journal of Database Management*, 22(2), 32-63, April-June 2011.

**Teaching Activity**

University of Cincinnati

IS 7034 - Data Warehousing and Business Intelligence, IS 7036 - Data Mining for Business Intelligence, IS 8080 - Independent Study on 1) Text Analytics, 2) Big Data Analytics, 3) Social Media Analytics.

Manhattan College

CIS 110 - Introduction to Information System, CIS 227 - Business Statistics, BUAN 327 - Advanced Business Statistics

Penn State University

MIS 434 - Internet Technology & E-commerce

**Editorial Service**

*Journal of Modelling in Management* - Associate Editor, 2017-present

*IGI Advances in Information Security, Privacy, & Ethics Book Series* - Advisory Board,

2017-present

*International Journal of Big Data* - Associate Editor, 2013-2015

*PAJAIS Special Issue on Business Intelligence and Analytics Research* - Guest Editor, 2014.

## Maria L. Weese

### Education

Ph.D. in Statistics, 2010, University of Tennessee, Knoxville, Tennessee

M.S. in Statistics, 2006, University of Tennessee, Knoxville, Tennessee

B.S. Chemical Engineering, Minor: Chemistry, 2001, Virginia Polytechnic Institute and State University, Blacksburg, Virginia

### Academic and Professional Experience

*Richard T. Farmer Assistant Professor*, Information Systems & Analytics, Miami University 2018-current

*Assistant Professor*, Information Systems & Analytics, Miami University, 2014-2018

*Lecturer*, Information Systems & Analytics, Miami University, 2012-2014

*Visiting Assistant Professor*, Information Systems & Analytics, Miami University, 2010-2012

*Process Improvement Engineer II*, Celanese Acetate, Narrows, Virginia 2001-2004

### Publications

**Weese, M.L.**, Montgomery, D.J., Ramsey, P.J., (2017) Analyzing Definitive Screening Designs:

Screening vs. Prediction. *Applied Stochastic Models in Business and Industry*. 34(2):244-255.

Ockuly, R. A., **Weese, M.L.**, Smucker, B.J., Edwards, D.J., Chang, L. \footnote{Undergraduate Student},

(2017) Response Surface Experiments: A Meta-Analysis. *Chemometrics and Intelligent Laboratory Systems*. 164:64-75.

**Weese, M.L.**, Edwards, D.J., Smucker, B.J. (2017) A Criteria for Constructing Powerful Supersaturated Designs when Effect Directions are Known". *Journal of Quality Technology*. 49(3):265-277.

**Weese, M.L.**, Martinez, W.G., and Jones-Farmer, L.A. (2016) On the Selection of the Bandwidth Parameter for the k-Chart. *Quality and Reliability Engineering International*. 33(7):1527-1547.

Campbell, J.T., **Weese, M.L.** (2016) Executive Pay as a Mixture: Compositional Models and the Influence of CEO Pay on Firm Performance". *Organizational Research Methods*. 20(1):95-120.

**Weese, M.L.**, Martinez, W.J., Megahed, F.M., Jones-Farmer, L.A. (2016) Statistical Learning Methods Applied to Process Monitoring: An Overview and Perspective. *Journal of Quality Technology*. 48(1):4-27.

**Weese, M. L.**, Smucker, B. J., Edwards, D. J. (2015) Searching for Powerful Supersaturated Designs. *Journal of Quality Technology*. 47(1):66-84.

Edwards, D. J., **Weese, M. L.**, Palmer, G. M. (2014) Comparing Methods for Design Follow-Up: Revisiting a Metal Cutting Case Study. *Journal of Applied Stochastic Models in Business and Industry*. 30(4):464-478.

**Weese, M. L.**, Leitnaker, M. G. (2012) Sequential Experimentation for Mixtures. *International Journal of Design of Experiments and Process Optimisation*, 3(1):33-42.

### Teaching Experience

ISA 491 Introduction to Data Mining in Business, ISA 496 Business Analytics Practicum

ISA/STA 365 Design of Experiments and Process Monitoring, ISA 291 Regression Analysis in Business,

ISA 205 Introduction to Business Statistics Online ISA 205, ISA 203 Supplementary Business Statistics ,

Online ISA 203, STAT 201 Introduction to Business Statistics, STAT 365 Statistical Process Control

### Professional Service

*Editorial Review Board Member*, Quality and Reliability Engineering International

*Curriculum vitae for***John H. Benamati**

Birth Place: Indiana, Pa

Birth Date: August 15, 1961

**EDUCATION**

**Doctor of Philosophy** (Business Administration - MIS), 1997

University of Kentucky, Lexington, KY

**Dissertation Title:** Managing Information Technology in a Changing Information Technology Environment

**Dissertation Committee Chair:** Albert L. Lederer

**Master of Computer Science** (Information Systems), 1987

Marist College, Poughkeepsie, NY

**Bachelor of Science** (Computer Science), 1984

Indiana University of Pennsylvania, Indiana, PA

**AREAS OF INTEREST**

Management of IS

IS Strategy

Privacy

Electronic Commerce

Outsourcing

**WORK EXPERIENCE**

2011-Present, Chair and Professor: Department of Information Systems and Analytics, Miami University

2009-2011, Professor: Miami University, Oxford, OH

2003-2009, Associate Professor: Miami University, Oxford, OH

1997-2003, Assistant Professor: Miami University, Oxford, OH

1994-2001, Information Technology Consultant: Self Employed - Data and Application Architect for large scale client/server application development effort

1996, Instructor: University of Kentucky, Lexington, KY

1984-1994, International Business Machines Corp. (IBM)

1993-1994, Data Architect: Sacramento, CA

1991-1993, Data Base Team Leader: Frankfort, KY

1989-1991, Application Development Product Marketing Specialist: Lexington, KY

1987-1989, Data Administrator: Poughkeepsie, NY

1984-1987, Database Administrator: Poughkeepsie, NY

1988, Adjunct Professor: Marist College, Poughkeepsie, NY

**COURSES TAUGHT**

2007-2018 MIS 406, Information Technology Project Management

2004-2018 MIS 235, Information Technology in Modern Organizations

2007-2010 MIS 387, Designing Business Systems

2005-2007 MIS 301, IT Fundamentals

2005-2006 MIS 403, E-commerce and Web Development

2003-2005 MIS 335, Internet Tools and Technologies

1997-2003, MIS 385, Electronic Commerce, Miami University

2000-2002, MIS 495, Seminar Capstone in MIS, Miami University

1999-2002, MIS 625, Management Information Systems - MBA, Miami University

2001 MIS 690 Advanced Management Information Systems Topics - MBA

1998 MIS 381 Business Production and Presentation Graphics, Miami University

1996, DIS 320, Management Information Systems, University of Kentucky

1988, MSCS 24537, Data Management, Marist College

1985-1993, Designed and conducted numerous professional product and concept education seminars  
(Both IBM and client staff and executives)

### **AWARDS and HONORS**

Senior Faculty Outstanding Research Award - University Farmer School of Business 2010  
 Howe Writing Center Best Practices in Teaching Writing Award 2007  
 Miami University Alumni Association Effective Educator Award Nominee 2006  
 Junior Faculty Outstanding Research Award - University Richard T. Farmer School of Business 2006  
 Faculty Advisor of the Year - Richard T. Farmer School of Business Student Advisory Council 2006  
 Associated Student Government Honored Professor Award Nominee- Miami University 2006  
 Associated Student Government Honored Professor Award Nominee- Miami University 2004  
 Miami University Alumni Association Effective Educator Award Nominee 2003  
 Faculty Advisor of the Year - Miami University Richard T. Farmer School of Business 2003  
 Associated Student Government Honored Professor Award Nominee- Miami University 2003  
 Teaching Effectiveness Award - Miami University Richard T. Farmer School of Business Administration 2002  
 Associated Student Government Honored Professor Award Nominee - Miami University 2002  
 Honorary Membership - Delta Sigma Phi Business Fraternity 2002  
 Best Paper Award - Association for Computing Machinery SIGCPR Conference, April 6-8, 2000  
 Associated Student Government Honored Professor Award Nominee - Miami University 2000  
 Richard D. Irwin Foundation Doctoral Dissertation Fellowship 1996-1997. (1 of 10 awarded nationally)  
 University of Kentucky Presidential Fellowship 1994-1997. (1 of 9 awarded university wide)  
 University of Kentucky Quality Achievement Fellowship 1994-1997.

### **JOURNAL PUBLICATIONS**

Ozdemir, Z.D., Smith H.J. and Benamati, J.H. "Antecedents and Outcomes of Information Privacy Concerns in a Peer Context: An Exploratory Study." forthcoming in *European Journal of Information Systems*, 26(6), 2017, pp. 642-660.

Benamati, J.H., Ozdemir, Z.D. and Smith H.J. "An Empirical Test of the Antecedents – Privacy Concerns – Consequents Model" *Journal of Information Science*, 43(5), 2017, pp. 583-600.

Xiang F., Lederer, A.L. and Benamati, J.H., "The Influence of National Culture on IT Development, Implementation and Support Challenges in China and the U.S." *Journal of Global Information Technology Management* 19(1), 2016. Pp. 26-43.

Benamati, J.H., and Rajkumar, T.M. "Undergraduate Student Attitudes Toward MIS: Instrument Development and Changing Perceptions of the Field Across Gender and Time" *Communications of the AIS*, Vol. 33, Article 14, December 2013.

Xiang F., Benamati, J.H., and Lederer, A.L. "Coping with rapid information technology change in different national cultures" *European Journal of Information Systems*, 20(5), 2011, pp. 560-573.

Rajkumar, T.M., Anderson, P., Benamati, J.H. and Merhout, J.W. "Are Student Self-Assessments a Valid Proxy for Direct Assessments in Efforts to Improve Information Systems Courses and Programs? An Empirical Study" *Communications of the AIS*, Vol. 28, Article 31, 2011.

Benamati, J.H., Fuller, M.A., Serva, M.A., "The Productive Tension of Trust and Distrust: The Coexistence and Relative Role of Trust and Distrust in Online Banking" *Journal of Organizational Computing and Electronic Commerce*, 20(4), 2010, 328-246.

Benamati, J.H., Fuller, M.A., Serva, M.A., and Baroudi, J.J. "Clarifying the Integration of Trust and TAM in E-Commerce Environments: Implications for Systems Design and Management" *IEEE Transactions on Engineering Management*, 57(3), 2010, pp. 380-393.

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- Benamati, J.H., Ozdemir, Z.D. and Smith, H.J. "Aligning Undergraduate IS Curricula with Industry Needs" *Communications of the ACM*, 53(3), 2010, pp. 152-156.
- Benamati, J.H. and Lederer, A.L., "Managing the Impact of Rapid IT Change" *Information Resource Management Journal*, 23(1), 2010, 1-16.
- Merhout, J.W., Benamati, J.H., Rajkumar, T.M., Anderson, P. and Marado, D. "Implementing Direct and Indirect Assessment in the MIS Curriculum" *Communications of the AIS*, Vol. 23, Article 24, November 2008, pp. 419-436.
- Benamati, J.H. and Lederer, A.L. "Decision Support Systems Infrastructure: The Root Problems of the Management of Changing IT" *Decision Support Systems*, 45(4), November 2008, pp. 833-844.
- Benamati, J.H. and Rajkumar, T.M. "An Outsourcing Acceptance Model: An Application of TAM to Application Development Outsourcing Decisions" *Information Resource Management Journal*, 21(2), April-June 2008, pp. 80-102.
- Fuller, M.A., Serva, M.A., and Benamati, J.H. "Seeing is Believing: The Transitory Influence of Reputation Information on E-Commerce Trust and Decision-Making" *Decision Sciences*, 38(4), 2007, 675-699.
- Benamati, J.H. and Serva, M.A. "Trust and Distrust in Online Banking: Their Role in Developing Countries," *Journal of Information Technology for Development*, 13(2), 2007, pp. 161-175.
- Benamati, J.H., Serva, M.A., Galletta, D., Harris, A. and Neiderman, F. "The Slippery Slope of MIS Academia: A Discussion of the Quest for Relevance in Our Discipline." *Communications of the AIS*. 18, December 2006, 657-675.
- Serva, M.A., Benamati, J.H. and Fuller, M.A. "Trustworthiness In B2C E-Commerce: An Examination Of Alternative Models" *The DATA BASE for Advances in Information Systems*. 36(3), 2005, 89-108.
- Young, L.D. and Benamati, J.H. "A Cross-Industry Analysis of Large Firm Transactional Public Web Sites," *Mid-American Journal of Business*, 19(1), Spring 2004, 37-46.
- Erasala, N. and Benamati, J.H. "Understanding the Electronic Commerce Cycles of Change," *Journal of Organizational Computing and Electronic Commerce*, 13(1), 2003, 58-72.
- Benamati, J.H. and Rajkumar, T.M. "The Application Development Outsourcing Decision: An Application Of The Technology Acceptance Model", *Journal of Computer Information Systems*, 42(4), Summer 2002, 35-43.
- Young, L.D. and Benamati, J.H. "Lessons From Current Adopters of Transactional Web Sites," *Information Strategy the Executives Journal*, 18(2), January 2002.
- Benamati, J.H. and Lederer, A.L. "Coping with Rapid Changes in IT," *Communications of the ACM*, 44(8), August 2001, 83-88.
- Benamati, J.H. and Lederer, A.L. "Rapid Information Technology Change, Coping Mechanisms, and the Emerging Technologies Group," *Journal of Management Information Systems*, 17(4), Spring 2001, 183-202.
- Benamati, J.H. and Lederer, A.L. "How IT Organizations Handle Rapid IT Change: Five Coping Mechanisms," *Information Technology and Management*, 2(1), 2001, 95-112.
- Benamati, J.H. and Lederer, A.L. "Rapid Change: Nine IT Management Challenges," *Information Systems and Operations Research*, 38(4), November 2000, 336-358.
- Young, L.D. and Benamati, J.H. "Differences in Public Web Sites: The Current State of Large U.S. Firms," *Journal of Electronic Commerce Research*, 1(3), August 2000.
- Benamati, J.H., Lederer, A.L. and Singh, M. "Information Technology Change: The Impact on IT Management," *Journal of Computer Information Systems*, 38(4), Summer 1998, 9-13.

Last updated December, 2018

Benamati, J.H., Lederer, A.L. and Singh, M. "How to Cope with Rapidly Changing Information Technology," *Information Strategy the Executives Journal*, 14,2, Winter 1998, 44-48.

Lederer, A.L. and Benamati, J.H. "What's New? The Challenges of Emerging Technologies," *Journal of Database Management*, (editorial) 9,1, Winter 1998, 33-34.

Benamati, J.H., Lederer, A.L. and Singh, M. "Changing Information Technology and Information Technology Management," *Information and Management*, 31, 1997, 275-288.

## BOOKS

Davis, W.S. and Benamati, J.H. "*E-Commerce Basics: Technology, Foundations, and E-Business Applications*," Addison Wesley Publishing, Boston, MA, 2003, ISBN 0-201-74840-1.

Benamati, J.H., Holsapple, C.W. and Kearns, G.S. "*Instructor's Manual for Decision Support Systems: A Knowledge Based Approach*," 349 pages, West Publishing, St. Paul, 1996, ISBN 0-314-06972.

## BOOK CHAPTERS

Benamati, J.H. and Rajkumar, T.M. "An Outsourcing Acceptance Model: An Application of TAM to Application Development Outsourcing Decisions" in *Outsourcing and Offshoring of Professional Services: Business Optimization in a Global Economy* Amar Gupta (Ed.) 2008, 89-113.

Lederer, A.L. and Benamati, J.H. "What's New? The Challenges of Emerging Technologies," with A. L. Lederer, in *Strategies for Managing Computer Software Upgrades*, N. Shaw (Ed.), Idea Group Publishing, 2001, 11-13.

Benamati, J.H. "Database Design," in *The Information Systems Consultant's Handbook: Systems Analysis and Design*, William S. Davis and David C. Yen, (Eds.), CRC Press, 1999, 351-358.

Benamati, J.H. "Database Administration," in *The Information Systems Consultant's Handbook: Systems Analysis and Design*, William S. Davis and David C. Yen, (Eds.), CRC Press, 1999, 665-674.

Benamati, J.H. and Krehbiel, T.C. "Cause-and-Effect Diagrams," in *The Information Systems Consultant's Handbook: Systems Analysis and Design*, William S. Davis and David C. Yen, (Eds.), CRC Press, 1999, 127-132.

Benamati, J.H. and Pakath, R. "Developing Support Systems," in *Business Support Systems: An Introduction*, R. Pakath, (Ed.), Copley Publishing, 1998, 104-124.

Benamati, J.H. and Pakath, R. "Mismanaging a Technology Project: The Case of ABC Inc.," in *Cases on Information Technology Management in Modern Organizations*, M. Khosrowpour and J. Liebowitz, (Eds.), Idea Group Publishing, 1997, 156-167.

"Demonstration of a Software Marketing DSS" presented in the instructional video *Case Demonstrations for Decision Support Systems: A Knowledge Based Approach* (C. Holsapple, W. Luo, and K. Sims) West Publishing, St. Paul, 1996, ISBN 0-314-20433-4.

"Requirements for a Software Marketing DSS" in *Decision Support Systems: A Knowledge Based Approach* (C. Holsapple and A. Whinston), West Publishing, St. Paul, 1996, pp. 270-273.

"A Software Marketing DSS" in *Decision Support Systems: A Knowledge Based Approach* (C. Holsapple and A. Whinston), West Publishing, St. Paul, 1996, pp. 380-383, A57-A73.

## CONFERENCE PRESENTATIONS

McGuire, C. and Benamati J. "Driving Relevance into the Introductory Information Systems Course" Proceedings of the 2018 Americas Conference on Information Systems, New Orleans, LA, Aug 2018.

Ozdemir, Z.D. Benamati J.H. and Smith H.J., "A cross-cultural comparison of information privacy concerns in Singapore, Sweden and the United States" Proceedings of the 18th Annual International Conference on Electronic Commerce: e-Commerce in Smart connected World, Suwon, Korea August 2016.

Last updated December, 2018

Merhout, J.W., Rajkumar, T.M. and Benamati J.H. "What Leads Students to Study IS?" Proceedings of the 2014 Americas Conference on Information Systems, Savannah, GA, Aug 2014.

Serva, M., Benamati, J. Blue, J, and Baroudi. J., "In Times of Stress, Be Bold and Valiant: A Preliminary Exploration of the Psychosocial and Physiological Measures of Stress and Suggestions for Future MIS Research " Proceedings of the 2011 Association for Computing Machinery Special Interest Group on Computer Personnel Research Conference. San Antonio TX. May 19-21.

Benamati, John "Skip", "An Instrument to Measure Student Attitudes Toward and Perceptions of MIS: Exploring the Success of Efforts to Change Perceptions of the Field Across Time and Gender" Proceedings of the 2010 Americas Conference on Information Systems, Lima, Peru, Aug 2010, Paper 45.

Anderson, Paul; Benamati, John "Skip"; Merhout, Jeffrey W.; and Rajkumar, T. M., "Are Student Self-Assessments a Valid Proxy for Direct Assessments in Information Systems Programs?" Proceedings of the 2010 Americas Conference on Information Systems, Lima, Peru, Aug 2010, Paper 106.

Blue, J., Serva, M., Baroudi. J. and Benamati, J., "Human Versus Virtual Moments: A Proposed Theoretical Framework for Understanding Their Implications in the Workplace" Proceedings of the 2009 Association for Computing Machinery Special Interest Group on Computer Personnel Research Conference. Newton, S. (Ed). Limerick, Ireland. May 28-30.

Benamati, J.H. and Mahaney, R. "Current and Future Entry-Level IT Workforce Needs in Organizations" Proceedings of the 2007 Association for Computing Machinery Special Interest Group on Computer Personnel Research Conference. Lending, D. & Vician, C. (Eds). St. Louis, MO. April 19-21, pp. 101-104.

Rajkumar, T.M., Anderson, P., Benamati, J.H., Marado, D, and Merhout, J.W. "Assessment Plans and Writing across the MIS Curriculum" Proceedings of the 2006 Americas Conference on Information Systems, García – Barranco, I. (Ed.), Acapulco, Mexico, Aug 2006.

Benamati, J.H., Serva, M.A. and Fuller, M.A., "Are Trust and Distrust Distinct Constructs? An Empirical Study of the Effects of Trust and Distrust Among Online Banking Users," Proceedings of the 2006 Hawaii International Conference on Systems Sciences, Sprague, R.H. (Ed.), Kauai, Hawaii, January 2006.

Benamati, J.H. and Mahaney, R. "Outsourcing: The IT Job Market and the IT Curriculum," The Annual Meeting of the Decision Sciences Institute, San Francisco, CA, Nov 2005.

Benamati, J.H. and Mahaney, R. "The Future Job Market for Information System Graduates," Proceedings of the 2004 Americas Conference on Information Systems, Ramano, N. (Ed.), New York, New York, Aug 2004, pp. 2925-2928.

Benamati, J.H. and Rajkumar, T.M. "An Empirical Study Of The Applicability Of The Technology Acceptance Model To Application Development Outsourcing Decisions," Proceedings of the 2003 Americas Conference on Information Systems, DeGross, J. and Ramsower, R. (Eds.), Tampa, Florida, Aug 2003.

Benamati, J.H. and Rajkumar, T.M. "A Design of an Empirical Study of the Applicability of the Technology Acceptance Model to Outsourcing Decisions ," Proceedings of the 2002 Association for Computing Machinery Special Interest Group on Computer Personnel Research Conference, Mandviwalla M. (Ed.), Kristiansand, Norway, May 2002, pp. 52-57.

Benamati, J.H. and Rajkumar, T.M. "Understanding the Outsourcing Decision," Proceedings of the Sixth Americas Conference on Information Systems, Strong D. and Straub, D. (Eds.) , Boston, Massachusetts, Aug 2001, pp. 1858-1860.

Benamati, J.H. and Lederer, A.L. "The Effect of Rapid IT Change on the Demand for Training," Proceedings of the 2001 Association for Computing Machinery Special Interest Group on Computer Personnel Research Conference, Serva, M. (Ed.), April 19-21, 2001, San Diego, CA, pp. 37-47.

Last updated December, 2018



Benamati, J.H. and Lederer, A.L. "The Emerging IT Group and Rapid IT Change," Proceedings of the 2000 Association for Computing Machinery Special Interest Group on Computer Personnel Research Conference, Prasad, J. (Ed.), April 6-8, 2000, Chicago, IL, pp. 23-32.

Benamati, J.H. and Lederer, A.L. "The Effect of Emerging IT Groups on Coping with Rapid IT Change," Proceedings of the Fifth Americas Conference on Information Systems, Haseman, W. D. and Nazareth, D. L. (Eds.), Milwaukee, Wisconsin, Aug 1999, pp. 387-389.

Benamati, J.H. and Lederer, A.L. "An Empirical Study of IT Management and Rapid IT Change," Proceedings of the 1999 Association for Computing Machinery Special Interest Group on Computer Personnel Research Conference, Prasad, J. (Ed.), April 8-10, 1999, New Orleans, LA, pp. 144-153.

Benamati, J.H. and Lindsey, J.A. "Valley Curtain Mentality: Investigating Team Accomplishments Across Disciplines," The 11th Annual Lilly Conference on College and University Teaching West, Lake Arrowhead, CA, March 5-7, 1999.

Benamati, J.H. and Lederer, A.L. "Nine IT Management Problems Due to Rapid IT Change," Proceedings of the Fourth Americas Conference on Information Systems, Hoadley, E. and Benbasat, I. (Eds.), Baltimore, Maryland, Aug 1998, pp. 713-715.

Benamati, J.H. and Lederer, A.L. "Coping with Rapid Change in Information Technology," Proceedings of the 1998 Association for Computing Machinery Special Interest Group on Computer Personnel Research Conference, Argarwal, R. (Ed.), March 26-28, 1998, Boston, MA, pp. 37-44.

Benamati, J.H., Lederer, A.L. and Singh, M. "The Problems of Rapid Information Technology Change," Proceedings of the 1997 Association for Computing Machinery Special Interest Group on Computer Personnel Research Conference, Niederman, F. (Ed.), April 3-5, 1997, San Francisco CA, pp. 204-209.

Benamati, J.H. and Lederer, A.L. "The Impact of Information Technology Change on the Management of Information" The Annual Meeting of the Decision Sciences Institute, Orlando, Florida, Nov 1996.

Benamati, J.H. "The Impact of Changing Information Technology on Information Technology Management," The Second Americas Conference on Information Systems, Aug 1996, Phoenix, Arizona, pp. 944-946.

Benamati, J.H., Lederer, A.L. and Singh, M. "The Impact of Rapid Change in Technology on the Information Systems Organization," The First Americas Conference on Information Systems, Aug 1995, Pittsburgh, Pennsylvania, pp. 355-356.

## PROFESSIONAL ACTIVITIES

### Editorial:

Reviewed manuscripts for

*MISQ*

*Communications of the ACM*

*Journal of Management Information Systems*

*Decision Sciences*

*Decision Support Systems*

*DATABASE*

*Communications of the AIS*

*Journal of Organizational Computing and Electronic commerce*

*Information Resource Management Journal*

*Information Technology and Management*

*Computer Personnel*

*Human Resource Management Journal*

*Journal of Information Technology Management*

*Journal of Electronic Commerce Research*

*Mid-American Journal of Business*

*Journal of Information Technology for Development*

Last updated December, 2018

On the editorial board for the *Journal of Electronic Commerce Research*

Program committee member - Mid-West Association for Information Systems Conference 2006-2007 & 2010

Program committee member - Association for Computing Machinery Special Interest Group on Management Information Systems and Computer Personnel Research Conference 1998-2002 & 2004-2007.

**Organizational:**

Member of AIS, ACM, ACM SIGED, and ACM SIGMIS

Last updated December, 2018



BOARD OF TRUSTEES  
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December 13, 2019  
Academic and Student Affairs

### RESOLUTION R2020-16

WHEREAS, University Senate on November 4, 2019 passed SR 20-06, endorsing a new degree, a Master of Science in Business Management, in the Farmer School of Business.

NOW THEREFORE BE IT RESOLVED, that the Board of Trustees hereby approves the establishment of a Master of Science in Business Management, in the Farmer School of Business.

*Approved by the Board of Trustees  
December 13, 2019*

A handwritten signature in black ink, appearing to read 'T. O. Pickerill II', with a long horizontal flourish extending to the right.

T. O. Pickerill II  
Secretary to the Board of Trustees



**EXECUTIVE COMMITTEE of UNIVERSITY SENATE**

Dana Cox, Chair

James Bielo, Chair-elect

University Senate Website: [miamioh.edu/academic-affairs/university-senate/](http://miamioh.edu/academic-affairs/university-senate/)

November 22, 2019

To: Gregory P. Crawford, President  
 From: Jeffrey Wanko, Secretary of the University Senate  
 Re: Degree Program Approval  
 SR 20-06, Master of Science in Business Management, with a major in Business Administration,  
 Farmer School of Business

The Miami University Policy and Information Manual, Section 11.1.E, Adding a New Degree, states that a proposal for any curriculum or program leading to a new undergraduate or graduate degree shall be submitted to the President, the Board of Trustees, and the Ohio Board of Regents/Ohio Regents' Advisory Committee on Graduate Study for approval following approval by the department or program, the academic division, the Council for Undergraduate Curriculum/Graduate Council, the Council of Academic Deans, and University Senate.

On November 4, 2019, University Senate adopted SR 20-06:

**BE IT HEREBY RESOLVED** that University Senate endorse the proposed degree, Master of Science in Business Management, with a major in Business Administration, Farmer School of Business;

**AND FURTHERMORE**, that the endorsement by University Senate of the proposed degree and major will be forwarded to the Miami University Board of Trustees for consideration.

**Approval of the President**

I, Gregory P. Crawford, President of Miami University, approve ~~do not approve~~ Master of Science in Business Management, with a major in Business Administration, Farmer School of Business.

<input checked="" type="checkbox"/>	Approve Forward to the Board of Trustees for action (copy to Secretary of University Senate)
<input type="checkbox"/>	Do Not Approve

  
 Gregory P. Crawford, President

12-4-19  
 Date

cc: Dana Cox, Chair, Executive Committee of University Senate  
 Jason Osborne, Provost, Chair University Senate  
 Ted Pickerill, Secretary to the Board of Trustees and Executive Assistant to the President



**Master of Science in Business Management  
(M.S. Business Management) with embedded  
Certificate in Business Management**

Miami University  
Farmer School of Business

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## **Basic Characteristics of the Educational Program**

### **1. Brief description of the disciplinary purpose and significance of the proposed degree**

Miami University proposes a 10-month graduate degree program for the Master of Science in Business Management. The aim of the Master of Science in Business Management (MSiM) is to deliver the trifecta of business knowledge, hands-on client based experiential learning and essential skills, to a broad set of students from diverse disciplines. This degree is positioned to help recent graduates start a career. The need for business knowledge, that is integrated with client based experiential learning and development of skills valued by employers, regardless of undergraduate major, is an imperative across most careers. The undergraduate curriculum for non-business majors does not focus on the above areas. Students will graduate with the foundational knowledge and experience that they need to compete for early career roles in business organizations.

### **2. Definition of the focus of the program**

The curriculum of the program is designed to instruct students to analyze and contribute new knowledge and insights to solving business problems. Graduates will be trained to analyze business problems that require a critical understanding of strategic thinking, data driven decision making, creative problem solving, entrepreneurial thinking, and ethical decision making, among other knowledge and skills. This degree is positioned to help recent graduates start a career. The program provides an innovative curriculum plus career coaching and leadership development, taught by the faculty in the Farmer School of Business at Miami University.

### **3. Rationale for the degree name**

In this program, students will gain knowledge and learn skills that will enable them to contribute new knowledge and insights into business decision making. In the culminating experience, every student will apply the scientific method, using data and insights to research, build perspectives and create new knowledge that informs business practice. After completion of the core and practice coursework, the culminating experience will deliver value to all stakeholders. This will be immersive and fast paced, will mimic a real business and require the delivery of value in the form of new knowledge that informs the practice of business.

#### **4. Duration of the program**

The MSiM is a 10-month, 30-credit hour program. It will run on the standard semester, August – May calendar. The program has three component parts, and offered over the Fall, Winter and Spring semesters. There are no tracks in the program.

#### **5. Admission Timing**

The target date for start of the new program is Fall 2021. The program plan includes one cohort per year.

#### **6. Primary target audience for the program and admission requirements**

The target audience is non-business graduates from Miami or any accredited university, with little to no work experience. Business minors are eligible. The student shall very recently have earned a bachelor's degree (preferably 1 year or less). Students who have fulfilled the requirements for a baccalaureate degree and earned at least a 3.25 cumulative GPA, are eligible to apply. Applications will begin in fall 2020.

As described by the Dean of Durham Business School in *Masters in Management: On the rise* (The Economist, May 23rd, 2017), “Students choose a first degree in a subject they are interested in, then take a Master’s in management to monetize it.” Given Miami University’s emphasis on career paths for all our majors, and a generation of students who are forging entrepreneurial careers, across the spectrum of startups, non-profits, and corporate organizations, this graduate program will be an attractive option for students, regardless of major, to stay on campus for an additional year, earn a business graduate degree, and accelerate their career trajectory.

We are confident that there is a market for this program. In the class of 2022, approximately 58% of students entered with an average of 18.6 hours of college credit from AP, CCP and other credit. (<http://www.miamioh.edu/oir/data/first-year-profile/index.html>). This suggests that there is a significant fraction of students who are on a fast-track since high school and are a strong target market for a graduate program that will add value where all graduates, regardless of major, can jump start a career.



## 7. Special efforts to target and retain underrepresented groups

The data shows that this degree has more diversity than a traditional MBA degree. As stated in “Masters in Management: On the Rise”, *The Economist*, May 2017, “MIMs attract more women, possibly because MBA students are at the age at which many take time out of their careers to start a family. The average proportion of women on an Economist-ranked MIM course is 46%, compared with just 36% on MBAs. Few who have experienced the alpha-male atmosphere of the average MBA classroom would disagree that changing the balance of the sexes at business school would be a good thing.”

Miami University has strongly prioritized promoting a diverse culture. We believe that the focus on this culture will enhance our efforts to enroll and retain underrepresented groups. The foundational goal to promote a diverse culture of inclusion, integrity, and collaboration that deepens understanding and embraces intercultural and global experiences, includes specific strategies.

The Farmer School of Business partners with the Division of Enrollment Management and Student Success to attract and retain students on this campus. To attract diverse students, the Farmer School of Business has several initiatives, that include partnering with area high schools for summer camps, including Discover U in Business and the Accountancy camp. This relationship with high schools will be an excellent vehicle to share information about this program and attract more diverse students to apply to the university. The Farmer School also partners with the Division of Enrollment Management and Student Success on new student recruitment. With this graduate degree, we will continue to work with Enrollment Management, to attract a more diverse group of students to apply to the university. We expect that as the program gets established, students will choose to come to Miami with an undergraduate major, and plan to stay an extra year to pursue the MSiM.

The Miami University Academic Affairs Office of Institutional Research provides annual statistics on the demographic profile and diversity of our first-time undergraduate students by division. This data is relevant because it illustrates that there is a pool of students at Miami University, who are underrepresented in traditional business school graduate programs and will potentially find the MSiM degree an attractive career opportunity. The statistics for each year are compiled on October 15th. So, at least some of the students we are targeting are represented by the 2017 class and potentially 2018 students. Below is the ethnicity, multicultural and international statistics, for the fall class of 2016, 2017

and 2018. Additional detail on the undergraduate enrollment by race/ethnicity for the undergraduate enrollment of the first-year class in the fall of 2018 is also included below.

<b><i>Race/Ethnicity: Domestic Multicultural</i></b>			
	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>College of Arts and Science</b>	14.9%	17.6%	16.9%
<b>College of Creative Arts</b>	12.6%	15.2%	17.6%
<b>College of Education, Health and Society</b>	18.0%	17.0%	16.6%
<b>College of Engineering and Computing</b>	17.3%	18.6%	21.0%
<b>College of Liberal Arts and Applied Science</b>	---	---	28.3%

<b><i>Race/Ethnicity: International</i></b>			
	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>College of Arts and Science</b>	7.9%	8.6%	7.4%
<b>College of Creative Arts</b>	2.3%	1.9%	4.1%
<b>College of Education, Health and Society</b>	4.7%	3.9%	4.4%
<b>College of Engineering and Computing</b>	11.3%	10.3%	10.4%
<b>College of Liberal Arts and Applied Science</b>	---	---	0.0%

<b><i>Miami University Undergraduate Enrollment By Race/Ethnicity October 15, 2018</i></b>								
	<b>Black or African- American</b>	<b>Asian</b>	<b>Hispanic/ Latino</b>	<b>American Indian or Alaska Native</b>	<b>Native Hawaiian or Other Pacific Islander</b>	<b>Multi Racial</b>	<b>Non- Resident Alien</b>	<b>White &amp; Unknown</b>
<b>Hamilton</b>	10.0%	2.1%	4.3%	0.1%	0.1%	3.6%	1.2%	78.6%
<b>Middletown</b>	3.5%	1.5%	2.3%	0.1%	0.1%	2.8%	14.5%	75.2%
<b>Oxford</b>	3.4%	2.2%	4.7%	0.2%	0.1%	3.7%	14.8%	71.0%
<b>OVERALL</b>	<b>4.2%</b>	<b>2.1%</b>	<b>4.5%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>3.6%</b>	<b>13.1%</b>	<b>72.2%</b>

www.MiamiOH.edu/OIR

2018-2019 Fact Book

## Curriculum and Instructional Design

### 1. Curricular Content

All courses are required for the degree. Course descriptions are in Appendix C.

Course #	Name	Credit Hours
ACC 611	Accountancy for Managers	3
ECO 618	Game Theory (New Course)	1.5
ISA 628	I.T. & Analytics Role (New Course)	1.5
ISA 629	Leveraging I.T. & Data Across Business (New Course)	1.5
MGT 627	Supply Chain & Operations Management	3
MKT 618	Marketing Management	3
MGT 610	Management Strategy (New Course)	1.5
FIN 625	Managerial Finance	3
ISA 641	Data Discovery Through Business Analytics for Managers (New Course)	2
MKT 633	Digital Marketing (New Course)	1
ESP 652	Applied Entrepreneurial Mindset: Creativity and Innovation (New Course)	1.5
MGT 650	Leadership, Teams and Ethics (New Course)	1.5
BUS 601	Consulting Capstone (New Course)	6
	Total Credit Hours	30

### 2. Requirements that students must fulfill to complete the program successfully

The MSiM is a 30-credit hour program with a required pre-program Foundation week. There is an embedded certificate in business management. There are three component parts to the MSiM: preparation (18 credit hours), practice (6 credit hours) and culmination or execution (6 credit hours). The execution component is the culminating experience of the program. The three parts will collectively engage the student, first with knowledge and integration of the various gears that are

engaged in the functioning of a business in the preparation component; then enable application and analysis in the practice module and finally, apply the scientific method, using data and insights to research, build perspectives and create new knowledge that informs business practice, in the execute or culminating component.

### **MSiM Program Components and Timeline**

<b>Program Components</b>	<b>Semester</b>
Foundation week	Pre-Program week. Credit/No Credit
Preparation Component	Fall Semester: 13.5 credit hours Winter Semester: 4.5 credit hours
Practice Component	Spring Semester: 6 credit hours
Execution Component or Culminating Experience	Spring Semester: 6 credit hours

#### **Foundation week**

Program Orientation, Career Preparation. Credit/No Credit. Required

Foundation week is the week prior to the start of fall Semester. Students will be introduced to the requirements and expectations of the program. It will include team activities and career preparation.

#### **Preparation Component: Fall and Winter Semester**

Business Core with an embedded Certificate in Business Management: 18 credit hours

The business core curriculum delivers on all the key functional areas of a business while integrated projects within and across the courses reinforce concepts and applications. This is achieved through faculty collaboration on curriculum development, with the integration of applications and cases, shared readings and assignments. Any business organization, irrespective of the products or platforms, operates on common fundamental business principles. It is therefore important to have knowledge of the functional areas of business for long term career success. At the same time, businesses are increasingly integrated across areas and employees are required to bridge silos and work effectively

across the organization. Therefore, it is equally important to understand how the apparently discrete pieces fit together to deliver organizational value.

There are eight courses in the business core.

Fall Semester Business Core 13.5 credit hours

<b>Dept</b>	<b>Course #</b>	<b>Name</b>	<b>Credit Hours</b>
ACC	611	Accountancy for Managers	3
ECO	618	Game Theory	1.5
ISA	628	I.T. & Analytics Role	1.5
ISA	629	Leveraging I.T. & Data Across Business	1.5
MGT	627	Supply Chain & Operations Management	3
MKT	618	Marketing Management	3
		Total Hours	13.5

Winter Semester Business Core 4.5 credit hours

<b>Dept</b>	<b>Course #</b>	<b>Name</b>	<b>Credit Hours</b>
MGT	610	Management Strategy	1.5
FIN	625	Managerial Finance	3
		Total credit hours	4.5

### **Certificate in Business Management**

The certificate will credential Foundation week plus any 12 credit hours of the Business core. It is a credentialed recognition for progress toward a master's degree. Depending on the students' career plans, they may return at a later date to complete the rest of the program.

### **Practice Component Spring Semester**

6 credit hours

The practice component of the MSiM program is designed to give students opportunities to work on business problems and develop creative solutions using foundational business knowledge together with data driven analysis, digital marketing, creative thinking, leadership, teamwork and ethics. Students will experience a hands-on approach to problem solving, framed around a case-based project.

There are four courses in the practice component.

Spring Semester Practice component 6 credit hours

<b>Dept</b>	<b>Course#</b>	<b>Name</b>	<b>Credit Hours</b>
ISA	641	Data Discovery Through Business Analytics for Managers	2
MKT	MKT 633	Digital Marketing	1
ESP	ESP 652	Applied Entrepreneurial Mindset: Creativity and Innovation	1.5
MGT	650	Leadership, Teams and Ethics	1.5
		Total credit hours	6

### **Execution Component or Culminating Experience Spring Semester**

6 credit hours

Here, students are immersed in an experiential consulting capstone. In the culminating experience, every student will apply the scientific method, using data and insights to research, build perspectives and create new knowledge that informs business practice. Details are provided in (3) below.

There is one course in the Execution component.

<b>Dept</b>	<b>Course#</b>	<b>Name</b>	<b>Hours</b>
BUS	601	Consulting Capstone	6

### **3. Description of a required culminating or integrated learning experience**

The execution component is the culminating program experience. In the culminating experience, every student will apply the scientific method, using data and insights to research, build perspectives and create new knowledge that informs business practice. This will be a client challenge, where every student will apply the scientific method, analyze, learn and deliver a response that creates new knowledge and insights into business decision making. The students will demonstrate a critical understanding of the context of the challenge and analyze the business problem to deliver their response. The program director, faculty and business client will serve as advisors and mentors. After completion of the core and practice coursework, the culminating experience in the execution component will deliver value to all stakeholders. This is an immersive and fast paced experience, that will mimic the pace of real business and will require the delivery of value in the form of new knowledge that informs business practice.

#### **Institutional Planning for the Program**

##### **1. Physical facilities, Equipment and staff needed to support the program**

The program will be delivered in the Farmer School of Business. No additional physical resources beyond what is already available, is required for the program. Classes will be offered in the evening, which will alleviate space issues during the day in the Farmer School of Business.

The curriculum is designed and will be delivered by Farmer School of Business faculty. This is a critically important element for program success, because this degree program is envisioned to be highly integrated and collaborative at all stages of development, delivery and ongoing revision. It is important to understand that the program does not require new faculty lines. All faculty are all Farmer School of Business Tenure/Tenure Track/Clinical Faculty, who will teach on overload. The multidisciplinary nature of MSiM does not put significant demands on any individual department. Rather, faculty from all areas of the Farmer School of Business will have the opportunity to be engaged in the program. The Faculty Matrix and Faculty Vitae are in Appendix A and B respectively.

The Farmer School has recently recruited a graduate program director to manage the Master of Science in Business Analytics in fall 2020 and also the MSiM, once approved. The duties for the director include program marketing, student recruiting, student placement, external networking to recruit clients

for the culminating experience, engagement with career services, and exploration of opportunities to collaborate with other professional master's programs, dual degree programs and graduate certificates across the University. The program director has experience and networks in academia and business, to effectively communicate with students, faculty, corporate clients, potential recruiters, university partners and all other stakeholders. The director is a professional with collaborative skills, vision and demonstrated ability to execute on the delivery. We will eventually recruit a (part time) administrative assistant to support the program director.

## **2. Evidence of market for the new program**

The employment outlook for graduates with either a MSiM or similar master's degree is above the average expected growth of the total labor market, as reported by Burning Glass Technologies. ([www.burning-glass.com](http://www.burning-glass.com)). Nationwide occupations requiring a MSiM or similar degree are expected to grow by 81% versus 7.4% for the total labor market. Employment for the midwest has increased from 1.7 million jobs in 2013, requiring a MSiM or similar master's degree, to 1.9 million jobs in 2017. "Based on Burning Glass data, the number of jobs with business master's backgrounds is expected to grow over by 9.5% by 2027 (1,941,231 to 2,124,614) across the Midwest. Nationally, demand is expected to grow 8.1% by 2027. Over the last year (2/18 - 1/19), the top 5 largest job postings states for business master's was California, New York, Texas, Massachusetts, and Illinois (rank order), all high priority prospective student recruiting states for Miami. The top 5 hiring employers in the region were Anthem Blue Cross, Deloitte, U.S. Bancorp, UnitedHealth Group, and JP Morgan Chase Company." Michael Kabbaz, (former) Senior Vice President, Enrollment Management and Student Success, Miami University. Market Analysis can be found in Appendix E.

The MBA program has long been the status quo graduate program in business schools. However, the enrollment in MBA programs been shrinking. (See Financial Times article: Masters in Management enjoys faster growth than the MBA, <https://www.ft.com/content/73469dac-868c-11e7-8bb1-5ba57d47eff7>). There is a rise in a new Master's degree program, the Master's in management. While the MBA degree targets students with prior work experience, looking for career advancement, the MSiM degree is uniquely positioned to assist new graduates. (See Financial Times article: <https://www.ft.com/content/767ba346-868c-11e7-8bb1-5ba57d47eff7>.)



The article, *Masters in Management: On the rise* (The Economist, May 23rd, 2017), documents the increasing global demand for this degree program. It also discusses the distinctly different student audiences for the Masters in Management and the MBA degree programs and a shifting paradigm, where enrollment in the latter is on the decline whereas the former is poised on a positive trend. (See Financial Times article: <https://www.ft.com/content/767ba346-868c-11e7-8bb1-5ba57d47eff7>.) Also, see Sheila Kloefkorn's article *It's Time To Reskill The Marketing Workforce*. (Forbes Agency Council, April 2018 <https://www.forbes.com/sites/forbesagencycouncil/people/sheilakloefkorn1/#320fb51b53d7>).

We are confident that there is a market for this degree program. Over 4000 students enter Miami every year, and approximately 58% of first-year students enter with an average of 18.6 hours of college credit from AP, CCP and other credit. (<http://www.miamioh.edu/oir/data/first-year-profile/index.html>). This suggests that there is a significant fraction of students who have been on a fast-track since high school and are a strong target market for a graduate program that will add value and jump-start a career. As described by the Dean of Durham Business School in *Masters in Management: On the rise* (The Economist, May 23rd, 2017), "Students choose a first degree in a subject they are interested in, then take a Master's in management to monetize it."

Miami University is investing in specialized Master's programs, and this program fits precisely within this institutional strategy. Additional evidence of institutional support can be found in letters of support in Appendix F.

**a)** Projected enrollment in first year of launch is to be around 30 students, to expand to 50 by year 4. This cohort size is designed for a small class and high engagement format. In context, a class of 30 students is about 0.01% of the approximately 3,000 non-business graduates from Miami University every year.

**b)** In the program planning and budgeting processes, we focused on a class size of 30, to allow the high engagement format. As discussed, this target class size is very achievable, given the size of the potential target market at Miami University alone, and not even considering other universities.

### **3. Statewide Alternatives**

The Weatherhead School of Management at Case Western Reserve University has a Master of Science in Management with specialized tracks in Finance, Business Analytics, and Operations Research and

Supply chain. That program has specific tracks in three specialized areas, and is therefore different than a generalized program as described in this proposal. Ohio University has a 100% online Master of Science in Management (MSM). The program is 36-credit hours, with twelve 3-credit courses. The significant distinction between the MSM and the proposed Miami University MSiM program is in the mode of delivery. We plan a highly immersive and experiential on-campus program. We are not aware of any other similar program in the State of Ohio.

Therefore, the MSiM at Miami University will be a unique opportunity to expand this degree in our state. Building on the strong brand and reputation of Miami University and the Farmer School of Business, this program will graduate a cohort of business school graduates who will add to the skilled workforce in Ohio.

We did benchmark against other similar programs in the country. The table below provides the benchmarking data. Additional benchmarking information is included in Appendix E.

<b>MASTER'S IN MANAGEMENT PROGRAMS 2017 (M.S.)</b>		
<a href="http://www.topmanagementdegrees.com/rankings/best-masters-management/">www.topmanagementdegrees.com/rankings/best-masters-management/</a>		
This list does not represent the rankings.		
<b>College</b>	<b>Degree</b>	<b>Credit Hrs</b>
University of Michigan- Ross School of Business	Master of Management	30
Penn State Smeal College of Business	Master's of Professional Studies in Management & Org. Leadership	30
University of Florida-Warrington College of Business	M.S. in Management	32
Northwestern Univ. Kellogg School of MGT	M.S. in Management Studies	16*
Duke University-Fuqua School of Business	Master of Management Studies	43
Univ. of Notre Dame	M.S. in Management	38
Edwin L. Cox S of Business at Southern Methodist University	M.S. in Management	30
University of Maryland	M.S. in Business and Management	30
Stevens Institute of Technology	Master's in Management	30
University of Central Florida-	Professional M.S. in Management	30
Boston University	M.S. in Management Studies	36
Rochester Institute of Technology-Saunders College of Business	M.S. in Management	30
Tulane University	Master's in Management	36

\*Northwestern- size of cohort is 20 students, and a portion of classes is with evening and MBA students. Each class is one credit hour; time to complete is 10 months. Slightly different credit hour methodology.

#### **4. Growth of the program**

Projected enrollment in the first year of the program is estimated at 30 students. In year 2, we expect to grow to 40 students and expand to a class size of 50 by year and 3. We expect the program will be self-sufficient (generate revenue to cover costs and also yield positive net revenue), at the end of the first year of operation. Details are provided in the fiscal impact statement in Appendix D.

#### **5. Institutional Staffing, Faculty, and Student Support**

##### **Faculty**

The program will be designed and delivered by Farmer School of Business faculty. This is critically important for program success, because this degree program is designed to be highly collaborative and integrated in all stages of development, delivery and ongoing revision. There will be over 35 faculty, all tenure/tenure track/clinical faculty, engaged in teaching and/or developing curriculum for the program. It is important to emphasize that the program does not require new faculty lines. Faculty will teach on overload. The multidisciplinary nature of MSiM does not put significant demands on any individual department. Rather, faculty from all areas of the Farmer School of Business will have the opportunity to be engaged in the program. The Faculty Matrix and Faculty Vitae are in Appendix A and B respectively.

##### **Administration and Support**

As discussed, there will be a program director, with duties that include program marketing, student recruiting, student placement, external networking to recruit clients for the culminating experience, engagement with career services, and exploration of opportunities to collaborate with other professional master's programs, dual degree programs and graduate certificates across the University. In the program director, we have a professional with experience and networks in academia and business, to communicate with students, faculty, corporate clients, potential recruiters, university partners and all other stakeholders. We have a professional, with collaborative skills, vision and demonstrated ability to execute on the delivery. We will also recruit a part time administrative assistant to support the program director. The financial support for the program director and administrative assistant support, is provided by the Miami University Provost's Boldly Creative initiative.

We anticipate the need for a marketing budget for program launch, materials, and creation of a web presence. Additionally, we have built in miscellaneous program support costs and a recurring

investment in curriculum development to keep the MSiM program agile and relevant. These expenses will be supported by the Office of the Dean, Farmer School of Business. Details are included in the fiscal impact statement in Appendix D. As the fiscal impact statement shows, the program is expected to break even and yield positive net revenue, in the first year of operation.

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# **Appendix A**

## **Faculty Matrix**

## Faculty Matrix

A faculty member must be identified for each course that is a required component of the curriculum. If a faculty member has not yet been identified for a course, indicate that as an “open position” and describe the necessary qualifications in the matrix (as shown in the example below). **All program proposals must include both the Faculty Matrix and a copy of each faculty member’s 2-page CV as Appendix items.**

Instructor Name	Rank or Title	Full-Time (FT) or Part-Time (PT)	Instructor Qualification			Course(s) Instructor will teach	
			Degree Title, Discipline Institution, Year	Years of Teaching Experience In the Discipline/ Field	Additional qualifications (e.g., licenses, certifications)	Courses in the proposed program (Include course number and title)	# taught Per Year at <u>All</u> University Locations
Chad ANDERSON	Assistant Professor	FT	Ph.D. Computer Information Systems, Georgia State, 2011	9		ISA 628: I.T. Analytics Role  ISA 629: Leveraging I.T. & Data Across Business	10
Bryan ASHENBAUM	Professor & Chair	FT	Ph.D. Supply Chain Management, Arizona State, 2006	13		MGT 627M: Supply Chain & Operations Management	7
Brian BALLOU	Ernst & Young Professor of Accountancy William Isaac and Michael Oxley Center for Business Leadership Faculty Fellow & Professor	FT	Ph.D. Accounting, Michigan State, 1996	23		ACC 611M: Acct for Managers	8

John BENAMATI	Professor & Chair	FT	Ph.D. Business Administration-MIS, University of Kentucky, 1997	31		ISA 628: I.T. Analytics Role ISA 629: Leveraging I.T. & Data Across Business	14
Thomas BOULTON	Lindmor Professor & Professor	FT	Ph.D. Finance University of Pittsburgh, 2006	12		FIN 625M: Managerial Finance	13
Jacob BRINDLEY	Assistant Teaching Professor	FT	Ph.D. Economics, Purdue University, 2016	3		ECO 618: Game Theory	4
James COYLE	Associate Professor	FT	Ph.D. Journalism with advertising research specialization, University of Missouri-Columbia	22		MKT 633: Digital Marketing	2
Devon DeLVECCHIO	Raymond E. Glos Professor in Marketing & Professor	FT	Ph.D. Marketing, Indiana University, 2001	18		MKT 618M: Marketing Management BUS 601: Experiential Consulting Capstone	11
Scott DUST	Dr. John F. Mee Professor in Management & Assistant Professor	FT	Ph.D. Management/Organizational Behavior, Drexel University, 2013	6		MGT 650M: Leadership, Teams and Ethics	7
Steven ELLIOTT	Associate Professor & Director of Undergraduate Studies	FT	Ph.D. Economics, University of Colorado, 1990	23		ECO 618: Game Theory	15
Deborah FLETCHER	Associate Professor	FT	Ph.D. Economics, University of Florida, 2003	16		ECO 618: Game Theory	7
Jim FRIEDMAN	White Family Associate Clinical Professor & Associate Clinical Professor	FT	Ph.D. Communication, Union Institute, 1982	41		ESP 652: Applied Entrepreneurial Mindset: Creativity	21
Megan GERHARDT	Professor & William Isaac and Michael Oxley Center for Business Leadership Co-Director & Director of Leadership Development	FT	Ph.D. Organizational Behavior, University of Iowa, 2003	16		MGT 650M: Leadership, Teams and Ethics	8



Douglas HAVELKA	Associate Professor	FT	Ph.D. Management Information Systems, Texas Tech University, 1994	31		ISA 628: I.T. & Analytics Role  ISA 629: Leveraging I.T. & Data Across Business	31
Dan HEITGER	Deloitte Professor & William Isaac and Michael Oxley Center for Business Leadership Co-Director & Professor	FT	Ph.D. Accounting, Michigan State University, 2000	20		ACC 611M: Acct for Managers	11
L. Allison JONES-FARMER	Van Andel Professor of Business Analytics & Professor	FT	Ph.D. Applied Statistics, University of Alabama, 1997	24		ISA 641: Business Analytics  ISA 629: Leveraging I.T. & Data Across Business	14
Janice KINGHORN	Associate Teaching Professor & Assessment Director	FT	Ph.D. Economics, Washington University in St. Louis, 1996	27		ECO 618: Game Theory	8
Younghwa (Gabe) LEE	C. Michael Armstrong Business Chair & Professor	FT	Ph.D. Business Administration-IS, University of Colorado at Boulder, 2005	19		ISA 628: I.T. & Analytics Role  ISA 629: Leveraging I.T. & Data Across Business	12
Michael LIPSITZ	Assistant Professor	FT	Ph.D. Economics, Boston University, 2017	6		ECO 618: Game Theory	6
Waldyn MARTINEZ	Assistant Professor	FT	Ph.D. Applied Statistics, University of Alabama, 2012	12		ISA 641: Business Analytics  ISA 629: Leveraging I.T. & Data Across Business	10
Michael McCARTHY	Professor & Chair	FT	Ph.D. Marketing, University of Pittsburgh, 1996	34		MKT 618M: Marketing Management	12

Carol McGUIRE	Assistant Teaching Professor	FT	Ph.D. Management, Case Western Reserve University, 2016	3		ISA 628: I.T. & Analytics Role  ISA 629: Leveraging I.T. & Data Across Business	6
Fadel MEGAHED	Neil R. Anderson Endowed Assistant Professor & Assistant Professor	FT	Ph.D. Industrial and Systems Engineering, Virginia Polytechnic Institute and State University, 2012	7		ISA 641: Business Analytics  ISA 629: Leveraging I.T. & Data Across Business	6
Jeffrey MERHOUT	Associate Professor	FT	Ph.D. Management Information Systems, Virginia Commonwealth University, 2002	23		ISA 628: I.T. & Analytics Role  ISA 629: Leveraging I.T. & Data Across Business	22
Charles MOUL	Associate Professor	FT	Ph.D. Economics, Northwestern University, 2000	19		ECO 618: Game Theory	7
Gregory NIEMESH	Assistant Professor	FT	Ph.D. Economics, Vanderbilt University, 2012	7		ECO 618: Game Theory	6
Terry NIXON	Professor	FT	Ph.D. Finance, University of South Carolina, 1996	28		FIN 625M: Managerial Finance	10
Gillian OAKENFULL	Professor & Faculty Director of Diversity and Inclusion	FT	Ph.D. Marketing, University of Houston, 1998	29		MKT 618M: Marketing Management	21
Glenn PLATT	C. Michael Armstrong Professor of Network Technology & Management & Professor	FT	Ph.D. Economics and Political Economy, Carnegie Mellon University, 1993	26		MKT 633: Digital Marketing	16
Joseph RODE	Professor	FT	Ph.D. Organizational Behavior, Indiana University, 2002	22		MGT 610M: Management Strategy  MGT 650M: Leadership, Teams and Ethics	9

Peter SALZARULO	Associate Professor & Endres Associate Professor Fellow	FT	Ph.D. Operations Management and Decision Sciences, Indiana University, 2006	18		MGT 627M: Supply Chain & Operations Management	9
Austin SMITH	Assistant Professor	FT	Ph.D. Economics, University of Colorado, 2015	4		ECO 618: Game Theory	5
Wayne SPEER	Instructor & Academic Advisor	FT	MBA Finance, Xavier University, 1990	11		MKT 618M: Marketing Management	10
Laurens STEED	Assistant Professor	FT	Ph.D. Organizational Behavior, Georgia Institute of Technology, 2018	3		MGT 610M: Management Strategy	2
Melissa THOMASSON	Chair and Julian Lange Professor of Economics	FT	Ph.D. Economics, University of Arizona, 1998	21		ECO 618: Game Theory	5
Mark TREMBLAY	Assistant Professor	FT	Ph.D. Economics, Michigan State University, 2016	3		ECO 618: Game Theory	5
Maria WEESE	Richard T. Farmer Endowed Assistant Professor & Assistant Professor	FT	Ph.D. Statistics, University of Tennessee, 2010	9		ISA 641: Business Analytics ISA 629: Leveraging I.T. & Data Across Business	10
Mark WESOLOWSKI	Associate Professor	FT	Ph.D. Industrial/Organizational Psychology, 1991	34		MGT 610M: Management Strategy	12

# **Appendix B**

## **Faculty Vitae**

**Chad Anderson, Ph.D.**  
**(859) 587-2830 (Mobile)**  
[canderson32@gmail.com](mailto:canderson32@gmail.com)

## Education

Degree	Major	Institution	Date
Ph.D.	Computer Information Systems Adviser: Daniel Robey	Georgia State University	2011
MBA	Business Administration	Eastern Kentucky University	2006
B.Sc.	Occupational Therapy	Eastern Kentucky University	1998
B.Sc.	Psychology	Eastern Kentucky University	1998
B.Sc.	Business Administration	North Dakota State University	1993

## Refereed Journal Publications

- Anderson, C., Baskerville, R., and Kaul, M. (2017). "Information Security Control Theory: Achieving a Sustainable Reconciliation between Sharing and Protecting the Privacy of Information", *Journal of Management Information Systems*, 34(4), pp. 1082-1112.
- Anderson, C. and Robey, D. (2017) "Affordance Potency: Explaining the Actualization of Technology Affordances", *Information and Organization*, 27(2), pp. 100-115.
- Yang, X., Zhang, X., Goh, S., and Anderson, C. (2017) "Curvilinear Effects of e-Loyalty in China's Online Tourism Industry", *Nankai Business Review International*, 8(2), pp. 174- 189.
- Anderson, C., Henner, T., and Burkey, J. (2013) "Tablet Computers in Support of Rural and Frontier Clinical Practice", *International Journal of Medical Informatics*, 82(11), pp. 1046- 1058.
- Robey, D., Anderson, C., and Raymond, B. (2013) "Information Technology, Materiality and Organizational Change: A Professional Odyssey", *Journal of the Association for Information Systems*, 14(7), pp. 379-398.
- Anderson, C., Al-Gahtani, S., and Hubona, G. (2011). "The Value of TAM Antecedents in Global IS Development and Research", *Journal of Organizational and End User Computing*, 23(1), pp. 18-37.
- Straub, D. and Anderson, C. (2009). "Journal Self-Citation VI: Forced Journal Self-Citation - Common, Appropriate, Ethical?", *Communications of the Association for Information Systems*, 25(1), Article 6, pp. 57-66.

## Teaching

### Graduate Courses

- Current Issues in Technical Environments
- Information Systems in Healthcare Organizations
- Information Systems in Organizations
- Information Technology Management
- Introduction to Healthcare Operations

### Undergraduate Courses

- Introduction to Computer-based Information Systems
- IS Development and Management
- Management Information Systems
- Systems Analysis
- Systems Analysis and Design

## Work Experience

- 2015 - Present, Assistant Professor, Northern Kentucky University, Highland Heights, KY
- 2011 - 2015, Assistant Professor, University of Nevada, Reno, NV
- 2010 - 2011, Temporary Instructor, Georgia State University, Atlanta, GA
- 2006 - 2010, Graduate Research Assistant, Georgia State University, Atlanta, GA
- 2003 - 2006, Healthcare Technical Representative, SimplexGrinnell, Lexington, KY
- 2000 - 2003, Health Systems Specialist, CT-Innovations, Louisville, KY

## BRYAN ASHENBAUM

**Professional:** 3056 Farmer School of Business, Miami University, Oxford, OH 45056

**Phone:** (513) 529 -8013 **Email:** ashenbb@miamioh.edu

**Personal:** 5314 Colorado River Trail, Liberty Twp, OH 45011

**Phone:** (480) 586-4148 **Email:** ashenbaum@gmail.com

### PROFESSIONAL EXPERIENCE / APPOINTMENTS

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#### Miami University, Farmer School of Business, Oxford, OH

<p>Chair, Department of Management</p> <ul style="list-style-type: none"> <li>• Twenty-eight full-time and two part-time faculty.             <ul style="list-style-type: none"> <li>○ Twenty-one tenured/tenure-track, seven instructional.</li> <li>○ Faculty expertise in Human Capital Management &amp; Leadership, Supply Chain &amp; Operations Management, Entrepreneurship, and Strategy.</li> </ul> </li> <li>• Responsible for department strategic direction, staffing and recruiting, course scheduling, annual evaluations, budget.</li> <li>• Work extensively with recruiters, corporate partners, and various stakeholders.</li> </ul>	2017 - Present
<p>Director, Miami PRIME</p> <ul style="list-style-type: none"> <li>• PRIME (Professional Institute for Management Education) is a nine-credit “business basics” summer program for non-business majors.</li> <li>• Director is responsible for program development, staffing, budgeting, marketing, and success measures.</li> </ul>	2014 – 2017
<p>Professor</p> <p>Associate Professor</p> <p>Assistant Professor</p>	2018 - Present 2012 – 2018 2006 – 2012
<p><b>Arizona State University</b>, Tempe, AZ</p> <p>Doctoral Candidate</p> <p>Research Associate, CAPS Research</p>	2002 – 2006
<p><b>Procter and Gamble</b>, Cincinnati, OH</p> <p>Purchasing Manager</p>	2001 – 2002
<p><b>Honeywell Engines and Systems</b>, Phoenix, AZ</p> <p>Supply Management MBA Intern, E-commerce and Six Sigma</p>	2000 (May – Dec)
<p><b>NIBCO</b>, Phoenix, AZ</p> <p>Sales Engineer</p>	1997 – 1999
<p><b>U.S. Navy</b>, USS Bainbridge (CGN-25)</p> <p>Leading Nuclear Quality Assurance Supervisor</p> <p>Nuclear Reactor Operator/Technician</p>	1988 – 1993

## EDUCATION

---

**Ph.D. in Business Administration** **August 2006**  
**Major Field: Supply Chain Management**  
 Arizona State University, Tempe AZ

**Master of Business Administration** **May 2001**  
 Arizona State University, Tempe AZ  
 Concentration: Supply Chain Management

**Bachelor of Science** **December 1996**  
 Arizona State University, Tempe AZ  
 Major: Microbiology

## REFEREED JOURNAL PUBLICATIONS (last 10)

---

Brewer, B., Ashenbaum, B., Blair, C. 2019. "Cross-Functional Influence and the Supplier Selection Decision in Competitive Environments: Who Makes the Call?" In Press, *Journal of Business Logistics*. Early view DOI: 10.1111/jbl.12199.

Ashenbaum, B. 2018. "From Market to Hierarchy: An Empirical Assessment of a Supply Chain Governance Typology." *Journal of Purchasing and Supply Management* 24(1): 59-67.

Ashenbaum, B., Maltz, A. 2017. "Purchasing-Logistics Integration and Supplier Performance: An Information-Processing View." *International Journal of Logistics Management* 28(2): 379-397.

Brewer, B., Wallin, C., Ashenbaum, B. 2014. "Outsourcing the Procurement Function: Do Actions and Results Align with Theory?" *Journal of Purchasing and Supply Management* 20(3): 186-194.

Ashenbaum, B. 2013. "A Pre-Validation of the Product-Process Matrix." *Decision Sciences Journal of Innovative Education* 11(4): 313-322.

Brewer, B., Ashenbaum, B., Carter, J. 2013. "Understanding the Supply Chain Outsourcing Cascade: When Does Procurement Follow Manufacturing Out the Door?" *Journal of Supply Chain Management* 49(3): 90-110.

Brewer, B., Ashenbaum, B., Ogden, J. 2013. "Connecting Strategy-Linked Outsourcing Approaches and Expected Performance." *International Journal of Physical Distribution and Logistics Management* 43(3): 176-204.

Terpend, R., Ashenbaum, B. 2012. "The Intersection of Power, Trust and Supplier Network Size: Implications for Supplier Performance." *Journal of Supply Chain Management* 48(3): 52-77.

Ashenbaum, B., Salzarulo, P., Newman, W.R. 2012. "Organizational Structure, Entrepreneurial Orientation and Trait Preference in Transportation Brokerage Firms." *Journal of Supply Chain Management* 48(1): 3-23.

Ashenbaum, B., Terpend, R. 2010. "The Purchasing-Logistics Interface: A 'Scope of Responsibility' Taxonomy." *Journal of Business Logistics* 31(2): 177-194.

Ashenbaum, B. 2010. "The 'Twenty Minute' Just-in-Time Exercise." *Decision Sciences Journal of Innovative Education* 8(1): 269-274.

**Brian Ballou**

EY Professor of Accountancy & Center for Business Excellence Co-Director  
 2042B Farmer School of Business, Miami University, Oxford, OH 45056  
 (513) 593-0365; balloubj@MiamiOH.edu  
 Center for Business Excellence website: www.fsb.muohio.edu/cbe

**EDUCATION, EXPERIENCE**

Ph.D., Accounting, Michigan State University, 1996

BSBA, cum laude in Accounting, The Ohio State University, 1988

2007 —Present *Miami University*, EY Professor of Accountancy  
 2006 —Present *Miami University*, Co-Founder and Co-Director Center for Business Excellence 2004  
 —2007 *Miami University*, Associate Professor  
 2003 *University of Illinois at Urbana-Champaign*, Visiting Associate Professor 2002  
 —2003 *Auburn University*, Associate Professor  
 1997 —2002 *Auburn University*, Assistant Professor  
 1992 —1997 *Michigan State University*, Visiting Prof./Ph.D. program 1996  
*Grand Valley State University*, Visiting Professor  
 1991 —1992 *Lexis/Nexis*, Dayton, Ohio, Senior Financial Analyst 1989  
 —1991 *Ernst & Young*, Indianapolis, Indiana, Senior Auditor  
 1988 —1989 *Financial Accounting Standards Board*, Norwalk, Conn.; One of five chosen  
 nationally for postgraduate internship  
 1988 *KPMG Peat Marwick*, Baltimore, Maryland, Audit Intern

**RESEARCH** Published and ongoing research examines the interrelationship between corporate governance, strategy, business processes, resiliency/risk management, performance measurement, stakeholder engagement, business reporting, and assurance.

**Academic Publications (last 10)**

- (1) Ballou, Brian and Dan Heitger. "Accounting for the Sustainability Cycle," New York: American Institute of Certified Public Accountants (aicpa.org/FRC). October 2013—Invited white paper by AICPA and reviewed by external experts selected by AICPA.
- (2) Ernst & Young (Craig Faris, Brian Gilbert, and Brendan LeBlanc) and Miami University (Brian Ballou and Dan Heitger). "Demystifying Sustainability Risk: Integrating the Triple Bottom Line into an Enterprise Risk Management Program," May 2013, The Committee of Sponsoring Organizations of the Treadway Commission (www.coso.org)—Invited white paper by COSO and reviewed by external experts and COSO members.
- (3) Krzsus, Michel, Brian Ballou and Dan Heitger. "The Economics of Sustainability," June 2013, New York: American Institute of Certified Public Accountants (www.aicpa.org/FRC)—Invited white paper by AICPA and reviewed by external experts selected by AICPA.
- (4) Stoel, Dale, Brian Ballou, and Dan Heitger. "Risk Reports and Perceptions," New York: Risk and Insurance Management Society (RIMS). October 2013. Invited white paper by RIMS and reviewed by external experts selected by RIMS.



- (5) Ballou, Brian, Dan Heitger, and Tim Eaton, “Schneider Electric North America: Demonstrating the Business Value of Safety, Health and Environmental Programs.” 2013. National Safety Council—Invited case and teaching notes by Schneider Electric as one element of it receiving the NSC’s Robert W. Campbell Award for internal safety practices.
- (6) Ballou, Brian, Ryan Casey, Jon Grenier, and Dan Heitger. “Exploring the Perceived Effectiveness of Sustainability Initiatives: Opportunities for Accounting Research.” *Accounting Horizons*. June 2012, Vol. 26 (2): 265-288.
- (7) Grenier, Jonathan, Brian Ballou, and Seth Philip. “Enhancing Perceived and Actual Audit Committee Effectiveness through Financial Expert Certification.” *Current Issues in Auditing* December 2012, Vol 6 (2): A15-A25.
- (8) Reffett, Andrew, Billy Brewster, and Brian Ballou. “Comparing Auditor versus Non-auditor Assessments of Auditor Liability in Cases of Alleged Auditor Negligence.” *Auditing: A Journal of Practice & Theory* August 2012, Vol 31 (3): 125-148.
- (9) Stoel, D., Ballou, B., and D. Heitger. 2011. Board of Director Perceptions of Risk Management Information: Analysis of COSO’s Strengthening Enterprise Risk Management for Strategic Advantage. *Management Accounting Quarterly* Summer 2011, Vol. 12 (4): 14- 22.
- (10) Ballou, Brian, Dan Heitger, and Thomas Schultz, “The Actions to Value Framework: Linking Management Behavior to Long-Term Organizational Value,” *Management Accounting Quarterly*, Summer 2010, Vol. 11 (4): 1 - 9.

## TEACHING

### Courses Developed & Taught:

- **Governance, Risk Management, and Reporting** (co-developed with Dr. Dan L. Heitger, Miami University).
- **Enterprise Risk Management.**
- **Audit and Assurance.**
- **Accounting for Managers** (co-developed with Dr. Dan L. Heitger, Miami University).
- **Control of Accounting Systems** (developed by the University of Illinois at Urbana-Champaign).
- **Integrated Topics in Accounting** (co-developed with Dr. Jennifer Mueller, Auburn University).
- **Cost Analysis.**
- **Introduction to Managerial Accounting** (co-developed with Dr. Dan L. Heitger, Auburn University).

## CENTER FOR BUSINESS EXCELLENCE

**Formation and Co-Directorship of the Center for Business Excellence.** The CBE was formed by Co-Directors Dr. Brian Ballou & Dr. Dan Heitger and involved efforts by the Farmer School Dean’s Office and the Miami University Offices of the President, Provost, Institutional Relations, and University Advancement. The actions and accomplishments of the CBE to date testify as to the sizable brand reputation it continues to develop as an international academic thought-leader and the substantial positive benefits it provides to Miami University and its key stakeholders.

*Curriculum vitae for***John H. Benamati****EDUCATION**

**Doctor of Philosophy** (Business Administration - MIS), 1997

University of Kentucky, Lexington, KY

**Dissertation Title:** Managing Information Technology in a Changing Information Technology Environment

**Dissertation Committee Chair:** Albert L. Lederer

**Master of Computer Science** (Information Systems), 1987

Marist College, Poughkeepsie, NY

**Bachelor of Science** (Computer Science), 1984

Indiana University of Pennsylvania, Indiana, PA

**WORK EXPERIENCE**

2011-Present, Chair and Professor: Department of Information Systems and Analytics, Miami University

2009-2011, Professor: Miami University, Oxford, OH

2003-2009, Associate Professor: Miami University, Oxford, OH

1997-2003, Assistant Professor: Miami University, Oxford, OH

1994-2001, Information Technology Consultant: Self Employed - Data and Application Architect for large scale client/server application development effort

1996, Instructor: University of Kentucky, Lexington, KY

1984-1994, International Business Machines Corp. (IBM)

1993-1994, Data Architect: Sacramento, CA

1991-1993, Data Base Team Leader: Frankfort, KY

1989-1991, Application Development Product Marketing Specialist: Lexington, KY

1987-1989, Data Administrator: Poughkeepsie, NY

1984-1987, Database Administrator: Poughkeepsie, NY

1988, Adjunct Professor: Marist College, Poughkeepsie, NY

**JOURNAL PUBLICATIONS (last 10 of 30)**

Ozdemir, Z.D., Smith H.J. and Benamati, J.H. "Antecedents and Outcomes of Information Privacy Concerns in a Peer Context: An Exploratory Study." forthcoming in *European Journal of Information Systems*

Benamati, J.H., Ozdemir, Z.D. and Smith H.J. "An Empirical Test of the Antecedents – Privacy Concerns – Consequents Model" *Journal of Information Science* 2016

Xiang F., Lederer, A.L. and Benamati, J.H., "The Influence of National Culture on IT Development, Implementation and Support Challenges in China and the U.S." *Journal of Global Information Technology Management* 19(1), 2016. Pp. 26-43.

Benamati, J.H., and Rajkumar, T.M. "Undergraduate Student Attitudes Toward MIS: Instrument Development and Changing Perceptions of the Field Across Gender and Time" *Communications of the AIS*, Vol. 33, Article 14, December 2013.

Xiang F., Benamati, J.H., and Lederer, A.L. "Coping with rapid information technology change in different national cultures" *European Journal of Information Systems*, 20(5), 2011, pp. 560-573.

Rajkumar, T.M., Anderson, P., Benamati, J.H. and Merhout, J.W. "Are Student Self-Assessmenst a Valid Proxy for Direct Assessments in Efforts to Improve Information Systems Courses and Programs? An Empirical Study" *Communications of the AIS*, Vol. 28, Article 31, 2011.

Benamati, J.H., Fuller, M.A., Serva, M.A., "The Productive Tension of Trust and Distrust: The Coexistence and Relative Role of Trust and Distrust in Online Banking" *Journal of Organizational Computing and Electronic Commerce*, 20(4), 2010, 328-246.

Benamati, J.H., Fuller, M.A., Serva, M.A., and Baroudi, J.J. "Clarifying the Integration of Trust and TAM in E-Commerce Environments: Implications for Systems Design and Management" *IEEE Transactions on Engineering Management*, 57(3), 2010, pp. 380-393.

Benamati, J.H., Ozdemir, Z.D. and Smith, H.J. "Aligning Undergraduate IS Curricula with Industry Needs" *Communications of the ACM*, 53(3), 2010, pp. 152-156.

Benamati, J.H. and Lederer, A.L., "Managing the Impact of Rapid IT Change" *Information Resource Management Journal*, 23(1), 2010, 1-16.

Member of AIS, ACM, ACM SIGED, and ACM SIGMIS

**THOMAS J. BOULTON**  
**3028 FARMER SCHOOL OF BUSINESS**  
**MIAMI UNIVERSITY • OXFORD, OH**  
**(513) 529-1563 • BOULTOTJ@MIAMIOH.EDU**

ACADEMIC EXPERIENCE

---

**Miami University, Oxford, OH**

Lindmor Professor of Finance, *July 2017 – Present*

Lindmor Professor and Associate Professor of Finance, *July 2013 – June 2017*

Assistant Professor of Finance, *August 2007 – June 2013*

**Indiana University, Bloomington, IN** Visiting Lecturer, *January 2006 – May 2007*

**University of Pittsburgh, Pittsburgh, PA** Visiting Lecturer, *January 2007 – April*

EDUCATION

---

**University of Pittsburgh, Pittsburgh, PA** Doctor of Philosophy – Finance, 2006

**Cleveland State University, Cleveland, OH** Master of Business Administration, 2002

**The Ohio State University, Columbus, OH** Bachelor of Science – Actuarial Science,

REFEREED PUBLICATIONS Last 10

---

“Angels or Sharks? The Role of Personal Characteristics in Angel Investment Decisions” with Thomas Shohfi and Pengcheng Zhu, *Journal of Small Business Management*, Forthcoming.

- Best paper award, Financial Management Association Conference on Finance and Investment in Creative Ventures

“Conservatism and International IPO Underpricing” with Scott Smart and Chad Zutter, *Journal of International Business Studies*, 48, August 2017, 763–785.

“The Litigation of Tax Benefit Preservation Plans” with Terry Nixon, *Managerial Finance*, 43, 2017, 76–94.

“Managerial Confidence and Initial Public Offerings” with T. Colin Campbell, *Journal of Corporate Finance*, 7, April 2016, 375–392.

“Failures to Deliver, Short Sale Constraints, and Stock Overvaluation” with Don Autore and Marcus Braga-Alves, *The Financial Review*, 50, May 2015, 143–172.

“The Incentives of Grey Directors: Evidence from Unexpected Executive and Board Chair Turnover” with Kenneth Borokhovich, Kelly Brunarski, and Yvette Harman, *Journal of Corporate Finance*, 28, October 2016, 102–115.

“Does Equity-Based Compensation Make CEOs More Acquisitive?” with Marcus Braga-Alves and Frank Schlingemann, *Journal of Financial Research*, 37, Fall 2014, 267–293.

“The Impact of Institutional Quality on Initial Public Offerings” with Don Autore, Scott Smart, and Chad Zutter, *Journal of Economics and Business*, 73, May/June 2014, 65–96.

“The Flash Crash: An Examination of Shareholder Wealth and Market Quality” with Marcus Braga-Alves and Manoj Kulchania, *Journal of Financial Intermediation*, 23, January 2014, 140–156.

“Industrial Diversification and Underpricing of Initial Public Offerings” with Scott Smart and Chad Zutter, *Financial Management*, 42, Fall 2013, 679–704.

---

## TEACHING EXPERIENCE

*Miami University, Oxford, Ohio*

*MBA*: Applied Advanced Corporate Finance; Mergers and Acquisitions; Risk Management

*MECO*: Applied Advanced Corporate Finance; Financial Analysis of Mergers, Buyouts, and Restructuring; Investment Management

*MECO Thesis Advisor*: Chris Haught (PwC); Andrew Forrester (Cato Institute)

*Undergraduate*: Financial Analysis of Mergers, Buyouts, and Restructuring; Financial Modeling with Excel; Intermediate Financial Management; International Business Finance; International Business in Finance; Introduction to Business Finance; Legal Institutions and Capital Market Development; Principles of Investments and Security Markets

*Honors Thesis Advisor*: Michael Gershenzon

*PhD Committees*: Daqi Xin (PhD student at Rensselaer Polytechnic Institute)

*Study Abroad/Away Programs*:

Summer 2019: FSB Europe (Italy, Austria, France, ~~Spain~~ Winter

2019: Wall Street Week (New York)

Winter 2017 & 2018: FSB Asian Financial Markets (Hong Kong, ~~China~~ Summer

2015: FSB Asian Economic Powers (Hong Kong, China, Japan) Summer

2013 & 2014: FSB Pacific-Rim (China, South Korea, Japan) Summer 2011 &

2012: FSB Luxembourg-Spain (Luxembourg)

*Yonsei University, Wonju, Gangwon-do, South Korea*

Fundamentals of Financial Management

*Indiana University, Bloomington, Indiana*

Intermediate Corporate Finance; Intermediate Investments; International Finance

*University of Pittsburgh, Pittsburgh, Pennsylvania*

# JACOB BRINDLEY

Department of Economics  
Farmer School of Business  
Miami University

Web: [sites.google.com/site/jacobbrindley/](https://sites.google.com/site/jacobbrindley/)

Office: 2031 FSB

Email: [brindlj@miamioh.edu](mailto:brindlj@miamioh.edu)

Phone: 513-529-4133

## ACADEMIC POSITIONS

Lecturer, Department of Economics, Miami University 2016 - Present

## EDUCATION

**Purdue University, West Lafayette, IN 2011 – 2016**

Ph.D., Economics

August 2016

M.S., Economics

May 2013

University of Pittsburgh, Pittsburgh, PA

2007 – 2011

B.S., Mathematics-Economics

April 2011

## PUBLICATIONS (PEER-REVIEWED)

*Research on Undergraduate Teaching/Learning*

Grabowski, Joseph J., Margaret E. Heely, and Jacob A. Brindley. "Scaffolding faculty-mentored authentic research experiences for first-year students." *CUR Quarterly* 29.1 (2008): 41-46.

## WORKING PAPERS

"Relational Contracting and Market Power: Experimental Evidence" (with Steven Y. Wu)

## WORKS IN PROGRESS

"How does the Principal Structure Performance Pay across Two Agents with Verifiable Output?: Experimental Evidence"

"A Relational Contracting Experiment on Subjective Performance"

## COURSES TAUGHT

*Miami University*

Principles of Microeconomics Fall

2016 Economic Analysis of Law Fall

2016

*Purdue University*

Principles of Economics Fall 2012

Principles of Microeconomics Summer 2013, Fall 2013, Summer 2014, Fall 2014

Behavioral Economics Spring 2014, Spring 2015, Summer 2015

## AWARDS

Teaching Academy Graduate Teaching Award (Purdue University), April 2016

## CONFERENCE PRESENTATIONS

2014: International Economic Science Association (ESA) Meetings

## Arthur Carvalho, Ph.D.

### Education

- Ph.D., University of Waterloo, 2014  
Major: Computer Science
- M.Math., University of Waterloo, 2010  
Major: Computer Science
- B.Sc., Federal University of Pernambuco, 2008  
Major: Computer Science

### Academic and Professional Positions

- Dinesh & Ila Paliwal Innovation Chair**, Miami University (July 2018 - Present)
- Assistant Professor**, Miami University (July 2016 - Present)
- Assistant Professor**, Erasmus University Rotterdam (May 2009 - August 2014)

### Research Publications (11 Refereed Journal Articles, 2 Book Chapters, 10 Referred Papers in Conference Proceedings). Last 10 Journal Papers Published:

- Dario Pevec, Jurica Babic, Martin A. Kayser, Arthur Carvalho, Yashar Ghiassi-Farrokhfal, and Vedran Podobnik. A Data-Driven Statistical Approach for Extending Electric Vehicle Charging Infrastructure. *International Journal of Energy Research*, vol. 42, p. 3102-3120, 2018.
- Jurica Babic, Arthur Carvalho, Wolfgang Ketter, and Vedran Podobnik. Evaluating Parking Policies for Parking Lots Handling Electric Vehicles, *IEEE Access*, vol. 6(1), p. 944-961, 2018.
- Arthur Carvalho. On a Participation Structure that Ensures Representative Prices in Prediction Markets. *Decision Support Systems*, vol. 104, p. 13-25, 2017.
- Arthur Carvalho, Stanko Dimitrov, and Kate Larson. Inducing Honest Reporting of Private Information in the Presence of Social Projection. *Decision*, vol. 4(1), p. 25-51, 2017.
- Arthur Carvalho. A Note on Sandroni-Shmaya Belief Elicitation Mechanism. *The Journal of Prediction Markets*, vol. 10(2), p. 14-21, 2016.
- Arthur Carvalho. An Overview of Applications of Proper Scoring Rules. *Decision Analysis*, vol. 13(4), p. 223-242, 2016.
- Arthur Carvalho, Stanko Dimitrov, and Kate Larson. How Many Crowdsourced Workers Should a Requester Hire? *Annals of Mathematics and Artificial Intelligence*, vol. 78(1), p. 45-72, 2016.
- Arthur Carvalho. Tailored Proper Scoring Rules Elicit Decision Weights. *Judgment and Decision Making*, vol. 10(1), p. 86-96, 2015.
- Arthur Carvalho, Stanko Dimitrov, and Kate Larson. The Output-Agreement Method Induces Honest Behavior in the Presence of Social Projection. *ACM SIGecom Exchanges*, vol. 13(1), p. 77-81, 2014.
- Arthur Carvalho and Kate Larson. Sharing Rewards Among Strangers Based on Peer Evaluations. *Decision Analysis*, vol. 9(3), p. 253-273, 2012.

### Teaching Experience

- Miami University: *Managing Big Data, Database Systems*
- Erasmus University: *Big Data and Business Analytics, Applied Business Methods*

### Editorial Service

- International Journal of Decision Support System Technology (Editorial Board - since 2018)
- International Journal of Business and Data Analytics (Editorial Board - since 2017)

**James R. Coyle, Ph.D.**  
**Curriculum Vitae**  
**Department of Marketing and AIMS, Richard T. Farmer School of Business**

### **EDUCATIONAL BACKGROUND**

**Ph.D. University of Missouri-Columbia, August 1997** Journalism, Specialization in Advertising Research

Dissertation Title: "The Effects of Progressive Levels of Telepresence in On-Line Advertising: Interactivity, Vividness, and Attitude-Behavior Consistency"

**M.A. University of Missouri-Columbia, December 1994** Journalism

**Rockhurst University, December 1986** Major: English

### **ACADEMIC APPOINTMENTS**

**Associate Professor, with tenure, of Marketing and Armstrong Interactive Media Studies**

Richard T. Farmer School of Business, Miami University, Oxford, OH, 2012 – Present

**Assistant Professor of Marketing and Armstrong Interactive Media Studies**

Richard T. Farmer School of Business, Miami University, Oxford, OH, 2006 – 2012

**Associate Professor, with tenure, of Marketing and International Business**

Zicklin School of Business, Baruch College, CUNY, New York, NY, 2004 – 2006

**Assistant Professor of Marketing and International Business**

Zicklin School of Business, Baruch College, CUNY, New York, NY, 1997 – 2003

### **RESEARCH (Last 10)**

### **REFEREED PUBLICATIONS**

1. Lee, Sooun, Joshua Schwarz, James R. Coyle, Thomas Boulton, and Naoki Kameda (2013)
2. "Important Business Considerations For Successful Entry Into the China Market," *Journal of Business Case Studies*, 10(1) (contribution 20%)
3. Ahrens, Jan, James R. Coyle and Michal Strahilevitz (2013) "Electronic Word of Mouth: The Effects of Incentives on eReferrals by Senders and Receivers," *European Journal of Marketing*, 47(7), 1034-1051 (contribution 33%)
4. Coyle, James R., Glenn Platt and Ted Smith (2012) "'I'm Here to Help': How Companies' Microblog Responses to Consumer Problems Influence Brand Perceptions," *Journal of Research in Interactive Marketing*, 6(1), 27-41. (contribution 60%)
5. Coyle, James R., Ted Smith, Liz Lightfoot, William Neace, and Glenn Platt (2011) "'Click Here to Share With a Friend': A Uses and Gratifications Approach to Word-of-Mouth Marketing Effectiveness," *International Journal of Electronic Marketing and Retailing*, 4 (4) (contribution 40%; acceptance rate 38% - information provided by editor)
6. Ahrens, Jan and James R. Coyle (2011), "A Content Analysis of Registration Processes in Websites: How Advertisers Gather Information to Customize Marketing Communications," *Journal of Interactive Advertising*, 11(2) (contribution: 50%; acceptance rate: 24%)



7. Clarke, James B. and James R. Coyle (2011) "A Capstone Wiki Knowledge Base: The Usability Test of an Online Engineering Research Tool Designed to Promote Life-Long Learning." *Issues in Science & Technology Librarianship*, Spring (contribution: 25%; acceptance rate: 70% - information provided by editor)
8. Coyle, James R. and Rita Ormsby (2010), [www.dollarsfromsense.com](http://www.dollarsfromsense.com), [Multimedia Educational Resources for Learning and Online Teaching](#) (contribution: 75%; acceptance rate: 20%--in addition, this work was given a 5-star rating, a rating achieved by only about 13.5% of work that is accepted - information provided by editor)
9. Kim, Heeman, James R. Coyle, and Stephen J. Gould (2009), "Collectivist and Individualist Influences on Website Design in South Korea and the U.S.: A Cross-Cultural Content Analysis," *Journal of Computer-Mediated Communication*, 14(3), 581-601 (contribution: 40%; impact factor: 1.96, 3rd highest among 67 communication journals included in the ISI database; acceptance rate 20%; number of times cited – 3)
10. Coyle, James R., Stephen J. Gould, Pola Gupta, and Reetika Gupta (2009), "'To Buy or To Pirate': The Matrix of Music Consumers' Acquisition-Mode Decision-Making," *Journal of Business Research*, (contribution 60%; impact factor 1.77; Yoo ranking: 13th out of 79 marketing journals; ABS ranking: 3; acceptance rate 6-10%; number of times cited – 14)
11. Coyle, James R., Andrew Mendelson, and Heeman Kim (2008), "The Effects of Interactive Images and Goal-Seeking Behavior On Telepresence and Site Ease of Use," *Journal of Website Promotion*, 3(1/2), 39-61. (contribution 75%; acceptance rate 21-30%; number of times cited – 1)

**DEVON S. DeLVECCHIO**  
**Richard T Farmer School of Business**  
**Miami University, Oxford Ohio**

[delvecds@miamioh.edu](mailto:delvecds@miamioh.edu)

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**Education**

Ph.D., Marketing Indiana University, 2001

Master of Business Administration, Marketing University of South Carolina, 1993

Bachelor of Science, Finance Pennsylvania State University, 1990

**Academic Appointments**

**Raymond E. Gloss Professor of Business in Marketing 2016-Present**

**Professor of Marketing, 2014-Present**

**Associate Professor and Endres Research Fellow, 2009 - 2014**

**Assistant Professor, 2005-2009**, Richard T. Farmer School of Business Miami University

**Assistant Professor, 2001-2005**, Gatton College of Business & Economics University of Kentucky

**Refereed Journal Publications (Last 10)**

1. Devon DelVecchio, Haeran Jae, and Jodie L. Ferguson (2018), "Consumer Aliteracy." Accepted at *Psychology & Marketing*.
2. DelVecchio, Devon, William J. Jones, and Eric Stenstrom (2017), "Integrating Partitioned Prices via Computational Estimation." *Psychology & Marketing*, 34 (8), 823-835.
3. Devon DelVecchio, Timothy B. Heath, and Max Chaucin (2017), "When Signal Swamps Substance: The Effects of Multi-Unit Discount's Positive and Negative Cues on Sales." *Journal of Product & Brand Management*, 26 (7), 750-758.
4. Sanjay Puligadda, Devon DelVecchio and Bob Gilbreath (2014), "Meaningful Marketing: A Process Investigation of How Consumers Reward Non-interruptive, Non-persuasive Marketing Communication" *Journal of Marketing Communications*, 20 (5), 325-338.
5. Devon DelVecchio and Timothy B. Heath (2013), "The Effect of Dual Anchors on Numeric Judgments: The Moderating Effects of Anchor Order and Domain Knowledge," in *Advances in Consumer Research* Volume 40, eds. Zeynep Gürhan-Canli, Cele Otnes, and Rui (Juliet) Zhu, Duluth, MN: Association for Consumer Research, Pages: 547-552.

6. Devon DelVecchio and Sanjay Puligadda (2012), "The Effects of Discounts on Perceptions of Brand Quality: A Choice Task Perspective," *Journal of Product and Brand Management*, 21 (September), 465-474.
7. Timothy B. Heath, Devon DelVecchio, and Michael S. McCarthy (2011), "The Asymmetric Effects of Extending Brands to Lower and Higher Quality," *Journal of Marketing*, 75 (July), 3-20.
8. Haeran Jae, Devon DelVecchio, and Terry Childers (2011), "Are Low-Literate and High-Literate Consumers Different? Applying Resource Matching Theory to Ad Processing across Literacy Levels." *Journal of Consumer Psychology*, 21 (July), 312-323.
9. Devon DelVecchio, Arun Lakshmanan, and H. Shanker Krishnan (2009), "The Effects of Discount Location and Frame on Consumers' Price Perceptions." *Journal of Retailing*, 85 (September), 336-346.
10. Devon DelVecchio and Timothy B. Heath (2008), "An Experimental Test of Brand Insulation Against Competitor Attacks: Effects of Consumer Heterogeneity and Residual Desire," *Psychology and Marketing*, 25 (October), 944-960.

## Teaching

### Courses Taught

- Services Marketing (MKT 399)
- Branding and Integrated Marketing Communications (MKT 435)
- Highwire Brand Studio (MKT 442)
- Advanced Marketing Research (MKT445)
- Marketing Practicum (MKT 495)
- Marketing Management and Creativity – MBA (MKT 601/602)
- Customer Acquisition - MBA (BUS 622)
- Brand Equity Management – MBA (MKT 635)
- Promotions Management (University of Kentucky)
- Doctoral Seminar in Consumer Behavior (University of Kentucky)
- Consumer Behavior (Indiana University)

## Scott B. Dust, Ph.D.

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### ACADEMIC APPOINTMENTS

- Assistant Professor **Miami University**, Farmer School of Business  
Department: Management  
Oxford, OH: May 2015 – Current
- Assistant Professor **Eastern Kentucky University**, College of Business and Technology  
Department: Management, Marketing, and International Business  
Richmond, KY: August 2013 – May 2015

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### EDUCATION

- Ph.D. **Drexel University**, LeBow College of Business  
Concentration: Management/Organizational Behavior  
Philadelphia, PA: August 2009 – June 2013
- M.B.A. **Indiana University**, Kelley School of Business  
Concentration: Management  
Indianapolis, IN: August 2007 – May 2009
- B.S. **Indiana University**, Kelley School of Business  
Concentration: Management and Entrepreneurship  
Bloomington, IN: August 2001 – December 2004

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### RESEARCH

#### **Peer-Reviewed Scholarly Publications (Last 10)**

Graham, K. A., Dust, S. B., & Ziegert, J. C. (in press). Supervisor-employee power distance incompatibility, gender similarity, and relationship conflict: A test of interpersonal interaction theory. *Journal of Applied Psychology*.

Dust, S. B., Rode, J. C., Arthaud-Day, M., Culbertson, S., & Ramaswami, A. (in press). Managing the self-esteem, employment gaps, and employment quality process: The role of facilitation- and understanding-based emotional intelligence. *Journal of Organizational Behavior*.

Dust, S. B., Resick, C. J., Margolis, J. A., Mawritz, M. B., & Greenbaum, R. L. (in press). Ethical leadership and employee success: Examining the roles of psychological empowerment and emotional exhaustion. *The Leadership Quarterly*.

Margolis, J. A., & Dust, S. B. (in press). It's all relative: A social comparison perspective on organizational based self-esteem in teams. *Group and Organization Management*.

Dust, S. B., & Ziegert, J. C. (2016). Multi-leader teams in review: A contingent-configuration perspective of effectiveness. *International Journal of Management Reviews*, 18(4), 518-541.

Dust, S. B. (2015). Mindfulness, flow, and mind wandering: The role of trait-based mindfulness in state-task alignment. *Industrial and Organizational Psychology*, 8(4), 1-6.

Mawritz, M. B., Dust, S. B., & Resick, C. J. (2014). Hostile climate, abusive supervision, and employee coping: Does conscientiousness matter? *Journal of Applied Psychology*, 99(4), 737-747.

Dust, S. B., Resick, C. J., & Mawritz, M. B. (2014). Transformational leadership, psychological empowerment, and the moderating role of mechanistic-organic contexts. *Journal of Organizational Behavior*, 35(3), 413-433.

Dust, S. B., & Greenhaus, J. H. (2013). Integrating spirituality and the work-home interface: A resource and demand perspective. *Journal of Management, Spirituality, and Religion*, 10(3), 282-305.

Resick, C. J., Hargis, M. B., Shao, P., & Dust, S. B. (2013). Ethical leadership, moral equity judgments, and discretionary work behavior. *Human Relations*, 66(7), 951-972.

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## TEACHING

### Experience (Last 4 years)

#### **Miami University**

Winter 2018 - Introduction to Management and Leadership (MGT 291 B): 4/4

Spring 2017 - Leadership and Learning (MGT 415 A): 4/4

Spring 2017 - Leadership and Learning (MGT 415 B): 3.97/4

Fall 2016 - Introduction to Management and Leadership (MGT 291 G): 3.82/4

Spring 2016 - Introduction to Management and Leadership (MGT 291 A): 3.71/4

Spring 2016 - Introduction to Management and Leadership (MGT 291 B): 3.71/4

Fall 2015 - Introduction to Management and Leadership (MGT 291 C): 3.6/4

Fall 2015 - Introduction to Management and Leadership (MGT 291 D): 3.94/4

CURRICULUM VITAE**STEVEN ROBERT ELLIOTT**

September, 2018

**EDUCATION:** Ph.D Economics, University of Colorado  
Boulder, CO, 1990.  
Thesis - "Innovative Rate Structures for Electrical Power  
Utility Load Management: An Experimental Approach".  
M.A. Economics, University of Colorado  
Boulder, CO, 1989.  
B.S. Economics (Honors), [Minor: Mathematics] University of Wyoming  
Laramie, WY, 1986.

**POSITIONS:** Chief Departmental Advisor, Department of Economics,  
Miami University, Fall 2012 to Present

Associate Professor, Department of Economics  
Miami University, Fall 2005 to Present

Faculty Affiliate, Institute for Environmental Science  
Miami University, Fall 2010 to Present

Visiting Assistant Professor, Department of Economics  
Miami University, Fall 1998 to Fall 2000.

Visiting Assistant Professor, Department of Economics  
Michigan Technological University, Fall 1997 to Summer 1998.

Visiting Professor, Department of Economics  
University of Colorado, Fall 1996 to Fall 1997.

Research Associate, Energy, Environment and Resource Center  
University of Tennessee, 1995 to Fall 1996.

Research Associate, Energy Division  
Oak Ridge National Laboratory, 1991 to 1995.

Post Doctoral Research Associate, Economic Science Laboratory  
University of Arizona, 1990 to 1991.

**FIELDS OF SPECIALIZATION:**

Applied Microeconomics  
Environmental Economics  
Industrial Organization

Regulation  
 Experimental Economics Methods  
 Labor Economics

**PUBLICATIONS:**

a) Refereed (Last 10)

“Assessment of Economic Sustainability of the Strip Clear-Cutting System in the Peruvian Amazon” (with D. Gorchov and X. Rondon), *Forest Policy and Economics*, Vol. 12, No. 5, pp 340-348, July, 2010.

“Sustainability: An Economic Perspective,” *Resources, Conservation and Recycling*, Vol. 44, No. 3, pp. 263-267, June, 2005.

"Evaluating Development Alternatives for a High-Quality Stream Threatened by Urbanization: Big Darby Creek Watershed," (with O.H. Erikson, O.L. Loucks, M. Smith, and R.J.F. Bruins) *Economics and Ecological Risk Assessment: Applications to Watershed Management*, (R.J.F. Bruins, Randall J.F. and Matthew T. Heberling eds), CRC Press, Boca Raton, Chapter 10, pp. 227-252, 2005.

"Assurance Information: an Experimental Study," (with L. Davis and B.P. Joyce), *Journal of Economics*, Vol. 30, No. 2, 2004.

“Approaching Sustainability Through a Business-Science Synthesis,” (with O.H. Erikson, R.F. Gorman, T.C. Krehbiel, O.L. Loucks, and A.M. Springer), *Teaching Business Sustainability: From Theory to Practice*, (C. Galea, ed), Greenleaf Publishing, London, Chapter 10, pp. 151-155, 2004.

“Integrating Business and Environmental Education” (with O.H. Erikson, R.F. Gorman, T. C. Krehbiel, O. L. Loucks), *Teaching Business Sustainability: From Theory to Practice*, (C. Galea, ed), Greenleaf Publishing, London, Chapter 6, pp. 95-106, 2004

"An Experimental Examination of Vertical Control and Cost Predation" (with J. Brown-Kruse and R. Godby), *International Journal of Industrial Organization*, Vol. 21, pp. 253-281, 2003.

"Rationing Supply Capacity Shocks: A Laboratory Comparison of Second Best Mechanisms," (with J. Brown-Kruse, W. Schulze and S. Ben-David) *Research in Experimental Economics* (Mark Isaac ed.). JAI Press, Greenwich, Connecticut, Vol 8. pp 153-183, 2001.

"Understanding Experimental Economics and Policy Analysis in a Federal Agency: The Case of Marketable Emissions Trading," (with D.J. Bjornstad and D. Hale) *Research in Experimental Economics* (Mark Isaac ed). JAI Press, Greenwich, Connecticut, Vol 7, pp. 163-180, 1999.

"Speculation in Experimental Markets for Emission Permits," (with T. Cason and M. Van Boening) in *Research in Experimental Economics* (Mark Isaac ed.). JAI Press, Greenwich, Connecticut, Vol. 7, pp. 93-120, 1999.

**Deborah Fletcher**  
**Department of Economics**  
**Miami University**  
**Phone: 513-529-4937**  
**fletchd@miamioh.edu**

### **Professional Experience**

Associate Professor, Miami University, 2010 – present Assistant Professor, Miami University, 2004 – 2010

Visiting Assistant Professor, University of Florida, 2004

Visiting Assistant Professor, University of North Florida, 2003 - 2004

### **Education**

Ph. D., Economics, University of Florida, August 2003 M.A., Economics, University of Florida, August 2001

B.A., Economics, University of South Florida, December 1998

### **Teaching and Research Interests**

Public Economics, Empirical Methods, Game Theory, Economics of Education, Microeconomics, Economics of Cuba

### **Published and Accepted Research Papers**

1. “Suburbanization, Demographic Change and the Consequences for School Finance,” with David N. Figlio, in press, *Journal of Public Economics*
2. “Bad Government Can Be Good Politics: Political Reputation, Negative Campaigning and Strategic Shirking,” with Steven Slutsky, *The B.E. Journal of Theoretical Economics (Contributions)* 10:1, May 2010, article 22
3. “Campaign Allocations Under Probabilistic Voting,” with Steven Slutsky, *Public Choice*, January 2010, DOI 10.1007/s11127-010-9599-4
4. “The Influence of the Elderly on School Spending in a Median Voter Framework,” with Lawrence W. Kenny, *Education Finance and Policy* 3:3, Summer 2008, 283-315 (lead article)
5. “The Economic Impact of the Olympic Games: Ex Ante Predictions and Ex Post Reality,” with Philip K. Porter, *Journal of Sport Management* 22, July 2008, 470-486
6. Research in Progress
7. “A Little Bit Nasty, Some of the Time: Mixed Strategy Equilibria in Political Campaigns,” with Steven Slutsky
8. “Colonel Blotto with Imperfect Targeting,” with Steven Slutsky
9. “Estimating the Effects of Campaign Spending When Voters May or May Not Swing,” with Steven Slutsky

### **Presentations**

2011: Public Choice Society meetings

2010: Public Choice Society meetings; NBER Fiscal Federalism Conference

2009: Public Choice Society meetings

2008: Public Choice Society meetings; World Congress of the Game Theory Society; Southern Economic Association meetings



- 2007: World Public Choice Society Meetings; International Conference on Business, Management and Economics
- 2006: New York University, Political Economy Seminar Series; University of Florida, Department of Economics Seminar Series; Society for Social Choice and Welfare
- 2005: Public Choice Society meetings (discussant)
- 2004: Southern Economic Association meetings (discussant)
- 2003: Public Choice Society meetings; American Education Finance Association meetings
- 2002: Southern Economic Association meetings; Public Choice Society meetings; American Education Finance Association meetings
- 2001: International Atlantic Economic Association meetings

**Teaching Experience Courses Taught:**

Game Theory, Economics of Education, Examining Economic Models and Data, Principles of Microeconomics, Public Sector Economics (Public Finance), Managerial Economics, Principles of Macroeconomics

**Honors Theses:**

- Brian Clark (2010), "Economics Majors are from Mars... Modeling Major Choice and the Gender Gap for Economics at Miami." First Reader
- Whitney Cole (2009), "How Does Campaign Spending Affect Election Outcomes? A Review and Comparative Analysis of Approaches to Endogeneity." First Reader.
- Will Sherlock (2009), "The International Expansion of Major League Baseball: The Case of Europe." Third Reader.
- Alan Cook (2008), "Boeing versus Airbus: An Economic Analysis." Third Reader.
- Lauren Rummel (2008), "Banking in a Free Society: Old Issues and New Concerns." Third Reader.

**JIM FRIEDMAN, Ph.D.**  
**7769 FANCYCAB COURT**  
**CINCINNATI, OHIO 45231**  
**513-608-9119**  
[jimfriedman@mac.com](mailto:jimfriedman@mac.com)

## EDUCATION

1980-1982	Union Institute, Cincinnati, OH Degree: Ph.D. Communication
1978-1979	University of Cincinnati - College of Arts and Sciences Credits toward M.A. Communication
1973-1978	University of Cincinnati-College of Design, Architecture and Art Degree: B.S. Design/ Industrial Design
2011-2012	iPEC: Institute for Professional Empowerment Coaching Certification: CPC Certification: ELI-MP
2012	The Hermann Institute, Lake Lure, NC. Certification: HBDI Assessment
2013	University of Georgia, Athens, GA TTCT, Torrance Test of Creative Thinking Course
2013	de Bono Consulting, Chicago, IL de Bono Course in Creativity, Lateral Thinking, Six Hats

## ACADEMIC EXPERIENCE

2015-Current	Miami University, Oxford, Ohio Farmer School of Business   Institute of Entrepreneurship White Family Clinical Professor of Creativity
2012-2014	Miami University, Oxford, Ohio Farmer School of Business Clinical Professor
2008- 2012	Miami University, Oxford, Ohio Farmer School of Business Markley Executive Visiting Professor of Marketing
1997	Miami University, Oxford, Ohio Adjunct Professor of Mass Communication
1993- 2004	Thomas More College Adjunct Professor of Communication

## ACADEMIC EXPERIENCE: CONTINUED

1991- 1993	Hughes High School for the Communication Professions Lecturer and Mentor for Broadcast students
1986-1989	Northern Kentucky University Assistant Professor of Radio/Television/Film
1986	University of Cincinnati Adjunct Professor, Broadcast Writing
1985-1986	Northern Kentucky University Lecturer in Radio/Television/Film
1985	Cincinnati Technical College - Adjunct Professor
1984-2002	The Union Institute Adjunct Professor in Communication
1983	Xavier University Lecturer in Communication Arts
1980-1981	Wilmington College Adjunct Instructor of Fine Arts and Humanities
1978	University of Cincinnati Lecturer: Freshman design seminars

## PROFESSIONAL EXPERIENCE (Last 13 Years)

2013- Current	Blind Squirrels Creative Group, Inc Creative Marketing, Branding, Consulting and Coaching
1993-2012	Blind Squirrels Production Group, Inc. (Formerly The Magic Production Group, Inc) Founder, Chief Creative Officer/VP Marketing Creating/Writing/Producing/Directing Broadcast, Cable programs, corporate communications, educational videos and Integrated Marketing programs
1996-2006	Startalk, Inc. Vice-President/Producer Produce three movie review features each week Syndicated to television stations in three states
2000-2005	The Dreambuilder Institute, Inc. Founder/President/Producer Created and operate a non-profit 501(c) 3 organization dedicated to annual diversity and opportunity-based screenwriting competition.
1996-2002	The Dreambuilder Celebration, Inc. Founder/Vice-President/Producer/Chief Marketing Officer Created and operate an annual diversity and opportunity-based screenwriting competition. Produced and directed eight movies and distributed to twenty-seven Midwest stations

## **Megan W. Gerhardt**

Department of Management  
Farmer School of Business  
Miami University  
Office Phone: (513) 529-4235  
Email: [gerharmm@miamoh.edu](mailto:gerharmm@miamoh.edu)

### **EDUCATION**

- Ph.D. University of Iowa, August 1998-May 2003**  
Organizational Behavior, Secondary Specialization: Human Resource Management  
Dissertation Title: “Does It Work For Everyone? Examining the Effects of Trainee Disposition and Situational Constraints on Change in Self-Efficacy as a Result of Self-Management Training”
- B.A. University of Iowa, August 1994-May 1998**  
Major: Psychology; With Honors  
Honors Thesis: “Autobiographical Memory Recall in Social Anxiety”

### **PROFESSIONAL EXPERIENCE**

**Associate Professor of Management**  
**Farmer School of Business, Miami University, Oxford, OH July 2009-present**

**Assistant Professor of Management**  
**Farmer School of Business, Miami University, Oxford, OH, May 2003-June 2009**

### **RESEARCH INTERESTS**

My primary research interests involve examining the role of individual in motivation, leadership, and learning. Specifically, my research aims to determine the degree to which individual differences facilitate or constrain the development of motivation, the effectiveness of leaders, and the outcomes of training programs.

### **REFEREED JOURNAL ARTICLES (All Blind Peer Reviewed- Last 10)**

- Gerhardt, M.W. (accepted for publication, October 2014). The Importance of Being...Social? Instructor Credibility and the Millennial Student. *Studies in Higher Education* (Contribution: 100%; Impact Factor: 1.28).
- Gerhardt, M.W., Brown, K.G., & Dysvik, A. (accepted for publication, February 2014). A bridge over troubled water: A former military officer, corporate executive, and business (Contribution: 35%, Impact Factor: 1.594)
- Gerhardt, M.W. & Le, H.A. (accepted for publication, May 2013). Overt Narcissism and Approach-Avoidance Motivation: Expanding the Lens to Examine Goal Orientation, *Journal of Organizational Psychology* (Contribution: 75%;

- Luzadis, R. & Gerhardt, M. (2012). An exploration of the relationship between ethical orientation and goal orientation. *Journal of Academic and Business Ethics*, 5. (Contribution: 50%, Journal Acceptance Rate: 30%, Cited by 3; as per Google Scholar).
- Wesolowski, M., Luzadis, R.A., & Gerhardt, M.W. (2011). Understanding the nomological net for gender bias. *Journal of Organizational Psychology*, 1, (Contribution: 33%)
- Gerhardt, M.W., Ashenbaum, B.A., Newman, W.R. (2009). Understanding the Impact of Proactive Personality on Job Performance: The Roles of Tenure and Self-Management. *Journal of Leadership and Organizational Studies*. (Contribution: 50%, Cited by 14, as per Google Scholar, Journal Acceptance Rate: 17%, Impact Factor: forthcoming 2015).
- Gerhardt, M.W. & Luzadis, R.A. (2009). The Importance of Perceived Task Difficulty in Goal Orientation-Assigned Goal Alignment. *Journal of Leadership and Organizational Studies*. (Contribution: 50%, Cited by 5, as per Google Scholar); Journal Acceptance Rate: 17%, Impact Factor: forthcoming 2015).
- Gerhardt, M. W.; Rode, J.C.; Peterson, S. J. (2007). Exploring mechanisms in the personality-performance relationship: Mediating roles of self-management and situational constraints. *Personality and Individual Differences*, 43 (6), 1344-1355. (Contribution: 40%; Cited by 23, as per Google Scholar); Journal Acceptance Rate: 40%; Journal Impact factor: 1.861)
- Barbosa, S.D.; Gerhardt, M. W.; Kickul, J.R. (2007). The Role of Cognitive Style and Risk Preference on Entrepreneurial Self-Efficacy and Entrepreneurial Intentions. *Journal of Leadership & Organizational Studies*, 13 (4), 86-104. (Contribution: 20%; Cited by 156 (as per Google Scholar), Journal Acceptance Rate: 18%, Impact Factor forthcoming 2015)
- Gerhardt, M. (2007). Teaching Self-Management: The Design and Implementation of Self-Management Tutorials. *Journal of Education for Business*, 83(1), 11-18. (Contribution-100%; Cited by 27, as per Google Scholar); Journal Acceptance rate: 52%)

## **COURSES TAUGHT (Miami University)**

### **Miami University**

MGT 415: Leadership and Learning

MGT 381: Managerial Communication and Consulting

MGT 615: Managerial Development

MGT 291: Introduction to Management and Leadership (formally Organizational Behavior and Theory)

MGT 291C: Introduction to Management and Leadership-Honors (formally Organizational Behavior and Theory-Honors)

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 3119 Farmer School of Business  
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 Oxford, OH 45255  
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881 Eaglesknoll Court  
 Cincinnati, OH 45255  
 Cell: 513-382-3005  
[dhavelka@yahoo.com](mailto:dhavelka@yahoo.com)

## EDUCATION

- Ph.D.** Texas Tech University, December 1994  
 Rawls College of Business  
 Department of Information Systems and Quantitative Analysis  
 Major Field: Management Information Systems  
 Minor Fields: Accounting Information Systems & Research Methods
- M.S.** Texas Tech University, May 1992  
 Rawls College of Business  
 Area of Department of Information Systems and Quantitative Sciences  
 Primary Field: Management Information Systems
- M.B.A.** Miami University, May 1983  
 Farmer School of Business  
 Concentration: Finance
- B.A.** Miami University, May 1982  
 College of Arts and Sciences  
 Major: Chemistry

## PROFESSIONAL CERTIFICATION

**Certified Public Accountant**, Ohio, 1997 - Present

## PROFESSIONAL WORK HISTORY

**Associate Professor of IS**, Farmer School of Business, Miami University, Oxford, Ohio, 2006-Present  
**Assistant Professor of IS**, Farmer School of Business, Miami University, Oxford, Ohio, 2000-2006  
**Project Manager for EC Industry Negotiation**, AT&T, Cincinnati, OH, 1997-2000  
**Assistant Professor of Accounting and Information Systems**, Thomas More College, 1996-1998  
**Visiting Assistant Professor of MIS**, Ohio University, Athens, OH, 1994-1997  
**Assistant Professor of MIS**, Northern Kentucky University, Highland Heights, KY, 1992-1994  
**Dean's Lecturer in MIS**, Texas Tech University, Lubbock, TX, 1988-1992  
**Sales Representative**, Van Waters & Rogers Co., Exon Ave, Evandale, OH. 1987-1988  
**Product Controller (Cost Accounting)**, The Andrew Jergens Co., Cincinnati, OH, 1984-1987  
**Financial Analyst**, Dun & Bradstreet Co., Van Nuys, CA, 1982-1983

## REFEREED JOURNAL PUBLICATIONS (Last 10)

- Bradds, N., Hills, E. Masters, K., Weiss K., Havelka, D., “Accentra Pharmaceuticals: Thrashing through ERP Systems,” *Information Systems Education Journal*, March 2017, v15, n2, p60.
- Havelka, Douglas, “The impact of social cognitive theory and social capital theory on knowledge sharing during student projects,” accepted at the *Journal of Information Systems Education*.
- Connelly, B., Dalton, T., Murphy, D., Rosales, D. Sudlow, D., and Havelka, D., “Too much of a good thing: User leadership at TPAC,” *Information Systems Education Journal*, March 2016, v14, n2.
- Brumberg, R., Gamble, G., Kops, E., Little, E., Underbakke, J., and Havelka, D., “Stalled ERP at Random Textiles,” *Information Systems Education Journal*, March 2016, v14, n2.
- Cain, J.R., Levorchick, M., Matuszak, A., Pohlman, A., and Havelka, D., “eLoanDocs: Riding the Waves of Technology without Wiping Out,” *Communications of the Association for Information Systems*, 2015, v36, n38.
- Havelka, D. and Neal, C.S. “A Basic Set of Criteria for Evaluation of Teaching Cases,” *Information Systems Education Journal*, April 2015, v13, i4, p41.
- Cohill, K., Dudley, D., Gregg, J., Millette, E., Zinnecker, A., and Havelka, D., “USMCo Payroll System,” *Information Systems Education Journal*, March 2015, v13, i2.
- Cundiff, J., McCallum, T., Rich, A., Truax, M., Ward, T. and Havelka, D., “HealthCare.Com: Opportunity Out of Disaster,” *Journal of Information Systems Education*, Fall 2014, v25, n3.
- Krehbiel, T., Eighme, J., and Havelka, D., “Fast Initial Response Control Charts for Accounting Activities,” *Journal of Business and Economics Research*, September 2013, v11, n9.
- Havelka, Douglas and Merhout, J.W., “Internal Information Technology Audit Process Quality: Theory development using structured group processes,” *International Journal of Accounting Information Systems*, v14, n3, p165-192, September 2013.

## TEACHING EXPERIENCE

### Miami University Associate Professor, 2006-Present Assistant Professor, 2000-2006

#### Courses taught:

- ISA621: Enabling Technologies I (MBA program)
- ISA617: Computers and Management Information Systems (MBA program)
- ISA601: Management of Information Technology (MBA program)
- ISA682: Information Systems Audit and Control (Masters of Accountancy program)
- ISA625: IT for Accountants (Masters of Accountancy program)
- ISA435: Advanced Databases in Electronic Commerce
- ISA406: IT Project Management
- MIS399: Global Information Technology (in Europe)
- MIS387: Systems Analysis & Design
- MIS385: Electronic Commerce Applications
- MIS303: Enterprise Systems (with SAP)
- MIS305: Information Security and Assurance
- MIS281: IT Hardware and Operating Systems (VB Programming)
- MIS245: Database Information Systems

## Dan L. Heitger

Deloitte Professor of Accounting & Center for Business Excellence Co-Director  
2042C Farmer School of Business, Miami University  
(513) 529-6208; [heitgedl@miamioh.edu](mailto:heitgedl@miamioh.edu)  
Center for Business Excellence website: [www.fsb.miamioh.edu/cbe](http://www.fsb.miamioh.edu/cbe)

### EDUCATION

Ph.D., Accounting, Michigan State University, 2000.  
BS, cum laude in accounting, minor in mathematics, Indiana University, 1993.

### EXPERIENCE

2013 – Present *Miami University*, Deloitte Professor of Accounting  
2011 – 2012 *Miami University*, Professor  
2006 – Present *Miami University*, Co-Founder & Co-Director, Center for Business Excellence  
2007 – 2011 *Miami University*, Associate Professor  
2004 – 2006 *Miami University*, Assistant Professor  
2002 – 2003 *Indiana University*, Visiting Assistant Professor  
1999 – 2004 *Auburn University*, Assistant Professor  
1993 – 1999 *Michigan State University*, Ph.D. Student; Research/Teaching Assistant  
1992 *Ernst & Young*, Indianapolis, IN, Audit Intern

### *Refereed Publications (Last 10)*

- (1) Ballou, B., Heitger, D., and C. Landes. “Accounting for the Sustainability Cycle,” New York: American Institute of Certified Public Accountants ([aicpa.org/FRC](http://aicpa.org/FRC)). 2013—Invited white paper by AICPA and reviewed by external experts selected by AICPA.
- (2) EY (Craig Faris, Brian Gilbert, and Brendan LeBlanc) and Miami University (Brian Ballou and Dan Heitger). “Demystifying Sustainability Risk: Integrating the Triple Bottom Line into an Enterprise Risk Management Program,” 2013, The Committee of Sponsoring Organizations of the Treadway Commission ([www.coso.org](http://www.coso.org))—invited white paper by COSO and reviewed by external experts and COSO members.
- (3) Krzus, M., Brian B., and D. Heitger. “The Economics of Sustainability,” 2013, New York: American Institute of Certified Public Accountants ([www.aicpa.org/FRC](http://www.aicpa.org/FRC)) —invited white paper by AICPA and reviewed by external experts selected by AICPA.
- (4) Ballou, B., Heitger, D., and T. Eaton, “Schneider Electric North America: Demonstrating the Business Value of Safety, Health and Environmental Programs.” 2013. National Safety Council—Invited case and teaching notes by Schneider Electric as one element of it receiving the NSC’s Robert W. Campbell Award for internal safety practices.
- (5) Ballou, B., Casey, R., Grenier, J., and D. Heitger. 2012. “Exploring the Perceived Effectiveness of Sustainability Initiatives: Opportunities for Accounting Research.” *Accounting Horizons*, Vol. 26 (2): 265-288.
- (6) Stoel, D., Ballou, B., and D. Heitger. 2011. Board of Director Perceptions of Risk Management Information: Analysis of COSO’s Strengthening Enterprise Risk Management for Strategic Advantage. *Management Accounting Quarterly*, Summer 2011,<sup>33</sup>



Vol. 12 (4): 14-22.

- (7) Schultz, T., and D. Heitger. 2011. "Can Your Business Afford *Not* to Go Green?" *The CPA Journal*. November.
- (8) Booker, D., Heitger, D., and T. Schultz. 2011. "The Effect of Causal Knowledge on Individuals' Perceptions of Nonfinancial Performance Measures in Profit Prediction". *Advances in Accounting*. Vol. 27 (1): 1-9.
- (9) Heitger, D., B. Ballou, and T. Schultz. 2010. "The Actions to Value Framework: Linking Managerial Behavior to Organizational Value." *Management Accounting Quarterly*. Vol. 11 (4): 1-9.
- \* (10) Ballou, B., Heitger, D., and L. Donnell. 2010. "Creating Effective Dashboards: How Companies Can Improve Executive Decision Making and Board Oversight." *Strategic Finance*. March: 27-32.

## TEACHING

Primary teaching interests include risk management, governance, business sustainability, and all levels of managerial accounting. Secondary teaching interests include financial accounting. Teaching experiences involve both undergraduate and graduate students (Masters of Accountancy, Masters of Business Administration, and Professional Masters of Business Administration), as well as numerous senior executives from various companies. A summary of teaching evaluations concludes this vita.

## L. Allison Jones-Farmer

### Academic Employment:

Van Andel Professor of Business Analytics 2014-Present-Miami University  
 C&E Smith Professor of Statistics 2013-2014-Auburn University  
 C&E Smith Associate Professor of Statistics 2007-2012-Auburn University  
 Assistant Professor of Statistics 2003-2006-Auburn University  
 Assistant Professor of Statistics 1997-2002-University of Miami

### Education:

Ph.D. Applied Statistics. The University of Alabama (1997).  
 M.S. Applied Statistics. The University of Alabama (1996).  
 B.S. Mathematics, Birmingham Southern College (1990).

**Research:** (46 refereed journal articles, 2 invited discussions, 3 scholarly book chapters). Last 10 journal articles published:

1. Shepherd, D.K., **Jones-Farmer, L.A.**, Rigdon, S.E., and Bodden, K.M. (2018) To Shrink or Not to Shrink: Hotellings  $T^2$  Chart Based on Shrunken Covariance Estimates. *Quality and Reliability Engineering International*, to appear.
2. Weese, M.L., Martinez, W.G., and **Jones-Farmer, L.A.** (2017). On the Selection of the Bandwidth Parameter for the k-chart. *Quality and Reliability Engineering International*, 33, 1527-1547.
3. Mazzei, M., Rutherford, M., **Jones-Farmer, L.A.**, and Oswald, S. (2016). Does Establishing Sociopolitical Legitimacy Overcome Liabilities of Newness? A Longitudinal Analysis of Top Performers. *Group & Organization Management*, doi:10.1177/1059601116676391.
4. Almer, E.D., Baldwin, A.A., **Jones-Farmer, L.A.**, Lightbody, M., and Single, L.F. (2016). Tenure Track Opt-Outs: Leakages from the Academic Pipeline. *Advances in Accounting Education: Teaching and Curriculum Innovations*, 1-36.
5. Weese, M., Martinez, W., Megahed, F., and **Jones-Farmer, L.A.** (2016). Statistical Learning Methods Applied to Process Monitoring: An Overview and Perspective. *Journal of Quality Technology*, 48(1), 4-27.
6. Cegielski, C, and **Jones-Farmer, L.A.** (2016). Knowledge, Skills, and Abilities for Entry-Level Business Analytics Positions: A Multi-Method Study. *Decision Sciences Journal of Innovative Education*, 14 (1), 91-118. **Winner of the DSJIE 2016 Best Research Article Award.**
7. Bourrie, D.M., **Jones-Farmer, L.A.**, and Sankar, C.S. (2016). Learning Technologies: Bridging the Gap between Intention, Adoption, and Routine Use. *International Journal of Engineering Education*, 32(5), 2107-2120.
8. Bourrie, D.M., **Jones-Farmer, L.A.**, and Sankar, C.S. (2016). Growing the Intention to Adopt Educational Innovations: An Empirical Study. *Knowledge Management and E-Learning* 8(1), 22-38.
9. Saleh, N., Mahmoud, M.A., **Jones-Farmer, L.A.**, Zwetsloot, I., and Woodall, W.H. (2015). Another Look at the EWMA Control Chart with Estimated Parameters. *Journal of Quality Technology*, 47 (4), 363-382.
10. Keefe, M.J., Woodall, W.H., and **Jones-Farmer, L.A.** (2015). The Conditional In-Control Run Length Performance of Self-Starting Control Charts. *Quality Engineering*, 27 (4), 488-499.

**Teaching:**

Award-winning educator with over twenty years of teaching experience in statistics and analytics at undergraduate, Master's, M.B.A., specialized Master's and Ph.D. levels in face-to-face, hybrid, and online formats. Supervised twenty-four Master's and Ph.D. students.

**Editorial Service:**

Editorial Board, *Journal of Quality Technology* since 2010

Guest Editor, *Journal of Quality Technology* 2016-2017

Associate Editor, *Technometrics* 2000-2005

**Janice Kinghorn, Ph.D.**  
**Senior Lecturer**  
**Economics**  
**Farmer School of Business**  
[kinghornj@miamioh.edu](mailto:kinghornj@miamioh.edu)

### Academic Degrees

Ph.D. Washington University, St. Louis, MO, Economics, 1996

M.A. Washington University, St. Louis, MO, Economics, 1993

B.S. Miami University, Oxford, OH 45056, Accounting, 1988

### Employment Experience

#### Academic

Assessment Director, Farmer School of Business, Miami University, Oxford Campus (2014 - Present), Oxford, Ohio.

Senior Lecturer, Department of Economics, Miami University Oxford Campus (2013 - Present), Oxford, Ohio.

Director of University Honors Program, Miami University Middletown Campus (2009 - 2013), Middletown, Ohio.

Lecturer, Miami University (August, 2008 - 2013), Middletown, Ohio.

Associate Professor, Antioch College (2006 - 2008), Yellow Springs, Ohio.

Associate Dean of Faculty for the Core Program, Antioch College (2005 - 2008), Yellow Springs, Ohio.

Chair, Department of Social and Global Studies, Antioch College (2004 - 2005), Yellow Springs, Ohio.

Assistant Professor, Antioch College (2003 - 2006), Yellow Springs, Ohio.

Web-Based Instruction, Antioch College (2002 - 2002), Yellow Springs, Ohio. Teaching Across the University Pilot Program

Visiting Assistant Professor, Antioch College (1999 - 2003), Yellow Springs, Ohio.

Adjunct Professor, University of Dayton (1999 - 1999), Dayton, Ohio.

Adjunct Professor, Wright State University (1998 - 2001), Dayton, Ohio. Graduate School

Assistant Professor, The New School for Social Research (1996 - 1999), New York, New York. Graduate Faculty

Visiting Professor, University of Munich (1996 - 1996), Munich, Germany.

Instructor, Washington University (1992 - 1994), St. Louis, Missouri.

### Courses Taught

**Courses from the Teaching Schedule:** Economic Development (Bachelors), Economic Perspectives on Inequality in America (Bachelors), FSB International Programs - Latin America (Bachelors), FSB Southeast Asia (Bachelors), Principles of Macroeconomics (Bachelors), Principles of Microeconomics (Bachelors), Principles of Microeconomics - Honors (Bachelors)

### Other Teaching Activities and International Instruction

2015 - Taught BUS 299. Vietnam, Cambodia, Thailand, Hong Kong

2014 - Taught ECO 347  
Vietnam, Cambodia, Hong Kong

2013 - Taught BUS 399  
Costa Rica and Panama

2012 - Taught BUS 399  
Costa Rica and Cuba

2011 - Taught BUS 399  
Costa Rica

### **Articles in Journals**

Kinghorn, J. (2014). The New Digital Divide - Peer Collaboration as a Bridge. *Association for University Regional Campuses of Ohio Journal*.

Kinghorn, J. & Womack-Smith, W. (2013). Nontraditional Honors. *Journal of the National Collegiate Honors Council*.

Kinghorn, J. (2011). Approaches to Improved Learning in Foundational Courses. *Association for University Regional Campuses of Ohio Journal*.

### **Articles in Proceedings**

Kinghorn, J. (2013). Can Virtual Mentors Bridge the Digital Divide. *UNM Mentoring Institute 6th Annual Conference*.

Kinghorn, J. (2011). Public Capital in a Knowledge Economy: Implications for Learning. *International Conference on Knowledge, Economy and Management*.

### **Chapters, Cases, Readings, Supplements**

Kinghorn, J. & Nielsen, R. (2008). Education and Economic Development. *Yearbook of the National Society for the Study of Education* (pp. 196-206). Wiley Online.

Kinghorn, J., Nettles, E., & Smith, C. (2008). Student Perception of Educational Needs: Exploring the Evidence. *Exploring the Evidence: Reporting Research on First Year Seminars* (pp. 1-5). National Resource Center for The First-Year Experience & Students in Transition.

## Younghwa Gabe Lee, Ph.D.

### Education

- Ph.D., University of Colorado at Boulder, 2005  
Major: Information Systems
- MBA, Korea University, South Korea, 1993  
Major: Quantitative Analysis and Operations Management
- B.A., Korea University, South Korea, 1991  
Major: Productions and Operations Management

### Academic and Professional Positions

- Professor**, Miami University (August 2017 - Present)
- Associate Professor**, Miami University (August 2013 – July 2017)
- Associate Professor**, University of Northern Iowa (August 2010 – May 2013)
- Assistant Professor**, University of Kansas (August 2005 - May 2010)

### Research Publications (Last 10 Journal Papers Published)

- Chen, A.N.K., and Lee, Y. "Managing Online Wait: Designing Effective Waiting Screens Across Cultures," *Information and Management*, forthcoming.
- Hwang, Y., Chung, J., Shin, D. and Lee, Y. "An Empirical Study on the Integrative PreImplementation Model of Technology Acceptance in a Mandatory Environment," *Behaviour & Information Technology*, 36(8), 2017, pp. 861-874.
- Lee, Y., Chen, A.N.K., and Hess, T. "The Online Waiting Experience: Using Temporal Information and Distractors to Make Online Waits Feel Shorter," *Journal of the Association for Information Systems*, 18(3), 2017, pp. 231-263.
- Hwang, Y., Al-Arabi, M., Shin, D. and Lee, Y. "Understanding Information Proactiveness and the Content Management System Adoption in Pre-Implementation Stage," *Computers in Human Behavior*, 64, 2016, pp. 515-523.
- Hwang, Y., Lee, Y., and Shin, D. "The Role of Goal Awareness and Information Technology Self-Efficacy on Job Satisfaction of Healthcare System Users," *Behaviour and Information Technology*, 35(7), 2016, pp. 548-558.
- Lee, Y., Lee, J., and Hwang, Y. "Relating motivation to information and communication technology acceptance: Self-determination theory perspective," *Computers in Human Behavior*, 51(part A), 2015, pp. 418-428.
- Lee, Y., Chen, A., and Ille, V. "Can Online Wait Be Managed? The Effect of Filler Interfaces and Presentation Modes on Perceived Waiting Time Online," *MIS Quarterly*, 36(2), 2012, pp.365-394.
- Lee, Y. and Kozar, K. "Music Composition Theory and Web Purchases," *Journal of Electronic Commerce Research*, 13(4), 2012, pp. 320-344.
- Lee, Y and Chen, A. "Usability Design and Psychological Ownership of a Virtual World," *Journal of Management Information Systems*, 28(3), 2012, pp. 269-307.
- Lee, Y. and Kozar, K." Understanding of Website Usability: Specifying and Measuring Constructs and Their Relationships," *Decision Support Systems*, 52(2), 2012, pp.450-463.

### Teaching Experience

- Miami University: Web Interaction Programming, Designing Business Systems
- University of Kansas and University of Northern Iowa: Database Management & Theory, IS Project Management, Managerial Information Systems

### Editorial Service

- Associate Editor, The International Conference on Information Systems (ICIS), 2014, 2017
- Track Chair, The Americas Conference on Information Systems (AMCIS), 2007-Current.
- Special Issue Editor, DATA BASE for Advances in Information Systems, 2007-2008.

## MICHAEL LIPSITZ

Email: [lipsitm@miamioh.edu](mailto:lipsitm@miamioh.edu)

Website: [sites.google.com/site/malipsitz](https://sites.google.com/site/malipsitz)

### EDUCATION

- Ph.D. (2017) Economics, Boston University  
 Dissertation: *The Costs and Benefits of Noncompete Agreements*  
 Committee: Andrew Newman, Kevin Lang, and Juan Ortner
- B.A. (2009) Economics and Mathematics, Haverford College

### EMPLOYMENT HISTORY

- 2017 – Present Assistant Professor  
 Department of Economics, Farmer School of Business, Miami University, Oxford, OH
- 2015 Instructor  
 Department of Economics, Northeastern University, Boston, MA
- 2013 – 2015 Instructor  
 Department of Economics, Boston University, Boston, MA
- 2009 – 2011 Research Assistant  
 Policy Analysis, Inc., Brookline, MA

### FIELDS OF INTEREST

Labor Economics, Organizational Economics, Industrial Organization

### TEACHING EXPERIENCE

- 2018 Sports Economics, Department of Economics, Miami University
- 2017 – 2018 Intermediate Microeconomic Theory, Department of Economics, Miami University
- 2017 – 2018 Advanced Microeconomic Theory (M.A.), Department of Economics, Miami University
- 2014 – 2016 Sports Economics, Department of Economics, Boston University
- 2015 Microeconomic Theory (M.A./Ph.D.), Department of Economics, Northeastern University
- 2014 – 2015 Game Theory, Summer Challenge, Boston University
- 2013 Introductory Microeconomic Analysis, Department of Economics, Metropolitan College of Boston University

### AWARDS, FELLOWSHIPS, AND GRANTS

- 2016 Gitner Prize for Excellence in Teaching Undergraduates, Boston University
- 2011 – 2016 Boston University Teaching Fellowship
- 2015 Institute for Economic Development Student Research Grant (with Matt Johnson) Boston University

### PUBLICATIONS/SUBMITTED PAPERS

- Lipsitz M, Delea T, Guo A. “Cost-effectiveness of letrozole vs. anastrozole in postmenopausal women with hormone receptor positive early stage breast cancer,” *Current Medical Research and Opinion*, October 2010, Vol. 26, No. 10, Pages 2315-2328.

Weycker D, Danel A, Marciniak A, Bendall K, Lipsitz M, Pettengell R. “Economic costs of chemotherapy-induced febrile neutropenia among patients with non-Hodgkin's lymphoma in European and Australian clinical practice,” *BMC Cancer*, August 2012, Vol. 12, No. 362.

Lipsitz M, Belloni A, Chernozhukov V, Fernandez-Vál I. “quantreg.nonpar: An R Package for Performing Nonparametric Series Quantile Regression.” (Conditionally accepted by *The R Journal*, October 2016)

“Why Are Low-Wage Workers Signing Noncompete Agreements?” (with Matthew Johnson; under review)

#### **WORKING PAPERS**

“Effortless Employee Retention: The Impact of Noncompete Agreements on Productivity”

“Noncompete Agreements and Labor Market Dynamics”

“Employee Poaching and Promotion: A Theory with No Informational Advantages”

#### **WORKS IN PROGRESS**

“Do Noncompete Agreements Make Noncompetitive Labor Markets?” (with Matthew Johnson and Kurt Lavetti)

“The Effect of Corporate Consolidation on Regulatory Outcomes”

“A Geospatial Approach to Estimating the Effects of Local Labor Market Concentration”

“The External Effect of Occupational Licensing and the Shape of Labor Markets” (with Austin Smith)

#### **PRESENTATIONS**

2018	AEA Annual Meeting, American Law and Economics Association Annual Meeting, University of South Florida, Miami University
2017	Miami University (x2), University of Georgia
2016	Boston University
2015	Boston University, MIT (Sloan)
2014	Boston University
2013	Boston University

#### **SOFTWARE PROFICIENCIES**

R, LaTeX, STATA, SAS, Visual Basic, Mathematica

#### **SOFTWARE PACKAGES**

“quantreg.nonpar: Nonparametric Series Quantile Regression in R,” June 2015 (with Alexandre Belloni, Victor Chernozhukov, and Iván Fernandez-Vál)

#### **PROFESSIONAL SERVICE**

Referee for *The R Journal*

Boston University Labor Reading Group Organizer, 2014-2015

M.A. Thesis committee member: 2018: Alex Lust, Tyler Schumacher



# Waldyn Martinez

## Curriculum Vitae

Miami University, FSB2020

☎ (513) 529 2154

☎ (513) 529 9689

✉ martinwg@miamioh.edu

updated: September 25, 2018

*"I can do all things through Christ which strengtheneth me." Philippians 4:13*

### Research Fields

Statistical Learning, Machine Learning, Deep Learning, Outlier & Noise Detection, Application of Machine & Statistical Learning Techniques in Industry.

### Education

- 2007–2012 **Ph.D. Applied Statistics**, *The University of Alabama*, Tuscaloosa, AL.
- 2007–2009 **M.Sc. Applied Statistics**, *The University of Alabama*, Tuscaloosa, AL.
- 2004–2006 **M.B.A.**, *The University of Alabama*, Tuscaloosa, AL.
- 2001–2004 **M.Sc. Management**, *Pontificia Universidad Católica Madre y Maestra*, Dominican Republic.
- 1996–2000 **B.Sc. Computer Science/Informatics Engineering**, *Universidad Tecnológica de Santiago*, D.R.

### Experience

- 2013–Current **Assistant Professor Business Analytics**, MIAMI UNIVERSITY, Oxford, OH.
- 2012–2013 **Assistant Vice President, Risk Modeling & Analytics**, JPMORGAN, Columbus, OH.
- 2007–2012 **Teaching Assistant (Instructor)**, THE UNIVERSITY OF ALABAMA, Tuscaloosa, AL.
- 2006–2007 **Assistant Vice President, Market Analytics**, BANK OF AMERICA, Charlotte, NC.
- 2005–2005 **(Intern) HR Productivity Analysis**, MACY'S LOGISTICS & OPERATIONS, Secaucus, NJ.
- 2001–2004 **Airport Operations**, AMERICAN AIRLINES, POP Airport, Dominican Republic.

### Publications [6]

- [1] Weng, B., **Martinez, W.**, Tsai, Y.T., Li, C., Lu, L., Barth, J., Megahed, F. M.: Macroeconomic Indicators can Help Predict the Monthly Closing Price of Major U.S. Indices: Insights from Artificial Intelligence, Time-Series Analysis and Hybrid Models, *Applied Soft Computing*, 2018, <https://doi.org/10.1016/j.asoc.2018.07.024>
- [2] Weng, B., Wang, X., Lu, L., **Martinez, W.**, Megahed, F. M.: Predicting Short-Term Stock Prices using Ensemble Methods and Online Data Sources, *Expert Systems with Applications*, 2018, <https://doi.org/10.1016/j.eswa.2018.06.016>
- [3] Weese, M., **Martinez, W.**, Jones-Farmer, A.: On the Selection of the Bandwidth Parameter for the k-Chart, *Quality and Reliability Engineering International*, 2017, 33 (7): 1527-1547
- [4] **Martinez, W.** and Gray, J. B: Noise Peeling Methods for Improving Boosting Algorithms, *Computational Statistics and Data Analysis*, 2016, 93: 483-497.
- [5] Weese, M., **Martinez, W.**, Megahed, F., Jones-Farmer, A.: Statistical Learning Methods for Statistical Process Control, *Journal of Quality Technology*, 2016, 48 (1).
- [6] **Martinez, W.** and Gray, J. B: The role of margins in the performance of Boosting, *Wileys Interdisciplinary Reviews (WIREs) Computational Statistics*, 2014, 6: 124-131.

### Current Research: Submitted, under Review, under Revision [4]

- [1] **Martinez, W.**: Ensemble Pruning via Margin Maximization, under revision: *The Journal of Machine Learning Research*, 2018
- [2] **Martinez, W.** and Gray, J. B: On the Insufficiency of the Large Margins Theory in Explaining Boosting Algorithms, under 2nd-round review: *The Journal of Machine Learning Research*, 2018
- [3] Mercado, G. R., Chakraborti, S., **Martinez, W.**: A Data-driven Adaptive Distribution-free Control Chart for Monitoring Location, under 2nd-round review: *Journal of Quality Technology*, 2018
- [4] **Martinez, W.**, Weese, M., Jones-Farmer, A.: A One-Class Peeling Method for Multivariate Outlier Detection with Applications in Phase I SPC, under review: *Technometrics*

## Teaching Experience

ISA-491	<b>Introduction to Data Mining in Business, Miami University</b>	<i>Instructor</i>
ISA-480B	<b>Business Statistics using R, Miami University</b>	<i>Instructor</i>
ISA-291	<b>Applied Regression Analysis in Business, Miami University</b>	<i>Instructor</i>
ISA-205	<b>Business Statistics, Miami University</b>	<i>Instructor</i>
ST-509	<b>Statistics for Business (MBA), University of Alabama</b>	<i>Teaching Assistant</i>
ST-475/575	<b>Statistical Quality Control, University of Alabama</b>	<i>Teaching Assistant</i>

## University Service

Current	High Performance Computing Committee, Miami University
Current	Curriculum Committee, ISA Department, Miami University
Current	Diversity Committee, Farmer School of Business, Miami University
2017	Center for Analytics and Decision Sciences (CADS) Faculty Project Lead
2015	STARS Seminar Committee, ISA Department, Miami University
2014	Student Scholarship Awards Committee, ISA Department, Miami University
2014	Faculty Search Committee (Assistant Professor B. Analytics), ISA Department, Miami University
2014	Faculty Search Committee (Van Andel Chair Professorship B. Analytics), ISA Department, Miami University

## Awards & Grants

2017	" <b>FSB Summer Research Grant</b> ," \$6,000 Award. Farmer School of Business, Miami University.
2014	" <b>Outstanding Dissertation Research Award</b> ," Culverhouse College of Commerce and Business Administration, University of Alabama.
2014	Nominated for " <b>University-Wide Award for Outstanding Dissertation Research</b> ," University of Alabama.
2011	" <b>Summer in Excellence Research Grant</b> ." \$5,000 Award. University of Alabama.
2010	" <b>CB&amp;A Excellence in Teaching Award by a Doctoral Student</b> ," Culverhouse College of Commerce and Business Administration, University of Alabama.
2010	Nominated for " <b>University-Wide Award for Excellence in Teaching by Doctoral Student</b> ," University of Alabama.
2010	" <b>Jeff Kurkjian Teaching Award</b> ," University of Alabama.
2010	" <b>Summer in Excellence Research Grant</b> ." \$5,000 Award. University of Alabama.
2009	" <b>Jeff Kurkjian Teaching Award</b> ," University of Alabama.
2004	" <b>Fulbright Scholar</b> ".
2003	" <b>Employee Excellence Award for the Dominican Republic</b> ," American Airlines.
2002	" <b>Excellent Performance as Customer Service Agent</b> ," American Airlines.
1996	" <b>Valuable Contribution to Society Award for Youth</b> ," Dominican Republic Department of Education. (Academic achievement, among top scores in the country's high school standard tests).
1995	Memorial Award " <b>Marjorie Bolton</b> " & <b>Class Valedictorian</b> , Mary Lithgow H.S. (#1 out of > 500).
1995	" <b>Top honors student Mathematics, Sciences &amp; Physics Track</b> " (#1 out of 36) & " <b>Gold Medal</b> " for academic performance throughout high school. (Mary Lithgow High School).

## Michael S. McCarthy

Farmer School of Business  
 Miami University  
 3025 Farmer Hall  
 Oxford, OH 45056  
 (513) 529-1223  
 mccartms@miamioh.edu

5129 Riverview Drive  
 South Lebanon, OH 45065  
 (513) 290-3880

### EDUCATION

#### Doctor of Philosophy

Joseph M. Katz Graduate School of Business, University of Pittsburgh  
 Major in Marketing, Minor in Strategic Planning and Policy  
 Graduated -- December 1996

#### Master of Business Administration

College of Business, Rochester Institute of Technology  
 Major in Marketing  
 Graduated with Highest Honors -- November 1988

#### Bachelor of Science in Business Administration

College of Business, Rochester Institute of Technology  
 Graduated with Highest Honors -- August 1979

### ACADEMIC POSITIONS

#### Farmer School of Business, Miami University

Visiting Instructor	Fall 1993 to Spring 1996
Assistant Professor of Marketing	Fall 1996 to Spring 2001
Associate Professor of Marketing	Fall 2001 to Spring 2012
Professor	Fall 2012 to Present
Teaching/Taught: <i>Branding and Integrated Marketing Communications, Highwire Brand Studio, Strategy Works, Marketing Management (MBA), Brand Equity Management (MBA)</i>	

#### Slippery Rock University

Assistant Professor of Marketing	Winter 1993
Taught <i>Principles of Marketing, Promotion Management, and Sales Management</i>	

#### Katz Graduate School of Business, University of Pittsburgh

Graduate Research Assistant	Fall 1989 to Summer 1992
Part-time Instructor	Winter 1991 to Spring 1992
Taught <i>Advertising and Promotion</i>	

#### College of General Studies, University of Pittsburgh

Part-time Instructor	Fall 1990 to Fall 1992
Taught <i>Principles of Marketing and Advertising and Promotion</i>	

#### English Department, University of Pittsburgh at Greensburg

Part-time Instructor  
Taught *Advertising and Promotion*

Fall 1990 to Fall 1991

College of Business, Rochester Institute of Technology

Adjunct Instructor  
Taught *Advertising and Promotion*

Winter 1985

SCHOLARLY ACTIVITY

Journal Articles (Last 10):

McCarthy, Michael S. and Gillian W. Oakenfull, (2014) "CAUCUS: Brand Association Elicitation in a Competitive Context," *Journal of Advertising Research* 54 (2), 163-177.

Fram, Eugene H. and Michael S. McCarthy, (2011) "Retaining Customer in Turbulent Times." *International Journal of Bank Marketing*, 29 (7).

Heath, Timothy B., Devon DeVecchio and Michael S. McCarthy, (2011) "The Asymmetric Effects of Extending Brands to Lower and Higher Quality," *Journal of Marketing*, 75 (July), 3-20.

Abridged version being re-printed as, "Line Extension Asymmetry: Higher-Quality Line Extensions Help — Lower-Quality Line Extensions Do Only Little Harm," in GfK Marketing Intelligence Review, May 2013.

Oakenfull, Gillian and Michael S. McCarthy, (2010) "Examining the Relationship Between Brand Usage and Brand Knowledge Structures," *Journal of Brand Management*, 17 (Oct), 279-288.

Oakenfull, Gillian K., Michael S. McCarthy and Timothy B. Greenlee, (2008) "Targeting a Minority Without Alienating the Majority: Advertising to Gays and Lesbians in Mainstream Media," *Journal of Advertising Research*, 48 (June), 191-198.

McCarthy, Michael S. and Eugene H. Fram, (2008) "Synergistic Effects of Promotional Products and Print Advertising in Building Brand Equity for a New Brand," *Journal of Promotion Management*, 14, 3-15.

McCarthy, Michael S. and Eugene H. Fram, (2007) "Hike Up Brand Equity," *Promotional Products Business*, August.

Borna, Shaheen, James Stearns, Ramon Avila and Michael McCarthy, (2005) "Obesity Effects and Interactions in the Sales Management Context: Social Category and Social Identity Explanations," *Marketing Management Journal*, 15 (Fall), 132-143.

Fram, Eugene H. and Michael S. McCarthy, (2004) "What's Not To Like?" *Marketing Management*, 13 (July/Aug), 36-39.

Fram, Eugene H. and Michael S. McCarthy, (2003) "The Authors Respond" *Marketing Management*, 12 (Sept/Oct), 51.

**CAROL MCGUIRE, PH.D.**

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**EDUCATION**

- 2012 – 2016**     **PhD • Management**  
CASE WESTERN RESERVE UNIVERSITY – Cleveland, OH
- 1997 – 2003**     **Master of Business Administration • Management**  
UNIVERSITY OF ST. THOMAS – St. Paul, MN
- 1983 - 1987**     **Bachelor of Science • Organizational Behavior and Management Information Systems**  
MIAMI UNIVERSITY – Oxford, OH

**TEACHING INTERESTS**

Management Information Systems	Strategic Leadership in the Digital Economy
Strategic Technology Management	Business Intelligence and Analytics
Strategic Global Sourcing	Organizational Behavior

**ACADEMIC EXPERIENCE**

- MIAMI University – Oxford, OH **2016 – Present**  
**Visiting Assistant Professor**
- COPENHAGEN BUSINESS SCHOOL – Copenhagen, Denmark **2018 – Present**  
**Part-time Lecturer**
- Guest Lectures**  
Fall 2015                      *Chatham University, Pittsburgh, PA*  
Spring 2016                    “Global Outsourcing: Introduction, Challenges, and Future Trends”

**COURSE DESIGN EXPERIENCE**

- 2017                      Introduction to Management Information Systems (Undergraduate level course, redesign)
- 2018                      Information Technology Management for the Digital Economy (Master’s level course, new)
- 2018                      Strategic Management – Competitive Strategy (Master’s level course, new)
- 2018                      Introduction to Management Information Systems (Undergraduate level course, redesign - online)

**CAREER EXPERIENCE**

- ORGANIZATION DYNAMICS – Minneapolis, MN **2014 – Present**  
**Managing Partner**
- AMERIPRISE FINANCIAL – Minneapolis, MN **2006 – 2014**  
**Vice President, Technologies**
- ALLINA HOSPITALS AND CLINICS – Minneapolis, MN **1994 – 2006**  
**Manager, Data Warehouse and Business Intelligence**

## RESEARCH PAPERS

McGuire, C., Lyytinen K., Boland, R. (2014). *Does an IT Organization Transform its Identity when engaged in Outsourcing?* (Case Western Reserve University).

McGuire, C., Lyytinen K., Lindberg, A. (2015). *How Organizational Identity influences Information Technology (IT) Outsourcing Success* (Targeting MIS Quarterly Executive).

McGuire, C., Lyytinen, K. (2015). *The Power of Who We Are: How Organizational Identity Influences Information Technology (IT) Outsourcing Success* (Targeting Strategic Outsourcing).

## RESEARCH PRESENTATIONS

- 2018 *International Conference on Information Systems, San Francisco, California.*  
"Improving IS Research Relevance for Practitioners: The Role of Knowledge Networks"
- 2018 *Americas Conference on Information Systems, New Orleans, Louisiana.*  
"Driving Relevance into the Introductory Information Systems Course"
- 2017 *Lilly Annual Conference on College Teaching, Oxford, Ohio.*  
"Scholar-Practitioners Bridging The Skills Gap Through Innovative Curriculum Redesign"
- 2017 *Environmental Design Research Association Annual Conference, Madison, Wisconsin.*  
"Integration of Factors that Affect the Engagement and Performance of Workers in Workplace: Worker-centered Approach"
- 2017 *Academy of Management Annual Conference, Atlanta, Georgia.*  
"Human-Centered Organizations: Redefining the Pillars of 21st Century Work Life"
- 2016 *Americas Conference on Information Systems, San Diego, California*  
"The Power of Who We Are: How Organizational Identity Influences Outsourcing Success"
- 2016 *International Conference on Engaged Management Scholarship, Paris, France.*  
"Human-Centered Organizations: Redefining the Pillars of 21st Century WorkLife"
- 2015 *University of Minnesota - Carlson School of Management, Minneapolis, MN*  
"Influence of Organizational Identity on Outsourcing Success"
- 2015 *Americas Conference on Information Systems, Puerto Rico.*  
"How Organizational Identity influences Information Technology (IT) Outsourcing Success"
- 2015 *International Conference on Engaged Management Scholarship, Baltimore, Maryland.*  
"The Influence of Organizational Identity on Outsourcing Success"
- 2014 *Academy of Management – Midwest Conference, Minneapolis, Minnesota.*  
"Does an Organization Transform its Identity when Engaged in Outsourcing?"
- 2013 *International Conference on Engaged Management Scholarship, Atlanta, Georgia.*  
"Does an Organization Transform its Identity when Engaged in Outsourcing?"

## Fadel Megahed

### Academic Employment:

Assistant Professor of Information Systems and Analytics, 2016-Present | Miami University

Assistant Professor of Industrial and Systems Engineering, 2012-2016 | Auburn University

### Education:

Ph.D. Industrial and Systems Engineering. Virginia Tech (2012).

M.S. Industrial and Systems Engineering. Virginia Tech (2009).

B.S. Mechanical Engineering. The American University in Cairo (2008).

### Research:

- **Summary:** 30 refereed journal articles, 1 invited discussion, 1 scholarly book chapter.
- **Funding:** Over \$840K in research funding (PI share of: ~\$475). **Sponsors include:** Aflac, Amazon Web Services, American Society for Safety Professionals Foundation, National Science Foundation (NSF), NIOSH Deep South Center for Occupational Health & Safety, P&G, and Windows Azure.
- **Impact:** Total Google Scholar Citations: 473; h-index: 13; i10-index: 14.
- **Last 10 journal articles published:**
  1. Weng, B., Martinez, W., Tsai, Y. T., Li, C., Lu, L., Barth, J. R., & **Megahed, F. M.** (2018). Macroeconomic indicators alone can predict the monthly closing price of major US indices: Insights from artificial intelligence, time-series analysis and hybrid models. *Applied Soft Computing*, *71*, 685-697.
  2. Weng, B., Lu, L., Wang, X., **Megahed, F. M.**, & Martinez, W. (2018). Predicting Short-Term Stock Prices using Ensemble Methods and Online Data Sources. *Expert Systems with Applications*. DOI: <https://doi.org/10.1016/j.eswa.2018.06.016>.
  3. Alamdar Yazdi, M. A., Negahban, A., Cavuoto, L., & **Megahed, F. M.** (2018). Optimization of Split Keyboard Design for Touchscreen Devices. *International Journal of Human-Computer Interaction*, 1-10. DOI: <https://doi.org/10.1080/10447318.2018.1464255>
  4. Tsai, Y. T., Swartz, S. M., & **Megahed, F. M.** (2018). Estimating the Relative Efficiency of Highway Safety Investments on Commercial Transportation. *Transportation Journal*, *57*(2), 193-218.
  5. Mohabbati-Kalejahi, N., Yazdi, M. A. A., **Megahed, F. M.**, Schaefer, S. Y., Boyd, L. A., Lang, C. E., & Lohse, K. R. (2017). Streamlining science with structured data archives: insights from stroke rehabilitation. *Scientometrics*, *113*(2), 969-983.
  6. Dag, A., Oztekin, A., Yucel, A., Bulur, S., & **Megahed, F. M.** (2017). Predicting heart transplantation outcomes through data analytics. *Decision Support Systems*, *94*, 42-52.
  7. He, K., Zhang, M., Zuo, L., Alhwiti, T., & **Megahed, F. M.** (2017). Enhancing the monitoring of 3D scanned manufactured parts through projections and spatiotemporal control charts. *Journal of Intelligent Manufacturing*, *28*(4), 899-911.
  8. Weng, B., Ahmed, M. A., & **Megahed, F. M.** (2017). Stock market one-day ahead movement prediction using disparate data sources. *Expert Systems with Applications*, *79*, 153-163.
  9. Maman, Z. S., Yazdi, M. A. A., Cavuoto, L. A., & **Megahed, F. M.** (2017). A data-driven approach to modeling physical fatigue in the workplace using wearable sensors. *Applied Ergonomics*, *65*, 515-529.
  10. Lu, L., **Megahed, F. M.**, Sesek, R. F., & Cavuoto, L. A. (2017). A survey of the prevalence of fatigue, its precursors and individual coping mechanisms among US manufacturing workers. *Applied Ergonomics*, *65*, 139-151.

## Teaching:

- Educator with six years of experience teaching industrial engineering and data analytic courses. Taught undergraduate, MS and PhD level courses on data analytics (e.g., Big Data, Data Mining, Data Visualization and Prescriptive Analytics).
- Supervised five Master's students and six Ph.D. students.

## Professional Service:

1. Editorial Board, *Journal of Quality Technology* since 2018.
2. International Program Committee Member, *ISSAT International Conference on Data Science in Business, Finance and Industry*, 2018-2019 (to be held in Da Nang, Vietnam July 3-5, 2019).
3. Scientific Committee Member, *13<sup>th</sup> International Workshop on Intelligent Statistical Quality Control*, 2018-2019 (to be held in Hong Kong Aug 13-15, 2019).
4. Have reviewed for over 20 journals.



**Jeffrey W. Merhout, Ph.D, CPA (Inactive)**

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**Office Phone: (513) 529-8340**

**Home Phone: (513) 759-1774**

**Fax: (513) 529-6992**

**EDUCATION**

**Doctor of Philosophy in Business**, December, 2002

Virginia Commonwealth University, Richmond, Virginia

Major: Management Information Systems

Minor: Education (emphasis on Adult Education and Training)

Dissertation Title: Industry Case Studies for Testing and Refining the Electronic Markets Hypothesis

**Master of Business Administration**, July, 1993

Virginia Commonwealth University

**Bachelor of Science in Business** (Accounting), June, 1984

Virginia Polytechnic Institute and State University

**ACADEMIC WORK EXPERIENCE**

MIAMI UNIVERSITY, Oxford, Ohio (Jan., 2003 to present)

Associate Professor of MIS (promoted and tenured July 1, 2010)

Assistant Professor of MIS (Jan., 2003 to June 2010)

Teach graduate and undergraduate MIS courses; Perform and publish research in MIS, Provide service to the University, the School of Business, the Department of Information Systems and Analytics (formerly the Department of Decision Sciences and Management Information Systems) and to the profession.

VIRGINIA COMMONWEALTH UNIVERSITY (VCU), Richmond, Virginia, (Aug., 1996 to Aug., 2002)

Instructor, Graduate Research Assistant and Teaching Assistant

Plan and teach management information systems and computer lab courses, such as database management and systems analysis. Research literature and gather information to assist professors in their research. Provide statistical analyses for research projects.

**ACCEPTED JOURNAL PUBLICATIONS**

*Published: (Last 10)*

Schiller, Shu Z., Jeffrey W. Merhout, and Rike Sandlin (2016), "Enterprise IT Asset Disposition: An Overview and Tutorial," *Journal of the Midwest Association for Information Systems*, Vol. 2016, Issue 2, July 2016, Article 2, pp. 27-42. Available at:

<https://uofi.app.box.com/s/6pk7trznct7k26bxzjd1k1j8wvro648>

Merhout, Jeffrey W. and Joseph O'Toole (2015), "Enhancing the Control Objectives for Information and Related Technologies (COBIT 5) Framework for Sustainable IT Governance," *Journal of the Midwest Association for Information Systems*, Vol. 2015, 50

Issue 2, July 2015, pp. 5-13. Available at: <https://uofi.app.box.com/s/kuyhr9iy0as7udozrakwcrvcicsu383w>

Havelka, Douglas and Jeffrey W. Merhout (2013), "Internal Information Technology Audit Process Quality: Theory Development Using Structured Group Processes," *International Journal of Accounting Information Systems*, Volume 14, Issue 3, September 2013, pp. 165-192.

Sutirtha Chatterjee, Jeffrey W. Merhout, Suprateek Sarker, Allen S. Lee, (2013) "An examination of the electronic market hypothesis in the US home mortgage industry: A deductive case study," *Information Technology & People*, Vol. 26 Issue 1, pp.4 – 27

Merhout, Jeffrey W., Sarah L. Newport, and Patrick E. Damo (2012), "Teaching Tip: Simulated Audits to Engage Students in IT Governance and Assurance Courses," *Journal of Information Systems Education*, Volume 23, Issue 2, pp. 113-118.

Note: Cited in *JISE*, vol. 24, num 2, Summer 2013, p.99

Stoel, M. Dale, Douglas Havelka, and Jeffrey W. Merhout (2012) "An analysis of attributes that impact information technology audit quality: A study of IT and financial audit practitioners," *International Journal of Accounting Information Systems*, Volume 13, Issue 1, March 2012, pp. 60-79.

Rajkumar, T.M.; Anderson, Paul; Benamati, John; and Merhout, Jeffrey W. (2011) "Are Student Self-Assessments a Valid Proxy for Direct Assessments in Efforts to Improve Information Systems Courses and Programs? An Empirical Study," *The Communications of the Association for Information Systems*: Vol. 28, Article 31. Available at: <http://aisel.aisnet.org/cais/vol28/iss1/31>

Merhout, Jeffrey W. (2010), "Discussion of "Factors associated with IT audits by the internal audit function",," *International Journal of Accounting Information Systems*, Volume 11, Issue 3, September 2010, Pages 152-154.

Havelka, Douglas and Jeffrey W. Merhout (2009), "Toward A Theory of Information Technology Professional Competence," *Journal of Computer Information Systems*, Winter 2009-2010, Vol. 50, Issue 2, pp. 106-116.

Merhout, Jeffrey W. and Havelka, Douglas (2008) "Information Technology Auditing: A Value-Added IT Governance Partnership between IT Management and Audit," *The Communications of the Association for Information Systems*: Vol. 23, Article 26. Available at: <http://aisel.aisnet.org/cais/vol23/iss1/26>

## CURRICULUM VITAE

### CHARLES C. MOUL

Department of Economics  
Miami University  
Oxford, OH 45056

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### PERSONAL INFORMATION

Age: 46  
Family status: Married, three children  
Citizenship: U.S.

### ACADEMIC EXPERIENCE

2014 – Present	Associate Professor, Miami University
2008 – 2014	Assistant Professor, Miami University
2000 – 2008	Assistant Professor, Washington University in St. Louis

### EDUCATION

1994 – 2000	Northwestern University, Evanston, IL Ph.D., Economics, December 2000
1990 – 1994	Miami University, Oxford, OH B.A., <i>Magna cum laude</i> , Economics and Political Science

### PUBLICATIONS IN REFEREED JOURNALS

- “Hoping Grey Goes Green: An Analysis of the Impact of Environmental Factors on Consumer Choice,” with Jia Li and Wanqing Zhang. 2017. *Marketing Letters*. 28(2): 267-79.
- “Who Should Handle Retail? Vertical Contracts, Customer Service, and Social Welfare in a Chinese Mobile Phone Market,” with Jia Li. 2015. *International Journal of Industrial Organization*. 39: 29-43.
- “Estimating Demand for Spatially Differentiated Firms with Unobserved Quantities and Limited Price Data.” 2015. *Economics Letters*. 131: 50-53.
- “Bank Panics, Government Guarantees, and the Long Run Size of the Financial Sector: Evidence from Free-Banking America,” with Ben Chabot. 2014. *Journal of Money, Credit, and Banking*. 46(5): 961-97.
- “Time to Unbridle U.S. Thoroughbred Racetracks? Lessons from Australian Bookies,” with Joseph Keller. 2014. *Review of Industrial Organization*. 44(3): 211-39.
- “Disease or Utopia? Testing Baumol in Education,” with Xin Chen. 2014. *Economics Letters*. 122(2): 220-3.
- “The House Doesn’t Always Win: Evidence of Anchoring among Australian Bookies,” with Patrick McAlvanah. 2013. *Journal of Economic Behavior and Organization*. 90: 87-99.
- “A New Test for Monopoly with Limited Cost Data.” 2012. *Economics Letters*, 117: 891-4.
- “Money isn’t Everything: Linking college choice to winning prizes and professorships,” with John Nye. 2011. *Applied Economics Letters*, 18 (11): 1091-8.
- “How Far for a Buck? Tax Differences and the Location of Retail Gasoline Activity in Southeast Chicagoland,” with Mark Manuszak. 2009. *Review of Economics and Statistics*, 91(4): 744-65.

### **PUBLICATIONS IN REFEREED JOURNALS (continued)**

- “Did the Soviets Collude? A Statistical Analysis of Championship Chess 1940-78,” with John Nye. 2009. *Journal of Economic Behavior and Organization*, 70(1-2): 10-21.
- “Retailer Entry Conditions and Wholesaler Conduct: The theatrical distribution of motion pictures.” 2008. *International Journal of Industrial Organization*, 26(4): 966-84.
- “Prices and Endogenous Market Structure in Office Supply Superstores,” with Mark Manuszak. 2008. *Journal of Industrial Economics*, 56(1): 94-112.
- “Measuring Word-of-Mouth’s Impact on Theatrical Movie Admissions.” 2007. *Journal of Economics and Management Strategy*, 16(4), 859-92.
- “The Political Economy of Numbers: On the Application of Benford’s Law to International Macroeconomic Statistics,” with John Nye. 2007. *B.E. Journal of Macroeconomics*, 7(1) Topics: Article 17.
- “Evidence of Qualitative Learning-by-Doing from the Advent of the ‘Talkie’.” 2001. *Journal of Industrial Economics*, 49(1): 97-109.

### **OTHER PUBLICATIONS**

- “The Movie Industry,” in *The Structure of American Industry* 13<sup>th</sup> edition (2015), J. Brock (ed.), Waveland Press: Long Grove, IL.
- “Benford’s Law as a Test for Manipulation of Economic & Financial Data,” with John Nye, in *Benford’s Law: Theory and Applications* (2015), S. Miller (ed.), Princeton University Press: Princeton, NJ.
- “The Day After Tomorrow: Longer Run Issues in Theatrical Exhibition (Comment).” 2006. *Marketing Science*, 25(6): 665-6.
- *A Concise Handbook of Movie Industry Economics* (editor) 2005. Cambridge University Press: New York, NY.
- “Theatrical Release and the Launching of Motion Pictures,” with Steven Shugan, in *A Concise Handbook of Movie Industry Economics* (2005), Cambridge: New York, NY.

### **COURSES TAUGHT**

- Miami University: Principles of Microeconomics, Intermediate Microeconomics, Industrial Organization, Advanced Microeconomic Theory (MA)
- Washington University: Principles of Microeconomics, Industrial Organization, Empirical Methods in Industrial Organization (PhD)

### **HONORS AND AWARDS**

- Associated Student Government Outstanding Professor Winner 2015; Nominee: 2014, 2018
- Richard K. Smucker Teaching Excellence Award (Junior Professor), May 2013
- Arts & Sciences Faculty Award (Washington University) Winner 2007; Nominee 2004, 2008
- Center for Study of Industrial Organization Dissertation Fellow (Northwestern U.), Fall 1999
- Phi Beta Kappa, 1994
- George W. Thatcher Prize for Distinguished Economics Undergraduate, 1994
- Truman Scholar Semi-Finalist, 1993
- Eagle Scout

*Last updated August 17, 2018*

# Gregory T Niemesh

Miami University  
Department of Economics  
Farmer School of Business  
800 East High Street  
Oxford, OH 45056

Phone: (513) 529-2150  
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Homepage: <http://www.gregoryniemesh.net/>

## Current Employment and Affiliations

Assistant Professor (Economics), Miami University, 2013-present

National Bureau of Economic Research, Faculty Research Fellow (DAE), 2017

## Past Employment

Senior Lecturer (Economics), Vanderbilt University, 2012-2013

Economist, U.S. Bureau of Labor Statistics, 2004-2007

## Education

### **Vanderbilt University, 2007-2012**

Ph.D. in Economics, August 2012

M.A. in Economics, May 2009

Dissertation: The Economic and Health Benefits of Iron Fortification in the United States

Advisor: William J. Collins

Fields of Specialization: Economic History, Labor Economics, Health Economics

### **DePauw University, 2000-2004**

B.A. in Economics and Management, with minor in Computer Science, May 2004

Awards: Phi Beta Kappa, Magna Cum Laude

## Research Papers

"Ironing Out Deficiencies: Evidence from the United States on the Economic Effects of Iron Deficiency" *The Journal of Human Resources*, Vol. 50, No. 4 (Fall 2015): 910-958.

"Revisiting the Great Compression: Wage inequality in the United States, 1940-1960" (with Taylor Jaworksi). (2018) Forthcoming at *Historical Methods*.

"Revising Infant Mortality Rates for the Early 20th Century United States" (with Katherine Eriksson and Melissa Thomasson). Revise and resubmit at *Demography*. [NBER Working Paper 23263](#).

"Unions and the Great Compression of American Inequality, 1940-1960" (with William J. Collins). Revise and resubmit at *Economic History Review*.

"The Swan Song of the Country Doctor? How Flexner Changed the Practice of Medicine." (with Carolyn M. Moehling, Melissa Thomasson, and Jaret Treber). Manuscript.

"Long Term Effects of Early Life Malnourishment: The Bengal Famine of 1943" (with Jason Milliken). Manuscript.

"Do Menu Labeling Laws Translate into Results? Impacts on Population Obesity" (with Jackie Craig and Charles Moul). Manuscript.

"Death in the Promised Land: The Great Migration and Black Infant Mortality" (with Katherine Eriksson). Manuscript.

"Residential Racial Segregation and Infant Health, 1960-1990" (with Katharine Shester). Manuscript.

"The Impact of Medical Education Reforms on the Mortality Transition: The Case of Diphtheria." (with Carolyn M. Moehling and Melissa Thomasson). In progress.

## Honors and Fellowships

Richard K. Smucker Teaching Excellence Award: Outstanding Junior Professor, Farmer School of Business, 2017

Arthur H. Cole Grant in Aid, Economic History Association, 2014

John E. Rovensky Fellowship, University of Illinois Foundation, 2011-2012

Noel Dissertation Fellowship, Department of Economics, Vanderbilt University, 2011

College of Arts & Science Summer Research Award, Vanderbilt University, 2011

Kirk Dornbush Summer Research Grant, Vanderbilt University, 2009

Graduate School Dissertation Enhancement Grant, Vanderbilt University, 2011

Household International Best Research Paper, Vanderbilt University, 2010

Council of Economics Graduate Students Research Grant, 2010, 2011

## Teaching

### Courses Taught

Miami University: Intermediate Microeconomic Theory, Labor Economics, Principles of Microeconomics (Honors)

Vanderbilt University: Labor Economics, Economic Statistics, Seminar in Microeconomic Policy

### Theses Advised

Jason Milliken, "Long-term Labor Market Effects of the 1943 Bengal Famine," 2015, M.A. Economics Exit Paper (supervisor)

Kelsey O'Flaherty, "Income Inequality and Fertility Choice," 2016, Honors Thesis, (supervisor)

Jackie Craig, "Posted Calorie Count Mandates Effectiveness to Reduce Obesity," 2015, USS project, (co-supervisor with Charles Moul)

Jackie Craig, "Intergenerational Mobility of Women in Early 20th Century United States," 2017, Honors Thesis and M.A. Economics Exit Paper (supervisor)

Philip Sizemore, 2014, M.A. Economics Exit Paper (reader)

Nathan Klyn, 2014, M.A. Economics Exit Paper (reader)

Amber Staines, 2015, M.A. Economics Exit Paper (reader)

Chris Curme, 2016, M.A. Economics Exit Paper (reader)

## TERRY D. NIXON

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---

### AREAS OF INTEREST

Research: Corporate Restructuring, Agency Theory  
Teaching: Corporate Finance, Financial Institutions, Investments

### EDUCATION

**Ph.D. in Business Administration, Finance**  
University of South Carolina, 1996

**Master of Business Administration, Finance**  
Miami University, 1986

**Bachelor of Business Administration, Finance/Management**  
University of Cincinnati, 1984, Summa Cum Laude

### REFEREED PUBLICATIONS (Last 10)

Boulton, Thomas J. and Terry D. Nixon, 2017, The Litigation of Tax Benefit Preservation Plans, *Managerial Finance* 43, 76-94.

Arnold, Tom and Terry D. Nixon, 2013, An Easy Method to Introduce MIRR into Introductory Finance Classes, *Advances in Financial Education* 11, 70-74.

Leonard, David C., Terry D. Nixon, David G. Shrider and David M. Shull, 2010, Price Stabilization of Closed-End Fund IPOs, *Quarterly Journal of Finance and Accounting* 49, 5-22.

Nixon, Terry D., Greg Roth and Andrew Saporoschenko, 2010, An Analysis of Operating Performance and Firm Characteristics Around Open Market Share Repurchases, *Journal of Finance and Accountancy* 3.

Nixon, Terry D., Greg Roth, and Andy Saporoschenko, 2008, Long-Term Share Returns and Operating Performance Following Very Large, Highly Publicized, Insider Stock Purchases, *European Journal of Economics, Finance and Administrative Sciences* Issue 12, 134-142.

Arnold, Tom, Gayle Erwin, Lance Nail and Terry D. Nixon, 2006, Do option markets substitute for stock markets? Evidence from trading on anticipated tender offer announcements, *International Review of Financial Analysis* 15, 247-255.

Arnold, Tom, Lance Nail and Terry D. Nixon, 2006, Getting More Out of Two Asset Portfolios, *Journal of Applied Finance* 16, 72-81.

Arnold, Tom and Terry D. Nixon, 2006, Adding Depth to the Discussion of Capital Budgeting, *Journal of Financial Education* 32, 79-90.

Leonard, David C., Terry D. Nixon, and David M. Shull, 2005, Marketing Closed-End Fund IPOs: An Analysis of the International Stock Funds, *Financial Review* 40, 497-518.

Arnold, Tom, Lance Nail, and Terry D. Nixon, 2004, Do ADRs Enhance Portfolio Performance for a Domestic Portfolio? Evidence from the 1990s, *Research in International Business and Finance* 18, 341-359.

## **HONORS AND AWARDS**

MBA Teaching Award – Core Courses, 2016  
Richard K. Smucker Teaching Excellence Award, 2012  
Effective Educator Award Nominee, 2011  
Effective Educator Award Nominee, 2009  
MBA Teaching Award – Best Boot Camp Instructor, 2008  
PSE Outstanding Professor, 2007  
Richard K. Smucker Teaching Excellence Award, 2007  
Richard K. Smucker Teaching Excellence Award Finalist, 2005 and 2006  
MBE Outstanding Professor, 2005  
Financial Executive Institute Award (Outstanding Finance Graduate Student), 1986.  
Scholar Athlete Award, 1984  
Beta Gamma Sigma (Business Honor Society)

## **WORK EXPERIENCE**

Professor, Miami University, 2018 - Present  
Associate Professor, Miami University, 2007 - 2018  
Assistant Professor, Miami University, 2001 - 2007  
Visiting Assistant Professor, Indiana University, 1999 – 2001  
Assistant Professor, Florida Atlantic University, 1997 – 1999  
Visiting Assistant Professor, Indiana University, 1996 – 1997  
Instructor, University of South Carolina, 1991 – 1996  
Research Assistant, University of South Carolina, 1991 – 1995  
Controller/Office Manager, George Welding and Fabricating, Inc., 1987 – 1991

## **COURSES TAUGHT**

Introduction to Finance, Intermediate Finance (Investments and Corporate Finance), Advanced Managerial Finance, Portfolio Management, Commercial and Central Banking, Banking and Financial Intermediation, Financial Institutions, Corporate Strategy and Governance, International Business Finance, MBA introductory finance course



**GILLIAN W. OAKENFULL, Ph.D.**

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Cincinnati, OH 45220

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3038 Farmer School of Business  
Miami University  
Oxford, OH 45056

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**EDUCATION**

Ph.D., Marketing  
University of Houston  
Houston, Texas, 1998

Master of Business Administration  
Lamar University  
Beaumont, Texas, 1992

BBA, Management  
Lamar University  
Beaumont, Texas, 1988

**ACADEMIC EXPERIENCE**

- Director of Corporate Partnerships, Department of Marketing, Farmer School of Business 2014 – Present.
- Director of Experiential Learning, Department of Marketing, Farmer School of Business 2009 – 2014.
- Professor of Marketing, Farmer School of Business, Miami University, 2013 - Present.
- Associate Professor of Marketing, Farmer School of Business, Miami University, 2005 - Present.
- Assistant Professor of Marketing, Farmer School of Business, Miami University, 1998 - 2005.
- Instructor, College of Business Administration, University of Houston, 1995-98.
- Research Assistant, College of Business Administration, University of Houston, 1994 - 98.
- Instructor, Lamar University, 1990-1992.

**JOURNAL ARTICLES (Last 10)**

- McCarthy, Michael and Gillian Oakenfull (2014), "CAUCUS: A Methodology for Eliciting Brand Associations Across Competitors," *Journal of Advertising Research*.
- Oakenfull, Gillian W. (2013), "What Matters: Factors Influencing Gay Consumers' Evaluations of Gay-friendly Corporate Activities" *Journal of Public Policy and Marketing* in a special issue titled "Marketplace Diversity and Inclusion." Vol. 32, pp. 79-89.
- Oakenfull, Gillian (2013), "Unraveling The Movement From The Marketplace: Lesbian Responses To Gay-Oriented Advertising," *Journal of Marketing Development and Competitiveness* in a special issue on marketing to diverse consumers, Vol 7 (2), pp.57-71.
- Oakenfull, Gillian (2012), "Gay Consumers and Brand Usage: The Gender-Flexing Role of Gay Identity and Community Involvement" *Psychology and Marketing*, Vol. 29, No.12, pp.968-979.
- Oakenfull, Gillian and Michael S. McCarthy (2010), "Examining the Relationship Between Brand Usage and Brand Knowledge Structures," *Journal of Brand Management*, Vol. 17, No. 4, pp. 279-288.

- Oakenfull, Gillian, Michael McCarthy, and Timothy Greenlee (2008), "Targeting A Minority Without Alienating The Majority: Advertising to Gays and Lesbians in Mainstream Media," *Journal of Advertising Research*.
- Oakenfull, Gillian (2008), "Effects of Gay Identity, Sex and Explicitness of Ad Imagery on Gay Responses to Advertising Content," *Journal of Homosexuality*.
- Oakenfull, Gillian and Timothy Greenlee (2005), "Queer Eye for a Gay Guy: Using Market-Specific Symbols in Advertising to Attract Gays and Lesbians Without Alienating the Mainstream," *Psychology and Marketing*, May, Vol. 22, Issue 5, pp. 421-439.
- Oakenfull, Gillian (2005), "The Effect of Gay Identity, Gender, and Gay Imagery on Gay Consumers' Attitude Towards Advertising," *Advances in Consumer Research*, Vol. 32, pp. 641-642.
- Oakenfull, Gillian and Timothy Greenlee (2004), "Three Rules of Targeting Gays and Lesbians in Mainstream Media: Lesbians, Lesbians, Lesbians," *Journal of Business Research*, November, Vol. 57, pp. 1276-1285.

### TEACHING EXPERIENCE

#### **Farmer School of Business, Miami University:**

##### Undergraduate

- Strategy Works (Experiential learning senior capstone) | 2009 – Present
- Principles of Marketing [Online] | Summer, 2012 - Present
- Principles of Marketing [Online – Hybrid] | Fall 2012
- SocietyWise (Experiential learning senior honors capstone) | 2010
- Careers in Marketing | 2009 – Present
- Highwire Brand Studio (Experiential learning senior capstone) | 2008 – Present
- Marketing Strategy Practicum (Experiential learning senior capstone) | 2006 - 2009
- Laws, Hall and Associates (Experiential learning senior capstone) | 2005 – 2008
- Global Marketing | 2005
- International Marketing | 1998 - 2005
- E-Commerce | 2001 – 2002

##### Study-Abroad

- Principles of Marketing, Farmer School of Business Study-Abroad Program – Luxembourg|Barcelona | June 2013
- Global Marketing, Farmer School of Business Study-Abroad Program – Central and Western Europe | Summer 2010
- Highwire Brand Studio -London, United Kingdom | Summer 2009
- Laws, Hall and Associates - London, United Kingdom | Summer 2007

##### Graduate

- Foundations of Marketing (MBA) | 2014
- Globalization and Marketing Strategy (MBA) | 2011 - 2013
- Laws, Hall and Associates (MBA) | 2007
- E-Commerce (MBA) | 2002

#### **College of Business Administration, University of Houston:**

##### Undergraduate

- International Marketing | 1998
- Advertising and Promotions Management | 1995 –1997

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**Glenn J. Platt****C. Michael Armstrong Professor****Director, Interactive Media Studies Program, and Professor, Department of Marketing**

203 Laws Hall

Miami University

Oxford, OH 45056

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Mobile: (513) 593-2019

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<http://glenn.pla.tt>[glenn.platt@miamioh.edu](mailto:glenn.platt@miamioh.edu)[glenn@pla.tt](mailto:glenn@pla.tt)**PERSONAL DATA**

Home address:

3718 Oxford-Middletown Road

Somerville, OH 45064

(513) 523-0960

**EDUCATION**

- Ph.D. Carnegie Mellon University, 1993  
Graduate School of Industrial Administration  
Concentration: Economics and Political Economy
- M.S. Carnegie Mellon University, 1990  
Graduate School of Industrial Administration  
Majors: Economics and Political Economy
- B.A. University of Florida, 1988  
Major: Economics (Departmental Honors)

**PROFESSIONAL EXPERIENCE**

- 2008 to present C. Michael Armstrong Chair in Interactive Media at Miami University
- 2001 to present Director, Interactive Media Studies, Miami University
- 2005 to present Professor, Department of Marketing, Richard T. Farmer School of Business, Miami University
- 2003 to 2005 Associate Professor, Department of Marketing, Richard T. Farmer School of Business, Miami University
- 1999 to 2003 Associate Professor, Department of Economics, Richard T. Farmer School of Business, Miami University
- 1993 to 1999 Assistant Professor, Department of Economics, Richard T. Farmer School of Business, Miami University

**PUBLICATIONS (last 10)**

Platt, G. & Faimon, P, "Brand as API", *The Journal of Digital Media Arts & Practice*, Fall 2014, v10 n1

Coyle, J., Smith, T., Platt, G., "'I'm here to help": How companies' microblog responses to consumer problems influence brand perceptions", 2012, *Journal of Research in Interactive Marketing*, Vol. 6 Iss: 1, pp.27 -- 41

Coyle, J., Smith, T., Lightfoot, L., Neace, W, and Platt, G., "'Click Here to Share With a Friend': A Uses and Gratifications Approach to Word-of-Mouth Marketing Effectiveness," 2011, *International Journal of Electronic Marketing and Retailing*, Vol.4, No.4, pp.225 -- 247

Magolda, P., & Platt, G. "Untangling Web 2.0's Influences on Student Learning," *About Campus: Enriching the Student Learning Experience*. , v14 n3 p10-----16 Jul-----Aug 2009.

Magolda, P., & Platt, G. "Unconventional Technologies Build Community," *Leadership Exchange*, 5, 40---41. 2008.

Forgette, R., & Platt, G. "Redistricting Principles, Processes, and Incumbency Protection," *Political Geography*, November 2005, Vol. 24, p. 934---951.

Forgette, R., & Platt, G. "The Disappearing Middle: An Incumbency-----based Explanation of a More Partisan Congress and a Less Partisan Electorate," *American Review of Politics*, Fall 2002, Vol. 23, p.225-----243.

Erekson, H, DeShano, K, Platt G, and Ziegert A., "Fungibility of Lottery Revenues in Support of Public Education" *Journal of Education Finance*, Vol.28 No.2, Fall 2002

*Principles of Microeconomics – A Complete On--line Course*. Prentice-Hall Publishing: New York, NY/Active Learning Technologies: West Park, NY, 2000. [On-----line Course for WebCT]

Lage, M., Platt, G., & Treglia, M., "Inverting the Classroom: A Gateway to Inclusive Learning Environments," *Journal of Economic Education*, Winter 2000, Vol.31, No.1.

**TEACHING INTERESTS**

Digital Branding, Social Media Marketing, Client Practicum

**COURSES TAUGHT**

Developed Executive Education curriculum in Digital Marketing delivered at Miami's Cincinnati Campus.

- IMS 419: Digital Branding
- IMS 418: Social Media Marketing and Online Community Management
- MKT 632: Digital Marketing (Executive MBA)
- IMS 440: Interactive Media Studies Practicum
- IMS 452: Senior Thesis
- IMS 340, IMS 390C, IMS 440: Digital Innovation Center (San Francisco, Cincinnati, Chicago)
- IMS 410: Digital Development Methods
- MKT 291: Principles of Marketing
- MKT/ARC: 380 Sustainable Building and the New School of Business
- ECO 399: Business in Russia
- ECO 320: Sustainability, Trade, and Latin America
- ECO 399: Business in Australasia
- ECO 435: Urban & Regional Economics
- ECO 333: Public Economics
- ECO 201: Principles of Microeconomics
- ECO 202: Principles of Macroeconomics

Developed and taught Miami University courses in China, Australia, Russia, Costa Rica, Australia, New Zealand, Hong Kong, England, and Ireland.

## CURRICULUM VITAE

September 2018

### **Dr. Joseph Charles Rode**

Farmer School of Business  
Miami University  
Oxford, OH  
Phone: (513) 529-4231  
Email: [rodej@miamioh.edu](mailto:rodej@miamioh.edu)

### **POSITIONS HELD**

#### **Academic Positions**

2016 – present	Professor of Management
2009 - 2016	Associate Professor of Management
2003- 2009	Assistant Professor of Management Farmer School of Business Miami University
2002-2003	Visiting Assistant Professor of Management Kelley School of Business Indiana University
1997-1998, 2000-2002	Associate Instructor Kelley School of Business Indiana University

#### **Other Work Experience**

1995-1997, 1998-2000	Change Management Consultant Accenture (formerly Andersen Consulting) Chicago, Illinois
1991-1993	Buyer May Corporation Denver, Colorado

### **EDUCATION**

1991	B.A., Indiana University/ Wabash College, Economics
1995	M.B.A., Indiana University, Organizational Development (Design Major)
2002	Ph.D., Indiana University, Organizational Behavior

**Journal Publications (Last 10)**

- 2018 Dust, S., Rode, J.C., Arthaud-Day, M.L., and Howes, S.S. "Managing the self- esteem, employment gaps, and employment quality process: The role of facilitation- and understanding- based emotional intelligence." *Journal of Organizational Behavior*, 39, 680-693.
- 2017 Rode J.C., Authard-Day, M., Ramaswami, A. & Howe, S. "A Time Lagged Study of Emotional Intelligence and Salary." *Journal of Vocational Behavior*, 101, 77-89.
- 2016 Rode, J. C., Xiaowen, H., & Flynn, B. "A cross-Cultural Examination of the Relationships among Human Resource Management Practices and Organisational Commitment: An Institutional Collectivism Perspective." *Human Resource Management Journal*, 26, 471-489.
- 2016 McFarland, R., Rode, J.C. & Tasadduq, T. "A Contingency Model of Emotional Intelligence in Professional Selling." *The Journal of the Academy of Marketing Science*, 44 (1), 108-118.
- 2013 Wang, P., Rode, J.C., Shi, K. & Luo, Z. "A Work Group Climate Perspective of the Relationships among Transformational Leadership, Work Group Diversity, and Employee Creativity." *Group and Organization Management*, 38, 334-360.
- 2012 Arthaud-Day, M.L., Rode, J.C., Neihoff, B.P., & Turnley, H.W. "Direct and Contextual Effects of Individual Values on Organizational Citizenship Behavior in Teams." *The Journal of Applied Psychology*, 97, 792-807.
- 2012 Rode, J.C., Judge T.A., & Sun, J.J. "Incremental Validity of Core Self-Evaluations in the Presence of Other Self-Concept Traits: An Investigation of Applied Psychology Criteria in the U.S. and China." *The Journal of Organizational and Leadership Studies*, 19, 324 – 338.
- 2011 Huang, X. and Rode, J.C., & Schroeder, R.G. "Organizational Structure and Continuous Improvement and Learning: Moderating Effects of Cultural Endorsement of Participative Leadership." *The Journal of International Business Studies*, 42, 1103-1120.
- 2010 Wang, P., and Rode, J.C. "Transformational Leadership and Follower Creativity: The Moderating Effects of Identification with Leader and Organizational Climate." *Human Relations*, 63, 1105-1128.
- 2008 Rode, J.C, Mooney, C.H., Arthaud-Day, M.L., Near, J.P., & Baldwin, T.T., "Ability and Personality as Predictors of Success in Newly Employed Professionals." *International Journal of Selection and Assessment*, 16, 292-299.

## PETER A. SALZARULO

Associate Professor, Farmer School of Business  
 Department of Management, 3001 Farmer School of Business  
 Miami University, Oxford, Ohio 45056  
 Office: (513) 529 – 4232  
 salzarpa@miamioh.edu

### Kelley School of Business, Indiana University

Ph.D. in Operations Management and Decision Sciences

August 2006

M.B.A. in Decision Support Modeling

May 2001

### Miami University

B.S. in Paper Science and Engineering

May 1995

## RESEARCH

---

### Refereed Publications

- Salzarulo, P., Mahar, S., and Modi, S. “Beyond Patient Classification: Using Individual Patient Characteristics in Appointment Scheduling”, forthcoming, *Production and Operations Management*
- Salzarulo, P., and Jacobs, F. 2014. “The Incremental Value of Central Control in Serial Supply Chains,” *International Journal of Production Research*, 52(7), 1989-2006
- Salzarulo, P., Krehbiel, T., Mahar, S., and Emerson, L. 2012 “Six Sigma Sales and Marketing: Application to NCAA Basketball,” *American Journal of Business*, 27(2), 113-132
- Ashenbaum, B., Salzarulo P., and Newman, W. 2012. “Organizational Structure, Entrepreneurial Orientation, and Individual Trait Preference in Transportation Brokerage Firms” *Journal of Supply Chain Management*, 48(1), 3-23
- Mahar, S., Salzarulo, P., and Wright, D. 2012. “Using Online Pickup Site Inclusion Policies to Manage Demand in Retail/E-tail Organizations,” *Computers and Operations Research*, 39(5), 991-999
- Mahar, S., Bretthauer, K., and Salzarulo, P. 2011. “Locating Specialized Service Capacity in a Multi-Hospital Network,” *European Journal of Operational Research*, 212(3), 596-605
- Salzarulo, P., Bretthauer, K., Côté, M., and Schultz, K. 2011. “The Impact of Variability and Information on Healthcare System Performance,” *Production and Operations Management*, 20(6), 848-859
- Finch, B. and Salzarulo, P. 2011. “The Customer Complaint Letter: a Student Exercise in Six Sigma,” *Decision Sciences Journal of Innovative Education*, 9(2), 307-314
- Mahar, S. and Salzarulo, P. 2008. “Putting it All Together: Weaving a Common Thread of Assignments through Introductory OM Courses,” *Decision Sciences Journal of Innovative Education*, 6(2), 233-237

### Working Papers

- “Exploring the Influence of Employee Compensation and Services Sourcing on Hospital Performance: Evidence from 1996-2009” with Modi, S.
- “Practical Policies for Allocating Multi-Product Online Orders Among Fulfillment Locations: with S. Mahar
- “Overtime as a Performance Measure in Determining Appointment Schedules,” with Modi, S.

### Refereed Conference Proceedings

- “Balancing Inventory Positions across Retailers with Pickup Site Policies”, with Steve Mahar and Daniel Wright, *Proceedings, Decision Sciences Institute National Meeting*, New Orleans, LA, 2009
- “A Comparative Study of Make to Order, Make to Stock, and Vendor Managed Inventory Systems,” with F. Robert Jacobs, *Proceedings, Decision Sciences Institute National Meeting*, San Francisco, CA, 2005
- “Variability in Healthcare Appointment Systems,” with Kurt M. Bretthauer, Kenneth L. Schultz, and Murray J. Côté, *Proceedings, Decision Sciences Institute National Meeting*, Boston, MA, November 2004
- "An Investigation of the Operations and Procedures of a Health Care Facility," with Kurt M. Bretthauer, Kenneth

- L. Schultz, and Murray J. Côté, *Proceedings, Decision Sciences Institute National Meeting*, Washington, DC, November 2003
- "The Effect of Patient Load on Physician Service Times," with Kurt M. Bretthauer, Kenneth L. Schultz, and Murray J. Côté, *Proceedings, Decision Sciences Institute National Meeting*, San Diego, California, November 2002

## **TEACHING EXPERIENCE**

**Miami University**, Oxford, Ohio August 2006 – present

- MGT 627: Supply Chain and Operations Management
  - Case based course taught in Professional MBA
  - Approximate class size of 28 students
  - Taught in Summer and Fall terms, 2015
- MGT 453: Quality Management Systems
  - Examines Six Sigma, Deming, TQM, and process reengineering
  - Approximate class size of 39 students per section
- MGT 302: Introduction to Operations and Supply Chain Management
  - Introduces students to core operations and supply chain concepts
  - Approximate class size of 36 students per section
- MGT 399: International Perspectives of Lean Production
  - Taught through the 2013 FSB – Europe program
  - Considers the Toyota Production System and cultural issues in its implementation
  - Approximate class size of 23 students

**Indiana University**, Bloomington, Indiana August 2000 – August 2006

- P320: Supply Chain Management: Sourcing
- K201: The Computer in Business
- P421: Supply Chain Management: Material Planning / Logistics
- P370: Introduction to Operations Management Discussion Section

## **INDUSTRY EXPERIENCE**

**GL & V**, Lawrenceville, Georgia

- Product Training Coordinator, June – August 2000
- Field Service Engineer, May 1997 – July 1999
- Systems Applications Engineer, July 1995 – April 1997



December 2018

## Austin C. Smith

Department of Economics  
Miami University  
3014 FSB  
Oxford, OH 45056

Office: (513) 529-1571  
Email: [smitha83@miamioh.edu](mailto:smitha83@miamioh.edu)  
Website: [sites.google.com/site/austincrowleysmith](https://sites.google.com/site/austincrowleysmith)

### Employment

Assistant Professor, Department of Economics, Miami University (2015-)

### Education

Ph.D., Economics, University of Colorado at Boulder (2015)  
M.A., Economics, University of Colorado at Boulder (2012)  
B.S., *summa cum laude*, Economics and Finance, and Global Perspectives, Bentley University (2010)

### Fields of Interest

Labor Economics; Public Economics; Applied Econometrics; Health Economics.

### Publications

“Spring Forward at Your Own Risk: Daylight Saving Time and Fatal Vehicle Crashes.” *American Economic Journal: Applied Economics*, 8(2), pp. 65-91, April 2016.

“Occupational Licensing of Social Services and Nursing Home Quality: A Regression Discontinuity Approach” (with John R. Bowblis). Forthcoming at *Industrial and Labor Relations Review*.

### Working Papers

“All-In or Checked-Out? Disincentives and Selection in Income Share Agreements” (with Greg Madonia). Revisions Requested at *Journal of Economic Behavior and Organization*.

“Legal Access to Alcohol and Academic Performance: Who is Affected?” (with Joung Yeob Ha). Revisions Requested at *Economics of Education Review*.

“Greek Life, Academics, and Earnings” (with William Even). *Under review*.

### Works in Progress

“Scanning the Tables: Do Professional Online Poker Players Respond to Earning Conditions?” (with Matthew Makofske)

“Performance Pay and Productivity in Health Care: Evidence from Community Health Centers” (with Brian Cadena)

“The External Effects of Occupational Licensing and the Shape of Labor Markets” (with Michael Lipsitz)

## Conference and Seminar Presentations

“Greek Life, Academics, and Earnings,”

University of Maine (2018), Miami University (2018)

“Performance Pay and Productivity in Health Care: Evidence from Community Health Centers”

Southern Economic Association Annual Meeting (2017), Miami University (2017)

“All-In or Checked-Out? Disincentives and Selection in Income Share Agreements”

West Virginia University (2018), Bentley University (2017), ASSA Annual Meeting (2017), Ohio University (2016), Xavier University (2016), Miami University (2015), Southern Economic Association Annual Meeting (2014)

“Scanning the Tables: Do Professional Online Poker Players Respond to Earning Conditions?”

Southern Economic Association Annual Meeting (2015)

“Spring Forward at Your Own Risk: Daylight Saving Time and Fatal Vehicle Crashes”

Purdue University (2015), The College of the Holy Cross (2015), Berry College (2015), Eastern Michigan University (2015), Miami University (2015), ASSA Annual Meeting (2015), UC Colorado Springs (2014), Colorado State University (2014), Colorado University Environmental Brown Bag (2014), Heartland Environmental and Resource Economics Workshop (2013), CU Environmental and Resource Economics Workshop (2013)

## Research Support

RRF Grant #2017-168: “Measuring the Impact of Social Workers on Psychosocial Functioning and Post-Acute Care Discharge.” The Retirement Research Foundation, 2018- 2019 (Statistical Consultant), \$49,321.

## Teaching

### Courses Taught

*Miami University:* Topics in Applied Econometrics (Graduate); Intermediate Microeconomics

*University of Colorado, Boulder:* Intermediate Microeconomics; Principles of Microeconomics (TA); Principles of Macroeconomics (TA)

### Advising

M.A. Thesis Committees: Kien Dao Bui (2016); Joung Yeob Ha\* (2017); Alex Lust (2018); Jameson Foran (2018); Jack Fetick (2018); James Inlow (2018); Zach Sanderson (2018)

Honors Thesis: Matt Runser\* (2018-2019)

\*Denotes adviser

**Wayne Speer**

Markely Visiting Professor of Corporate Entrepreneurship

**Professional Preparation:**

M.B.A. Xavier University, Finance, 1990

B.S. University of Missouri, Marketing, 1976

**Teaching and Instructional Activities**

2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
467 (2)	306 (2)	306 (2)	306 (2)	360 (2)	251 (4)	251 (8)	251 (6)
469 (2)	467 (2)	469 (2)	469 (2)	469 (2)	469 (2)	341 (2)	341 (2)
	469 (2)	481 (2)	481 (2)	644	618 (2)	377	618 (2)
	481 (2)					401	
						618 (2)	

**Service to the Miami U**

Department: Co-Leader of Corporate Entrepreneurship Pillar, Developed Course: Value Creation and Capture, liaison with external Miami Departments.

2009 - 2011: Founder and Interim CEO, Pharymed LLC, Miami owned IT.

2011 -2014: *Project High Flight*: Collaboration with Engineering Dept.

2016: *Making Senior's Lives Better*, Business Capstone Collaboration with Gerontology Dept.

2016 – present: Executive Entrepreneur Mentor, *Miami I-Corps Team*: Donna Scarborough/Michael Bailey Van Kuren

**Grant**

2014 - Present "Utilizing Corporate Innovation Techniques in STEM Disciplines." Greater Cincinnati Foundation and Procter and Gamble. (\$10,000.00).

**Advising**

2009 – 2017: Advisor, Miami University Student Venture Fund, \$400,000 Investment Fund

2015 – 2017: Advisor, High Street Start-Ups

**External**

2009 – present: *Entrepreneur in Resident*, Innovation Consultant/Mentor, Procter & Gamble Co.

2009 – present: President & Innovation Consultant, Speer & Associates LLC. Clients include: P&G, State Farm, China Retail, Jarden, Sears

2009 – 2014: Personnel Committee, Cincinnati Presbytery

2010 – present: Founder and Board Member, BeMyDD

2013 – present: President and member, Deerfield Township Zoning Appeals

2016 – present: Mentor/Consultant, The First Batch, Cincinnati, Ohio

2016 – present: Mentor/Consultant, The Hamilton Mill, Hamilton, Ohio

2017 – present: Trustee, Deerfield Township, Ohio

## LAURENS BUJOLD STEED

Farmer School of Business  
 Miami University  
 800 E. High Street  
 Oxford, OH  
 steedel@miamioh.edu

### ACADEMIC EMPLOYMENT

Assistant Professor    Fall 2018 - present    Department of Management  
 Farmer School of Business  
 Miami University

### EDUCATION

Ph.D.                      2018                      Georgia Institute of Technology  
 Major: Organizational Behavior  
 Dissertation: A penny for your thoughts: The  
 psychological effects of payday

BSM                        2010                      Georgia Institute of Technology  
 Major: Management

### REFEREED PUBLICATIONS

Harari, D., Swider, B. W., **Steed, L. B.**, & Breidenthal, A. P. (2018) Is perfect good? A meta-analysis of perfectionism in the workplace. In press at *Journal of Applied Psychology*.

Lemoine, G. J., Aggarwal, I., & **Steed, L. B.** (2016). When women emerge as leaders: Effects of extraversion and gender composition in groups. *The Leadership Quarterly*, 27(3), 470-486.  
<http://dx.doi.org/10.1016/j.leaqua.2015.12.008>

### MANUSCRIPTS UNDER REVIEW

**Steed, L. B.**, Swider, B. W., Keem, S. J., & Liu, J. [Title removed to protect anonymity]. Second revise-and-resubmit to *Journal of Management*.

Swider, B. W. & **Steed, L. B.** [Title removed to protect anonymity]. Under review at Personnel Psychology.

## WORKS IN PROGRESS

Swider, B. W. & **Steed, L. B.** You were always my favorite: Applicant initial attitudes and job choice decisions. Manuscript in preparation for submission.

Marr, J. C., **Steed, L. B.**, & Bianchi, E. How status inequality undermines work engagement: The role of cynical attitudes about work. Manuscript in preparation for submission to *Organizational Behavior and Human Decision Processes*.

Marr, J. C., & **Steed, L. B.** Leader self-control and context. Data collection in process.

**Steed, L. B.** & Swider, B. W. A penny for your thoughts: The psychological effects of payday. Manuscript in preparation for submission to *Academy of Management Journal*.

## TEACHING EXPERIENCE

Georgia Institute of Technology, Scheller College of Business

*MGT 3102 – Managing Human Resources in a Regulated Environment*

Overall instructor rating, Spring 2016 (1 section): 4.8 (5 point scale)

Overall instructor rating, Fall 2016 (2 sections): 4.8; 4.9 (5 point scale)

Overall instructor rating, Spring 2018 (1 section): 4.9 (5 point scale)

- Teaching Ph.D. Candidate of the Year Award. 2018
- Center for the Enhancement of Teaching and Learning “Thank a Teacher” Award Recipient. 2016
- GT Professor Appreciation recognition: Men’s Baseball, Men’s Basketball, Women’s Softball.
- Participant, Serve-Learn-Sustain Course Design Workshop. 2016

## RESEARCH IN THE NEWS

Fast Company – “How women leaders emerge from leaderless groups”

[<https://www.fastcompany.com/3063599/strong-female-lead/research-suggests-that-women-are-more-likely-to-emerge-as-leaders-in-lead>]

Business News Daily – “Open communication makes female leaders more effective.”

[<http://www.businessnewsdaily.com/9392-open-communication-women-leaders.html>]

The Clarion-Ledger – “Women can get ahead, but it isn’t easy”

[<http://www.clarionledger.com/story/business/2016/08/29/how-women-can-get-ahead/89540846/>]

**MELISSA A. THOMASSON**  
**Miami University • Department of Economics • Oxford, OH 45056**  
**Phone: (513) 529-2858 • Fax: (513) 529-6992**  
**Email: *mthomasson@MiamiOH.edu***

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## APPOINTMENTS

- Julian Lange Professor of Economics, Miami University, 2015-present.
- Associate Professor of Economics, Miami University, 2005-2015.
- Assistant Professor of Economics, Miami University: 1998-2005.
- Research Associate, National Bureau of Economic Research: 2005-present.
- Faculty Research Fellow, National Bureau of Economic Research: 1999-2005.

## EDUCATION

### University of Arizona, 1992-1998

Ph.D. in Economics, August 1998.

M.A. in Economics, December 1993.

Fields of Specialization: Applied Microeconomics, Health Economics, Economic History.

### University of Puget Sound, 1988-1992

B.S. in Economics, minors in Mathematics and English Literature, May 1992.

Awards: Phi Beta Kappa, Magna Cum Laude, Phi Kappa Phi.

## REFEREED ARTICLES AND BOOK CHAPTERS (Last 10)

- “Revising Infant Mortality Rates for the Early 20<sup>th</sup> Century United States” (with Katherine Ericksson and Gregory T. Niemesh). NBER Working Paper #w23263, 2017. In press, *Demography*.
- “Hard Times in the Land of Plenty: The Effect of Childhood During the Great Depression on Adult Outcomes” (with Price V. Fishback). *Explorations in Economic History*, 54(1), October 2014, 64-78.
- “Saving Babies: The Impact of Public Health Education Programs on Infant Mortality.” (with Carolyn Moehling). *Demography*, 51(2), April 2014, 367-386.
- “The Political Economy of Saving Mothers and Babies: The Politics of State Participation in the Sheppard-Towner Program” (with Carolyn Moehling). *Journal of Economic History*, 72(1), March 2012, 75-103.
- “The Trials of Job: The Impact of Climate and Weather on Infant and Non-Infant Death Rates During the Great Depression,” with Price F. Fishback, Werner Troesken, Trevor Kollman, Michael Haines, and Paul W. Rhode. In *The Economics of Climate Change*:

*Adaptations Past and Present*, edited by Gary D. Libecap and Richard H. Steckel, The University of Chicago Press, 2011.

- “From Home to Hospital: The Evolution of Childbirth in the United States, 1928-1940” (with Jaret Treber). *Explorations in Economic History*, 45(1), January 2008, 76-99.
- “Racial Differences in Health Insurance Coverage and Medical Expenditures: An Historical Perspective.” *Social Science History* 30(4), Winter 2006.
- Early Evidence of an Adverse Selection Death Spiral? *Explorations in Economic History*, 41(4), October 2004, 313-328 (lead article, awarded prize for best article published in 2004).
- “The Declining Contribution of Socioeconomic Disparities to the Racial Gap in Infant Mortality Rates” (with William J. Collins). *Southern Economic Journal*, 70(4), April 2004, 746-776.
- “The Importance of Group Coverage: How Tax Policy Shaped U.S. Health Insurance.” *American Economic Review*, 93(4), September 2003, 1373-84.

### **ADDITIONAL PROFESSIONAL SERVICE**

- Editorial Board member, *Explorations in Economic History*, 2006- 2014.
- Editorial Board member, *Journal of Economic History*, 2010-2014.
- Convener of Nevins Prize (awarded to best dissertation in U.S. economic history by the Economic History Association, 2006.
- Co-organizer, NBER Development of the American Economy Summer Institute, 2006-2007

### **REFEREE**

*American Economic Journal: Applied Economics; Economic Inquiry; Bulletin of the History of Medicine; Cliometrica; Demography; Economic Journal; Explorations in Economic History; European Review of Economic History; Historical Methods; Independent Review; Journal of Economic History; Journal of Political Economy; Journal of Population Economics; MIT Press; National Science Foundation; Robert Wood Johnson Foundation; Southern Economic Journal; University of Chicago Press.*

### **PROFESSIONAL AFFILIATIONS**

American Economic Association, Economic History Association, Cliometrics Society.

## Mark J. Tremblay

August 2018

Miami University  
Farmer School of Business, Room 2017

tremblmj@miamioh.edu  
<https://sites.google.com/site/markjtremblay/>

### ACADEMIC EMPLOYMENT

---

<b>Assistant Professor in Economics</b> <i>Miami University, Oxford, Ohio</i>	<i>August 2018 - Present</i>
<b>Postdoctoral Fellow in Economics</b> <i>McMaster University, Hamilton, Ontario, Canada</i>	<i>July 2016 - June 2018</i>

### EDUCATION

---

<b>Ph.D. in Economics</b> <i>Michigan State University, East Lansing, MI</i>	<i>May 2016</i>
<b>B.S. in Mathematics and B.A. in Economics</b> <i>Pacific Lutheran University, Parkland, WA</i>	<i>December 2010</i>
<b>Budapest Semesters in Mathematics</b>	<i>Fall 2009 and Spring 2010</i>

### RESEARCH INTERESTS

---

Industrial Organization, Platforms and Two-Sided Markets, Public Economics, Microeconomics

### WORKING PAPERS

---

“Inferring Tax Compliance from Pass-through: Evidence from Airbnb Tax Enforcement Agreements” (with Andrew Bibler and Keith Teltser), [SSRN Working Paper](#).

“Market Power and Mergers in Multi-Sided Markets,” [SSRN Working Paper](#).

“Platform Competition and Endogenous Switching Costs,” [SSRN Working Paper](#).

“Taxing Platform Markets: Transaction vs. Access Taxes,” [SSRN Working Paper](#).

“Platform Competition with Endogenous Homing” (with Thomas D. Jeitschko), [DICE Discussion Paper 166](#).

### WORK IN PROGRESS

---

“Bargaining in Two-Sided Markets” (with Takanori Adachi).

“Cournot vs. Bertrand Competition in Two-Sided Markets.”

### PUBLICATIONS

---

“Tax Incidence and Demand Convexity in Cournot, Bertrand, and Cournot—Bertrand Models” (with Victor J. Tremblay). *Public Finance Review*, 45 (6), November 2017, 748-770.

“Vertical Relationships within Platform Marketplaces.” *Games*, 2016, Vol. 7 (3).

“A General Cournot-Bertrand Model with Homogeneous Goods” (with Carol H. Tremblay and Victor J. Tremblay). *Theoretical Economics Letters*, 2011, Vol. 1 (2), 38-40.



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 TEACHING EXPERIENCE
 

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Intermediate Microeconomics (Miami University)  
 Mathematical Economics - M.A./B.A (Miami University)  
 Game Theory (McMaster University and Michigan State University)  
 Microeconomic Theory I - Ph.D./M.A. (McMaster University)  
 Principles of Microeconomics (Michigan State University)

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 CONFERENCE PRESENTATIONS AND INVITED SEMINARS
 

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“Inferring Tax Compliance from Pass-through: Evidence from Airbnb Tax Enforcement Agreements”  
*Taxation and Regulation in the Digital Economy Workshop*, Bergen, Norway, October 2018.  
*CPEG-PEUK Public Economics Workshop*, Hamilton, ON, April 2018.  
*Annual Conference on Taxation*, Philadelphia, PA, November 2017.

“Market Power and Mergers in Multi-Sided Markets”  
*International Industrial Organization Conference*, Indianapolis, IN, April 2018.  
*Miami University*, Oxford, Ohio, January 2018.  
*Platform Strategy Research Symposium*, Boston University Questrom School of Business, July 2017.  
*University of Louisville*, Louisville, KY, September 2016.

“Platform Competition and Endogenous Switching Costs”  
*International Open and User Innovation Conference*, Harvard Business School, August 2016.  
*Internet Search and Innovation Conference*, Northwestern University, June 2016.  
*International Industrial Organization Conference*, Philadelphia, PA, April 2016.  
*The University of Queensland*, Brisbane, Australia, February 2016.  
*McMaster University*, Hamilton, ON, February 2016.  
*Michigan State University: Media and Information Department*, February 2016.  
*Gonzaga University*, Spokane, WA, January 2016.  
*Universidad Carlos III de Madrid*, Madrid, Spain, January 2016.

“Taxing Platform Markets: Transaction vs. Access Taxes”  
*International Institute of Public Finance Annual Conference*, Dublin, Ireland, August 2015.

“Platform Competition with Endogenous Homing”  
*Royal Economic Society Annual Conference*, Manchester, United Kingdom, April 2015.  
*Internet Search and Innovation Conference*, Northwestern University, June 2014.  
*International Industrial Organization Conference*, Chicago, IL, April 2014.  
*Midwest Economic Theory Meetings*, University of Michigan, October 2013.

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 PROFESSIONAL RESPONSIBILITIES
 

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## Referee:

*Economic Theory*, *Journal of Economics & Strategic Management*, *Review of Network Economics*, *Review of Industrial Organization*, *Journal of Public Economic Theory*, *Annals of Operations Research*, *The Manchester School*, *Games*, *Sustainability*, *Journal of Economic Behavior & Organization*

## McMaster University:

Micro Theory Comprehensive Exam Committee, June 2017 and August 2017  
 Incoming Ph.D. Summer Math Camp, August 2016

## Co-editor:

*Games*; Special Issue on “Game Theoretic Analyses of Multi-Sided Markets,” Spring 2016

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 AWARDS AND HONORS
 

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Dissertation Fellowship, Michigan State University, Spring 2016.  
 Kelly Scholar Research Fellowship, Michigan State University, Summer 2015.  
 MSU-CIBER Professional Development Grant, Michigan State University, Spring 2015.  
 Red Cedar Award for Best 3<sup>rd</sup> Year Paper, Michigan State University, Spring 2014.  
 Graduate Assistantship, Michigan State University, Fall 2011-2016.  
 Graduate Fellowship, Michigan State University, Fall 2011-2016.

## Maria L. Weese

### Education

Ph.D. in Statistics, 2010, University of Tennessee, Knoxville, Tennessee

M.S. in Statistics, 2006, University of Tennessee, Knoxville, Tennessee

B.S. Chemical Engineering, Minor: Chemistry, 2001, Virginia Polytechnic Institute and State University, Blacksburg, Virginia

### Academic and Professional Experience

*Richard T. Farmer Assistant Professor*, Information Systems & Analytics, Miami University 2018-current

*Assistant Professor*, Information Systems & Analytics, Miami University, 2014-2018

*Lecturer*, Information Systems & Analytics, Miami University, 2012-2014

*Visiting Assistant Professor*, Information Systems & Analytics, Miami University, 2010-2012

*Process Improvement Engineer II*, Celanese Acetate, Narrows, Virginia 2001-2004

### Publications

**Weese, M.L.**, Montgomery, D.J., Ramsey, P.J., (2017) Analyzing Definitive Screening Designs:

Screening vs. Prediction. *Applied Stochastic Models in Business and Industry*. 34(2):244-255.

Ockuly, R. A., **Weese, M.L.**, Smucker, B.J., Edwards, D.J., Chang, L. \footnote{Undergraduate Student},

(2017) Response Surface Experiments: A Meta-Analysis. *Chemometrics and Intelligent Laboratory Systems*. 164:64-75.

**Weese, M.L.**, Edwards, D.J., Smucker, B.J. (2017) A Criteria for Constructing Powerful Supersaturated Designs when Effect Directions are Known". *Journal of Quality Technology*. 49(3):265-277.

**Weese, M.L.**, Martinez, W.G., and Jones-Farmer, L.A. (2016) On the Selection of the Bandwidth Parameter for the k-Chart. *Quality and Reliability Engineering International*. 33(7):1527-1547.

Campbell, J.T., **Weese, M.L.** (2016) Executive Pay as a Mixture: Compositional Models and the Influence of CEO Pay on Firm Performance". *Organizational Research Methods*. 20(1):95-120.

**Weese, M.L.**, Martinez, W.J., Megahed, F.M., Jones-Farmer, L.A. (2016) Statistical Learning Methods Applied to Process Monitoring: An Overview and Perspective. *Journal of Quality Technology*. 48(1):4-27.

**Weese, M. L.**, Smucker, B. J., Edwards, D. J. (2015) Searching for Powerful Supersaturated Designs. *Journal of Quality Technology*. 47(1):66-84.

Edwards, D. J., **Weese, M. L.**, Palmer, G. M. (2014) Comparing Methods for Design Follow-Up: Revisiting a Metal Cutting Case Study. *Journal of Applied Stochastic Models in Business and Industry*. 30(4):464-478.

**Weese, M. L.**, Leitnaker, M. G. (2012) Sequential Experimentation for Mixtures. *International Journal of Design of Experiments and Process Optimisation*, 3(1):33-42.

### Teaching Experience

ISA 491 Introduction to Data Mining in Business, ISA 496 Business Analytics Practicum

ISA/STA 365 Design of Experiments and Process Monitoring, ISA 291 Regression Analysis in Business,

ISA 205 Introduction to Business Statistics Online ISA 205, ISA 203 Supplementary Business Statistics ,

Online ISA 203, STAT 201 Introduction to Business Statistics, STAT 365 Statistical Process Control

### Professional Service

*Editorial Review Board Member*, Quality and Reliability Engineering International

## VITA

### MARK ANDREW WESOLOWSKI

Farmer School of Business  
 Department of Management Miami University  
 Oxford, OH 45056  
 Phone: (513)529-1652  
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#### EDUCATION

- Ph.D Auburn University. (1991).  
 Major Area: Industrial and Organizational Psychology.  
**Dissertation:** Effects of demographics, problem-solving style, and job complexity on work outcomes in subordinate-supervisor dyads, University Microfilms (1991).
- M.S. University of Wisconsin, Oshkosh. (1985).  
 Major Area: Industrial and Organizational Psychology.  
**Thesis:** The assessment of retirement preparedness using the Johnson-Gray Retirement Assessment Profile.
- B.S. University of Wisconsin, Madison.  
 (1981). Major Area: Psychology.

#### TEACHING EXPERIENCE

- 1998- Present Associate Professor. Department of Management, Miami University.  
 Responsibilities include the preparation and teaching of undergraduate, graduate, and international courses in Human Resource Management and Organizational Behavior with a 4/3 or 3/3 teaching assignment
- 8/91-1998 Assistant Professor. Department of Management, Miami University.  
 Responsibilities include the preparation and teaching of undergraduate and graduate courses in Human Resource Management and Organizational Behavior with a 3/3 teaching assignment.
- 1/90-8/91 Instructor. Department of Management, Miami University.  
 Responsibilities included the preparation and teaching of an undergraduate and graduate Human Resource Management course with a 3/3 teaching assignment.
- 1/89-1/90 Instructor. Department of Management, Auburn University.  
 9/87-6/88 Responsibilities included the preparation and teaching of an undergraduate Business and Economic Statistics course.
- 9/85-9/86 Instructor. Department of Psychology, Auburn University.  
 Responsibilities included the preparation and teaching of an undergraduate Psychology course.

## I. Publications

### A. Work in progress

The interdependent classroom (writing conceptual paper)

The impact of interdependent relationships on outcomes in the classroom (empirical research project at conceptual stage)

### B. Book chapter

"Recruiting and selecting qualified employees," In J.S. Hornsby and D.E. Kuratko. (2002). The human resource function in emerging enterprises. South Western Publishing.

### C. Articles

Wesolowski, M., Luzadis, R., and Gerhardt, M. (2011). Understanding the nomological net for gender bias. Journal of Organizational Psychology.

Luzadis, R., Wesolowski, M., & Snavelly, B.K. (2008). Understanding criterion choice in hiring decisions from a prescriptive gender bias perspective. Journal of Managerial Issues, 20, 468-484.

Mossholder, K.W., Bennett, N., Kemery, E.R., & Wesolowski, M.A. (1998). "Relationships between bases of power and work reactions: The mediational role of procedural justice," Journal of Management, 24, 533-552. (Acceptance rate is 6%-10%. Order of authorship for the second through fourth authors is alphabetical since all contributed significantly and equally.)

Wesolowski, M.A., & Mossholder, K.W. (1997). "Relational demography in supervisor-subordinate dyads: Impact on subordinate job satisfaction, burnout, and perceived procedural justice," Journal of Organizational Behavior, 18, 351-362. (Acceptance rate is 11%-20%. The order of authorship was randomly determined since both authors contributed significantly and equally to this work. Wesolowski assumed a leadership role for writing and presenting an earlier version of this paper at a Southern Academy of Management meeting.)

Schwarz, J.L., & Wesolowski, M.A. (1995). "Employee orientation: What employers should know," Journal of Contemporary Business Issues, 3, 44-54. (Acceptance rate is 21%-30%. The order of authorship was randomly determined since both authors contributed significantly and equally.)

Mossholder, K.W., Bedeian, A.G., Niebuhr, R.E., & Wesolowski, M.A. (1994). "Dyadic duration and the performance satisfaction relationship: A contextual perspective," Journal of Applied Social Psychology, 24, 1251-1269. (Acceptance rate is 35%. Order of authorship for the second through fourth authors is alphabetical since all contributed significantly and equally.)

Mossholder, K.W., Giles, W.F., & Wesolowski, M.A. (1991). "Information privacy and performance appraisal: An examination of employee perceptions and reactions," Journal of Business Ethics, 10, 151-156. (Acceptance rate is 21-30%. Order of authorship for the second and third authors is alphabetical since each contributed significantly and equally. Wesolowski assumed a leadership role for writing and presenting an earlier version of this paper at a national Academy of Management meeting.)

Wesolowski, M.A., Mossholder, K.W., Feild, H.S., & Giles, W.F. (1989). "The role of perceptions of political tactics in predicting turnover from behavioral intentions," The Journal of Business and Psychology, 3, 413-422. (Acceptance rate is 11-20%; Order of authorship represents relative contributions to research project. Wesolowski assumed a leadership role for writing and presenting an earlier version of this paper at a national Academy of Management meeting.)

Hornsby, J.S., Smith, B.N., Benson, P.G., & Wesolowski, M.A. (1989). "What is in a name: The impact of job titles on job evaluation results," The Journal of Business and Psychology, 3, 341-352. (Acceptance rate is 11-20%. Order of authorship represents relative contributions to research project.)

Wesolowski, M.A., & Feild, H.S. (1987). "Recruiting and selecting Ph.D. 1/0 graduates by business and consulting organizations," The Industrial-Organizational Psychologist, 25, 17-27. (Acceptance rate is not available. Order of authorship represents relative contributions to research project. Wesolowski assumed a leadership role for writing and presenting a version of this paper as an invited participant at an IO/OB Graduate Student conference.)

# **Appendix C**

## **Course Descriptions**

## Course Descriptions for MSiM Program

Required Courses (all courses required to complete the MSiM):

### Foundation Week

This week prior to the start of fall term classes, will introduce students to the requirements and expectations of the program. It will include cohort and team activities and a career preparation module. In October, approximately two months into the program, students will meet potential employers at Fall Career fair. To facilitate career readiness, this module will provide tools and training in resume preparation, interview skills and practice, business etiquette, and networking opportunities. An important part of career preparation is business communication. In the Foundations of business communication module, students will learn digital and technical writing, research, document and presentation design, presentation skills and professional communication strategies.

Topics for the business communication module include:

- Conducting Business Research and Integration of Research into Business Communication
- Business and Technical Writing
- Digital Writing and Communication
- Document and Presentation Design
- Mastering Presentation / Oral Communication
- Presentations of Projects

### Fall Semester

ACC 611 3 credit hours. This course explores how accounting information is used by managers to make internal business decisions, to create financial plans, and to evaluate actual performance relative to those plans. It also explores how managers analyze financial statements for internal management purposes.

ECO 618 1.5 credit hours. Course covers topics and methods from the field of game theory and applies them to microeconomic decision problems. This is a required course for students in the Master's of Science in Management degree.

ISA 628 1.5 credit hours. Examines existing and emerging information technology (IT) for reinventing processes, managing and disseminating data, and consuming that data to improve decision making within the organization. The foci of the course are the role IT plays in business processes, the underlying theoretical basis for innovation through IT, infrastructure technologies commonly employed and technologies for leveraging data.

ISA 629 1.5 credit hours. This course introduces common technologies and techniques for data manipulation and consumption in various business processes common to most organizations. The course is integrated with and taught in conjunction with the three other domain specific courses in the Certificate in Business Management taught in the first semester of the Master's in Management. Students will learn current tools and apply common techniques to solve discipline specific problems. The course reinforces both the use of data and technology for decision making and the domain specific knowledge covered in the other courses.

MGT 627 3 credit hours. Broad study of production system that is part of all manufacturing and service organizations. Examines, in a variety of organizational settings, the process design, facilities deployment, materials management, quality control problems, and supply chain management.

MKT 618 3 credit hours. Focuses on business's front lines; the value creation from which all economic activity derives. Address how sellers identify, manage, and meet customer needs and wants through concepts, heuristics, models, and frameworks that help stimulate and manage customer-centric organizations. Leverage a mix of current readings and case analyses to bring cutting edge thinking and applications to life.

#### Winter Semester

MGT 610 1.5 credit hours. This course focuses how to align human capital management and organizational strategy. Research indicates that establishing and maintaining this alignment is critical for organizations seeking a sustainable competitive advantage. The course examines how human capital management practices in areas such as talent acquisition, talent development, and compensation relate to key human capital and organizational performance outcomes in a range of settings.

FIN 625 3 credit hours. Introduces M.B.A. student to essentials of the finance functions of the organization. Emphasis on analysis of financial statements and understanding of the time value of money. Only available to full-time M.B.A. students.

#### Spring Semester

ISA 641 2 credit hours. This course introduces the current, basic tool and methods of data driven decision making. Included in the course will be introduction to programming using open source software. Students will learn to apply basic programming concepts to summarize and visualize data as well as cursory data discovery.

MKT 633 1 hour. Students will gain hands-on experience managing an actual digital marketing campaign for a real client. This will include creating, executing and optimizing a campaign on a live advertising platform. Over the course of the campaign, students will develop an understanding of online consumer

behavior, real-time marketing, online brand building, and social media strategy. Deliverables will include a pre-campaign strategy brief and a post-campaign analysis.

ESP 652 1.5 credit hours. Applied Entrepreneurial Mindset: Creativity & Innovation is designed to provide students with a practical understanding of the foundations of creativity in business. The ability to imagine something new, leading to the creation of new realities and possibilities that advance current practice in our classrooms, businesses, organizations and lives in new and innovative ways is an essential skill set needed in the 21st century. The course explores Design Thinking/Human Centered Design as the central focus of providing tools and techniques to solve problems. This course investigates creativity and innovation frameworks to identify and assess potentially valuable problem/solution opportunities/ideas, to evaluate the feasibility and attractiveness of those ideas. This course considers personal creative styles along with personal growth techniques. The goal is to help students apply creativity, innovation and the entrepreneurial mindset to meet the challenges of everyday life. Students finish the course with their own creativity framework and a personal creativity manifesto to propel their careers, lives and ventures.

MGT 650 1.5 credit hours. This course prepares students to become effective organizational leaders. By studying both traditional and contemporary approaches to leadership, students will develop an understanding of key leadership success factors, team leadership, and ethical decision-making. Course readings and hands on experiential exercises will allow students to enhance their self-awareness and refine their leadership skills, and to apply these skills to improve their effectiveness as leaders.

BUS 601 6 credit hours. Consulting Capstone. The Consulting Capstone is an immersive, project-based, capstone course. It will enable an integrated application of skills and knowledge from courses in the Masters of Science in Business Management (MSiM) program. Students will be engaged in a hands on client project. This will require the application of skills and knowledge covered in the Business Core and Practice components of the MSiM program, to address the client challenge.



# **Appendix D**

## **Fiscal Impact Statement**

## Fiscal Impact Statement

### Budget for New Graduate Degree Programs

	Year 1	Year 2	Year 3	Year 4
<b>Projected Enrollment</b>				
Head-count full time	30	40	50	50
Head-count part time				
Full Time Equivalent (FTE) enrollment				
<b>Projected Program Income</b>				
Tuition (paid by student or sponsor)	900,000	1,200,000	1,500,000	1,500,500
Externally funded stipends, as applicable				
Expected state subsidy				
Other income (if applicable, describe in narrative section below)				
<b>TOTAL PROJECTED PROGRAM INCOME:</b>	<b>900,000</b>	<b>1,200,000</b>	<b>1,500,000</b>	<b>1,500,000</b>
<b>Program Expenses</b>				
New Personnel	231,000	231,000	231,000	231,000
• Faculty (e.g. tenure-track, clinical, professional)				
Full ____				
Part Time _30__				
• Non-instruction (indicate role(s) in narrative section below)	142,800	145,656	148,570	151,540
Full _1__				
Part time __1__	25,704	26,218	26,743	27,277
New facilities/building/space renovation (if applicable, describe in narrative section below)				
Tuition Scholarship Support (if applicable, describe in narrative section below)				
Stipend Support (if applicable, describe in narrative section below)				
Additional library resources (if applicable, describe in narrative section below)				
Additional technology or equipment needs (if applicable, describe in narrative section below)				
Other expenses (e.g., Waived Tuition and Fees, travel, office supplies, accreditation costs) (if applicable, describe in narrative section below)	93,300	93,300	93,300	93,300
<b>TOTAL PROJECTED EXPENSE:</b>	<b>492,804</b>	<b>496,174</b>	<b>499,613</b>	<b>503,118</b>
<b>NET</b>	<b>407,196</b>	<b>703,826</b>	<b>1,000,387</b>	<b>996,882</b>

# **Appendix E**

## **Market Analysis**



## EXECUTIVE SUMMARY

### **Burning Glass Technologies National and Midwest Summary Statistics for the Masters in Management Employment Outlook.**



Burning Glass Technologies (<https://www.burning-glass.com/>) is an analytics software company that has cracked the genetic code of an ever-changing labor market. Powered by the world's largest and most sophisticated database of labor market data and talent, we deliver real-time data and breakthrough planning tools that inform careers, define academic programs, and shape workforces.

In developing the M.S. Business Management (MSiM), we used the Labor Market Analytics Warehouse via Burning Glass Technologies to find the current market for graduates with either an **MSiM or similar Master's degree**. The data cannot distinguish between MSiM and MBA and similar degrees. The data points below were compiled from this warehouse.

## National Data

- For this project criteria, there were **384,008 job postings** in the last 12 months. Compared to: 29,280,440 total job postings across the country. 2,769,114 total job postings requesting a Master's degree across the country. The number of jobs is expected to grow over the next 8 years.
- The average salary in the nation for graduates of a Master's of Management or similar program is \$93,784. This average salary is **Above** the average living wage for the nation of \$31,450.
- Nationwide occupations requiring similar degrees are expected to grow by 8.1% versus 7.4% of the total labor market.
- Employment career outcomes for similar programs have increased from 6.6 million employees in 2013 to to 7.5 million employees in 2017 nationwide. This number is projected to increase to 8.1 million by 2027.

## National Data Top Titles and Top Skills

### Top Titles

#### Experience Level: All Experience

Title	Postings	Market Share (%)
Business Analyst	9,356	3.57%
Program Manager	8,278	3.16%
Project Manager	7,413	2.83%
Accounting Manager	4,728	1.80%
Director of Finance	4,230	1.61%
Sales Manager	3,963	1.51%
Director of Sales	3,385	1.29%
Supply Chain Manager	2,991	1.14%
Management Analyst	2,672	1.02%
Program Analyst	2,312	0.88%
Senior Project Manager	1,916	0.73%
Finance Manager	1,857	0.71%
Business Development Manag	1,787	0.68%
Procurement Manager	1,786	0.68%
Consultant	1,692	0.65%

#### Top 15 Specialized Skills

##### Skill

Budgeting  
 Project Management  
 Business Development  
 Scheduling  
 Staff Management  
 Sales  
 Accounting  
 Customer Service  
 Program Management

#### Top 15 Baselines Skills

##### Skill

Communication Skills  
 Planning  
 Teamwork / Collaboration  
 Problem Solving  
 Microsoft Excel  
 Research  
 Building Effective Relationships  
 Writing  
 Organizational Skills

## Midwest Data

For this project criteria, there were **84,414 job postings** in the last 12 months.

Compared to: 7,558,294 total job postings in the midwest. 599,565 total job postings requesting a Master's degree in the midwest. The number of jobs is expected to grow over the next 8 years.

### Growth by Geography

Geography	Selected Occupations	Total Labor Market
Selected States	9.52%	6.54%
Nationwide	8.10%	7.40%

\* Selected States include Wisconsin, Iowa, Missouri, Illinois, Kentucky, Tennessee, Indiana, Ohio, Michigan, Pennsylvania, West Virginia, Minnesota

Employment has increased from 1.7 million jobs in 2013 for similar degrees, to 1.9 million jobs in 2017. This number is expected to increase to 2.1 million by 2027 in the midwest.

The average salary in Wisconsin, Iowa, Missouri, Illinois, Kentucky, Tennessee, Indiana, Ohio, Michigan, Pennsylvania, West Virginia and Minnesota for graduates of similar programs is \$90,888.

This average salary is **Above** the average living wage for Wisconsin, Iowa, Missouri, Illinois, Kentucky, Tennessee, Indiana, Ohio, Michigan, Pennsylvania, West Virginia and Minnesota of \$30,538. (Salary numbers are based on Burning Glass models that consider advertised job posting salary, BLS data, and other proprietary and public sources of information.)

## Midwest Data, Continued

### Midwest Top Titles and Top Skills

Experience Level: All Experience

Title	Postings	Market Share (%)
Business Analyst	2,080	3.52%
Project Manager	1,728	2.93%
Program Manager	1,658	2.81%
Accounting Manager	1,102	1.87%
Director of Finance	991	1.68%
Sales Manager	900	1.52%
Director of Sales	868	1.47%
Supply Chain Manager	781	1.32%
Procurement Manager	473	0.80%
Finance Manager	452	0.77%
Consultant	451	0.76%
Regional Sales Manager	443	0.75%
Management Analyst	438	0.74%
Regional Director	435	0.74%
Senior Project Manager	412	0.70%

Key Competencies required by these graduates.

#### Top 10 Specialized Skills

Budgeting  
 Project Management  
 Business Development  
 Sales  
 Scheduling  
 Staff Management  
 Customer Service  
 Accounting  
 Business Process  
 Strategic Planning

#### Top 10 Baseline Skills

Communication skills  
 Planning  
 Teamwork/Collaboration  
 Problem Solving  
 Microsoft Excel  
 Building Effective Relationships  
 Research  
 Microsoft Office  
 Organizational Skills  
 Writing

## Benchmarking of MSiM Programs Nationwide

### MASTER'S IN MANAGEMENT PROGRAMS 2017

[www.topmanagementdegrees.com/rankings/best-masters-management/](http://www.topmanagementdegrees.com/rankings/best-masters-management/)

This list is a selection from the top 20 programs			
College	Degree	Length	Credit hours
University of Michigan- Ross School of Business	Master of Management	10 months	30
Penn State Smeal College of Business	Master's of Professional Studies in Management and Org. Leadership	10 months	30
University of Florida-Warrington College of Business	M.S. in Management	1 year	32
Northwestern Univ. Kellogg School of MGT	M.S. in Management Studies	10 months	16*
Duke University-Fuqua School of Business	Master of Management Studies	10/11 months	43
Univ. of Notre Dame	M.S. in Management	11 months	38
Edwin L. Cox S of Business at Southern Methodist University	M.S. in Management	9 months	30
University of Maryland	M.S. in Business and Management	9 months	30
Stevens Institute of Technology	Master's in Management	Less than 1 year	30
University of Central Florida-	Professional M.S. in Management	20 months	30
Boston University	M.S. in Management Studies	9 months	36
Rochester Institute of Technology-Saunders College of Business	M.S. in Management	1 year	30
Tulane University	M.S. in Management	1 year	36



# Appendix F

## Letters of Support

Internal:

Dr. Chris Makaroff  
Professor of Chemistry & Biochemistry  
Dean, College of Arts and Science, Miami University

Michael S. Kabbaz, Former Senior Vice President  
Enrollment Management & Student Success, Miami University

External:

Justin Sheperd, 1994  
Farmer School of Business, Dean's Advisory Council, Co-chair  
Former Chief Investment Officer - Aurora Investment Management

Brett Stover, 1986  
Farmer School of Business, Dean's Advisory Council  
Trustee National Alumni Board  
Founder Spectrum LGBT Alumni Engagement Top City Program

Brian D. Wolfe, 2000  
Farmer School of Business, Dean's Advisory Council  
Partner, Kirkland & Ellis LLP.



Chris Makaroff Office of the Dean  
College of Arts and Science OXFORD, OH  
45056-1465  
513-529-1234

February 19, 2019

Dr. Marc A. Rubin  
Dean and Mitchell P. Rales Chair in Business Leadership  
Farmer School of Business  
Miami University Oxford, OH 45056

Dear Marc:

I am writing to express my strong support for your proposal to offer a Master of Science in Management. This one-year, post-baccalaureate M.S. degree program will provide our nonbusiness students the necessary business skills to obtain their first job and better prepare them to directly utilize their liberal arts degrees in a business environment. Over 50% of Arts and Science majors take positions in the private/business sector directly after graduation. The breadth of knowledge and core critical thinking and communication skills from the liberal arts degrees of our graduates combined with essential business skills and hands-on client based experiential learning provided by the proposed MSiM will provide an exceptional educational background. This combination will make our students highly competitive as they enter the workforce and prepare them for long successful careers in the business world. I believe that the MSiM will be an attractive option for Arts and Science students and a valuable asset as they transition into the business world. Therefore, I am happy to provide my strong endorsement of your proposal.

Sincerely,

A handwritten signature in black ink that reads 'Chris Makaroff'.

Chris Makaroff  
Professor of Chemistry & Biochemistry  
Dean, College of Arts and Science



*Enrollment Management &  
Student Success Office of the  
Senior Vice President*

Roudebush Hall 214  
501 E. High Street  
Oxford, OH 45056  
513-529-8114

To: Marc Rubin, Dean, Farmer School of Business  
From: Michael S. Kabbaz, Senior Vice President, Enrollment Management & Student Success  
Re: Letter of Support for the Master of Science in Business Management  
Date: March 1, 2019

---

I am writing to express my full support for the proposed Master of Science in Business Management (MSiM) in the Farmer School of Business (FSB). It is vital for the Oxford campus to continue to add high- quality, in-demand master’s degrees that assist Miami’s ability to attract talented and diverse prospective students from Ohio, across the nation, and around the world. As importantly, this proposed degree opens up a new and desirable post-undergraduate pathway opportunity that leads to high demand business careers for non-business students.

Based on Burning Glass data<sup>1</sup>, the number of jobs with business master’s backgrounds is expected to grow over by 9.5% by 2027 (1,941,231 to 2,124,614) across the Midwest. Nationally, demand is expected to grow 8.1% by 2027. Over the last year (2/18 - 1/19), the top 5 largest job postings states for business master’s was California, New York, Texas, Massachusetts, and Illinois (rank order), all high priority prospective student recruiting states for Miami. The top 5 hiring employers in the region were Anthem Blue Cross, Deloitte, U.S. Bancorp, UnitedHealth Group, and JP Morgan Chase Company.

As described in the program proposal, the new master’s degree will provide the FSB faculty the ability to “leverage core critical thinking skills from the liberal arts Foundation of our graduates, and add value with the trifecta of essential business skills, business knowledge and hands-on client based experiential learning.” This new proposed master’s degree couples the national reputation of the FSB with Miami’s top-rated undergraduate degree to provide relevant, in-demand skills that without question will significantly expand high-quality employment opportunities for its graduates immediately upon graduation.

<sup>1</sup> <http://www.burning-glass.com>

**Letter of Support Miami University**  
**Master of Science in Business Management**

Dear Sir/Madam:

As Co-Chair of the Farmer School's Business Advisory Council, I am an avid supporter of the proposed Master of Science in Business Management program at Miami University. I feel this program meets a critical need for all business as we strive to compete both locally and globally.

In an increasingly complex and data rich environment, skill sets such as those to be offered in the proposed program will provide a pipeline of individuals with skills that can help make a difference for the success of any organization. As such, I offer my enthusiastic support for this program.

The whole Business Advisory Council looks forward to engaging with M.U. on this initiative in various mutually beneficial ways including providing real-world project opportunities for students.

Please add my voice in support of this new and exciting program.

Sincerely,

Justin Sheperd

Co-Chair – Business Advisory Council - Farmer School of Business  
Former Chief Investment Officer - Aurora Investment Management

**Signed copy of letter above:**

**Letter of Support**  
**Miami University Master of Science in Business Management**

Dear Sir/Madam:

As Co-Chair of the Farmer School's Business Advisory Council, I am an avid supporter of the proposed Master of Science in Business Management program at Miami University. I feel this program meets a critical need for all business as we strive to compete both locally and globally.

In an increasingly complex and data rich environment, skill sets such as those to be offered in the proposed program will provide a pipeline of individuals with skills that can help make a difference for the success of any organization. As such, I offer my enthusiastic support for this program.

The whole Business Advisory Council looks forward to engaging with M.U. on this initiative in various mutually beneficial ways including providing real-world project opportunities for students.

Please add my voice in support of this new and exciting program.

Sincerely,



Justin Sheperd

Co-Chair – Business Advisory Council - Farmer School of Business  
Former Chief Investment Officer - Aurora Investment Management



372 Danbury Rd. Suite 100, Wilton CT 06897  
 (203)834-2800 info@kantaretail.com

Letter of Support Miami University Master of Science in Business Management

Dear Grant Decision Makers for BOLDLY CREATIVE,

**This program is a winner. It embodies the spirit of BOLDLY CREATIVE.** It will equip our students with the skills they need to be workplace leaders while enhancing the university's undergraduate teaching, learning and research. *This program focuses on innovation, creativity, practicality and student success.*

**Importantly, this program will generate significant net incremental profit and will become self-sustaining**

Dr. Barnali Gupta indicates this program is expected during the initial face to face delivery phase, to scale to a steady state of 50 students per year and generate net incremental profit of around \$1 million per year.

***I believe her estimates are conservative.*** Expansion to online, after proof of concept, is the next step and will further accelerate and amplify this initiative.

***For me the question is not should we fund this program? It is are we moving fast and bold enough to get this to scale? Are we investing enough?***

This program will deliver to the non-business major, the trifecta of essential skills, business knowledge and hands-on client based experiential learning that I see the need for in my consulting assignments. I see this consistently across my client base which includes: Unilever, Colgate, Kimberly-Clark, Coca-Cola, Mars Candy, General Mills, Nestle, Clorox, Campbell's, Mattel/Fisher-Price, Pfizer, Abbott, Pharmavite, Sony, J&J, Grupo Bimbo, Lego, and Michelin.

What is particularly exciting is that Dr. Gupta and the Farmer School of Business is thinking about **the success of all Miami University students** by creating a path for students with majors from across campus who want to develop business skills and knowledge, regardless of their undergraduate major.

It is with pleasure that I endorse this creative and innovative Master of Science in Business Management in the Farmer School of Business and with deep appreciation to Dr. Barnali Gupta for her leadership.

A handwritten signature in black ink that reads "Brett A. Stover".

For Love & Honor,  
 Brett Stover

B.S. Business, 1986  
 Farmer School of Business Dean's Advisory Council Trustee National Alumni Board  
 Founder Spectrum LGBT Alumni Engagement Top City Program

FROM THE DESK OF

**Brian Wolfe**

Dear Sir/Madam:

I am a strong supporter of the proposed Master of Science in Business Management program at Miami University. I am an advocate of encouraging undergraduate students to major in an area of study they are passionate in. The Master of Science in Business Management program will provide non-business major students a more formal "bridge" into the business world through classroom study and hands-on experiences.

Business leaders seek out young persons who understand how to problem solve and think systemically. Non-business undergraduate programs such as engineering, the sciences and software development encourage and develop these skills, but may not prepare students for functional business roles, such as in project and product management. The Master of Science in Business Management program will do an excellent job of taking a student's existing skills and translating and supplementing those skills for application in the business world. As such, I offer my enthusiastic support for this program.

I look forward to engaging with Miami on this initiative.

Sincerely,



Brian D. Wolfe

---

**864 Bryant, Winnetka, Illinois 60093**



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ROUEBUSH HALL ROOM 212  
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December 13, 2019  
Academic and Student Affairs

**RESOLUTION R2020-17**

BE IT RESOLVED: that the Board of Trustees hereby accepts and approves the attached Annual Report of Remedial Education at Miami University, and directs the Provost and Executive Vice President to submit the report to the Ohio Department of Higher Education.

*Approved by the Board of Trustees  
December 13, 2019*

T. O. Pickerill II  
Secretary to the Board of Trustees





ACADEMIC AFFAIRS  
*Provost and Executive Vice President  
 for Academic Affairs*

209 Roudebush Hall  
 501 E. High Street  
 Oxford, OH 45056-3653  
 MiamiOH.edu

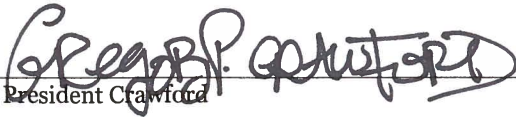
**Miami University Recommendation  
 To the Board of Trustees  
 For Action**

Date: December 12, 2019  
 Title: REPORT OF REMEDIAL EDUCATION  
 Synopsis: Annual Report on Remedial Education for the Ohio Department of Higher Education

It is recommended that the Board of Trustees approve sending the attached report to the Ohio Department of Higher Education. This is in response to provision House Bill 49 which “requires the issuance of an annual report on the number of students that require remedial education, the costs of remediation, the specific areas of remediation provided by the university, and causes for remediation.” This report has been reviewed and approved by the appropriate authorities.

Prepared by:   
 William Knight, Assistant Provost

Reviewed by:   
 Jason Osborne, Provost and Executive Vice President for Academic Affairs

FOR BOARD OFFICE USE ONLY:	
Recommendation Number _____	
Date of Board Approval: <u>12/13/19</u>	Submitted By: <u></u> Gregory P. Crawford President of Miami University

## 2019 University Remediation Report

**Name of University:** **Miami University**

Ohio Revised Code Section 3345.062 requires the president of each state university to issue a report by December 31, 2017, and each thirty-first day of December thereafter, regarding the remediation of students. The report must include the following areas:

### 1. The number of enrolled students that require remedial education (FY19 actual).

Number of Students	Description (if needed)
767	All first-time students entering fall 2018 with one or more scores indicating need for remediation. The threshold ACT scores indicating the need for remediation are reading less than 22, English less than 18, and math less than 22. This includes Oxford Scholastic Enhancement Program (SEP,) Oxford American Culture and English Program (ACE,) and Regional campus students. For Regional students without ACT scores, remediation is required based on scores of alternative tests. Specifically, WritePlacer (scores of less than 5), Accuplacer Next Gen (scores of less than 250), and STEM Accuplacer (scores of less than 243).

### 2. The cost of remedial coursework that the state university provides (FY19 actual).

Please select the type of cost in the following areas and describe.

- **Costs to the university:** Please include a description of all university resources allocated in support of and/or on behalf of remedial education, including but not limited to costs associated with the following: faculty & staff, buildings/classrooms, administration, and additional student advising, among others.
- **Costs to the student:** Please include a description of tuition paid by students in pursuit of remedial education.
- **Costs to the state:** Please include a description of state resources provided to your institution in support of remedial education. (See Appendix A containing this information for all state universities.)

Cost Type	Amount	Description
Costs to the university	\$ 961,691	Instructional costs for remedial courses for FY 2019
Costs to the university	\$ 1,833,885	Estimated costs of Advising & Learning Center on the Regional Campuses for FY 2019 multiplied by the percent of students on the Regionals needing some form of
Costs to the state	\$ 44,402	State share of instruction for remedial courses for FY 2019
Costs to the student	\$ 3,040.00	Tuition and fees for Regional full-time students in first semester
	\$ 17,447.32	Tuition and fees for Oxford ACE full-time students in first semester
	\$ 7,689.04	Tuition and fees for Oxford SEP full-time students in first semester

### 3. The specific areas of remediation provided by the university.

Subject Area	Description
Writing	ENG007 Fundamentals of Writing (3 credits)
Blended English	ENG007/ENG111 - Corequisite, development course plus College English Course taken concurrently (5 credits)
Reading	EDT002 College Reading II (3 credits)
Quantitative Reasoning	MTH049 Math Literacy (Quantitative Reasoning) 4 pre-college credits
Math	MTH 025 Algebra for Precalculus (Math for STEM) 5 pre-college credits
Academic Support	Miami Regionals offer a range of support programs for students with high academic need, including: College Readiness Program (intensive support for math, reading, writing), co-remediation study skills courses that can be paired with commonly enrolled general education courses, tutoring/mentoring and career development guidance, TRIO program, online financial aid course, technology workshops, and first-year experience course (UNV 101).

### 4. Causes for remediation.

Please select all that are relevant from the following categories and provide detail.

- **Lack of student preparation at the K-12 level**
- **Prescriptive placement policies** (over reliance on a single assessment measure)
- **Deferred entry into higher education** (adult students returning to higher education)
- **Other** (any other cause identified by the university)

Cause	Description
Lack of student preparation	High percentages of incoming students on the regional campuses have academic need stemming from attending less rigorous high schools, challenging family situations, and lack of study skills and a college mindset.
Lack of student preparation	Many incoming students on the regional campuses have poor technology skills due to out-of-date or nonexistent technology at home, antiquated word processing software, and computers riddled with viruses.
Other	For most students on the Regional campuses, future jobs are of utmost priority. Yet, because Miami stresses a liberal arts approach to higher education, the correlation between academic pathways and career pathways seems murky to students.
Other	All students on the regional campuses commute to school, and many have significant family and work commitments. Most students come to campus, attend class and leave which means that they have little opportunity to build meaningful relationships with faculty and advisors nor take advantage of support services available on the campuses.

**TUITION ORDINANCE 2020-01**  
**Professional MBA Program and Master in Science for Business Analytics**

WHEREAS, Miami University is committed to providing a quality and affordable education and services to its graduate students; and

WHEREAS, the Board of Trustees of Miami University annually adopts tuition (instructional and general fees) and an out-of-state surcharge for graduate students on all campuses; and

WHEREAS, the University has identified existing and new graduate program offerings that have unique costs and market conditions; and

WHEREAS, after evaluating the competitive position of the Miami PMBA program in the greater Cincinnati market, the Farmer School of Business recommends that the per credit hour tuition remain at \$1,050; and

WHEREAS, after evaluating the market for a Master's Degrees in Business Analytics, the Farmer School of Business recommends a tuition rate of \$995 per credit hour.

NOW, THEREFORE, BE IT ORDAINED: that the Board of Trustees adopts the comprehensive per credit hour tuition rates for resident and non-resident graduate students as presented above.

*Approved by the Board of Trustees*  
*December 13, 2019*



T. O. Pickerill II  
Secretary to the Board of Trustees



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## RESOLUTION R2020-18

WHEREAS, each biennium Ohio's public colleges and universities are asked to submit a six-year Capital Improvements Request in accordance with capital funding guidelines provided by the Ohio Office of Budget and Management and the Ohio Department of Higher Education; and

WHEREAS, the proposed capital improvement plan aligns with the criteria identified in the previous biennium's Ohio's Higher Education Capital Funding Commission's guiding principles, the university's current academic priorities, and existing facility condition needs; and

NOW, THEREFORE, BE IT RESOLVED: that the Board of Trustees hereby authorizes the 2021-2026 Capital Improvements plan and 2021-2022 funding request; and

BE IT FURTHER RESOLVED: that the Senior Vice President for Finance and Business Services and Treasurer is hereby authorized to amend the 2021-2026 Capital Improvements Plan and Funding Request as may be required to conform to changes in the allocation distribution made by the Ohio Office of Budget and Management and/or the Ohio Department of Higher Education.

*Approved by the Board of Trustees  
December 13, 2019*

A handwritten signature in black ink, appearing to read 'T. O. Pickerill II', with a long horizontal flourish extending to the right.

T. O. Pickerill II  
Secretary to the Board of Trustees



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## RESOLUTION R2020-19

WHEREAS, the High Street Safety Enhancements project will improve pedestrian and bicyclist safety along the US 27/Patterson Avenue corridor; and

WHEREAS, Miami University and the City of Oxford successfully partnered in seeking grant funding from the Ohio Department of Transportation in the amount of \$1,000,000 toward the safety enhancement project; and

WHEREAS, the City of Oxford, which plans to repave the impacted asphalt roadways and will administer the University's safety enhancement project along with the repavement project; and

WHEREAS, Miami University has identified a total project cost in the amount of \$3,900,000 for the High Street Safety Enhancements project, which includes the \$1,000,000 grant from the Ohio Department of Transportation and local funds in the amount of \$2,900,000; and

WHEREAS, the \$3,900,000 budget includes a cost of construction estimate of approximately \$3,170,000; and

WHEREAS, the State of Ohio allows award of contracts up to 110% of the construction estimate necessitating a bid variation contingency of \$317,000 in addition to the \$3,170,000 construction budget; and

WHEREAS, the design is being completed and receipt of bids is planned for February 2020;

NOW, THEREFORE, BE IT RESOLVED: that the Board of Trustees hereby authorizes the Senior Vice President for Finance and Business Services and Treasurer, to proceed with the award of contract for the High Street Safety Enhancements project in partnership with the City of Oxford for a total project budget not to exceed \$3,900,000.

*Approved by the Board of Trustees  
December 13, 2019*

T. O. Pickerill II  
Secretary to the Board of Trustees

Executive Summary  
For the  
High Street Safety Enhancements  
December 12, 2019

In 2018 Miami University completed safety enhancements along the US27/Patterson Avenue corridor on the southern portion of Patterson Avenue from Chestnut Street to State Route 73. This project will continue those design concepts along the US27 corridor on the north portion of Patterson Avenue and onto High Street to Campus Avenue, the most heavily trafficked road through campus.

Safety enhancements include installing refuge islands, planted medians, reduced and improved improved crosswalk locations, lighting and safety signals, and modified bus stops. The project will continue the multi-use bicycle/pedestrian path that exists on the west side of Patterson Avenue onto High Street. All necessary curb and gutter replacements will occur along the entire US27 corridor (Patterson Avenue and High Street) in preparation for this corridor to be repaved at the completion of the project. This project is not responsible for the cost of the repaving. The project costs include pre-emption devices that will be installed in City and Miami first responder vehicles to manage traffic light sequencing.

Funding for this project will be from local funds and a grant from ODOT to the City of Oxford:

ODOT Grant to City of Oxford	\$1,000,000
Local Funds	\$2,900,000

<u>Project component:</u>	<u>Budget:</u>	<u>Funding Source:</u>
Est. Design and Administration:	\$345,000	Local Funds
Est. Cost of Work:	\$2,170,000	Local Funds
Est. Cost of Work	\$1,000,000	ODOT Grant
Est. Owner's Costs:	\$0	Local Funds
Est. Contingency:	<u>\$385,000</u>	Local Funds
Est. Total:	\$3,900,000	



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**RESOLUTION R2020-20**

WHEREAS, the Dodds Hall Renovation project involves the renovation of one existing residence hall; and

WHEREAS, Miami University has determined that cost control, speed of implementation, and best value may be gained by utilizing the Design-Build project delivery method; and

WHEREAS, the receipt of the Guaranteed Maximum Price (GMP) is planned for December 2020; and

WHEREAS, Miami University has identified funds in the amount of \$17,660,000 for the Dodds Hall Renovation project; and

NOW, THEREFORE, BE IT RESOLVED: that the Board of Trustees authorizes the Senior Vice President for Finance and Business Services and Treasurer, to proceed with the award of contract for the Dodds Hall project with a total project budget not to exceed \$17,660,000.

*Approved by the Board of Trustees  
December 13, 2019*

A handwritten signature in black ink, appearing to read 'T. O. Pickerill II', with a long horizontal flourish extending to the right.

T. O. Pickerill II  
Secretary to the Board of Trustees

Executive Summary  
for the  
Dodds Hall Renovations  
December 12, 2019

This project will result in the renovation of Dodds Hall as part of the Long-Range Housing Master Plan. The project will be delivered using Design-Build methodology to reduce time taken from design through construction, reduce the cost of construction, and minimize the risk to the University.

Renovations will include new windows, ADA accessibility improvements, elevators, insulating of attics, new corridor ceilings, interior lighting, plumbing systems, sprinkler system, electrical distribution, HVAC systems, life safety and fire alarm systems, utility tie-ins, site utilities, selective addition and/or demolition of bedroom walls, and new bedroom finishes. Student life programming elements such as community rooms, group study rooms, and other support spaces will be included.

<u>Project component:</u>	<u>Budget:</u>	<u>Funding Source:</u>
Est. Design and Administration:	\$1,100,000	Bond Funding
Est. Cost of Work:	\$15,160,000	Local Funding
Est. Owner's Costs:	\$800,000	Local Funding
Est. Contingency:	<u>\$600,000</u>	Local Funding
Est. Total:	\$17,660,000	





### RESOLUTION R2020-21

WHEREAS, the Harris Hall Renovation project will create a temporary location for the activities occurring in the Health Services Center while the current building is deconstructed as part of the new Clinical Health Sciences Building project; and

WHEREAS, Miami University has previously approved pre-construction funds for the design of a new Clinical Health Sciences Building as a way to address the growing need for health-related programs; and

WHEREAS, Miami University has determined the best location for the new Clinical Health Sciences Building is in the area of campus where the current Health Services Center facility is located, and there is benefit to the University to include the Health Services Center program within the new Clinical Health Sciences Building requiring the de-construction of the current structure; and

WHEREAS, the renovation of Harris Hall will modify existing kitchen and seating areas, address infrastructure needs including HVAC, plumbing, electrical, data and safety systems to create code compliant clinic space, counseling center and wellness offices; and

WHEREAS, after the temporary need for Health Services ends, Harris Hall will be used as swing space for future renovation projects, most notably the renovation of Bachelor Hall, which is identified in the next two state capital requests in the University's Six Year Capital Plan; and

WHEREAS, Miami University intends to identify an overall project budget in the amount of \$96,000,000 for the Clinical Health Sciences Building project to include the temporary relocation of health services; and

WHEREAS, the cost of work estimate for the renovation of Harris Hall is \$6,200,000; and

WHEREAS, Miami University has determined that reduced costs, speed of implementation, and coordination may be gained by using the Design Build project delivery method; and

WHEREAS, the receipt of Guaranteed Maximum Price for the Harris Hall Renovation is planned for January 2020;

NOW, THEREFORE, BE IT RESOLVED: that the Board of Trustees hereby authorizes the Senior Vice President for Finance and Business Services and Treasurer to proceed with signing of the GMP for the Harris Hall Renovation with a GMP not to exceed \$6,200,000.

*Approved by the Board of Trustees  
December 13, 2019*

T. O. Pickerill II  
Secretary to the Board of Trustees

Executive Summary  
for the  
Harris Hall Renovation  
December 12, 2019

Harris Hall was originally constructed and operated as a dining hall. Since 2017 there has not been any dining operations in the building, and a portion of the first floor was modified into temporary office space for University Advancement. The renovation of additional portions of the first floor will create the appropriate spaces for the temporary relocation of the Health Services Center, which includes the student health clinic, student counseling services, student wellness, and the health clinic supporting faculty and staff. These programs will ultimately be incorporated into the new Clinical Health Sciences Building. Spaces will be created for clinic exam rooms and counseling offices. The remaining spaces will be used mostly as-is for waiting rooms, wellness programs, provider offices and storage. The renovation will introduce fire suppression to the building, replace the electrical service, and modify HVAC, plumbing, other building systems to accommodate the Health Services Center programs.

Once these programs move into their new building, Harris Hall will be used as swing space for future projects and for administrative purposes. Bachelor Hall is identified as the next major academic renovation project. Bachelor Hall currently houses English, Math, Speech Pathology & Audiology, and the ACE Program. Under current planning, English will be the only remaining department in Bachelor requiring temporary relocation. The English Department has 86 offices which are planned to be accommodated in Harris.

The renovation must be completed by spring 2020 in anticipation of the demolition of the current facility in summer 2020. The temporary relocation of the Health Services Center will end in the summer of 2022 in time for the beginning of Fall term 2022.

Funding for this project will be from local funds:

<u>Project component:</u>	<u>Budget:</u>	<u>Funding Source:</u>
Est. Design and Admin:	\$325,000	Local Funds
Est. Cost of Work:	\$5,875,000	Local Funds
Est. Owner's Costs (FFE, etc):	(incl. in larger project)	Local Funds
Est. Contingency:	<u>(incl. In larger project)</u>	Local Funds
Total:	\$6,200,00	



**RESOLUTION R2020-22**  
**RESOLUTION INDICATING INTENT TO ISSUE**  
**BONDS FOR THE PURPOSE OF CONSTRUCTING, REHABILITATING**  
**AND EQUIPPING OF VARIOUS UNIVERSITY FACILITIES**

WHEREAS, Treasury Regulation §1.150-2 (the “Reimbursement Regulations”), issued pursuant to Section 150 of the Internal Revenue Code of 1986, as amended, (the “Code”) prescribes certain requirements by which proceeds of tax-exempt bonds, notes, certificates or other obligations included in the meaning of “bonds” under Section 150 of the Code (“Obligations”) used to reimburse advances made for Capital Expenditures (as hereinafter defined) paid before the issuance of such Obligations may be deemed “spent” for purposes of Sections 103 and 141 to 150 of the Code and therefore, not further subject to any other requirements or restrictions under those sections of the Code; and

WHEREAS, such Reimbursement Regulations require that the University make a Declaration of Official Intent (as hereinafter defined) to reimburse any Capital Expenditure paid prior to the issuance of the Obligations intended to fund such Capital Expenditure and require that such Declaration of Official Intent be made no later than sixty (60) days after payment of the Capital Expenditure and further require that any Reimbursement Allocation (as hereinafter defined) of the proceeds of such Obligations to reimburse such Capital Expenditures occur no later than eighteen (18) months after the later of the date the Capital Expenditure was paid or the date the property acquired with the Capital Expenditure was placed in service, except that any such Reimbursement Allocation must be made no later than three years after such Capital Expenditure was paid;

WHEREAS, the Reimbursement Regulations provide that an Issuer may delegate the authority for making such Declarations of Official Intent and Allocations to one or more individuals; and

WHEREAS, The Board of Trustees of Miami University (the “University”), wishes to ensure compliance with the Reimbursement Regulations;

NOW, THEREFORE, be it resolved by the Board of Trustees of the University:

**Section 1. Definitions.** The following definitions apply to the terms used herein:

“Allocation” means written evidence that proceeds of Obligations issued subsequent to the payment of a Capital Expenditure are to reimburse the University for such payments.

“Authorized Officer” means the Senior Vice President for Finance and Business Services and Treasurer of the University and any person with authority at the time to exercise functions of that office.

“Capital Expenditure” means any expense for an item that is properly depreciable or amortizable or is otherwise treated as a capital expenditure for purposes of the Code, as well as any costs of issuing Reimbursement Bonds.

“Declaration of Official Intent” means a written declaration that the University intends to fund Capital Expenditures with an issue of Reimbursement Bonds and reasonably expects to be reimbursed from the proceeds of such an issue.

“Reimbursement” means the restoration to the University of money temporarily advanced from other funds, including moneys borrowed from other sources, of the Corporation to pay for Capital Expenditures before the issuance of Obligations intended to fund such Capital Expenditures.

“Reimbursement Bonds” means Obligations that are issued to reimburse the University for Capital Expenditures, and for certain other expenses permitted by the Reimbursement Regulations, previously paid by or for the Corporation.

“Reimbursement Regulations” means Treasury Regulation §150-2 and any amendments thereto or superseding regulations, whether in proposed, temporary or final form, as applicable, prescribing conditions under which the proceeds of Obligations may be allocated to reimburse the University for Capital Expenditures and certain other expenses paid prior to the issuance of the Obligations such that the proceeds of such Obligations will be treated as “spent” for purposes of Sections 103 and 141 to 150 of the Code.

**Section 2. Declaration of Official Intent.**

(a) The University declares that it reasonably expects that the Capital Expenditures described in Section (b), which were paid no earlier than sixty (60) days prior to the date hereof, or which will be paid prior to the issuance of any Obligations intended to fund such Capital Expenditures, will be reimbursed with the proceeds of Obligations, representing a borrowing or borrowings by the University in the maximum principal amount, for such Reimbursements, of \$150,000,000; and

(b) The Capital Expenditures to be reimbursed are to be used for (a) the acquisition, construction, equipping and/or furnishing of a new clinical health sciences building and a new digital innovation multidisciplinary building, (b) the renovation of Bachelor and Upham Halls, and (c) other capital projects approved by the Board of Trustees of the University.

**Section 3. Reasonable Expectations.** The University does not expect any other funds (including the money advanced to make the Capital Expenditures that are to be reimbursed), to be reserved, allocated on a long-term basis, or otherwise set aside by the University or any other entity, with respect to the Capital Expenditures for the purposes described in Section 2(b).

The undersigned has been authorized by the University to sign this resolution on behalf of the University.

Date of Resolution:

December 13, 2019

*Approved by the Board of Trustees  
December 13, 2019*




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Secretary, Miami University Board of  
Trustees



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ROUDEBUSH HALL ROOM 212  
OXFORD, OHIO 45056  
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### RESOLUTION R2020-23

WHEREAS, Executive Order 2015-01K establishing the Ohio Task Force on Affordability and Efficiency in Higher Education (Ohio Task Force) to review and recommend ways in which state-sponsored institutions can be more efficient, offering an education of equal or higher quality while decreasing their costs; and

WHEREAS, Section 3333.95 of the Ohio Revised Code requires all boards of trustees of Ohio's state institutions of higher education to complete an efficiency review based on the report and recommendations of the Ohio Task Force and to make a report to the Chancellor of Higher Education on the institution's progress toward the implementation of the recommendations and cost saving measures; and

WHEREAS, the report of the task force included two master recommendations requiring: the savings and new dollars from the efficiency review be employed to reduce the cost of college for students or provide tangible benefits for the quality of students' education and a five year goal to be established for savings and new resources to be achieved by fiscal year 2021; and

WHEREAS, Miami University increased student scholarships by \$26.3 million in FY19 towards its five year goal of \$30 million by fiscal year 2021 and continues to implement efficiency actions consistent with the objectives submitted to comply with the Ohio Task Force report; and

WHEREAS, the institution's progress on its efficiency goals were reviewed by Miami's Fiscal Priorities committee; and

WHEREAS, Miami envisions this action not only being important for the five year period required by the report but is developing a process for performing program reviews for non-academic programs to better ensure that the Ohio Task Force goals to improve quality and efficiency be continued beyond 2021;

NOW, THEREFORE, BE IT RESOLVED: that the Board of Trustees of Miami University accepts the FY 2019 efficiency report and update on progress towards the University's five year goal to increase student scholarships by at least \$30 million; and

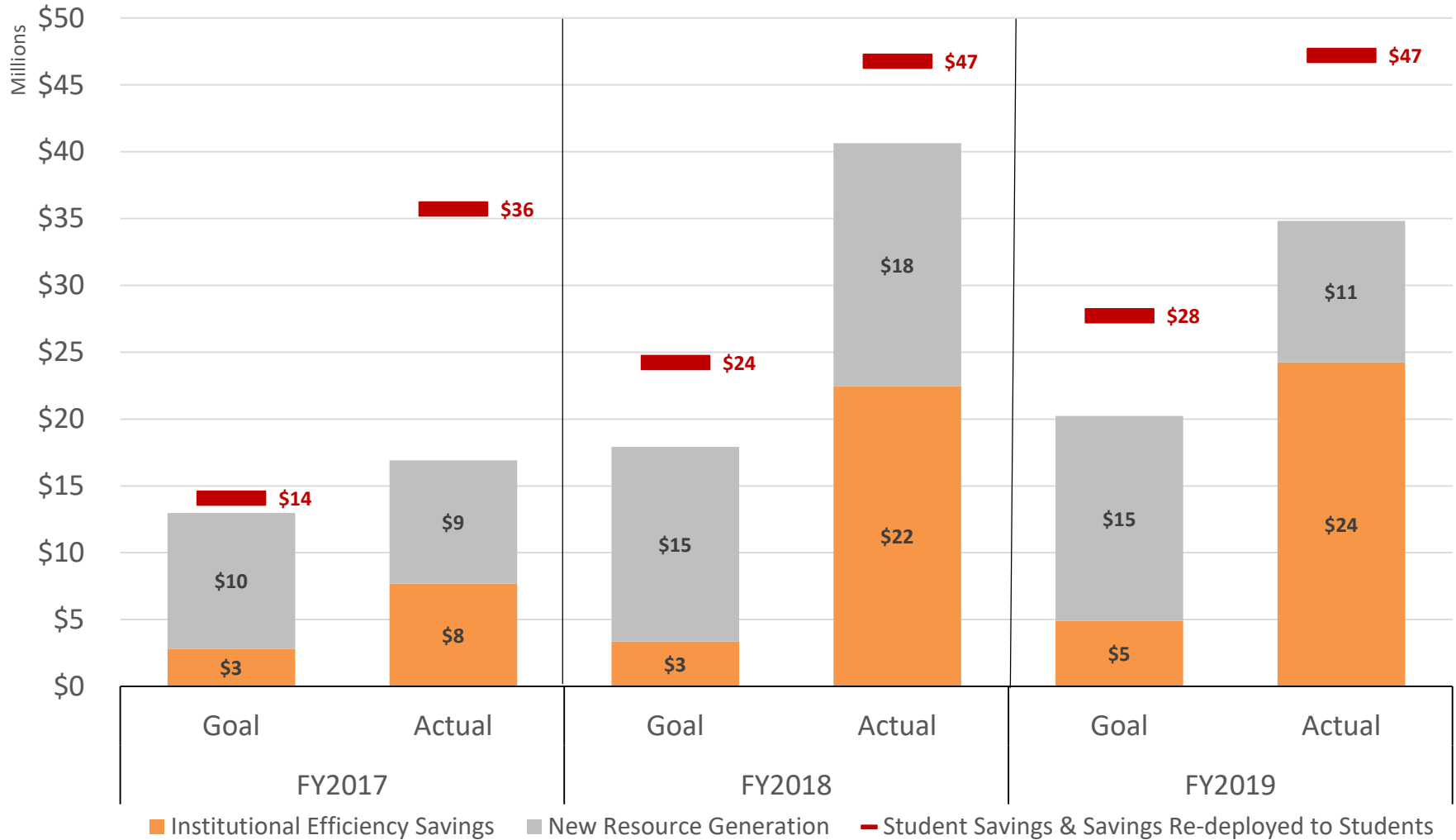
BE IT FURTHER RESOLVED: that the Board of Trustees directs the Senior Vice President for Finance and Business Services to submit the accompanying report and the related recommendations to the Chancellor of Higher Education by the legislated deadline.

*Approved by the Board of Trustees  
December 13, 2019*

T. O. Pickerill II  
Secretary to the Board of Trustees

# Miami University Performance on Ohio Efficiency Report

## Comparison of University Efficiencies and Student Savings





Department of  
Higher Education

Mike DeWine, Governor  
Randy Gardner, Chancellor



Affordability & Efficiency

## FY19 Efficiency Reporting Template

### Introduction:

Ohio Revised Code section 3333.95 requires the chancellor of the Ohio Department of Higher Education (DHE) to maintain an “Efficiency Advisory Committee” that includes an “efficiency officer” from each state institution of higher education (IHE). Each IHE must then provide an “**efficiency report**” updated annually to DHE, which is compiled by the chancellor into a statewide report shared at year end with the governor and legislature. The committee itself meets periodically at the call of the chancellor.

Affordability and efficiency in higher education are high among the DeWine-Husted administration’s policy priorities; however, as compared to prior years, this year’s template is increasingly focused on identifying quantifiable measures of progress in evaluating how well we are addressing affordability and efficiency. DHE’s preference for report responses is, to the degree feasible, quantitative data as opposed to narrative responses. Please respond with specific numbers where available. In addition, some questions included in the past are not included this year in recognition of the progress made in implementing earlier recommendations. Finally, you will notice some new points of emphasis that reflect unique priorities of the DeWine-Husted administration.

The FY19 reporting template asks for updates on several topics included in prior reports and continues to require Ohio’s IHEs to conduct an annual study to determine the cost of textbooks for students enrolled in the institution pursuant to revised code section 3333.951(C). The FY19 template also continues to request information on efficiencies gained as a result of the “regional compacts” as outlined in revised code section 3345.59.

New to the reporting template this year are information requests regarding online and/or competency-based delivery models for education, financial literacy efforts related to college debt and debt collection practices. Eliminated from the reporting template are some specific questions related to contracting as well as administrative and academic practices, although the new template does request some institutional data on expenditures that may relate to contracting and other operational practices.

***Your Efficiency Report Contact:*** Sara Molski, Project Manager, Fiscal and Legal Affairs, 614-728-8335, smolski@highered.ohio.gov. Please provide your institution’s efficiency report by **Friday, November 1, 2019** via email to [smolski@highered.ohio.gov](mailto:smolski@highered.ohio.gov)

As in previous years, the Efficiency Reporting Template is structured into sections:

- **Section I: Operational Efficiencies** – This section captures practices likely to yield significant savings that may be shared with students or benefit the institution generally. Topics include controlling costs in procurement, employee benefits, utilities and avoidance of duplication.
- **Section II: Academic Practices** – This section covers areas more directly related to instruction, such as the cost of textbooks, time-to-degree, and academic course and program reviews. Generally, our hope is that academic improvements may reduce student costs and/or improve student outcomes such as graduation rates, time to degree, student loan debt, etc.
- **Section III: Policy Reforms** – This section captures state IHE responses to suggested policy reforms originating in gubernatorial task force efforts, legislative joint committee reports, student loan debt advisory group reports, etc. In recent years, a number of stakeholder perspectives have been shared with institutions. Our hope is that institutions will respond to this stakeholder feedback.
- **Section IV: Student Benefit** – This section asks institutions to provide cost savings and/or resource generation in actual dollars for any major initiatives within the past fiscal year. Emphasis should be placed on highlighting major initiatives that may be considered best practices, rather than responding to specific recommendations from the Ohio Task Force on Affordability and Efficiency in Higher Education October 2015 report. To facilitate understanding, IHE's should advise if savings have been redeployed to students to reduce costs, or if they have been reinvested in some other manner for the benefit of students.
- **Section V: Future goals** – This section corresponds to Master Recommendation 2 of the Ohio Task Force on Affordability. It is designed to allow each institution to benchmark its respective five-year goals to its actual institutional cost savings or avoidance. In the spirit of continuous improvement, this section allows you to revise and/or update your five-year goals as needed. In addition, the DeWine-Husted administration would like to know more about possible roles the state could play in supporting your institutional goals; your input is requested in this section.

**For purposes of this report, efficiency is defined as quality versus cost as a means to measure value:**

- Direct cost savings to students (reducing costs)
- Direct cost savings to the institution (reducing costs)
- Cost avoidance for students (reducing costs)
- Cost avoidance to the college/university (reducing costs)
- Enhanced advising, teaching (improving quality)
- IP commercialization (improving quality)
- Graduation/completion rates (improving quality)
- Industry-recognized credentials (improving quality)
- Experiential learning (improving quality)

These are examples only. Please consider your responses to address broader measures of efficiency, quality, cost and value. Please also note that this is only a template. Feel free to respond in any additional way you believe is helpful.



## Miami University

### Section I: Operational Efficiency

Affordability and efficiency in higher education are high among the DeWine-Husted administration's policy priorities. DHE continues to encourage institutions to consider the Ohio Task Force on Affordability and Efficiency's October 2015 report "Action Steps to Reduce College Costs" (Task Force) linked here: [www.ohiohighered.org/sites/ohiohighered.org/files/uploads/affordability-efficiency/Action-Steps-to-Reduce-College-Costs\\_100115.pdf](http://www.ohiohighered.org/sites/ohiohighered.org/files/uploads/affordability-efficiency/Action-Steps-to-Reduce-College-Costs_100115.pdf). Although this year's template does not require each IHE to report on every recommendation of the Task Force, we are requesting that IHE's provide the most recent information available on selected items.

As presented in Recommendation 3B of the Task Force, IHE's have access to multiple joint purchasing agreements in the following categories:

- Copier/printer services
- Computer hardware
- Travel services
- Outbound shipping
- Scientific supplies and equipment
- Office supplies and equipment

Contract Type	Did your IHE participate in joint contracts in FY19? [yes, no, worked toward]	Monetary Impact
Copier/printer services	Yes	\$51,600
Computer hardware	Yes	\$146,997
Travel services	Yes	\$87,003
Outbound shipping	Yes	\$1,021
Scientific supplies & equipment	Yes	\$31,080
Office supplies & equipment	Yes	\$53,185

Per recommendation 4C of the Task Force, IHE's should evaluate opportunities for affinity relationships and sponsorships that can support students, faculty, and staff. Institutions can use these types of partnerships to generate new resources by identifying "win-win" opportunities with private entities that are interested in connecting with students, faculty, staff, alumni, or other members of their communities. Please complete the section below with the implementation status of your institution.

Did your institution initiate any new partnerships or sponsorships in FY19? If yes, please complete the below table for those new relationships.

Partnerships/Sponsorships	Description	Revenue Generated
PNC Bank	Banking Agreement	\$132,000
Mercy Health	Athletic Health Care	\$833,333
IMG	Marketing Rights	\$767,700

If the IHE realized efficiencies gained in FY19 from already existing relationships, please identify, specifically including revenue generated. *Include in the table above or add a similar table.*

Employee health benefits continue to be a major cost driver for all IHE's. The Task Force recommendations addressed this issue in 5D, recommending that a statewide working group identify opportunities to collaborate on health-care costs. At this point we are especially interested in learning about best practices that could be applicable around the state. Please provide the following information if your institution has generated any significant savings or health benefits improvements in FY 19

What initiatives or plan changes did the IHE implement in FY19 to manage or reduce healthcare costs?

Miami University released RFP in FY19 soliciting responses for health plan administrative services effective January 1, 2020. The university negotiated a reduction in fixed administrative expense to the health plan to be realized beginning January 1, and a medical claims trend guarantee, limiting any increase in medical claims for CY20 to less than the projected national trend. Additionally, Miami will have access to a quality/cost transparency reporting tool (Castlight) allowing for greater visibility into the quality and cost of healthcare services monitor the university's benefit design which incentivizes utilization through certain providers.

Miami also participated in several shared services RFP's through the IUC for ancillary (e.g. Life, LTD and Dental) plan providers.

Has the institution achieved any expected annual cost savings through healthcare efficiencies in FY19? Please explain how cost savings were estimated.

Miami University's orthopedic Centers of Excellence program reduced plan costs by \$103,715 and the Pharmacy Management program reduced costs by \$1,240,267. Savings from our Centers of Excellence are based on a comparison of average costs for the bundled service to the same services purchased separately (unbundled). Pharmacy savings were provided by our pharmacy benefit administrator and compare our costs to their broader customer base.

Energy Efficiencies seek to refine sustainable methods utilized by the institution to procure and use energy (resulting in more efficient use of energy), including but not limited to lighting systems, heating & cooling systems, electricity, natural gas, and utility monitoring. Again, we are especially interested in learning about best practices that could be applicable around the state. Please provide the following information if your institution has undertaken any significant energy savings projects in FY19.

FY19 Projects/Initiatives	Efficiencies Gained, including Monetary Impact
LED Lighting Upgrades	\$124,998
Thermal Energy Storage Tank	\$286,250

Has the institution gained efficiencies in FY19 from previously implemented projects/strategies? If yes, please discuss cumulative efficiencies gained.

Miami University constructed a geothermal plant served by 600 wells in FY 2015. In FY19, the plant’s Coefficient of Performance (COP) maintained the high level achieved last year at 5.10 – a 20% improvement from FY17. The cost of production improved by decreasing from \$2.79/MMBTU in FY18 to \$2.73/MMBTU in FY19. The cost of production has decreased nearly 11% since FY17. In total, these improvements amount to nearly \$75,000 in annual savings. Operation of this plant requires less maintenance and daily personnel interaction over our base case plant saving an estimated \$105,000 in labor (1.5 FTE). The total annual savings \$180,000 or \$900,000 since installation.

The Task Force charged DHE with developing a common measurement of administrative productivity. However, the Task Force also acknowledged that each institution should have the latitude to develop its own standards of the proper level of productivity for its campus units. DHE will provide specific financial data for each institution as part of this year’s reporting process. The Efficiency Advisory Committee will need to continue to evaluate this data and determine how best to utilize it taking into account the significant diversity of IHE’s and their missions throughout Ohio.

Specific institutional measures to be evaluated include:

- Average Expenditure per Student
- Total Revenue per Student
- Facility Cost per Student
- Square Feet per Student

## Regional Compacts

Ohio Revised Code Section 3345.59 requires regional compacts of Ohio’s public institutions, with an executed agreement in place by June 30, 2018 for institutions to collaborate more fully on shared operations and programs. Per O.R.C. §3345.59 {E} colleges and universities shall report within their annual efficiency reports the efficiencies gained as a result of the compact.

Please discuss efficiencies gained or opportunities for future partnerships as a result of each of the categories within the compact.

Category	Description	Monetary Impact
Reducing duplication of academic programming	<p>In response to the 2017 request by the Ohio Department of Higher Education, Miami University conducted a review of potential duplicate associate and baccalaureate degree programs with University of Cincinnati. The review included nine associate degree programs and 55 baccalaureate degree programs. To conduct this review, Miami evaluated programs in terms of the following indicators: (1) retention rates; (2) graduation rates; (3) enrollment pattern over past five years; (4) employment of its graduates; and (5) contributions to the core liberal education mission of the University. The Office of Institutional Research, in consultation with the Office of the Provost, compiled the program data and shared the information with the academic deans who offered feedback based on their contextual understanding of the program’s mission, purpose and effectiveness. Each academic dean determined whether the programs within their division warranted no action or further evaluation. In their review, the deans noted six bachelor degree programs and two associate degree programs that may benefit from further evaluation, including possible program elimination, realignment of the program within the University to improve efficiencies, or collaboration with University of Cincinnati.</p> <p>Below are some of the action steps implemented as a result of the study:  <b>Associate of Technical Studies (Engineering Technology Focus, Computer Information Technology Focus, and</b></p>	

**Commerce Focus):** Although Miami has had no enrollment in these programs for the past eight years, the Ohio Department of Higher Education has mandated that we offer an ATS degree to make higher education degrees more accessible to students in Ohio Career Technical Centers. In 2018, Miami revised this degree program so that it aligns with the requirements and includes concentrations in relevant One-Year Option pathways.

**Associate of Criminal Justice:** This degree currently serves 53 students who typically use this associate degree as a gateway to the four-year bachelor's degree in criminal justice, and the enrollment has been increasing in the past two years. Because the associate degree requirements are folded into the baccalaureate degree requirements, there are no additional resources required to maintain the associate degree. Other students in this program are either working professionals who may find the bachelor's degree too time-consuming, daunting, or financially prohibitive or individuals who often use this degree to distinguish themselves when applying to police academies. Because enrollment in a police academy requires students to be at least 20 years old, this degree program enables students who come to us directly out of high school to complete two years of higher education prior to enrollment at a police academy.

**Black World Studies BA:** The outcomes and content of this program are critical to ensuring that Miami meets its goal of advancing inclusion and offering culturally relevant curricula to students. Despite its critical role in promoting inclusion and diversity, this program has experienced diminished enrollment in recent years. To address this challenge, the program has been eliminated and replaced by a new BA in Critical Race & Ethnic Studies, with updated and streamlined requirements. The old program had stopped admitting students. The new program began admitting students in Fall, 2019.

**Classical Humanities and Classical Languages BA:** Despite the fact that some of its course offerings of the department are popular among Miami's undergraduate

students, demand for the majors within this department has been low for some time. To address this issue, in concert with its program review in 2018-19, the department is revising the program to consolidate the two separate majors offered into one degree with two tracks. Moreover, the Dean of the College of Arts & Science has requested that the Department of Classics be merged into an existing department, thereby reducing staffing and administrative costs. For the past six years, Classics faculty have engaged in a productive course-based collaboration with Ohio University. Miami and OU faculty collaborate to offer one or two upper-level classes in Ancient Greek and Latin each semester, with faculty from each university delivering the course on alternate years. The courses are offered in face-to-face versions on the home campus with the students from the other university participating virtually via an IVDL connection.

**Geography BA:** The program has rebranded and renamed the major, to “Geography and Sustainable Development,” effective Fall 2019. The department is simultaneously working with alumni and corporate partners to build their internship program and career development programming. The ultimate goal is for the program to grow and serve important needs of the state.

**Hebrew Language Program:** This program has been suspended.

**Individualized Studies BA:** Following a recent program review, in spring 2018 this program revised its curriculum to be more flexible and thus attractive to prospective students.

**Medical Laboratory Science BS:** In 2014, the Miami University Clinical Laboratory Science (CLS) major was replaced by the Medical Laboratory Science (MLS) major, which currently has 46 majors. Miami University’s Combined MLS Program, which consists of three or four years of core STEM classes, includes a one-year internship at an institution that offers a National Accrediting Agency for Clinical Laboratory Science (NAACLS)-accredited laboratory educational MLS internship. The required

	<p>internship encompasses didactic courses and rigorous laboratory rotations in NAACLS-accredited MLS medical laboratories. As a result of its intensity, the number of majors that can be accommodated by the program is limited by design. Miami’s MLS major is recognized statewide, regionally and nationally, as a premier Combined MLS Program. Nationwide, acceptance rates into NAACLS-accredited MLS Programs fall below 25%, whereas Miami students’ placement rate is approximately 80%. Currently, the program is working on a number of strategies to increase the number of MLS majors, including developing more partnerships with NAACLS-accredited MLS medical laboratories.</p> <p>Beyond the duplication study, Miami is continuously committed to streamlining its entire curricular portfolio. The University Registrar tracks enrollment trends and provides data annually to deans and department chairs. Data analysis has led Miami to eliminate 330 courses, 9 minors and three majors (BS Athletic Training, BS General Engineering and BS Earth Science) in the past year.</p> <p>Finally, Miami, along with UC and Cincinnati State, is a member of the Greater Cincinnati Collegiate Connection (GC3), which enables students to enroll in courses taught by another member institution as part of their schedule. Miami Regionals (along with Southern State Community College and Cincinnati State) is a member of the Southwest Ohio Council for Higher Education (SOCHE) which allows for collaboration with both public and private member institutions for course consortium.</p>	
<p>Implementing strategies to address workforce education needs of the region</p>	<p>Miami has submitted and received approval for hundreds of Transfer Assurance Guides and is now 95% compliant for all Transfer Assurance Guides and 100% compliant for all Career Technical Assurance Guides for which we are eligible.</p> <p>Miami actively participates in the One-Year Option and Transfer to Degree Guaranteed Pathways – all designed to</p>	

	<p>obtain technical credits without unnecessary duplication or institutional barriers. Miami’s has pathways in business, arts &amp; humanities, as well as social and behavioral sciences.</p> <p>Miami has also developed bilateral agreements that are designed to meet in-demand occupations in Ohio. For example, Miami has partnered with Southern State Community College to create agreements related to engineering technology and commerce. It has partnered with UC to create agreements related to criminal justice, psychology and nursing. It has also partnered with Cincinnati State on agreements related to engineering technology (electromechanical and mechanical), computer programming, criminal justice, English studies, applied social research and commerce. With respect to electromechanical engineering, Miami delivers the second two years of the EMET and Electrical degrees on Cincinnati State’s campus via Live Video.</p> <p>The Miami associate provost serves on the Ohio Articulation &amp; Transfer Advisory Board of the Ohio Department of Higher Education where she regularly collaborates with leaders from career technical centers as well as two- and four-year institutions across the state.</p>	
<p>Sharing resources to align educational pathways and to increase access within the region</p>	<p>In 2018 and again in 2019, Miami University’s associate provost partnered with leaders from University of Cincinnati, Cincinnati State Technical &amp; Community College, Southern State Community College, and Sinclair Community College to create a grant proposal for the “Tackling Transfer” Initiative through the Ohio Department of Higher Education. The two grants have funded several all-day summits designed to promote transfer student success. To date, five summits have been held at different campuses across the region (UC Clifton, SSCC’s Mt Orab campus, Sinclair Courseview, Miami Regionals’ Voice of America Center). Over 40 persons have attended each summit. Key outcomes of these summits have included new bilateral agreements in variety of subject areas (sciences, technology, engineering), a SW Ohio Regional Transfer</p>	

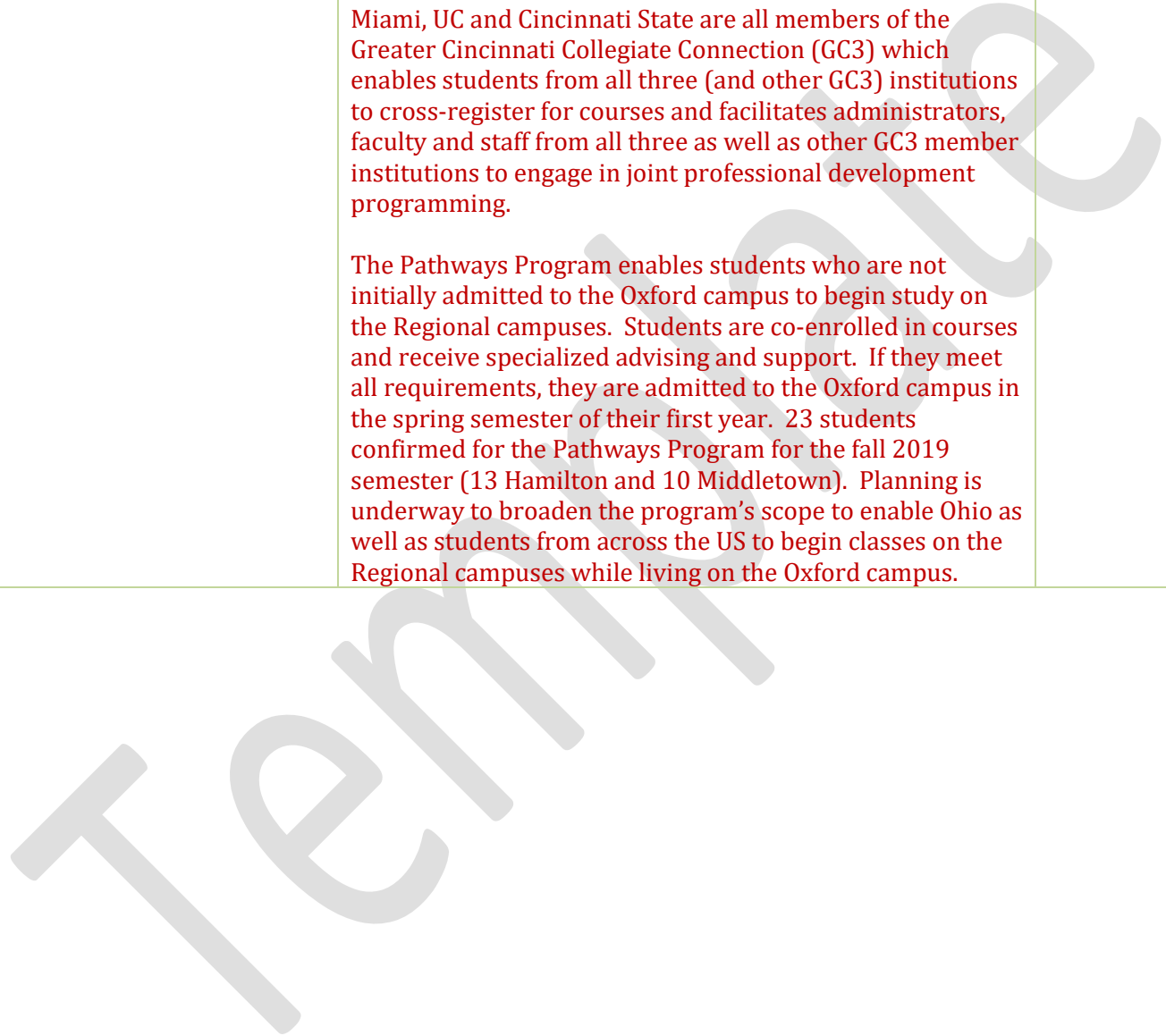


	<p>Summit website [https://www.uc.edu/aas/southwesttransfer.html], a charter and bylaws, and the development of a SW Ohio Transfer Toolkit which is currently under development. Planning is underway to hold a sixth summit at University of Dayton which will focus on forging productive institutional partnerships to advance transfer student success.</p> <p>Miami partners with UC as a participant in the Southwest Regional Depository which is one of five regional depositories in Ohio that houses library materials of IUC members in lieu of new library space.</p>	
<p>Reducing operational and administrative costs to provide more learning opportunities and collaboration in the region</p>	<p>Miami participates in a courier delivery service to provide requested library material to public libraries, colleges, universities and the State Library of Ohio.</p> <p>Miami's Institute for Learning in Retirement engages in joint programming with the Osher Lifelong Learning Institute at the University of Cincinnati, in the West Chester area, to provide non-credit, enrichment programming for people age 50 and older. Over 400 persons are enrolled in this semester's courses.</p> <p>Discussions are beginning with OH-AHEAD about forming partnerships and coalitions among institutions in the southwest Ohio region, particularly in the areas of alternative format production and captioning. Representatives from all four institutions continue to meet with the goal of finding additional common services and efficiencies in Southwest Ohio.</p>	
<p>Enhancing career counseling and experiential learning opportunities for students</p>	<p>Miami Regionals (along with Cincinnati State, University of Cincinnati, and Southern State) is actively engaged in workforce education and pathway development through involvement with the Tech Prep Southwest Regional Center. Tech Prep staff members are located at Miami University Hamilton (along with Southern State Community College and Cincinnati State). Tech Prep also shares staff with a regional workforce development initiative, Partners for a</p>	

	<p>Competitive Workforce, to further link the educational initiative with employers. College staff link their respective institutions to collaborative regional activities that address statewide goals focused on workforce education, pathway development and technical services. The center serves 16 secondary partner districts including three of Ohio’s largest Career Technical Planning Districts (CTPDs); four urban districts; six rural CTPDs and one Compact.</p> <p>For the last four years, Miami Regionals, Cincinnati State, and UC have collaborated to offer annual conferences targeted to high school juniors and seniors interested in engineering careers. More than 1000 students have been impacted by shared expertise, business engagement and access to regional resources.</p> <p>Miami’s Center for Career Exploration &amp; Success recently partnered with REDI Cincinnati to share best practices and procedures relating to internships in the Cincinnati area.</p> <p>Miami and UC have collaborated on several Ohio Means Internships &amp; Co-Ops grants in the past five years to increase the number of internships and co-ops in the Southwest Ohio Region.</p>	
<p>Collaboration and pathways with information technology centers, adult basic and literacy education programs and school districts</p>	<p>Miami participates in the ODHE ASPIRE Program to provide free services for people in need of acquiring skills in post-secondary education and training, and employment. In 2017, Miami students conducted a research project that resulted in rebranding the program (formerly entitled ABLE). Miami University Regionals offers ASPIRE courses at Adult Education Opportunity Centers and other sites throughout the region.</p> <p>Miami also participates actively in the statewide College Credit Plus program that offers qualified students grades seven through 12 the opportunity to take college courses while earning credit for both high school and college at little or no cost to students. Over 700 students annually</p>	

	<p>participate in Miami CCP courses on the Oxford and Regional campuses.</p> <p>In 2017, Miami signed a partnership agreement with Cincinnati Public Schools to identify students early to introduce them to college-readiness activities and provide opportunities for mentorship and engagement on Miami's campus. Selected students receive the full cost of attendance (minus the family's estimated family contribution and an expected student self-help of \$3500) through a variety of aid sources and will receive faculty mentoring, specialized academic advising, structured curriculum, intensive academic summer programs, transition support services, career development and specialized CPS-specific recruitment programs.</p> <p>Beginning in fall 2018, the partnership with CPS expanded to include both the M.O.R.E. and Girls to Women programs in an effort to broaden the diversity of the cohort and to increase the number of students with whom Miami regularly engages. This fall, Miami achieved its initial goal of enrolling 15 Cincinnati Scholars.</p>	
<p>Enhancing the sharing of resources between institutions to expand capacity and capability for research and development</p>	<p>Miami and UC faculty have collaborated to secure seven external research grants in the past six years. Grants have focused on such diverse topics as increasing the participation of women in STEM fields, understanding bipolar disorder, investigating racial bias, evaluating STEM in the play space, and advanced turbine cooling. In addition, Miami, UC, and Cincinnati State have collaborated on three regional submissions to the ODHE RAPIDS grant program, providing approximately \$3M in equipment used for education, research, and workforce training in SW Ohio.</p>	
<p>Identifying and implementing the best use of university regional campuses</p>	<p>To provide a seamless transition of students who relocate from one campus to another, Miami University (Oxford) and Miami University Regionals share the same general education requirements, academic policies, curricular approval processes, and are governed by a single University Senate and Board of Trustees. In addition, many administrative and instructional staff work at multiple</p>	

	<p>campuses and collaborate on research projects as well as community and University service projects.</p> <p>Miami, UC and Cincinnati State are all members of the Greater Cincinnati Collegiate Connection (GC3) which enables students from all three (and other GC3) institutions to cross-register for courses and facilitates administrators, faculty and staff from all three as well as other GC3 member institutions to engage in joint professional development programming.</p> <p>The Pathways Program enables students who are not initially admitted to the Oxford campus to begin study on the Regional campuses. Students are co-enrolled in courses and receive specialized advising and support. If they meet all requirements, they are admitted to the Oxford campus in the spring semester of their first year. 23 students confirmed for the Pathways Program for the fall 2019 semester (13 Hamilton and 10 Middletown). Planning is underway to broaden the program's scope to enable Ohio as well as students from across the US to begin classes on the Regional campuses while living on the Oxford campus.</p>	
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## Section II: Academic Practices

### Textbook Affordability

#### Textbook Cost Study

Ohio Revised Code Section 3333.951(D) requires Ohio's public colleges and universities to annually conduct a study to determine the current cost of textbooks for students enrolled in the institution and submit the study to the Chancellor. Please attach the analysis of textbook costs developed by your institution labeled "[Institution Name – Academic Year – Textbook Cost Study]" Please summarize the results of your institution's study below.

In collaboration with the IUC, Miami participates actively in a Textbook Cost Study. Miami has identified its top twelve undergraduate majors, consisting of 45.33% of the student population, and has mapped the typical course path to completion. With the use of the e-campus virtual bookstore textbook pricing data, Miami calculates the four-year cost of required text purchases for each major. Miami's Affordable and Open Educational Resources Committee has targeted the departments that house these majors to assist them in reducing or eliminating textbook costs. Through Miami's various textbook affordability efforts, Miami students recognize real cost savings on their textbook purchases.

Category	Amount
Average cost for textbooks that are new	\$92
Average cost for textbooks that are used	\$43
Average cost for rental textbooks	\$16
Average cost for eBook	\$32

#### Reducing Textbook Costs for Students

Ohio Revised Code Section 3333.951(C) requires Ohio's public colleges and universities to report their efforts toward reducing textbook costs for students. Please discuss all initiatives implemented, including those referenced below that ensure students have access to affordable textbooks.

1. Does your institution offer inclusive access purchasing of college textbooks? If yes, what percentage of courses participate?

In 2017, Miami University selected a provider of online textbooks and course materials, e-Campus, which signaled a shift away from the traditional brick and mortar bookstore approach toward a virtual approach. The e-Campus bookstore not only lowers the overhead cost of running a physical bookstore, but it provides faculty, at a glance, multiple textbook options so that they can

ensure that they are selecting high quality, affordable and accessible course materials for their students. Because the virtual bookstore is linked to the SIS system, students can easily purchase new, used, rental and digital textbooks instantly upon registering for particular courses. Miami faculty are provided training (via workshops and online videos) on how to use the software platform as well as how to select appropriate and cost-effective textbooks.

In July 2019, Miami became a member of the Unizin Consortium which provides an inclusive access service. This consortium which includes several major universities (e.g., Ohio State, University of Florida, Indiana University, University of Michigan) has arranged wholesale pricing agreements on electronic textbooks with over 19 major publishers. Unizin delivers the e-textbooks as well as supplementary digital learning materials to students via a digital platform that is fully integrated into Miami's Learning Management System. The publisher agreements reduce the cost of textbooks by 40-70 percent. Miami will pilot the program in spring 2020 with ten high-enrollment courses, including introductory Calculus, Microbiology and Marketing courses.

In addition, when faculty submit their textbook selections in compliance with the Higher Education Opportunity Act (HEOA), it allows our staff and e-Campus vendor to suggest standardized materials, more affordable editions, or alternative resources. In the past four years, faculty on all campuses increased their compliance by as much as 60%.

2. Does your institution offer open educational resources (OER) in lieu of purchased materials? If yes, what percentage of courses participate? How many non-duplicative students benefit currently from OER?

Two years ago, Miami formed the Open & Affordable Educational Resources Committee whose members are appointed by the provost and co-chaired by an associate provost and librarian with faculty representation from all academic divisions. The committee has crafted several programs and set of resources designed to target faculty teaching courses with the highest cost textbooks and largest enrollments:

- **OER Explore.** Based on a model developed by the Ohio Textbook Network, the OER Explore workshop is intended to help faculty better understand textbook affordability issues and possible solutions for addressing them. During this two-hour workshop, faculty learn about how the cost of textbooks can negatively impact student learning, are introduced to the concept of OER, and participate in hands-on activities using free or affordable textbooks. The workshop concludes with an overview of Miami University's OER and Affordable Learning grant programs. After faculty write and publish a review of an OER textbook in their field or investigate and reflect on inclusive access electronic textbook possibilities, they receive a modest stipend. Since its inception in 2016, 86 faculty members have completed the OER Explore program. Eight have gone on to participate in one of the other programs listed here where they have adopted a more affordable or open educational resources in their teaching.
- **OER Adopt.** This selective grant program supports faculty in replacing their commercial textbook with an OER. Faculty submit an application; those selected must complete a three-phase program and receive professional development funds when each phase is successfully completed.
  - o **Phase one:** The faculty member teaches the course using a commercial textbook and required learning materials. Assessment is performed to gauge the impact of the traditional textbooks and other required materials on student learning and course outcomes. In collaboration with their Subject Librarian and the Coordinator of Scholarly Communications, the faculty member selects and prepares OER materials to be used in teaching future sections of the course.

- o **Phase two:** The faculty member teaches the course using the selected OER materials. Assessment is performed to gauge the impact of the OER textbook and other newly selected learning materials on student learning and course outcomes.
- o **Phase three:** The faculty member makes necessary revisions to the OER text and learning materials based on previous assessment. The faculty member uploads any OER created or modified in the course to the OER Collection in Miami's institutional repository, the Scholarly Commons. The faculty member writes a report evaluating the impact of the OER on the course outcomes and student learning, and on student and faculty satisfaction as well as plans for future use. The final report is shared with the University Committee for Affordable and Open Educational Resources as well as colleagues within their Department or School and peers in the profession.

Twelve faculty members have been selected and are currently participating in this program which has led to over \$244,330 in cost savings to students to date and an estimated cost savings of over \$500,000 for the upcoming year.

- **OER Create.** This grant program supports faculty who wish to write and publish their own OER textbook and learning materials. As an incentive to do so, Miami University provides faculty professional development funds as well guidance and support for publishing the OER (e.g., editorial services, layout, and electronic publishing). To accomplish this, the University agreed to be an inaugural partner (with nine other higher education institutions) in the OTN Publishing Cooperative. OER published as part of this grant program will be published to the OER Collection in Miami's institutional repository, the Scholarly Commons, and in the Open Textbook Library (OTL). This program is being piloted with a Chemistry professor this year who is teaching a high enrollment course, and will provide Miami students with approximately \$72,945.00 per year in cost savings.

3. Is your institution a member of an organization that works to develop high-quality, low-cost materials including OER? If yes, what organization? Please describe.

Miami (along with the other Southwest Ohio institutions) has OhioLINK which negotiates the purchase and enables the sharing of library materials. OhioLINK joined the Open Textbook Network in 2017 and selected seven member librarians, faculty and staff to become the OhioLINK Open Textbook Network (OTN) System Leaders. A Miami librarian, Carla Myers, was chosen to serve on the team. As system leader, she coordinates OhioLINK OTN awareness and advocacy initiatives regarding open educational resources and open textbooks on Miami's campuses and throughout the state. As part of the consortium-wide membership, OhioLINK sent system leaders to OTN's Summer Institute (OTNSI) which is an intensive, five-day training program at the University of Minnesota. The OhioLINK system leaders, in conjunction with OTN staff, coordinate full-day "train the trainer" workshops. These workshops focus on developing campus leaders and aid in their efforts to reduce textbook costs for students. The Miami representative also coordinated an OhioLINK-sponsored OER summit in 2017 and served as co-coordinator for the same event in 2018. Members from around the state discussed their OER activities and initiatives and attendees participated in some hands on activities exploring OER implementation. Additionally, as a system leader, she gave workshops focusing on copyright and OER and Creative Commons licensing at multiple OhioLINK institutions on request.

4. What other practices does your institution utilize to improve college textbook affordability?

Miami's Affordable and Open Educational Resources Committee has also spearheaded a number of other affordability initiatives, including:

- **Course Pack Consultation Service (CPCS)** allows faculty to reduce or eliminate the costs associated with course packs. To be eligible for this program, faculty must currently be using a readings-based course pack (e.g., one that contains articles and book chapters) that students are required to purchase and must agree to use the University's Learning Management System (LMS) for making readings accessible to students in subsequent semesters. The Coordinator of Scholarly Communications reviews the list of materials included in the course pack to determine which readings can be made freely available to students through the library's purchased electronic collections (eBooks and electronic articles) or through other freely and legally accessible online outlets (e.g., linking to archival materials on state historical society website). Links to these works are posted on to a page in the instructor's LMS course site for students to access. Faculty participating in the CPCS are awarded modest professional development funds after the consultation. Since launching the program in fall 2017, nineteen consultations have been completed, leading to over \$49,000 in cost savings for students. The program resulted in \$42,561 in cost savings for students in FY19.
- **Alternate Textbook Service.** The Alternate Textbook Service, or ATS, launched in this past academic year, involves a collaboration between the course instructor, Library liaison, and the Coordinator of Scholarly Communications to replace the instructor's commercial textbook with an "alternate" textbook comprised of resources pulled from the library's electronic collections, from legal online resources, and reading selections made available in compliance with US copyright law. Not only is this alternate textbook be made freely available to students, but the collaboration between librarian and faculty promotes the use of library resources and draws attention to the diversity of Miami's library collections. Faculty participating in this grant program are provided modest professional development funds. Since the program's inception, six faculty members have used the service. Additionally, faculty have created alternative textbooks outside of this service. Student savings attributable to alternative textbooks was \$285,000 in FY19.
- **Revision of Annual Reports and Promotion Dossiers:** To ensure that Department Chairs, Deans and Personnel Committees recognize the efforts of faculty to incorporate affordable texts into their courses, the committee created a proposal for revising the annual report and dossier format to include a specific mention of open and affordable educational resources under the category relating to innovative teaching.
- **Affordable Education Leader Award:** Modeled after a similar award at Texas A&M University, Miami University's OER Committee partnered with the leadership of Miami's student government to develop an annual award to be given to a continuing faculty member on any campus who demonstrates compelling and significant impact in areas related to affordable and open educational resources. The award has been given for the past two years.



Please provide any relevant information in the table below.

Initiative	Explanation of Initiative	Cost Savings to Students
OER Adopt	See above	\$244,330
OER Create	See above	\$72,945
Course Pack Consultation Services (CPCS)	See above	\$42,561
Alternative Textbook Service	See above	\$285,000

### Textbook Selection Policy

Ohio Revised Code Section 3345.025 requires the board of trustees of each state IHE to adopt a textbook selection policy for faculty to use when choosing and assigning textbooks and other instructional materials. The policy shall include faculty responsibilities and actions faculty may take in selecting and assigning textbooks and other instructional materials. Examples of topics addressed within such a policy include textbook adoption deadlines, faculty ethics rules on personal use/resale of publisher-provided free textbooks, disclosure of personal interest/royalties and textbook ownership of faculty-use books.

1. Has your institution's board of trustees adopted a textbook selection policy consistent with Ohio Revised Code 3345.025?

Miami revised its policy in spring 2018. It was approved by the Board of Trustees in June 2018, and the policy is now in effect. See revised policy, MUPIM 10.4.

2. Has your institution adopted a faculty textbook auto-adoption policy that assigns the previous semester's version of a textbook when a faculty member does not actively select a new edition by the federally-required date of class registration?

The University's textbook policy was revised to include a paragraph that explicitly encourages faculty consider textbook affordability when selecting a textbook. Additionally, the University's policy that requires multiple levels of approval for faculty wishing to teach courses that use a textbook they have authored was altered to eliminate any approvals for faculty teaching an OER which they authored.

Miami currently does not have a textbook auto-adoption policy; however, department chairs are notified when a faculty member does not order a textbook on time. Chairs are responsible for ensuring that a textbook is ordered.

Please attach the policy in full length and label the file as “[Institution Name – Academic Year – Textbook Selection Policy].”

### **Miami University – Textbook Selection Policy**

The selection and adoption of textbooks and/or course materials are an academic departmental responsibility. Academic departments are encouraged to adopt the most appropriate and highest quality textbook for presenting course content and accomplishing course objectives. However, to maintain our goal of higher education access and affordability for our students and to comply with the Ohio Department of Higher Education statutory requirements, academic departments are also encouraged to take into consideration the cost and expense of the textbook and other materials for the student taking the course when making adoption decisions.

Academic departments should strive to make selections for required textbooks and supplemental materials in a timely manner to ensure that sufficient quantities of textbooks and supplemental materials are available to meet the needs of students and to assist students in being responsible consumers.

Before each upcoming academic term, the Office of the Provost shall partner with the University Bookstore to make publicly accessible the following information for each upcoming academic term:

- the International Standard Book Number (ISBN) and retail price information of required and recommended textbooks and supplemental materials for each course listed in the course schedule; and
- the expected number of students enrolled in each course and the maximum student enrollment for the course.

The Office of the Provost, in consultation with the University Bookstore, shall communicate to the deans, department chairs, program directors, and regional campus coordinators the date by which their textbook information is to be provided to the University Bookstore.

The textbook information provided to the University Bookstore shall be published on the University Bookstore website and shall be made readily accessible through a link from the University’s on-line course registration system.

If the ISBN is not available, then the author, title, publisher, and copyright date for such college textbook or supplemental material will be published. If the University Bookstore determines that the disclosure of the information required by this policy is not practicable for a college textbook or supplemental material, then it will place the designation ‘To Be Determined’ in lieu of the information required.

### Use of Self-Authored Material

In the event that an instructor wishes to utilize a commercial textbook(s) or other material which is authored by the instructor and the sale of which results in a royalty being paid to the instructor, then such textbook/material may only be required by the instructor if:

- the instructor's chair or program director and dean have consented to the use of the textbook/material; or
- the majority of faculty within the instructor's department has voted to permit the instructor's use of the commercial textbook/material in the instructor's class.

Sales of such items cannot be conducted directly between a faculty member and a student.

### Departmental Responsibilities

- The information referenced above will be made available by academic departments and programs each academic term to the University Bookstore on or before a date specified by the Office of the Provost. The academic departments and programs will endeavor to ensure that the information provided to the University Bookstore is in an acceptable format so as to avoid unnecessary orders and returns by the University Bookstore.
- Unless the academic department has made other arrangements, it is the responsibility of each individual instructor to secure his or her own desk copies of textbooks.
- Each academic department or program and regional campus coordinator should designate a person to act as its representative with the University Bookstore and should inform the Bookstore of the name of the designated person.
- To the extent possible, the University Bookstore should be notified of increased enrollments of scheduled course sections and/or of additional course sections to be offered.
- Following the submission to the University Bookstore of textbook lists for the upcoming academic term, instructors are expected to use the textbooks specified for that term.

### Additional Bookstore Responsibilities

The University Bookstore is responsible for disseminating information to students regarding:

- available institutional programs for renting textbooks or for purchasing used textbooks;
- available institutional guaranteed textbook buy-back programs, if any;
- available institutional alternative content delivery programs; and/or
- other available institutional cost-saving strategies.

## Time to Degree

Reducing time to degree is one of the most effective ways to reduce student costs. The Task offered several recommendations for assisting students in reducing time to degree, including developing an educational campaign to increase student awareness on the importance of maintaining an adequate course load, providing incentives for students to attend full-time and graduate on time. Institutions have also been encouraged to review academic programs to assure the number of hours necessary to earn a degree align with recommended standards.

Miami students not only can easily access degree path information, but they are also educated on how to make purposeful choices about their academic plans. Access to degree paths is made available through: (1) the student's Degree Audit Report which a student can run at any time for his or her chosen major as well as for any other major he or she may be considering; (2) the General Bulletin, the Guidebook for New Students and advising guides for each major (the latter are available in divisional advising offices) which provide clear listings of degree program requirements and term-by-term suggested schedules; and (3) term-by-term academic plans which are created as part of the UNV 101 course in consultation with the student's academic advisor.

Miami's Regional Campuses are currently implementing a comprehensive "meta majors" initiative. A meta major is a collection of academic majors that focus on a broad content area and that are aligned with students' interests, knowledge, skills, abilities and career goals. These meta majors provide students with educationally coherent pathways (course scheduling blocks and co-curricular options), along with customized academic support and progress monitoring. Students pursue a pathway which is associated with their interests and career goals and which guides them through initial academic requirements and into their chosen major or program of study.

Academic advisors also are trained in and have access to the EAB Student Success Collaborative which not only displays suggested term-by-term schedules for each student's degree program but also indicates when and how each student might have moved off track so that immediate advising interventions can be made. Departments are required to display on their websites transfer advising plans for all of Miami's academic partnership agreements, using a common template for ease of use.

U.Achieve Planner, a web application technology designed to allow students and advisors to explore multiple degree paths and identify a four-year, term-by-term schedule for success, is currently being implemented. This system also enables chairs and deans to plan course schedules well in advance and ensure the appropriate number and array of courses are available to meet student needs.

Beginning in 2015, Miami shifted its academic advising model to focus on clear outcomes, a shared university-wide advising approach, required comprehensive (six-part) training for all advisors, four levels of advisor recognition, and ongoing assessment of advising. In addition, the model features the use of the EAB Student Success Collaborative which provides advisors up-to-the-minute and predictive data about each advisee so that the advisor can provide customized intervention and communicate with

advisees easily and regularly. Advisors are required to record summaries of each advising session in order to track each student's progress and build upon previous advice given. The academic advising effort is led by an associate provost with the guidance of a university-wide committee. Each year, the committee produces an annual assessment report which summarizes findings from the multiple measures used to assess advising at Miami (e.g., national surveys, retention and graduation rates, advisor training completion rates, surveys and focus groups) and offers multiple recommendations for future improvement.

In the past two years, Miami has increased its efforts to intervene with students who are at academic risk. Using predictive analytics, several nudge campaigns in both the fall and spring semester are sent to students with moderate or low persistence prediction scores identified in Civitas. Each included a specific call to action and directed students to contact the Dean of Students or the Student Success Center (depending on the student's record).

This academic year, Miami implemented a centralized university-wide registration override system that allows students to add themselves to a "waitlist" for oversubscribed courses. The system provides all pertinent student and curricular information to the advisor and faculty who is then able to assess the overall demand for the course. The goal is to garner timely and actionable information during the registration process that will translate into students with the greatest need as it pertains to "on-time" graduation access to the seats in the class and assist with appropriate and efficient staffing models for high demand courses.

Miami has fully complied with the College Level Examination Program (CLEP) Initiative spearheaded by the ODHE which awards students specific and similar course credit when they reach a standard minimum score for each examination.

The goal of these pathways is to help guide students' choices but without overly limiting their options so that they carry a full load each semester and thereby have a better change of on-time college completion and overall academic success.

**Standardize Credits**

Recommendation 7C of the Task Force was for institutions to streamline graduation requirements so that most bachelor’s degree programs can be completed within 126 credit hours or less, and associate degree programs can be completed within 65 credit hours or less.

Effective with the fall 2017 incoming class, Miami’s graduation requirement for baccalaureate degrees was reduced from 128 to 124 credits, and the requirement for associate degrees were reduced from 64 to 62 credits. This reduction followed a major revision of Miami’s general education program (Global Miami Plan) in 2015 which featured a four-credit reduction in its requirements. Additionally, Miami makes available a public [website](#) that demonstrates 3-year plans for 68% of its undergraduate degree programs. These steps, coupled with sound academic advising, enables Miami students to graduate on average in four years—a statistic which is among the best of any Ohio public university and significantly below the national average of 5.2 years for four-year public institutions.

Time to degree for student awarded a baccalaureate degree in FY 19 was 4.05 years.

Please provide a spreadsheet list of every degree program at your institution that requires more than 65 credit hours to complete and associate degree and/or 126 credit hours to complete a bachelor’s degree, list the number of credit hours required in a separate column and label the file “[Institution Name – Academic Year – Time to Degree Standardization]” Please complete the table below.

<b>Percent of Programs that require more than the recommended minimum credit hours to earn a degree</b>	<b>Percent of FTE in programs that require more than the recommended minimum credit hours to earn a degree</b>
11.8%	10.1%
<b>Average number of credit hours earned by students awarded an associate degree in FY 19</b>	<b>Average number of credit hours earned by students awarded a baccalaureate degree in FY 19</b>
65	140

<b>Degree Program Requiring More than 126 Credit Hours</b>	<b>Hours Required</b>
B.S., Medical Laboratory Science	135
B.A., Architecture	137
B.S., Engineering – Bioengineering	132
B.S., Engineering – Chemical Engineering	128
B.S., Engineering – Computer Engineering	128
B.S., Engineering – Electrical Engineering	128
B.S., Engineering – Engineering Management	128-144
B.S., Engineering – Manufacturing Engineering	128
B.S., Engineering – Mechanical Engineering	128
Bachelor of Fine Arts in Studio Art	134
Bachelor of Music in Music Education	147
Bachelor of Music in Music Performance	179

### Alternative Delivery Methods

Online and competency-based education are both growing dramatically as delivery platforms for higher education across the United States. Recommendation 7G of the Task Force was for institutions to consider developing or expanding programs that measure student success based on demonstrated competencies instead of through the amount of time students spend studying a subject.

1. Does your institution offer competency-based education? If yes, please provide a list of enrollment, degrees and course offerings.

Although Miami does not offer formal competency based degree programs (due to Higher Learning Commission accreditation requirements), it does provide prior learning assessment and courses and programs with that have self-paced features or are offered in accelerated or flexible delivery modes.

Miami has fully complied with the College Level Examination Program (CLEP) Initiative spearheaded by the ODHE which awards students specific and similar course credit when they reach a standard minimum score for each examination.

Drawing from other Ohio public institutions (Columbus State, Kent State), Miami piloted a Math Emporium competency-based course for underprepared, incoming students. Success data, however, indicated that this approach was not effective. As a result, Miami applied and was accepted for participation in the two-year ODHE “Strong Start to Finish” initiative which will aim to develop co-requisite programs for gateway courses, improve placement processes, and enhance advisement of students who are academically underprepared for college. The Miami planning group is focusing efforts on gateway Math and English courses.

In spring 2018, Miami launched a Prior Learning Assessment Portfolio approach to awarding credit for general education requirements. With guidance from the Office of Liberal Education, students with significant work or military experience may develop a portfolio (including reflections on how the learning relates to learning outcomes) in the Canvas Learning Management system which is then reviewed by Miami’s Liberal Education Council (general education committee) for possible general education credit.

2. Has your institution seen a difference in completion rates relative to traditional modes of education?
3. Have students experienced cost savings? How is the fiscal impact quantified?

Template



Flexible delivery methods, such as distance learning, provide an opportunity to improve access by providing students with additional opportunities to complete their education. In fact, enrollment in such programs has increased dramatically in recent years.

1. Does your institution offer distance-based or online education? If yes, please provide a list of enrollment, degrees and course offerings.

Academic Program (Degree/Major)	Campus	Current Program Enrollment	Course Offerings
A.A.B. Applied Business	Hamilton/Middletown	147	CMR 101, Intro to Accounting CMR 105 Intro to Marketing CMR 106, Intro to Business & Economy CMR 108, Intro to Business Law CMR 111, Intro to Management I CMR 181, Computers and Business CMR 207, Management Planning and Control ENG 111, Composition and Rhetoric EGS 215, Workplace Writing MTH 119, Quantitative Reasoning STC 136, Interpersonal Communication
A.A.S. Pre-Kindergarten Education	Hamilton/Middletown	38	EDP 201, Human Development and Learning EDP 256, Psychology of Exceptional Learner EDT 190, Intro to Education EDT 273, PreK Integrated Curriculum I EDT 274, PreK Integrated Curriculum II ENG 111, Composition and Rhetoric FSW 207, Serving & Supporting Children, Youth and Families I FSW 283, Intro to Child Care Administration FSW 382, Infant and Toddler Caregiving KNH 245, Issues of Health & Wellness for Young Child EDL 204, Sociocultural Studies in Education EDT 246E Foundations of Language & Literacy EDT 315E, Teaching with Children's Lit FSW 225, Family, School & Community Connections FSW 293 & 294, Field Placement MTH 115, Math for Teachers of Grades P-6
B.S. in Applied Science, Engineering Technology	Hamilton/Middletown	327	ECO 201, Microeconomics ENG 111, Composition and Rhetoric EGS 313, Technical Writing MTH 151, Calculus I

			<p>PHY 161, Physics for Life Sciences with Lab I                  PHY 162, Physics for Life Sciences with Lab II                  STC 135, Public Speaking                  CHM 141 and 144 College Chemistry with Lab                  ENT 271, Mechanics I: Statics                  ENT 298, Data Communications                  ENT 301, Dynamics                  ENT 303, Digital Signal Processing Technology                  ENG 311, Process Control Interface Design                  ENT 316, Project Management                  ENT 401, Computerized Instrumentation                  ENT 402, Industrial Automation Lab                  ENG 403, Wireless Communication and Networks                  ENT 418, Electro Mechanical Control Systems                  ENG 497 and 498, Senior Design Project                  MTH 231 Elements of Discrete Mathematics                  MTH 251, Calculus II                  STA 301, Applied Statistics                  Technical courses</p>
B.S. in Commerce	Hamilton/Middletown	554	<p>CMR 101, Intro to Accounting I                  CMR 105, Intro to Marketing                  CMR 108, Intro to Business Law                  CMR 111, Intro to Management I                  CMR 207, Management Planning &amp; Control                  CMR 211, Economics for Commerce                  CMR 244, Intro to Global Business                  CMR 282, Computer-Based Business Analysis                  CMR 302, Financial Info for Managers                  CMR 495, Strategic Management for Commerce                  STA 261, Statistics                  CMR 242, Management of Small Business Operations                  CMR 263, Sales and Promotion                  CMR 301, Personal Organizational Skills                  CMR 361, Marketing for Small Business                  CMR 401, Leadership Decision Skills                  CMR 442, Current Issues and Innovations in Small Business</p>

B.A. in Applied Communication, Health Communication	Hamilton/Middletown	44	<p>APC 201, Intro to Health and Risk Communication</p> <p>APC 363, Advanced Methods in Applied Communication</p> <p>APC 401, Applied Communication Capstone</p> <p>ENG 313, Technical Writing</p> <p>NSG 321, US Health Care System</p> <p>PHL 131, Intro to Ethics</p> <p>STA 261, Statistics</p> <p>STC 262, Empirical Research Methods</p> <p>STC 136, Intro to Interpersonal Communication</p> <p>CIT 431, Health Information Technology</p> <p>CIT 448, Global and Strategic Issues in Info Technology</p> <p>CMR 224, Medical Terminology</p> <p>APC 428, Communication in Conflict Management</p>
B.A., English Studies	Hamilton/Middletown	70	<p>ENG 298, Intro to Literary and Cultural Studies</p> <p>EGS 301, Writing &amp; the Professions</p> <p>EGS 495, Capstone in English Studies</p> <p>ENG 272, English Lit to 1660</p> <p>ENG 273, English Lit 1660-1900</p> <p>ENG 274, English Lit 1901 – Present</p> <p>ENG 460, Issues in Literary &amp; Cultural Studies</p> <p>ENG 123, Intro to Poetry</p> <p>ENG 124, Intro to Fiction</p> <p>ENG 125, Intro to Drama</p> <p>EGS 215, Workplace Writing</p> <p>ENG 224, Digital Writing</p> <p>EGS 320, Readings in Literatures and Cultures</p> <p>EGS 410, Readings in Multicultural Perspectives</p>
B.S., Information Technology, Health Information Technology	Hamilton/Middletown	37	<p>BIO 232, Human Heredity</p> <p>BIO 342, Genetics</p> <p>CIT 168, Information Technology Tools and Techniques</p> <p>CIT 201, Advanced Spreadsheets and Analytics</p> <p>CIT 214, Database Design and Development</p> <p>CIT 268, Intro to Human-Computer Interaction</p> <p>CIT 276, IT Systems Design and Development</p> <p>CIT 338, Business Intelligence Tools</p>

			<p>CIT 348, Information Management and Retrieval  CIT 357, Current Practices in Information Technology  CIT 358, Information Technology Assurance and Security  CIT 376, IT for Organizations  CIT 431, Health Information Technology I  CIT 432, Health Information Technology II  CMR 224, Medical Terminology  EGS 215, Workplace Writing  MTH 125, Precalculus  NSG 321, US Health Care System and Culture  STA 261, Statistics  STC 135, Public Speaking  Technical Electives</p>
M.A.T. Biological Science, Global Field Program and Advanced Inquiry Program	Oxford	191	<p>Field Courses (21 credits)  Leadership in Science Inquiry  Professional Media Workshop  Master's Capstone</p>
M.A., Biology, Global Field Program and Advanced Inquiry Program	Oxford	590	<p>Field Courses (21 credits)  Leadership in Science Inquiry  Professional Media Workshop  Master's Capstone</p>
M.A., Instructional Design and Technology	Oxford	9	<p>EDP 583, Game Based Learning Design  EDP 631, Foundations of Instructional Design and Technology  EDP 632, Instructional Design Theory and Models  EDP 633, Evaluation &amp; Assessment for Instructional Design  EDP 636, Diversity, Learning &amp; Technology  EDP 637, Blended and Online Learning Design  EDP 639, Trends in Instructional Design and Learning Analytics  EDP 643, Interactive Design  EDP 669, Qualitative Research in Educational Psychology  EDP 648, Capstone Project</p>
Master of Education, Educational Technology	Oxford	33	<p>EDP 583, Game-Based Learning Design  EDP 631, Foundations of Instructional Design and Technology  EDP 632, Instructional Design Theory and Models</p>

			<p>EDP 633, Evaluation &amp; Assessment for Instructional Design</p> <p>EDP 636, Diversity, Learning &amp; Technology</p> <p>EDP 637, Blended and Online Learning Design</p> <p>EDP 643, Interactive Design</p> <p>EDP 645, Curriculum &amp; Technology</p> <p>EDP 648, Capstone Project</p> <p>EDP 669, Qualitative Research in Ed Psych</p>
Master of Education, Special Education	Oxford	100	<p>EDP 656, Education of Individuals with Exceptionalities</p> <p>EDP 650, Seminar in Special Education</p> <p>EDP 586, Methods I</p> <p>EDP 578, Effective Social Skills Development in Special Ed</p> <p>EDP 571, Literacy Seminar: Clinical</p> <p>EDP 596, Behavioral Interventions</p> <p>EDP 591, Methods II</p> <p>EDP 601, Advanced Educational Psychology</p> <p>EDP 667, Behavioral Statistics I</p> <p>EDP 651, Educational Research</p> <p>EDP 652, Educational Research Practicum</p> <p>EDP 605F, Supervised Field Experience</p> <p>EDP 650, Seminar in Special Education</p>
Master of Fine Arts, English (Creative Writing)	Oxford	30	<p>ENG 631, Writing in Genres</p> <p>ENG 635, Reading for Writing</p> <p>ENG 637, Final Residency</p> <p>ENG 605, Issues in Profession</p> <p>ENG 700, Master's Thesis Research</p> <p>ENG 632-636, Residency Studies</p>
Master of Fine Arts, Experience Design	Oxford	11	<p>ART 555, History of Design</p> <p>ART 560, Special Topics Design Studio</p> <p>ART 622, Experience Design Methods</p> <p>ART 623, Writing for Design Audiences</p> <p>ART 624, Design for Access</p> <p>ART 625, Systemic Design</p> <p>ART 626, Methods of Dissemination</p> <p>ART 627, Design Research Methods</p> <p>ART 650, Experience Design Studio</p> <p>ART 651, Design Research Theory</p> <p>ART 700, Thesis</p> <p>IMS 524, Ethics and Digital Media</p>
Certificate, Customer Service	Hamilton/Middletown	2	<p>CMR 105, Intro to Marketing</p> <p>CMR 181, Computers and Business</p> <p>CMR 261, Customer Service &amp; Satisfaction</p> <p>CMR 282, Computer-Based Business Analysis</p>

			CMR 301, Personal Organizational Skills
Certificate, Analytics	Oxford	0	ISA/STA 250, Basic Math for Analytics ISA 225, Principles of Business Analytics ISA 243, Database and Programming for Analytics ISA 291, Applied Regression Analysis in Business
Certificate, Social Entrepreneurship & Aging	Oxford	1	GTU 601, New Frontiers in Aging ESP 670, Intro to Entrepreneurship and Business Models in Field of Aging GTU 612, Innovations and Trends in the Aging Marketplace ESP 501, New Ventures in Field of Aging

2. Has your institution seen a difference in completion rates relative to traditional modes of education?

Yes, the three-year graduation rates for associate degree-seeking students are greater for those who are online than for others. The online bachelor's degrees at the regional campuses are too new for cohorts to have graduated. Commerce shows new freshmen for the first time in 2015, and Health Communication shows new freshmen for the first time in 2017.

3. Have your students experienced cost savings? How is the fiscal impact quantified?

### Course and Program Evaluation

Recommendation 8 of the Task Force was for institutions to evaluate courses and programs for enrollment and consideration of continuation. Per O.R.C 3345.35, the colleges and universities need to address this recommendation every five years. The next applicable date is FY22.

Is your institution currently undertaking, or within the past year undertook, a review of course and degree enrollment for consideration of possible changes such as continuation or termination? If yes, please explain and list specific courses and degrees.

In October 2019, Miami contracted with Gray Associates to engage in a comprehensive, neutral and data-driven evaluation of all academic programs, including degree programs, majors and certificates at the graduate and undergraduate level. The goal of the evaluation is to identify programs that need to be started, sustained, improved, or eliminated. Each academic program will be assigned scores related to student-demand, market size and trends, competitive intensity and degree fit. The analysis will be completed by mid-November. The Provost, deans, department chairs, and leaders from a range of other units will meet in late November to develop a plan to address the evaluation findings.

What steps, if any, did your IHE take in FY19 to share courses/programs with partnering institutions? **See below**

If you implemented course/program sharing, please discuss efficiencies gained, including cumulative efficiencies to date.

**For the past five years, Classics faculty have engaged in a productive course-based collaboration with Ohio University. Miami and OU faculty collaborate to offer one or two upper-level classes in Ancient Greek and Latin each semester, with faculty from each university delivering the course on alternate years. The courses are offered in face-to-face versions on the home campus with the students from the other university participating virtually via an IVDL connection**

**Co-located Campuses**

Ohio Revised Code Section 3333.951 requires Ohio’s co-located colleges and universities to annually review best practices and shared services in order to improve academic and other services and reduce costs for students. Co-located campuses are then required to report their findings to the Efficiency Advisory Committee. (Reference also recommendation 9 from the Task Force.)

Co-located campus: \_\_Not Applicable\_\_

Type of Shared Service or Best Practice (IE: Administrative, Academic, etc.)	Please include an explanation of this shared service.	Monetary Impact from Shared Service

## Section III: Policy Reforms

### Financial Advising

Recommendation 10A of the Task Force was for institutions to provide financial literacy as a standard part of students' education. In addition, the Ohio Attorney General's Student Loan Debt Advisory Group report of June 2017 made a similar recommendation as well as other proposals on how to improve processing of student accounts and debts. The report can be found at:

[www.ohioattorneygeneral.gov/Files/Publications-Files/Publications-for-Schools/Ohio-Attorney-General-s-Student-Loan-Debt-Collecti.aspx](http://www.ohioattorneygeneral.gov/Files/Publications-Files/Publications-for-Schools/Ohio-Attorney-General-s-Student-Loan-Debt-Collecti.aspx)

1. Has your institution considered the Ohio Attorney General's Student Loan Debt Advisory Group report recommendation on financial literacy? If so, please describe your institution's implementation.

Yes, Miami University offers the following types of financial counseling:

- Financial literacy modules in select courses
- One-to-one financial counseling before borrowing and again before graduation (to explain loan terms, encourage responsible borrowing, provide repayment information, etc.)
- Online monitoring for the student of current student loan debt amounts, estimated repayment rates, and calculations around potential salary earnings.
- Yearly reminders on overall student loan indebtedness
- Speaking engagements at approximately 30 local high schools to explain federal and state aid opportunities and to encourage FAFSA completion
- Partnering with three local high schools where Miami staff assist families one-on-one as they complete the FAFSA

2. Does your institution provide a standard course for incoming students that includes financial literacy education?

Miami University currently offers financial literacy components in several courses, including our introductory University course for first-generation students.

3. Does the course explain the institution's debt collection practices, fees, notifications and referral process to the AG?

This information is available online and is referenced and available to new and returning students.

4. Does the institution have a process to inform students that they do not have to accept the entire student loan amount for which they are eligible?

Miami University emphasizes that students do not have to accept the entire student loan amount in its literature and in our 1:1 discussion with students and families. The average student loan debt at graduation dropped for the third year in a row, with a decrease of \$791 in the average over the prior year.



## **Financial Aid**

Ohio IHEs should strive to meet guidance issued by the U.S. Department of Education (USDE) on April 15, 2019:

(<https://ifap.ed.gov/eannouncements/041519RecWhatPostInstShouldWork2Avoid.html>).

The guidance calls for not describing loans as “awards”, including the total cost of attendance in letters, breaking costs down into clear components, avoiding comingling grants, scholarships, loans and work-study together, and always including a net cost calculation in financial aid letters. The State of Ohio also wishes to ensure that financial aid dollars it provides are supplementing financial aid for students, not supplanting dollars that would otherwise be given to a similar or identical student.

1. What strategies does your institutions use to coordinate multiple forms of financial aid (institutional or otherwise) for students that are certain or likely to receive state-sponsored financial aid in the form of OCOG, Choose Ohio First, Ohio National Guard Scholarships, War Orphans Scholarships, etc. or other state aid?

Miami University utilizes a coordinated and regulated process to ensure proper awarding of all Federal, State, and University financial aid. All awards are considered at the time of eligibility and students receive a comprehensive financial aid offer notice, plus additional information, that explains each award type and encourages the student to borrow only what they need. Financial aid is categorized by type (grants/scholarships, loans, work) with each area subtotaled and a net cost after each displayed.

2. Which of the April 15, 2019 recommendations made by the USDE regarding financial aid letters has your institution implemented? If you have chosen not to implement a particular recommendation, please explain why.

All of the April 15, 2019 recommendations were implemented years ago, with the exception of #1 (we had referred to our aid offer notice as the “financial aid award letter”.) We changed the terminology upon receiving April 15, 2019 communication.

## Certification Practices

Ohio Revised Code 131.02 requires state IHE's to certify their outstanding debt to the Ohio Attorney General's office (AGO) for collection either 45 days after the amount is due or within 10 days after the start of the next academic session, whichever is later. However, Ohio's institutions certify their outstanding debt pursuant to varying policies and practices. To ensure that all Ohio students are treated fairly and uniformly, the recommendation #7 of the Student Loan Debt Advisory Group report is that state institutions adopt uniform certification practices that emphasize transparency for both debtors and the AGO. The advisory group recommended that the Ohio Bursars Association, in partnership with the Ohio Association of Community Colleges and the Inter-University Council, facilitate this effort.

Specifically, institutions were asked to develop uniform practices for collecting debt with attention to the type, content, and frequency of notices issued to students; and the fees and other collection costs applied to student debts.

1. Has your institution reviewed its certification practices per the 2017 AG Student Loan Debt Advisory Group report? If yes, explain.

Yes, Miami University has reviewed our operations to ensure that they are aligned with the AGO regulations on time and age of placement. Miami practices align with all recommendations, except as noted below in #2.

2. When your institution certifies debt to the Attorney General, are late fees or other penalties that your institution charged to the student included before certification, thereby leading to collection fees applied to prior collection fees?

Currently, Miami University charges an unpaid balance fee of 3% in certain situations. No additional collection costs or fees are assessed to the student until placement by the AGO.

Miami's current vendor has been unable to use their current software to place the unpaid balance fee amounts separately. After working extensively with them during the last year, we have determined that to comply we need a new vendor. We published an RFP, and have selected a vendor that can identify our unpaid fees and report them separate from the principle. This new contract is under review by Miami University procurement and legal counsel and we expect the new system will be implemented within the next six to eight months.

3. Does your institution provide student debtors with opportunities for settlement of debt before certification to the AG? If not, has your institution explored options with the AG to allow settlement?

Yes, and additionally Miami also allows the students to settle with the AGO.

## Section IV: Students Benefit

When institutions save money, they ideally invest a portion of those savings into student benefits, such as reduced fees, increased institutional aid, quality improvements, etc.

For fiscal year 2019 only, please explain what, if anything, your institution is doing that is a new benefit for your students. Answers may be financial benefits or intangibles such as efforts to improve career counseling, undergraduate teaching, research, etc. If you have targeted financial aid for tuition, fees, room and board, books, technology or other expenses, please explain the focus of cost reduction.

If you have seen a significant savings from an initiative in the past fiscal year, please describe that here.

Category	Initiative	FY19 (Actual)
Cost savings/avoidance to the institution in FY19 ONLY	Campus Contracts	\$318,660
	Collaborative contracts	\$1,939,452
	Operations Review	\$4,097,211
	Cost Diagnostic, Productivity Measure & Organizational Structure	\$15,938,451
	Health Care	\$1,343,982
	Energy Projects	\$609,445
New resource generation for the institution in FY19 ONLY	Asset Review	\$1,644,676
	Affinity partnerships and sponsorships	\$3,281,674
	Other Revenue	\$10,584,719
Cost savings/avoidance to students in FY19 ONLY	Impact of text book strategies, advising leading to shorter time to degree, and 20% tuition discount for resident undergraduates taking online courses in summer and winter terms.	\$5,221,778
	Financial Advising	\$3,500,000
	Student Financial Aid	\$26,261,028
	Student Success Collaborative	\$1,137,492
	Improvements to high demand/high value programs	\$8,054,696
	Investments in STEM Facilities	\$3,031,867

## Additional Practices

Some IHE's may implement practices that make college more affordable and efficient, but which have not been the topic of a specific question in this reporting template. This section invites your institution to share any positive practices you have implemented that benefit student affordability and/or institutional efficiency.

Please share any additional best practices your institution is implementing or has implemented.

### **Miami Lean Initiative**

Miami University began its Lean journey in 2009. Since 2009, Miami employees have completed 1514 projects valued at \$83,312,242 in cost avoidance, cost reduction, and new revenue. In FY 2019 Miami completed 167 of those projects at a value of \$15,289,984.

Over 2500 employees have been introduced to Lean and 170 are currently in the Lean Certification Program with 67 of them having completed the program to achieve Senior Lean Leader status, 12 of the 67 attained this certification in FY2019. The certification process takes 24-30 months and includes over 100 hours of specialized formal training, involvement in 5 Lean Projects and Lean leader of three, plus the presentation of a significant project to the Miami Lean Review Board. In FY2017, the University added a tier system to the certification process to recognize milestones of certification completion. In FY2019, 5 people achieved Tier 1 status, 8 people achieved both tier 1 and tier 2 status.

In addition to the training provided to Miami University staff and students, the Lean program has extended Lean training to other colleges and universities in Ohio and across the continent. In FY2019, Miami shared the Lean program with Bowling Green State University in Ohio in addition to universities in Oregon and Canada. Miami also continued to collaborate with The Ohio State University, and Wright State University in Ohio regarding Lean and schools and universities in West Virginia and Indiana and the Wright-Patterson Air Force base.

As part of the Lean program, Miami has developed a Lean structure, Lean database with dashboard reporting, and standardized processes for Lean project management. Three full-time staff are dedicated to Lean. All of the other employees have other non-related Lean responsibilities. Presently, all divisions of the university have employees engaged in Lean.

### **Boldly Creative**

Miami University is investing \$50 million in a new generation of academic excellence, enhancing its nationally recognized undergraduate teaching, learning and research with a sharpened focus on innovation and creativity. Called Boldly Creative, the multiyear initiative emphasizes data, analytics and programs that span traditional disciplines, creating engaged citizens and workplace leaders who will help expand the Ohio economy. Miami faculty are generating the ideas for investment, all aimed at sustaining Miami's premier undergraduate experience and creating new partnerships with industry and government. "We will unleash creativity and innovation to equip our students with the skills they need to solve the biggest challenges in our state, nation and world. These programs will also enhance the undergraduate experience that has defined Miami for generations, allowing us to continue to attract top students and faculty to Miami." per Crawford. Faculty collaborations across Miami University created the first round of Boldly Creative proposals. The faculty teams looked into the future, collaborated with internal colleagues and external reviewers and proposed new or enhanced academic programs that will grow Miami's enrollment, prepare students for workforce leadership and strengthen Miami's contributions to our communities. Second round is starting in November 2019.

### Construction Reform

Construction reform has had a substantial benefit to outcomes of Miami University construction projects. Miami has been able to execute over \$924,200,000 since 2013 with zero litigation claims, reduced contingency spends, increased quality (measurably fewer punch list and deficient work issues). Since the adoption of construction reform, more than \$56,370,000 has been avoided contingency allocation that was either saved or applied to more productive increase in scope of work. The work has been performed with no increase in University staff to support increase in capital projects executed. These outcomes have allowed Miami University to purchase more work directly benefiting students. Select outcomes and efficiency gains:

- Average annual construction spending per capital project manager before construction reform was \$6,075,625. Average annual construction spending per capital project manager after construction reform is \$25,110,000. Construction reform has resulted in an estimated 80% reduction in monthly paperwork processing time.<sup>[[SEP]]</sup>
- Reduction in contingency funds allocated for work performed after construction reform.
  - Contingency allocation before construction reform for renovation work - 15%
  - Contingency allocation after construction reform for renovation work - 10%
  - Contingency allocation before construction reform for new work - 7%
  - Contingency allocation after construction reform for new work - 5%.
- Overall reduction in number of change orders and value of change orders as a percentage of construction cost
- Article 8 Claims have been reduced to 0.<sup>[[SEP]]</sup>
- Projects are consistently hitting key interim milestone and completion dates, with many projects running ahead of schedule. During this reporting period, the University managed over \$75 million in residence hall work that was completed well ahead of schedule
- Contracts for multiple building projects under one CM allows better buying power and lower first costs.<sup>[[SEP]]</sup>
- Improved overall construction quality since construction reform. Quality outcomes due to best value procurement, with selections based on qualifications as well as price. Best Value Selection allows relationships with contractor to be built on past successes which leads to greater efficiency and eliminates learning curve with University standards, best practice, and working with staff & faculty.<sup>[[SEP]]</sup>
- Shorter time to bring projects to market when the construction manager is hired early in design and bid packages can be sent out prior to full completion of drawings.<sup>[[SEP]]</sup>
- Negotiating a guaranteed maximum price ahead of bidding allows owners to reduce risk and plan project budgets with a higher degree of accuracy.<sup>[[SEP]]</sup>
- Smaller, local subcontractors are encouraged to pre-qualify with the construction manager prior to bidding to promote diversity and inclusion
- CMs substantially improved EDGE participation percentages on projects with their ability to commit personnel to community engagement and support of smaller start-up sub-contractors

## Section V: Future Goals

This year's template does not require updates on every recommendation of the Task Force. Nonetheless, it is important that each institution continue to track its progress on achieving its Five-year goals that have been identified in prior years' submissions. An updated copy of the five-year goal template is attached. Please provide the data to complete the template, including information already provided in Section IV. In addition, if you have any updates or changes that need to be made to your five-year goals submitted in 2016, please update.

See attached MasterRecommendation2. Template to complete.

The DeWine-Husted administration recognizes that each institution of higher education in Ohio faces unique challenges and opportunities with respect to the institution's highest priority goals over the next several years. With that in mind, please provide any suggestions about possible roles the state could play in supporting your institutional goals.

1. Please provide your thoughts and suggestions regarding ways that the State of Ohio can further support strength, resiliency and reputational excellence in Ohio's post-secondary education system.
2. What legislative obstacles or policy roadblocks, if any, inhibit efficiencies and affordability practices at the IHE's?

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Thank you for completing the FY19 Efficiency Reporting Template. We appreciate the important role Ohio's colleges and universities play in supporting Ohio students, economic growth, world-class research and the overall success for our state.

Miami University - MASTER RECOMMENDATION 2: FIVE-YEAR GOAL FOR INSTITUTIONAL SAVINGS AND NEW RESOURCE GENERATION														
Category	Recommendation	Component	Description	Savings from FY12 - FY16	FY 2017 Goal	FY2017 Actual	FY 2018 Goal	FY2018 Actual	FY 2019 Goal	FY2019 Actual	FY 2020 Goal	FY 2021 Goal	Total Goal	
Efficiency Savings	3A	Campus Contracts	Require employees to use existing contracts for purchasing goods and services.	\$ 11,456,528	\$ 588,000	\$ 585,571	\$ 538,000	\$ 529,995	\$ 493,000	\$ 318,660	\$ 473,000	\$ 453,000	\$ 2,545,000	
	3B	Collaborative Contracts	Pursue new and/or strengthened purchasing agreements.	\$ 1,800,000	\$ 212,000	\$ 694,818	\$ 262,000	\$ 1,168,635	\$ 307,000	\$ 1,939,452	\$ 277,000	\$ 297,000	\$ 1,355,000	
	4B	Operations Review	Conduct assessment of non-academic operations that might be run more efficiently by regional cooperative, private operator or other entity.	\$ 8,200,000	\$ 800,000	\$ 2,070,000	\$ 300,000	\$ 3,507,211	\$ 470,000	\$ 4,097,211	\$ 360,000	\$ 320,000	\$ 2,250,000	
	5A	Cost Diagnostic <sup>1</sup>	Produce a diagnostic to identify its cost drivers, along with priority areas that offer the best opportunities for efficiencies.										\$ -	
	5B	Productivity Measure <sup>1</sup>	ODHE should develop a common measurement of administrative productivity that can be adopted across Ohio's public colleges and universities.	\$ 11,300,910	\$ 1,071,576	\$ 3,845,348	\$ 2,140,291	\$ 14,307,393	\$ 3,206,164	\$ 15,938,451	\$ 4,269,209	\$ 5,329,438	\$ 16,016,678	
	5C	Organizational Structure <sup>1</sup>	Review organizational structure to identify opportunities to streamline and reduce costs.											\$ -
	5D	Health Care Costs	Take advantage of economies of scale, a statewide working group should identify opportunities to collaborate on health-care costs.	\$ 5,660,153				\$ 1,668,542		\$ 1,343,982				\$ -
	5E	Data Centers	Develop a plan to move their primary or disaster recovery data centers to the State of Ohio Computer Center.	\$ 1,633,114					\$ 50,000		\$ 50,000	\$ 50,000	\$ 50,000	\$ 150,000
	5F	Space Utilization	Study the utilization of its campus and employ a system that encourages optimization of physical spaces.		\$ -		\$ -	\$ -	\$ 250,000		\$ 500,000	\$ 750,000	\$ 750,000	\$ 1,500,000
		Energy	Energy Efficiency	\$ 2,212,986	\$ 132,794	\$ 498,176	\$ 132,130	\$ 1,269,669	\$ 131,470	\$ 609,445	\$ 130,812	\$ 130,158	\$ 130,158	\$ 657,364
	6A	Negotiate Cost	Professional negotiators must be assigned to help faculty obtain the best deals for textbooks and instructional materials, starting with high-volume, high-cost courses.		\$ -	\$ 31,724	\$ 1,819,270	\$ 1,038,487	\$ 1,839,687	\$ 1,409,035	\$ 1,839,775	\$ 1,839,775	\$ 1,839,775	\$ 7,338,506
	6B	Standardize Materials	Encourage departments to choose common materials, including digital elements, for gateway courses that serve large volumes of students.			\$ -								\$ -
	6C	Digital Capabilities	Participate in a consortium to develop digital tools and materials, including open educational resources, that provide students with high-quality, low-cost materials.		\$ -	\$ 65,847	\$ 2,423,964	\$ 45,719	\$ 2,451,166	\$ 644,836	\$ 2,451,283	\$ 2,451,283	\$ 2,451,283	\$ 9,777,696
	7A	Educational Campaign	Develop a campaign to educate full-time undergraduates about the course loads needed to graduate on time.		\$ -	\$ 893,420	\$ -	\$ 1,389,999	\$ -	\$ 1,464,822	\$ 947,826	\$ 947,826	\$ 947,826	\$ 1,895,652
	7B	Graduation Incentive	Consider establishing financial incentives that encourage full-time students to take at least 15 credit hours per semester.											\$ -
	7C	Standardize Credits for Degree	Streamline graduation requirements so that most bachelor's degree programs can be completed within four years or less		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,107,800	\$ 4,189,956	\$ 8,297,756
	7D	Data Driven Advising	Enhance academic advising services so that students benefit from both high-impact, personalized consultations and data systems that proactively identify risk factors that hinder student success.		\$ 308,567	\$ 986,319	\$ 466,431	\$ 192,168	\$ 183,861	\$ -	\$ 323,715	\$ 535,878	\$ 535,878	\$ 1,818,452
	7E	Summer Programs	Develop plans to evaluate utilization rates for summer session and consider opportunities to increase productive activity.		\$ 887,552	\$ 1,039,407	\$ 905,303	\$ 1,087,456	\$ 923,409	\$ 1,703,085	\$ 941,877	\$ 960,715	\$ 960,715	\$ 4,618,856
	7F	Pathway Agreements	Develop agreements that create seamless pathways for students who begin their educations at community or technical colleges and complete them at universities.			NA	NA	NA	NA	NA	NA	NA	NA	NA
	7G	Competency Based Education	Consider developing or expanding programs that measure student success based on demonstrated competencies instead of through the amount of time students spend studying a subject.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Program Review (duplicative programs)	Consider consolidating programs that are duplicated at other colleges and universities in their geographic area.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
10A	Financial Advising	Make financial literacy a standard part of students' education.			\$ 1,200,000	\$ 3,000,000	\$ 3,000,000	\$ 3,500,000	\$ 3,500,000	\$ 3,500,000	\$ 3,500,000	\$ 3,500,000	\$ -	
		<b>Subtotal Student Savings</b>	\$ -	\$ 1,196,119	\$ 4,216,717	\$ 5,614,968	\$ 6,753,829	\$ 5,398,123	\$ 8,721,778	\$ 10,612,276	\$ 10,925,433	\$ 10,925,433	\$ 33,746,918	
		<b>Subtotal Institutional Efficiency Savings</b>	\$ 42,263,691	\$ 2,804,370	\$ 7,693,913	\$ 3,372,421	\$ 22,451,445	\$ 4,907,634	\$ 24,247,201	\$ 6,060,021	\$ 7,329,596	\$ 7,329,596	\$ 24,474,042	
		<b>Subtotal All Savings</b>	\$ 42,263,691	\$ 4,000,489	\$ 11,910,630	\$ 8,987,389	\$ 29,205,274	\$ 10,305,757	\$ 32,968,979	\$ 16,672,297	\$ 18,255,029	\$ 18,255,029	\$ 58,220,960	

Category	Recommendation	Component	Description		FY 2017	FY2017 Actual	FY 2018	FY2018 Actual	FY 2019	FY2019 Actual	FY 2020	FY 2021	Total Goal	
New Resource Generation	4A	Asset Review	Conduct an assessment of non-core assets to determine market value if sold,, leased or otherwise repurposed.		\$ 664,471	\$ 132,587	\$ 714,471	\$ 1,031,903	\$ 164,471	\$ 1,644,676	\$ 164,471	\$ 164,471	\$ 1,872,355	
	4C	Affinity Partnerships	Upon determining assets and operations that are to be retained, evaluate opportunities for affinity relationships and sponsorships.		\$ 3,154,762	\$ 3,180,333	\$ 3,154,762	\$ 3,335,404	\$ 3,154,762	\$ 3,281,674	\$ 3,154,762	\$ 3,154,762	\$ 15,773,810	
		Other Revenue	Other Resource Generation		\$ 24,114,041	\$ 6,348,726	\$ 5,898,182	\$ 10,672,523	\$ 13,822,541	\$ 12,001,562	\$ 5,658,369	\$ 17,001,562	\$ 22,001,562	\$ 68,025,935
	<b>Subtotal New Resource Generation</b>					<b>\$ 24,114,041</b>	<b>\$ 10,167,959</b>	<b>\$ 9,211,102</b>	<b>\$ 14,541,756</b>	<b>\$ 18,189,848</b>	<b>\$ 15,320,795</b>	<b>\$ 10,584,719</b>	<b>\$ 20,320,795</b>	<b>\$ 25,320,795</b>
<b>TOTAL OF COMBINED INSITUTIONAL OPPORTUNITIES FOR STUDENT AFFORDABILITY</b>					<b>\$ 66,377,732</b>	<b>\$ 12,972,329</b>	<b>\$ 16,905,015</b>	<b>\$ 17,914,177</b>	<b>\$ 40,641,293</b>	<b>\$ 20,228,429</b>	<b>\$ 34,831,920</b>	<b>\$ 26,380,816</b>	<b>\$ 32,650,391</b>	<b>\$ 110,146,142</b>

SPECIFIC RE-DEPLOYMENT OF SAVINGS TO STUDENTS: Please use the space below to describe, in detail, how you plan to re-deploy institutional resources that are saved and/or generated through the task force components outlined above.

	FY 2017	FY2017 Actual	FY 2018	FY2018 Actual	FY 2019	FY2019 Actual	FY 2020	FY 2021	Total Goal	
Increase undergraduate student financial aid	\$ 31,809,204	\$ 8,000,000	\$ 10,729,821	\$ 14,000,000	\$ 17,081,494	\$ 20,000,000	\$ 26,261,028	\$ 25,000,000	\$ 30,000,000	\$ 97,000,000
Student Success Collaborative	\$ 355,000	\$ 161,000	\$ 315,047	\$ 161,000	\$ 1,876,603	\$ 161,000	\$ 1,137,492	\$ 161,000	\$ 161,000	\$ 805,000
Investments in STEM facilities	\$ -	\$ 4,000,000	\$ 19,730,000	\$ 3,000,000	\$ 18,372,122	\$ -	\$ 3,031,867	\$ -	\$ -	\$ 7,000,000
Investments in faculty for high demand programs	\$ -	\$ 727,549	\$ 727,549	\$ 1,451,480	\$ 2,689,852	\$ 2,171,771	\$ 8,054,696	\$ 3,088,460	\$ 3,801,567	\$ 11,240,827
<b>Total</b>	<b>\$ 32,164,204</b>	<b>\$ 12,888,549</b>	<b>\$ 31,502,417</b>	<b>\$ 18,612,480</b>	<b>\$ 40,020,071</b>	<b>\$ 22,332,771</b>	<b>\$ 38,485,083</b>	<b>\$ 28,249,460</b>	<b>\$ 33,962,567</b>	<b>\$ 116,045,827</b>

Notes:

1. Savings attributable from initiatives falling under components 5A, 5B and 5C are all shown under 5B.

SIGNIFICANT CHANGE(S) IN 5-YEAR GOALS FROM FY16 SUBMISSION TO FY18 SUBMISSION: Please use the area below to describe, in detail, significant deviation in your institution's 5-year goals from the FY16 submission to the FY17 submission, if applicable.





## **Quasi-Endowment Resolution R2020-24**

WHEREAS, Miami University has accumulated unrestricted expendable funds; and

WHEREAS, Resolution R2019-28 established the Miami University Quasi-Endowment Policy; and

WHEREAS, The Senior Vice President for Finance and Business Services has proposed that a significant portion of these unrestricted, expendable funds be used to establish a new scholarship quasi-endowment; and

WHEREAS, both the Senior Vice President for University Advancement and the Senior Vice President for Finance and Business Services of the University recommend approval of this plan;

NOW, THEREFORE BE IT RESOLVED that the Board of Trustees approves the creation of the Unrestricted Scholarship Fund with \$1,500,000.00 from the Miami University unrestricted endowments expendable fund; and

BE IT FURTHER ESOLVED that the annual distributions of the Unrestricted Scholarship Fund be used for unrestricted financial aid for Miami students as determined by the Office of Student Financial Assistance.

*Approved by the Board of Trustees  
December 13, 2019*

A handwritten signature in black ink, appearing to read 'T. O. Pickerill II', with a long horizontal flourish extending to the right.

T. O. Pickerill II  
Secretary to the Board of Trustees



FINANCE AND BUSINESS SERVICES  
Investments & Treasury Services Office


107 Roudebush Hall  
501 E High Street  
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MiamiOH.edu

To: Tom Herbert and David Creamer  
From: Bruce Guiot *BAG*  
Subject: Unrestricted Scholarship Quasi-endowment  
Date: October 8, 2019

The annual spending distributions from Miami University's unrestricted endowment funds have been accumulating as a contingency part of the original financial plan for the Armstrong Student Center (ASC) construction project. ASC has an outstanding internal loan balance of \$9.5 million. The annual debt service is being met through a combination of the student fee, annual spending distributions from two quasi-endowments, and a few remaining pledge payments. In addition, two bequests pledged toward this project total \$9.5 million.

The expendable balance associated with the University's unrestricted endowments was \$2,167,327.44 at June 30, 2019. At this point, the ASC project's financial condition appears to be solid and this full contingency balance is no longer needed.

Currently, the University's most pressing financial need is additional student financial aid. In order to provide an additional perpetual funding source to support financial aid, the recommendation to the Board of Trustees is to create a new scholarship quasi-endowment in the amount of \$1,500,000. The fund will be called the Unrestricted Scholarship Fund and will make an annual distribution to an expendable account as determined by the Miami University Endowment Spending Policy. The expendable will be used to provide student financial aid at the discretion of the Office of Student Financial Assistance.

Approved:   
Tom Herbert

Date: 11/1/19

Approved:   
David Creamer

Date: 11-12-19



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**Miami University  
RESOLUTION R2020-25**

**MIAMI UNIVERSITY  
INVESTMENT POLICY STATEMENT - NON-ENDOWMENT  
Updated December 2019**

WHEREAS, the Board of Trustees of Miami University adopted Resolution R2018-50 on June 22, 2018, to update and amend the Non-Endowment Funds Investment Policy; and

WHEREAS, Miami's staff and outsourced chief investment officer have proposed various revisions and updates to the Investment Policy; and

WHEREAS, the Senior Vice President for Finance and Business Services of the University, with the concurrence of the Investment Sub-Committee and the Finance and Audit Committee, has recommended revising and updating this policy as stated below;

NOW, THEREFORE BE IT RESOLVED that the Board of Trustees approves the amended Non-Endowment Funds Investment Policy; and

BE IT FURTHER RESOLVED that this Resolution supersedes and replaces Resolution R2018-50.

*Approved by the Board of Trustees  
December 13, 2019*

T. O. Pickerill II  
Secretary to the Board of Trustees

**MIAMI UNIVERSITY**  
**Investment Policy Statement – Non-Endowment**  
*DECEMBER 2019*

**I. Purpose**

This Investment Policy Statement (“IPS”) shall serve as the governing framework for the management of the Non-Endowment assets of Miami University (the “University”) and will guide the activities and decisions of the Board of Trustees of the University (the “BoT”), as well as the Finance and Audit Committee of the BoT (the “FAC”), the Investment Subcommittee of the FAC (the “Investment Subcommittee”), the University staff, and the Outsourced Chief Investment Officer (“OCIO”) in managing the University’s Non-Endowment assets.

All University funds derived from the sources enumerated in Ohio Revised Code 3345.05 (A) (hereafter the “Non-Endowment”), shall for investment purposes be designated into one of three pools:

- (Tier I) the University’s Operating Cash;
- (Tier II) the University’s Core Cash Sub-Account; and
- (Tier III) the University’s Long-Term Capital Sub-Account.

In addition, the BoT may designate some of these funds as quasi-endowments, which for investment purposes shall be invested with the University’s endowment pool according to the Pooled Investment Agreement between the University and the Miami University Foundation and the endowment investment policy (Appendix A).

**II. Fiduciary Duties**

In fulfilling its responsibilities described herein, each of the BoT, the FAC and its Investment Subcommittee, the Office of Investments and Treasury Services, and the OCIO is a fiduciary to the Non-Endowment and shall act in accordance with the Uniform Prudent Management of Institutional Funds Act (“UPMIFA”). Among other things, UPMIFA requires each person managing an institutional portfolio to do so in good faith and with the care an ordinarily prudent person in a like position would exercise under similar circumstances.

**III. Roles and Responsibilities**

***Board of Trustees.*** The BoT shall approve this IPS, its guidelines, and amendments. The BoT shall also approve recommendations to hire or fire third party service providers (e.g., auditors, custodian, OCIO, and consultants).

The IPS will guide the activities and decisions of the BoT, as well as, the FAC, the Investment Subcommittee, the Office of Investments and Treasury Services, and the OCIO in managing the assets of the Non-Endowment.

***Finance and Audit Committee.*** The BoT has delegated implementation oversight of the IPS to the FAC, which, in turn, may entrust an Investment Subcommittee to carry out these responsibilities and which serves as the Investment Committee required by Ohio Revised Code 3345.05. Specific responsibilities of the FAC include:

- upon recommendation of its Investment Subcommittee, submitting for BoT approval an IPS, setting forth, among other things, the fiduciary roles and responsibilities, investment guidelines and objectives for the investment of the assets, including asset allocation target exposures, permissible ranges (i.e., minimum and maximum allocations to each asset class), and the benchmarks against which the performance of each asset class, and the portfolio as a whole, will be evaluated;
- upon recommendation of its Investment Subcommittee, submitting for BoT approval Investment Subcommittee recommendations to hire or fire third party service providers (e.g., auditors, custodian, OCIO, and consultants); and
- reporting at least semi-annually to the BoT.

***Investment Subcommittee.*** The Investment Subcommittee as a governing fiduciary shall oversee the investment and administration of the Non-Endowment. It serves as the “investment committee” required by Ohio Revised Code 3345.05. The Investment Subcommittee, in conjunction with the OCIO, develops policies and guidelines for recommendation to the BoT and the FAC designed to position the Non-Endowment to achieve its objectives with a prudent level of risk. Revisions to the IPS may be recommended by the Investment Subcommittee and approved by the BoT as necessary.

The Investment Subcommittee delegates its authority to make investment decisions to the OCIO in accordance with the Investment Management Agreement dated May 16, 2018 and as may be amended (the “Investment Management Agreement”), which is incorporated herein by reference. Specific responsibilities of the Investment Subcommittee include:

- submitting for FAC concurrence and BoT approval an IPS, setting forth, among other things, the fiduciary roles and responsibilities, investment guidelines and objectives for the investment of the Non-Endowment assets, including asset allocation target exposures, permissible ranges (i.e., minimum and maximum allocations to each asset class), and the benchmarks against which the performance of each asset class, and the portfolio as a whole, will be evaluated;
- proposing for FAC concurrence and BoT for approval such updates to the IPS as it, in consultation with the Office of Investments and Treasury Services, the OCIO, and any other advisor, deems appropriate;

- communicating to the Office of Investments and Treasury Services and the OCIO any changes in the risk profile and characteristics of Miami University that may impact the investment objectives and guidelines of the Non-Endowment;
- delegating specific administrative, operational, and managerial responsibilities relating to the investment and reinvestment of the Non-Endowment assets;
- monitoring compliance with the IPS;
- reviewing the Office of Investments and Treasury Services' oversight and evaluation of third party vendors on its behalf and making recommendations to the FAC and the BoT with respect thereto;
- reviewing periodically the following:
  - investment performance, including comparisons to objectives and benchmarks
  - asset allocation for the Non-Endowment
  - fees paid in support of the management of the Non-Endowment
- reporting at least semi-annually to the BoT.

**Staff.** The Secretary to the BoT will maintain the official minutes and records of the FAC and Investment Subcommittee. The Office of Investments and Treasury Services is responsible for managing the operations of the Non-Endowment investment program. Specific responsibilities of the Office of Investments and Treasury Services include:

- budgeting, investing, forecasting, and monitoring funds associated with the Tier 1 Operating Cash portfolio;
- managing the transfer of funds among the Non-Endowment investment Tiers;
- facilitating division carry forward balances, donor gifts, and other unrestricted funds that can be quasi-endowed;
- providing administration, reporting, accounting, audit, and tax support for the Non-Endowment operations;
- ensuring compliance with Ohio Revised Code Section 3345.05 (C)(1);
- serving as the day-to-day contact with the OCIO including communicating planned contributions and withdrawals, transfers of funds, and liquidity needs, communicating with the OCIO and any other advisor(s) any changes in the risk profile and characteristics of Miami University that may impact the investment objectives and guidelines of the Non-Endowment;
- monitoring and evaluating third party service providers (e.g., auditors, custodian, OCIO, and consultants), specifically
  - overseeing the OCIO or other advisor(s) who shall have the responsibility, and may have discretion, for implementing investment strategies in accordance with the guidelines set forth in the IPS;
  - overseeing other service providers to the Non-Endowment, including the custodian of Non-Endowment assets;
- recommending to the Investment Subcommittee the hiring and termination of third party service providers (e.g., auditors, custodian, OCIO, and consultants);

- managing constituent relationships;
- providing support to the FAC and its Investment Subcommittee;
- reporting to the FAC and its Investment Subcommittee at their respective meetings.

***Outsourced Chief Investment Officer.*** To assist with managing the Non-Endowment investment program, the BoT has retained the services of an OCIO in conformity the requirements of Ohio Revised Code Section 3345.05(D)(1). The Investment Subcommittee delegated authority to make investment decisions to the OCIO in accordance with the Investment Management Agreement, which is incorporated herein by reference.

The OCIO will have day-to-day responsibility and discretion for investing a designated portion of the Non-Endowment assets (specifically Tiers II and III). The OCIO will report to the Investment Subcommittee on a regular basis in accordance with the Investment Management Agreement that governs the relationship. Specific responsibilities include:

- advising the Investment Subcommittee on the development of the IPS;
- periodically reviewing and recommending to the Investment Subcommittee any changes, modifications, and/or amendments to the IPS, including the investment guidelines and objectives;
- implementing the investment program with respect to Tiers II and III on a discretionary basis, including the selection and monitoring of commingled investment vehicles, the appointment of sub-advisers, and the direct management of assets not allocated to investment vehicles or sub-advisers, in accordance with the guidelines and asset allocation ranges as set forth in this IPS and the Investment Management Agreement;
- taking all necessary actions with respect to the hiring and termination of sub-advisers, and the subscription to and withdrawal from, commingled investment vehicles, including reviewing and executing investment management agreements and subscription documents;
- setting investment guidelines for sub-advisers in conformity to this IPS and the Investment Management Agreement and monitoring their compliance therewith;
- meeting with sub-advisers and evaluating their investment performance;
- interacting with the custodian and other relevant service providers to the Non-Endowment, as necessary to perform its investment management services;
- assisting the Office of Investments and Treasury Services in meeting its reporting and administrative requirements;
- providing reporting and performance monitoring as necessary for the Investment Subcommittee to perform its oversight responsibilities; and
- meeting with the Investment Subcommittee at least quarterly or at other intervals as reasonably agreed with the Investment Subcommittee.

#### **IV. Objectives: Non-Endowment Investment Program**

The primary objective of the Non-Endowment investment program is to ensure adequate operating liquidity for the University. Liquidity needs are actively managed in a three-pool structure that allows for differentiation among investment risks and returns.

**For investment strategy purposes, the University's Non-Endowment and Foundation Endowment portfolios should be considered together. The liquidity, risk, and return characteristics of the combined pools provide the opportunity to more effectively deploy capital and improve the overall risk-adjusted returns of both investment programs.**

The investment of Non-Endowment assets will be guided by the objective of earning rates of return in excess of savings accounts or 91-day Treasury Bills while accepting a low level of market risk and maintaining a high degree of liquidity. The three Tiers of the Non-Endowment investment program are constructed to adequately meet the University's projected budgetary needs and Ohio Revised Code requirements (listed below in Section XI Investment Guidelines) with low risk and liquid investments in Tier I, and with progressively higher expected returns at higher risk profiles in Tiers II and III. The portfolio's asset allocation will be statistically modeled using historical and projected risk and return characteristics of the portfolio's asset classes.

The Investment Subcommittee has adopted asset allocation targets and permissible ranges, set forth in Exhibits 1 and 2, that are designed to meet this objective provided that markets deliver equilibrium returns consistent with normal market conditions. A benchmark index has been assigned to each asset class, as set forth in Exhibits 1 and 2. The combination of the benchmark index assigned to each asset class, weighted in accordance with the target allocation to that asset class, forms the "Policy Benchmark" against which the portfolio's overall performance will be measured. Each Tier seeks to achieve performance (net of management fees) that exceeds the performance of the applicable Policy Benchmark (net of assumed passive management fees and rebalancing costs) over rolling five- and ten-year periods.

#### **V. Investment Objectives: Non-Endowment Tiers**

##### **TIER I - University Operating Cash**

- Objective: To meet the day-to-day cash obligations of the University, provide a liquid and low investment risk source of funds when needed, and meet Ohio Revised Code requirements for public funds.
- Investments: Includes bank deposits, other cash vehicles, and eligible investments under ORC 3345.05 (C) (1).
- Tier Size: The targeted minimum cash balance held in Tier 1 is budgeted each fiscal year by the Office of Investments and Treasury Services and is confirmed



every six months. The minimum balance will be two times the average monthly negative cash flow of the preceding fiscal year.

### **TIER II - University Core Cash Sub-Account**

- Objective: The Baseline Tier II provides a liquid source of funds in the event the Tier I pool is insufficient to meet the University's operating cash needs, while providing an opportunity for incremental returns with modest volatility. The University may periodically create a Special Projects fund within Tier II but housed apart from the Baseline Tier II for funds earmarked for specific future disposition by the University that are likely to require target date maturity matching.
- Investments: Include U.S. Treasury and government agency securities generally with an average weighted maturity of between zero and two years for the baseline allocation. May include eligible investments under ORC 3345.05(C)(1).
- Tier Size: The targeted Baseline balance within this Sub-Account is calculated using the method outlined in Section VIII Annual Expenditure Policy, confirmed during each fiscal year budgeting cycle, and verified every six months. The target Baseline balance is based upon the reserve for investment fluctuations. The minimum balance shall not fall below two times the average negative monthly cash flow of the preceding fiscal year. The Special Projects allocation has no size restrictions.

### **TIER III - University Long-Term Capital Sub-Account**

- Objective: To provide "endowment-like" long-term risk-adjusted returns on assets that would be expended by the University only in the unlikely event of severe financial exigency.
- Investments: Include public equity, absolute return and hedged strategies, open-ended real estate funds, futures-based commodity strategies, and diversified global fixed income securities. May include eligible investments under ORC 3345.05(C)(1). While these funds are expected to have less liquid fund structures, private capital investments will be excluded from consideration unless approved by the Investment Subcommittee.
- Tier Size: This Sub-Account has no size restrictions and generally receives deposits of residual operating cash not deployed in Tiers I and II.

## **VI. Asset Allocation**

To achieve the investment objectives of this IPS, an asset allocation study was conducted and shared with the Investment Subcommittee. It was used to establish percentage targets and ranges for each asset class eligible for investments within Tiers II and III. The asset allocation study analyzed the expected return, risk, and correlation of several asset classes as well as, the expected return and risk of various hypothetical portfolios comprising these asset classes. The expected return and risk characteristics of various portfolios were

evaluated in terms of the future expected efficiency of achieving the investment objectives of the Non-Endowment.

Based upon this analysis, asset allocation policies, including ranges for each asset class, were defined. The asset allocation policies are contained in the investment guidelines set forth in Exhibits 1 and 2.

## **VII. Risk Management**

The Tier II Sub-Account will emphasize liquidity and low volatility in keeping with the portfolio's objective of serving as a cash buffer for the University's short-term operating cash needs. The appropriate duration target and range will be agreed to by the Investment Subcommittee and OCIO and specified in Exhibit 1.

Investments in the Tier III Sub-Account will be broadly diversified across and within asset classes in order to seek to minimize the impact of adverse asset class and security-specific shocks, and to avoid excessive portfolio volatility. An appropriate target range for the annual standard deviation of the Tier III policy portfolio will be agreed on by the Investment Subcommittee and OCIO as specified in Exhibit 2. Meeting the "endowment-like" long-term return objectives of the Non-Endowment program shall require the OCIO to regularly monitor and manage market risks associated with the overall portfolio as well as individual asset classes. Specific investments will also be reviewed and aggregated, as available from each manager, on a regular basis to ensure that the portfolio does not maintain unwarranted concentration risks with respect to any single factor or security at the manager level, asset class level and portfolio level.

Leverage shall also be monitored to ensure that the intended exposure is in line with parameters determined by the OCIO to be appropriate for a specific strategy and/or asset class. In addition, the portfolio will seek to maintain sufficient liquidity, at all times, to meet the ongoing distribution needs of the Non-Endowment, to rebalance the portfolio, and to capture tactical opportunities. The source of monies for such liquidity needs will be based on rebalancing and cost considerations.

## **VIII. Annual Expenditure Policy**

A reserve for investment fluctuations will be maintained in order to buffer the portfolio from short-term investment fluctuations. The target balance of the reserve for future investment fluctuations is determined as 20% of the previous fiscal year-end Non-Endowment pool Tier III Long Term Capital balance, plus two years of budgeted Non-Endowment investment earnings.

Each year, the University budget office shall budget investment earnings based on a reasonable assessment of the interest rate and capital markets environment and any funding to be added to the reserve for investment fluctuations.

Any earnings in excess of this budgeted level shall be allocated 100% to the reserve for investment fluctuations, unless otherwise determined by the BoT. In the event the earnings are short of the budgeted amount, the difference shall be drawn from the reserve for investment fluctuations.

The target amount of the reserve for investment fluctuations shall be reviewed at least annually to determine its sufficiency and to establish a future target.

## **IX. Performance Monitoring and Evaluation**

The performance of the Non-Endowment, component asset classes, sub-advisers and investment vehicles shall be monitored by the OCIO on an ongoing basis and shall be reviewed with the Investment Subcommittee at least quarterly. Investment returns are to be measured net of all fees, including investment manager and the OCIO fee. The OCIO shall provide a summary of returns versus stated benchmarks for short-term and long-term periods. The OCIO will meet with the Investment Subcommittee regularly to provide a review of performance and risk, a discussion of market conditions and a summary of the current positioning of the portfolio.

## **X. Conflicts of Interest**

The Investment Subcommittee shall take reasonable measures to assess the independence of the OCIO, and any other service providers to the Non-Endowment. Any actual or potential conflicts of interest relating to any of the foregoing, or to any member of the BoT, FAC, Investment Subcommittee or Office of Investment and Treasury Services, shall be disclosed and addressed in accordance with UPMIFA, Ohio's Ethics laws as applicable, and any conflict of interest policy adopted by the University.

## **XI. Investment Guidelines**

Sub-advisers who are appointed to manage accounts for the Non-Endowment shall be provided investment guidelines as determined by the OCIO. In general, the guidelines will stipulate the types of securities in which the account may invest, general characteristics for the portfolio and/or the performance benchmark and objectives. The specific guidelines may vary depending upon the asset class or sub-asset class. Commingled investment vehicles will be governed by their offering memorandum and other constituent documents.

The investment of the Non-Endowment is subject to and shall be made in accordance with ORC 3345.05 (C) (1), with at least twenty-five percent of the average amount of the investment portfolio over the course of the previous fiscal year invested in securities of the United States government or of its agencies or instrumentalities, the treasurer of state's pooled investment program, obligations of Ohio or any political subdivision of Ohio, certificates of deposit of any national bank located in Ohio, written repurchase agreements

with any eligible Ohio financial institution that is a member of the federal reserve system or federal home loan bank, money market funds, or bankers acceptances maturing in two hundred seventy days or less which are eligible for purchase by the federal reserve system, as a reserve. The Non-Endowment assets in excess of the twenty-five percent may be pooled with other University funds and invested in accordance with Ohio Revised Code Section 1715.52 (UPMIFA).

**Exhibit 1****MIAMI UNIVERSITY – NON-ENDOWMENT (TIER 2)****Policy Allocation Targets, Ranges and Benchmarks***JUNE 2018*

<i>Asset Category</i>	<i>Policy Allocation</i>	<i>Policy Ranges</i>		<i>Benchmark Indices <sup>(1)</sup></i>
		<i>-</i>	<i>+</i>	
<b>Fixed Income</b>	<b>100.0%</b>	<b>-10.0%</b>	<b>0.0%</b>	
U.S. Treasury & Gov't Agency Securities	100.0%	-10.0%	0.0%	<i>ICE BAML 0-2 Year Treasury Index</i>
<b>Cash</b>	<b>0.0%</b>	<b>0.0%</b>	<b>10.0%</b>	<i>Citigroup 3 Month Treasury Bill Index</i>
<b>Total</b>	<b>100%</b>			

## Footnotes:

(1) The Policy Benchmark will be reported both gross and net of assumed passive management fees and rebalancing costs.

(2) Targeted Duration for the Baseline Allocation: a range of +/- 0.5 years will be targeted around the duration of the benchmark. For example, should the ICE BAML 0-2 Year Treasury Index carry a duration of 1 year, a target range of 0.5 and 1.5 years will be targeted.

(3) Should this sub-account house funds earmarked for special university projects requiring target date matching, the Office of Investments and Treasury Services will establish an estimated draw schedule and the OCIO will invest in U.S. Treasury and government/agency securities accordingly.

**Exhibit 2**  
**MIAMI UNIVERSITY – NON-ENDOWMENT (TIER 3)**  
**Policy Allocation Targets, Ranges and Benchmarks**  
**JUNE 2018**

<i>Asset Category</i>	<i>Policy Allocation</i>	<i>Policy Ranges</i>		<i>Benchmark Indices <sup>(1)</sup></i>
		<i>-</i>	<i>+</i>	
<b>Equities</b>	<b>54.0%</b>	<b>-10.0%</b>	<b>+10%</b>	
U.S. Equities	27.0%	-10.0%	+10%	<i>Russell 3000 Index</i>
Non-U.S. Equities	18.0%	-10.0%	+10%	<i>MSCI World ex-US Investable Market Index (IMI) (Net) <sup>(2)</sup></i>
Emerging Market Equities	9.0%	-9.0%	+10%	<i>MSCI Emerging Markets Index (Net) <sup>(2)</sup></i>
<b>Alternatives (Net) <sup>(3)(4)</sup></b>	<b>12.0%</b>	<b>-12.0%</b>	<b>+10%</b>	
Hedge Funds (Net) <sup>(4)</sup>	12.0%	-12.0%	+10%	<i>HFRX Equal Weighted Strategies Index</i>
<i>Hedge Funds (Gross)</i>	22.0%	-22.0%	+5%	
<i>Portable Alpha Overlay</i>	10.0%	-10.0%	+10%	
<b>Real Assets</b>	<b>10.0%</b>	<b>-7.0%</b>	<b>+13%</b>	
Real Estate	3.0%	-3.0%	+5%	<i>NCREIF Fund Index - Open End Diversified Core Equity Index</i>
Commodities	3.0%	-3.0%	+6%	<i>S&amp;P GSCI Total Return Index</i>
TIPS	4.0%	-4.0%	+6%	<i>Bloomberg Barclays 1-10 Year U.S. TIPS Index</i>
<b>Fixed Income <sup>(4)</sup></b>	<b>24.0%</b>	<b>-10.0%</b>	<b>+10%</b>	
U.S. Investment Grade Fixed Income <sup>(5)</sup>	21.5%	-15.0%	+10%	<i>Bloomberg Barclays U. S. Aggregate Index</i>
U.S. High Yield Bonds	2.5%	-2.5%	+10%	<i>BofA Merrill Lynch High Yield Cash Pay Index</i>
Non-U.S. Fixed Income	0.0%	0.0%	+10%	<i>Citigroup Non-USD World Government Bond Index Hedged</i>
<b>Cash</b>	<b>0.0%</b>	<b>0.0%</b>	<b>+20%</b>	<i>Citigroup 3 Month Treasury Bill Index</i>
<b>Total</b>	<b>100%</b>			

Footnotes:

(1) The Policy Benchmark will be reported both gross and net of assumed passive management fees and rebalancing costs.

(2) Indices are net of dividend withholding tax.

(3) (Net) indicates that allocations are net of portable alpha strategies. The maximum gross allocation to hedge funds, including those overlaid in portable alpha strategies, is 27%.

(4) U.S. Fixed Income includes physical holdings of Treasuries, corporates and synthetic fixed income achieved through portable alpha strategies.

(5) For purposes of assessing compliance with the minimum of the policy range, fixed income will be deemed to include the allocation to cash.

(6) The targeted annual standard deviation range is 10-12%.

**Appendix A**  
**MIAMI UNIVERSITY FOUNDATION INVESTMENT POLICY STATEMENT**  
**Most recent version as adopted by the Foundation Board of Directors**

[\[AVAILABLE UPON REQUEST\]](#)

**MIAMI UNIVERSITY**  
**Investment Policy Statement – Non-Endowment**  
*JUNE 2018-DECEMBER 2019*

**I. Purpose**

~~This Investment Policy Statement (“IPS”) shall serve as the governing framework for the management of the Non-Endowment assets of Miami University (the “University”) and will guide the activities and decisions of the Board of Trustees of the University (the “BoT”), as well as the Finance and Audit Committee of the BoT (the “FAC”), the Investment Subcommittee of the FAC (the “Investment Subcommittee”), the University staff, and the Outsourced Chief Investment Officer (“OCIO”) in managing the University’s Non-Endowment assets.~~

~~This Investment Policy Statement (“IPS”) is intended to serve as a governing framework for the management of the Non-Endowment assets of Miami University. All University funds derived from the sources enumerated in Ohio Revised Code 3345.05 (A) (hereafter referred to as the “Non-Endowment”), shall for investment purposes be designated into one of three pools:~~

- ~~• (Tier I) the University’s Operating Cash (Tier 1);~~
- ~~• (Tier II) the University’s Core Cash Sub-Account (Tier 2); and~~
- ~~• (Tier III) the University’s Long-Term Capital Sub-Account (Tier 3).~~

~~The IPS will guide the activities and decisions of the Board, as well as, the Committee, the staff of Miami University (the “Staff”), and the OCIO in managing the assets of the Non-Endowment.~~

In addition, the ~~Board of Trustees of Miami University (the “BoardBoT”)~~ may designate some of these funds as quasi-endowments, which for investment purposes shall be invested with the University’s endowment pool according to the Pooled Investment Agreement between the University and the Miami University Foundation and the endowment investment policy (Appendix A).

**II. Fiduciary Duties**

~~In fulfilling its responsibilities described herein, each of the BoardBoT, the FACCommittee and its Investment Subcommittee, the Office of Investments and Treasury Services, and the OCIO is a fiduciary to the Non-Endowment and shall act in accordance with the Uniform Prudent Management of Institutional Funds Act (“UPMIFA”). Among other things, UPMIFA requires each person managing an institutional portfolio to do so in good faith and with the care an ordinarily prudent person in a like position would exercise under similar circumstances.~~

~~The investment of the Non-Endowment is subject to and shall be made in accordance with ORC 3345.05 (C) (1), with at least twenty five percent of the average amount of the~~



~~investment portfolio over the course of the previous fiscal year invested in securities of the United States government or of its agencies or instrumentalities, the treasurer of state's pooled investment program, obligations of Ohio or any political subdivision of Ohio, certificates of deposit of any national bank located in Ohio, written repurchase agreements with any eligible Ohio financial institution that is a member of the federal reserve system or federal home loan bank, money market funds, or bankers acceptances maturing in two hundred seventy days or less which are eligible for purchase by the federal reserve system, as a reserve. The Non-Endowment assets in excess of the twenty five percent may be pooled with other University funds and invested in accordance with Ohio Revised Code Section 1715.52 (UPMIFA).~~

### III. Roles and Responsibilities

~~**Board of Trustees.** The BoT shall approve this IPS, its guidelines, and amendments. The BoT shall also approve recommendations to hire or fire third party service providers (e.g., auditors, custodian, OCIO, and consultants).~~

~~The IPS will guide the activities and decisions of the BoT, as well as, the FAC, the Investment Subcommittee, the Office of Investments and Treasury Services, and the OCIO in managing the assets of the Non-Endowment. The IPS has been adopted by the Board upon the recommendation of the Board's Finance and Audit Committee ("Finance & Audit") which serves as the Investment Committee required by Ohio Revised Code 3345.05.~~

~~The Board has delegated implementation of this policy to an investment subcommittee comprised of Board members (the "Committee"). To assist with the investment program the Committee has retained the services of an outsourced Chief Investment Officer (the "OCIO") which satisfies the requirements of Ohio Revised Code Section 3345.05 (D) (1).~~

~~The IPS will guide the activities and decisions of the Board, as well as, the Committee, the staff of Miami University (the "Staff"), and the OCIO in managing the assets of the Non-Endowment.~~

~~**Finance and Audit Committee.** The BoT has delegated implementation oversight of the IPS to the FAC, which, in turn, may entrust an Investment Subcommittee to carry out these responsibilities and which serves as the Investment Committee required by Ohio Revised Code 3345.05. Specific responsibilities of the FAC include:~~

- ~~• upon recommendation of its Investment Subcommittee, submitting for BoT approval an IPS, setting forth, among other things, the fiduciary roles and responsibilities, investment guidelines and objectives for the investment of the assets, including asset allocation target exposures, permissible ranges (i.e., minimum and maximum allocations to each asset class), and the benchmarks against which the performance of each asset class, and the portfolio as a whole, will be evaluated;~~

- upon recommendation of its Investment Subcommittee, submitting for BoT approval Investment Subcommittee recommendations to hire or fire third party service providers (e.g., auditors, custodian, OCIO, and consultants); and
- reporting at least semi-annually to the BoT.

**Investment Subcommittee.** The Board has delegated implementation of this policy to an investment subcommittee comprised of Board members (the “Committee”). To assist with the investment program the Committee has retained the services of an outsourced Chief Investment Officer (the “OCIO”) which satisfies the requirements of Ohio Revised Code Section 3345.05 (D) (1).

The Investment Subcommittee as a governing fiduciary shall oversee the investment and administration of the Non-Endowment. It serves as the “investment committee” required by Ohio Revised Code 3345.05. The Investment Subcommittee, in conjunction with the OCIO, establishes-develops policies and guidelines for recommendation to the BoT and the FAC consistent with this IPS designed to position the Non-Endowment to achieve its objectives with a prudent level of risk. Revisions to the IPS may be recommended by the Investment Subcommittee and approved by the BoT as necessary.

The Investment Subcommittee delegates its authority to make investment decisions to the OCIO in accordance with the Investment Management Agreement dated May 16, 2018 and as may be amended (the “Investment Management Agreement”), which is incorporated herein by reference. The Committee delegates its authority to make investment decisions to the OCIO in accordance with the Investment Management Agreement dated May 16, 2018, which is incorporated herein by reference. The Committee shall report at least semi-annually to the Board. Revisions to the IPS may be recommended by the Committee and approved by the Board as necessary. Specific responsibilities of the Committee Investment Subcommittee include:

- submitting for FAC concurrence and BoardBoT approval an IPS, setting forth, among other things, the fiduciary roles and responsibilities, investment guidelines and objectives for the investment of the Non-Endowment assets, including asset allocation target exposures, permissible ranges (i.e., minimum and maximum allocations to each asset class), and the benchmarks against which the performance of each asset class, and the portfolio as a whole, will be evaluated;
- proposing for to the FAC concurrence and BoardBoT for approval such amendmentsupdates to the IPS as it, in consultation with the Office of Investments and Treasury Services, the OCIO, and any other advisor, deems appropriate;
- communicating to the Office of Investments and Treasury Services and the OCIO any changes in the risk profile and characteristics of Miami University that may

~~impact the investment objectives and guidelines of the Non-Endowment; of the Board, the Committee, the Staff, the OCIO, and any other advisors or service providers as deemed appropriate by the Committee~~

- ~~submitting for Board approval, following consultation with the OCIO, investment guidelines and objectives for the investment of the assets, including asset allocation target exposures, permissible ranges (i.e., minimum and maximum allocations to each asset class), and the benchmarks against which the performance of each asset class, and the portfolio as a whole, will be evaluated;~~
- delegating specific administrative, ~~and~~ operational, and managerial responsibilities relating to the investment and reinvestment of the Non-Endowment assets;
- monitoring compliance with the IPS;
- reviewing the Office of Investments and Treasury Services' oversight and evaluation of third party vendors on its behalf and
- making recommendations to the FAC and the BoT with respect thereto;
- reviewing periodically the following:
  - ~~Investment-investment~~ performance, including comparisons to objectives and benchmarks
  - ~~Asset-asset~~ allocation for the Non-Endowment
  - ~~Fees-fees~~ paid in support of the management of the Non-Endowment
  -
- ~~reporting at least semi-annually to the BoT. overseeing the OCIO or other advisor(s) who shall have the responsibility, and may have discretion, for implementing investment strategies in accordance with the guidelines set forth in the IPS~~
- ~~communicating with the OCIO and any other advisor(s) any changes in the risk profile and characteristics of Miami University that may impact the investment objectives and guidelines of the Non-Endowment~~
- ~~overseeing other service providers to the Non-Endowment, including the custodian of Non-Endowment assets~~
- ~~proposing to the Board such amendments to the IPS as it, in consultation with the OCIO and any other advisor, deems appropriate~~

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**Staff.** The Secretary to the BoT will maintain the official minutes and records of the FAC and Investment Subcommittee. The Office of Investments and Treasury Services ~~The Staff~~ is responsible for overseeing-managing the operations of the Non-Endowment investment program. Specific responsibilities of the Staff-Office of Investments and Treasury Services include:

- ~~directing oversight of the~~ budgeting, investing, forecasting, and monitoring funds associated with the Tier 1 Operating Cash portfolio;
- managing the transfer of funds among the Non-Endowment investment Tiers;

- facilitating division carry forward balances, donor gifts, and other unrestricted funds that can be quasi-endowed;
- providing administration, reporting, accounting, audit, and tax support for the Non-Endowment operations;
- ensuring compliance with Ohio Revised Code Section 3345.05 (C)(1);
- servicing as the day-to-day contact with the OCIO including communicating planned contributions and withdrawals, transfers of funds, and liquidity needs, communicating with the OCIO and any other advisor(s) any changes in the risk profile and characteristics of Miami University that may impact the investment objectives and guidelines of the Non-Endowment;
- monitoring and evaluating third party service providers (e.g., auditors, custodian, OCIO, and consultants), specifically
  - o overseeing the OCIO or other advisor(s) who shall have the responsibility, and may have discretion, for implementing investment strategies in accordance with the guidelines set forth in the IPS;
  - o overseeing other service providers to the Non-Endowment, including the custodian of Non-Endowment assets;
- recommending to the Investment Subcommittee the hiring and termination of third party service providers (e.g., auditors, custodian, OCIO, and consultants);
- ~~—~~
- ~~servicing as the day to day contact with the OCIO including communicating planned contributions and withdrawals, transfers of funds, and liquidity needs~~
- ~~specifying the appropriate strategy for the transfer of funds among the Non-Endowment investment tiers~~
- ~~identifying division carry forward balances, donor gifts, and other unrestricted funds that can be quasi-endowed~~
- ~~managing constituent relationships;~~
- ~~monitoring third party service providers (e.g., auditors, custodian, consultants)~~
- ~~providing administration, reporting, accounting, audit and tax support for the Non-Endowment operations~~
- ~~providing support to the FAC and its Investment Subcommittee;~~
- ~~reporting to the FAC and its Investment Subcommittee at their respective meetings, ensuring compliance with Ohio Revised Code Section 3345.05 (C)(1)~~
- ~~maintaining the official minutes and records of the Committee~~

***Outsourced Chief Investment Officer.*** To assist with managing the Non-Endowment investment program, the BoT has retained the services of an OCIO in conformity the requirements of Ohio Revised Code Section 3345.05(D)(1). The Investment Subcommittee delegated authority to make investment decisions. The Committee delegates its authority to make investment decisions to the to the OCIO in accordance with the Investment Management Agreement dated May 16, 2018, which is incorporated herein by reference.

The OCIO will have day-to-day responsibility and discretion for investing a designated portion of the Non-Endowment assets (specifically Tiers ~~2-II~~ and ~~III~~<sup>3</sup>). The OCIO will report to the Investment Subcommittee on a regular basis in accordance with the Investment Management Agreement that governs the relationship. ~~The OCIO will report to the Committee on a regular basis in accordance with the investment management agreement (“Investment Management Agreement”) that governs the relationship.~~ Specific responsibilities include:

- ~~advising the Investment Subcommittee on the adoption-development of, and any amendments to,~~ advising the Investment Subcommittee on the development of, and any amendments to, the IPS;
- ~~periodically reviewing and recommending to the Investment Subcommittee any changes, or modifications, and/or amendments to~~ periodically reviewing and recommending to the Investment Subcommittee any changes, or modifications, and/or amendments to of the IPS, including the investment guidelines and objectives; ~~to the Committee~~
- ~~overseeing the implementation of~~ overseeing the implementation of the investment program with respect to Tiers II and III on a discretionary basis, including the selection and monitoring of commingled investment vehicles, the appointment of sub-advisers, and the direct management of assets not allocated to investment vehicles or sub-advisers, in accordance with the guidelines and asset allocation ranges as set forth in ~~the this IPS and the~~ this IPS and the Investment Management Agreement;
- ~~periodically reviewing and recommending to the Committee any changes or modifications of the IPS, including the investment guidelines and objectives, to the Committee~~
- taking all necessary actions with respect to the hiring and termination of sub-advisers, and the subscription to and withdrawal from, commingled investment vehicles, including reviewing and executing investment management agreements and subscription documents;
- setting investment guidelines for sub-advisers in conformity to this IPS and the Investment Management Agreement and monitoring their compliance therewith;
- ~~meeting with sub-advisers and evaluating their investment performance;~~
- ~~interacting with the custodian and other relevant service providers to the Non-Endowment, as necessary to perform its investment management services;~~
- ~~assisting the Staff~~ assisting the Staff ~~Office of Investments and Treasury Services in meeting its reporting and administrative requirements;~~
- ~~providing reporting and performance monitoring as necessary for the~~ providing reporting and performance monitoring as necessary for the ~~Investment Subcommittee to perform its oversight responsibilities; and~~
- ~~meeting with~~
- ~~meeting with~~ meeting with the Investment Subcommittee at least quarterly or at other intervals as reasonably agreed with the Investment Subcommittee;
- ~~interacting with the custodian and other relevant service providers to the Non-Endowment, as necessary to perform its investment management services~~
- ~~assisting the Staff in meeting its reporting and administrative requirements~~

- ~~providing reporting and performance monitoring as necessary for the Committee to perform its oversight responsibilities. The OCIO will report to the Committee on a regular basis in accordance with the investment management agreement (“Investment Management Agreement”) that governs the relationship.~~

### II.I. Fiduciary Duties

~~In fulfilling its responsibilities described herein, each of the Board, the Committee and the OCIO is a fiduciary to the Non-Endowment and shall act in accordance with UPMIFA. Among other things, UPMIFA requires each person managing an institutional portfolio to do so in good faith and with the care an ordinarily prudent person in a like position would exercise under similar circumstances.~~

### III.IV. Objectives: Non-Endowment Investment Program

The primary objective of the Non-Endowment investment program is to ensure adequate operating liquidity for the University. Liquidity needs are actively managed in a three-pool structure that allows for differentiation among investment risks and returns.

**For investment strategy purposes, the University’s Non-Endowment and Foundation Endowment portfolios should be considered together. The liquidity, risk, and return characteristics of the combined pools provide the opportunity to more effectively deploy capital and improve the overall risk-adjusted returns of both investment programs.**

The investment of Non-Endowment assets will be guided by the objective of earning ~~market~~ rates of return in excess of savings accounts or 91-day Treasury Bills –while accepting a low level of market risk and maintaining a high degree of liquidity. ~~The portfolio’s asset allocation will be statistically modeled using historical and projected risk and return characteristics of the portfolio’s asset classes.~~ The three Tiers of the Non-Endowment investment program are constructed to adequately meet the University’s projected budgetary needs and Ohio Revised Code requirements (listed below in Section XI Investment Guidelines) –with low risk and liquid investments in Tier I, and with progressively higher expected returns at higher risk profiles in Tiers 2-II and 3-III. The portfolio’s asset allocation will be statistically modeled using historical and projected risk and return characteristics of the portfolio’s asset classes.

The Investment SubcCommittee has adopted asset allocation targets and permissible ranges, set forth in Exhibits 1 and 2, that are designed to meet this objective provided that markets deliver equilibrium returns consistent with normal market conditions. A benchmark index has been assigned to each asset class, as set forth in Exhibits 1 and 2. The combination of the benchmark index assigned to each asset class, weighted in

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accordance with the target allocation to that asset class, forms the “Policy Benchmark” against which the portfolio’s overall performance will be measured. Each Tier seeks to achieve performance (net of management fees) that exceeds the performance of the applicable Policy Benchmark (net of assumed passive management fees and rebalancing costs) over rolling five- and ten-year periods.

## **V. Investment Objectives: Non-Endowment Tiers**

### **TIER I - University Operating Cash**

- Objective: To meet the day-to-day cash obligations of the University, provide a liquid and low investment risk source of funds when needed, and meet Ohio Revised Code requirements for public funds.
- Investments: Includes bank deposits, other cash vehicles, and eligible investments under ORC 3345.05 (C) (1).
- Tier Size: The targeted minimum cash balance held in Tier 1 is budgeted each fiscal year by the ~~University staff~~Office of Investments and Treasury Services, and is confirmed every six months. The minimum balance will be two times the average monthly negative cash ~~balance~~flow of the preceding fiscal year.

### **TIER II - University Core Cash Sub-Account**

- Objective: ~~The Baseline Tier II~~To provides a liquid source of funds in the event the Tier I pool is insufficient to meet the University’s operating cash needs, while providing an opportunity for incremental returns with modest volatility. ~~This Sub-Account also~~The University may periodically create a Special Projects fund within Tier II but ~~houses~~apart from the Baseline Tier II for funds earmarked for specific future disposition by the University that are likely to require target date maturity matching.
- Investments: Include U.S. Treasury and government agency securities generally with an average weighted maturity of between zero and two years for the baseline allocation. May include eligible investments under ORC 3345.05(C)(1).  
Tier Size: The targeted Baseline balance within this Sub-Account is calculated using the method outlined in Section VIII Annual Expenditure Policy, confirmed during each fiscal year budgeting cycle, and verified every six months. The target Baseline ~~balance~~ is based upon the reserve for investment fluctuations. The minimum balance shall~~generally should~~ not fall below two times the average negative monthly ~~negative~~ cash ~~balance~~flow of the preceding fiscal year. The Special Projects allocation has no size restrictions.

•

### **TIER III - University Long-Term Capital Sub-Account**

- Objective: To provide “endowment-like” long-term risk-adjusted returns on assets that would be expended by the University only in the unlikely event of severe financial exigency.
- Investments: Include public equity, absolute return and hedged strategies, open-ended real estate funds, futures-based commodity strategies, and diversified global fixed income securities. May include eligible investments under ORC 3345.05(C)(1). While these funds are expected to have less liquid fund structures, private capital investments will be excluded from consideration unless approved by the Investment SubcCommittee.
- Tier Size: This Sub-Account has no size restrictions and generally receives deposits of residual operating cash not deployed in Tiers ~~1~~ and 2.

#### ~~V~~.VI. Asset Allocation

To achieve the investment objectives of this IPS, an asset allocation study was conducted and shared with the Investment SubcCommittee. It was used to establish percentage targets and ranges for each asset class eligible for investments within Tiers ~~2~~ and ~~3~~. The asset allocation study analyzed the expected return, risk, and correlation of several asset classes as well as, the expected return and risk of various hypothetical portfolios comprising these asset classes. The expected return and risk characteristics of various portfolios were evaluated in terms of the future expected efficiency of achieving the investment objectives of the Non-Endowment.

Based upon this analysis, asset allocation policies, including ranges for each asset class, were defined. The asset allocation policies are contained in the investment guidelines set forth in Exhibits 1 and 2.

#### ~~V~~.VII. Risk Management

The Tier ~~2~~ Sub-Account will emphasize liquidity and low volatility in keeping with the portfolio’s objective of serving as a cash buffer for the University’s short-term operating cash needs. The appropriate duration target and range will be agreed to by the Investment SubcCommittee and OCIO and specified in Exhibit 1.

Investments in the Tier ~~3~~ Sub-Account will be broadly diversified across and within asset classes in order to seek to minimize the impact of adverse asset class and security-specific shocks, and to avoid excessive portfolio volatility. An appropriate target range for the annual standard deviation of the Tier ~~3~~ policy portfolio will be agreed on by the Investment SubcCommittee and OCIO as specified in Exhibit 2. Meeting the “endowment-like” long-term return objectives of the Non-Endowment program ~~shall~~ requires the OCIO to regularly monitor and manage market risks associated with the overall portfolio as well as individual asset classes. Specific investments will also be reviewed and aggregated, as available from each manager, on a regular basis to ensure that the portfolio does not



maintain unwarranted concentration risks with respect to any single factor or security at the manager level, asset class level and portfolio level.

Leverage ~~is shall~~ also be monitored to ensure that the intended exposure is in line with parameters determined by the OCIO to be appropriate for a specific strategy and/or asset class. In addition, the portfolio will seek to maintain sufficient liquidity, at all times, to meet the ongoing distribution needs of the Non-Endowment, to rebalance the portfolio, and to capture tactical opportunities. The source of monies for such liquidity needs will be based on rebalancing and cost considerations.

#### **VIII. Annual Expenditure Policy**

A reserve for investment fluctuations will be maintained in order to buffer the portfolio from short-term investment fluctuations. The target balance of the reserve for future investment fluctuations is determined as 20% of the previous fiscal year-end Non-Endowment pool Tier III Long Term Capital balance, plus two years of budgeted Non-Endowment investment earnings.

Each year, the University budget office shall budget investment earnings based on a reasonable assessment of the interest rate and capital markets environment and any funding to be added to the reserve for investment fluctuations.

Any earnings in excess of this budgeted level shall be allocated 100% to the reserve for investment fluctuations, unless otherwise determined by the BoT. In the event the earnings are short of the budgeted amount, the difference shall be drawn from the reserve for investment fluctuations.

The target amount of the reserve for investment fluctuations shall be reviewed at least annually to determine its sufficiency and to establish a future target.

#### **VH-IX. Performance Monitoring and Evaluation**

The performance of the Non-Endowment, component asset classes, ~~Subsub-Advisers advisers~~ and investment vehicles ~~will shall~~ be monitored by the OCIO on an ongoing basis and ~~shall be~~ reviewed ~~by with~~ the Investment SubcCommittee at least quarterly. Investment returns are to be measured net of all fees, including investment manager and the OCIO fee. The OCIO ~~will shall~~ provide a summary of returns versus stated benchmarks for short-term and long-term periods. The OCIO will meet with the Investment SubcCommittee regularly to provide a review of performance and risk, a discussion of market conditions and a summary of the current positioning of the portfolio.

~~The review should include estimated losses modelled at one, two, and three standard deviations of the combined allocations to Tiers 1 and 2.~~

### XII.X. Conflicts of Interest

The Investment Subcommittee shall take reasonable measures to assess the independence of the OCIO, and any other service providers to the Non-Endowment. Any actual or potential conflicts of interest relating to any of the foregoing, or to any member of the Board-BoT, FAC, or Investment Subcommittee or Office of Investment and Treasury Services, shall be disclosed and addressed in accordance with UPMIFA, Ohio's Ethics laws as applicable, and any conflict of interest policy adopted by Miami-the University.

### XII.XI. Investment Guidelines

Sub-advisers who are appointed to manage accounts for the Non-Endowment ~~will~~ shall be provided investment guidelines as determined by the OCIO. In general, the guidelines will stipulate the types of securities in which the account may invest, general characteristics for the portfolio and/or the performance benchmark and objectives. The specific guidelines may vary depending upon the asset class or sub-asset class. Commingled investment vehicles will be governed by their offering memorandum and other constituent documents.

The investment of the Non-Endowment is subject to and shall be made in accordance with ORC 3345.05 (C) (1), with at least twenty-five percent of the average amount of the investment portfolio over the course of the previous fiscal year invested in securities of the United States government or of its agencies or instrumentalities, the treasurer of state's pooled investment program, obligations of Ohio or any political subdivision of Ohio, certificates of deposit of any national bank located in Ohio, written repurchase agreements with any eligible Ohio financial institution that is a member of the federal reserve system or federal home loan bank, money market funds, or bankers acceptances maturing in two hundred seventy days or less which are eligible for purchase by the federal reserve system, as a reserve. The Non-Endowment assets in excess of the twenty-five percent may be pooled with other University funds and invested in accordance with Ohio Revised Code Section 1715.52 (UPMIFA).

**Exhibit 1**  
**MIAMI UNIVERSITY – NON-ENDOWMENT (TIER 2)**  
**Policy Allocation Targets, Ranges and Benchmarks**  
*JUNE 2018*

Asset Category	Policy Allocation	Policy Ranges		Benchmark Indices <sup>(1)</sup>
		-	+	
<b>Fixed Income</b>	<b>100.0%</b>	<b>-10.0%</b>	<b>0.0%</b>	
U.S. Treasury & Gov't Agency Securities	100.0%	-10.0%	0.0%	ICE BAML 0-2 Year Treasury Index
<b>Cash</b>	<b>0.0%</b>	<b>0.0%</b>	<b>10.0%</b>	Citigroup 3 Month Treasury Bill Index
<b>Total</b>	<b>100%</b>			

Footnotes:

- (1) The Policy Benchmark will be reported both gross and net of assumed passive management fees and rebalancing costs.
- (2) Targeted Duration for the Baseline Allocation: a range of +/- 0.5 years will be targeted around the duration of the benchmark. For example, should the ICE BAML 0-2 Year Treasury Index carry a duration of 1 year, a target range of 0.5 and 1.5 years will be targeted.
- (3) Should this sub-account house funds earmarked for special university projects requiring target date matching, the University Staff Office of Investments and Treasury Services will establish an estimated draw schedule and the OCIO will invest in U.S. Treasury and government/agency securities accordingly.

**Exhibit 2****MIAMI UNIVERSITY – NON-ENDOWMENT (TIER 3)****Policy Allocation Targets, Ranges and Benchmarks**

JUNE 2018

Asset Category	Policy Allocation	Policy Ranges		Benchmark Indices <sup>(1)</sup>
		-	+	
<b>Equities</b>	<b>54.0%</b>	<b>-10.0%</b>	<b>+10%</b>	
U.S. Equities	27.0%	-10.0%	+10%	Russell 3000 Index
Non-U.S. Equities	18.0%	-10.0%	+10%	MSCI World ex-US Investable Market Index (IMI) (Net) <sup>(2)</sup>
Emerging Market Equities	9.0%	-9.0%	+10%	MSCI Emerging Markets Index (Net) <sup>(2)</sup>
<b>Alternatives (Net) <sup>(3)(4)</sup></b>	<b>12.0%</b>	<b>-12.0%</b>	<b>+10%</b>	
Hedge Funds (Net) <sup>(4)</sup>	12.0%	-12.0%	+10%	HFRX Equal Weighted Strategies Index
Hedge Funds (Gross)	22.0%	-22.0%	+5%	
Portable Alpha Overlay	10.0%	-10.0%	+10%	
<b>Real Assets</b>	<b>10.0%</b>	<b>-7.0%</b>	<b>+13%</b>	
Real Estate	3.0%	-3.0%	+5%	NCREIF Fund Index - Open End Diversified Core Equity Index
Commodities	3.0%	-3.0%	+6%	S&P GSCI Total Return Index
TIPS	4.0%	-4.0%	+6%	Bloomberg Barclays 1-10 Year U.S. TIPS Index
<b>Fixed Income <sup>(4)</sup></b>	<b>24.0%</b>	<b>-10.0%</b>	<b>+10%</b>	
U.S. Investment Grade Fixed Income <sup>(5)</sup>	21.5%	-15.0%	+10%	Bloomberg Barclays U. S. Aggregate Index
U.S. High Yield Bonds	2.5%	-2.5%	+10%	BofA Merrill Lynch High Yield Cash Pay Index
Non-U.S. Fixed Income	0.0%	0.0%	+10%	Citigroup Non-USD World Government Bond Index Hedged
<b>Cash</b>	<b>0.0%</b>	<b>0.0%</b>	<b>+20%</b>	Citigroup 3 Month Treasury Bill Index
<b>Total</b>	<b>100%</b>			

## Footnotes:

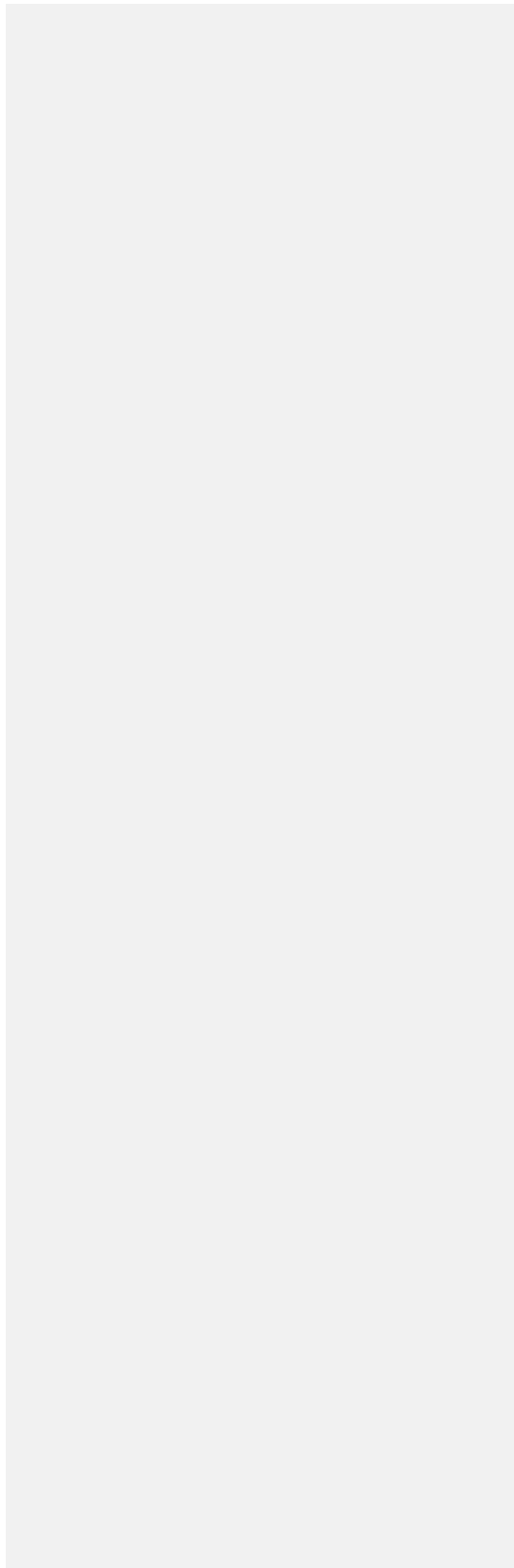
- (1) The Policy Benchmark will be reported both gross and net of assumed passive management fees and rebalancing costs.
- (2) Indices are net of dividend withholding tax.
- (3) (Net) indicates that allocations are net of portable alpha strategies. The maximum gross allocation to hedge funds, including those overlaid in portable alpha strategies, is 27%.
- (4) U.S. Fixed Income includes physical holdings of Treasuries, corporates and synthetic fixed income achieved through portable alpha strategies.
- (5) For purposes of assessing compliance with the minimum of the policy range, fixed income will be deemed to include the allocation to cash.
- (6) The targeted annual standard deviation range is 10-12%.

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**Appendix A**  
**MIAMI UNIVERSITY FOUNDATION INVESTMENT POLICY STATEMENT**  
**Most recent version as adopted by the Foundation Board of Directors**

[\[AVAILABLE UPON REQUEST\]](#)



# Board of Trustees

December 2019



MIAMI UNIVERSITY

# University Advancement Report

**Tom Herbert, J.D.**

Senior Vice President, University Advancement  
President, Miami University Foundation



MIAMI UNIVERSITY

# \$1B Campaign Progress Report

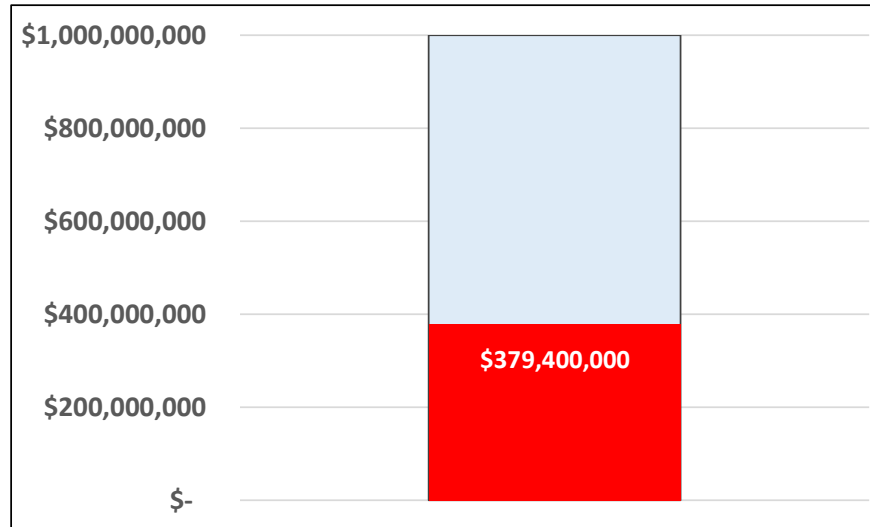
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- » Goal: \$1 billion
- » Raised to date: \$379.4 million (38% of goal)



# \$1B Campaign Progress Report

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# FY'20 Fundraising To Date

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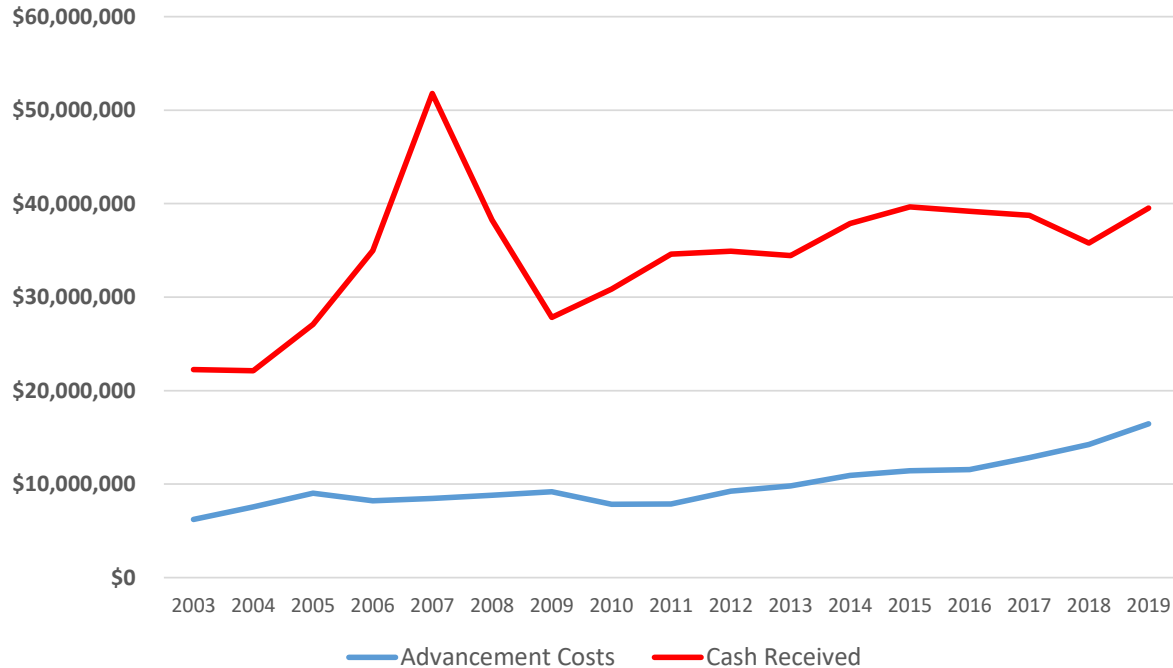
- » Goal: \$100 million
- » Raised to date: \$40 million (40% of goal)
- » Solicitation activity in FY20:
  - » 21 asks of \$1M+ (\$75 million)
  - » 279 asks of \$50-999k (\$32 million)
  - » In addition, expected close on \$52 million of previous asks

# Farmer School of Business Campaign

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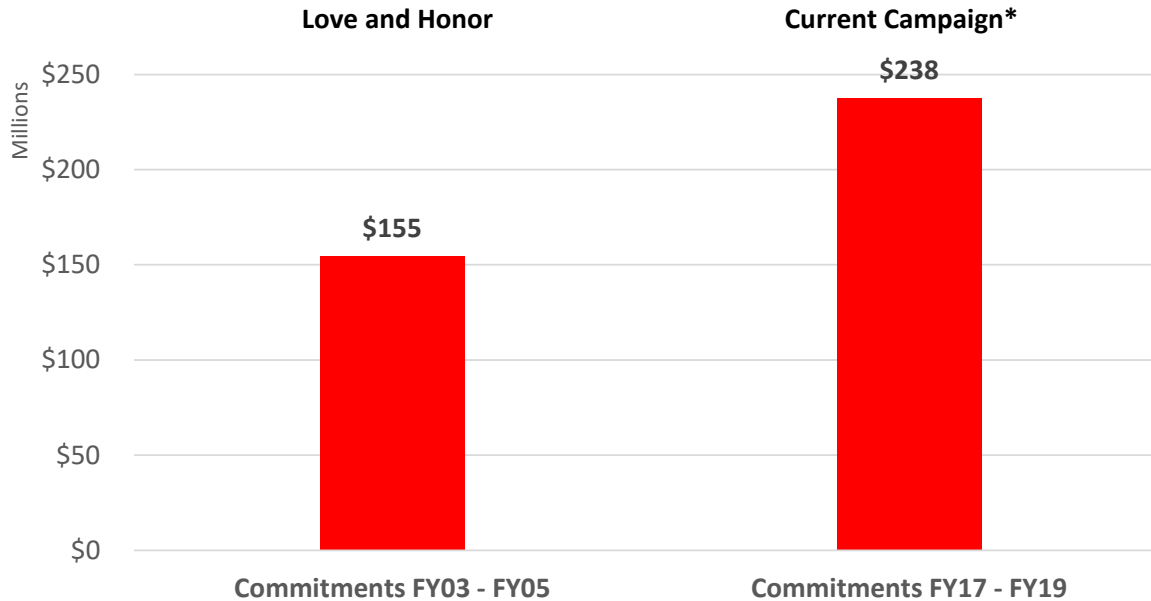
- » Seven year campaign for \$250 million
- » Timeline: July 1, 2016 - June 30, 2023
- » Time line extended
- » Raised to date: \$71.5 million
- » Cash received: \$21.9 million

# Trends in Cash Received and Advancement Costs



# L&H Campaign compared to Current Campaign First Three Years – Overall Commitments

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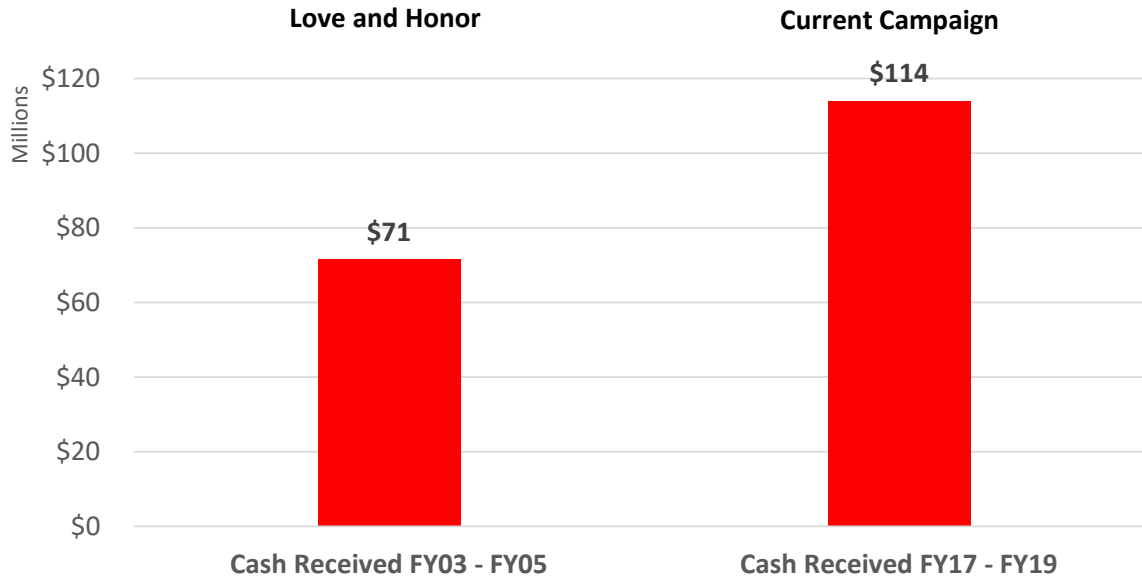
\* Does not include reach back



# L&H Campaign compared to Current Campaign

## First Three Years – Cash Received

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# Planned Gift Commitments

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## L&H Campaign (FY03-FY06)

» 29%

## Current Campaign (FY17-FY20\*)

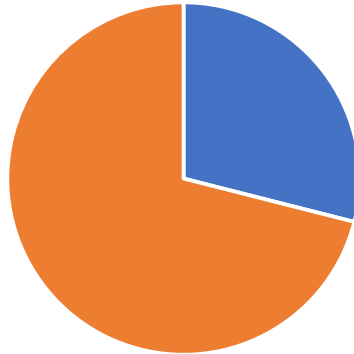
» 42%

*\* FY20 to date*

# Planned Gift Commitments

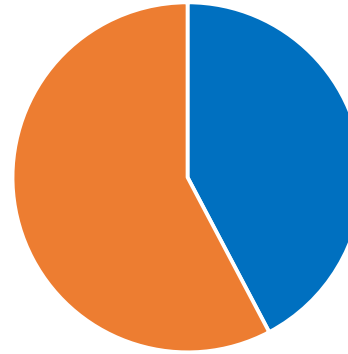
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FY03-FY06



■ Planned Gifts ■ Cash & Pledges

FY17-FY20\*



■ Planned Gifts ■ Cash & Pledges



# CASE District V awards: 2019

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- » Miami University won **23 awards**
  - » 19 for University Advancement
  - » 4 for University Marketing and Communications
  
- » Next highest was University of Michigan with 11
  
- » Won 3 Platinum Awards – more than any other institution
  - » Highest honor
  - » Proceeds to compete internationally

# Thank you!

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BOARD OF TRUSTEES  
ROUDEBUSH HALL ROOM 212  
OXFORD, OHIO 45056  
(513) 529-6225 MAIN  
(513) 529-3911 FAX  
WWW.MIAMIOH.EDU

December 13, 2019  
Other Business

**RESOLUTION R2020-26**

BE IT RESOLVED: that the Board of Trustees hereby appoints Jeff Pegues as a National Trustee for a three-year term beginning February 1, 2020, and ending January 31, 2023.

*Approved by the Board of Trustees  
December 13, 2019*

T. O. Pickerill II  
Secretary to the Board of Trustees